# Metrication in the United States and Canada

**EUGENE WAGNER** 

Metrication in the United States goes slower than in Canada. The big event in Canada in September 1977 was the change of all highway speed and distance signs to the use of metric units. While the actual change was done on the local and provincial levels within one month, it was coordinated with the Metric Commission in Ottawa.

Canadian weather reporting has been metric for many months, so motorists were not entirely unfamiliar with the metric terms when they appeared on highway signs.

The top speed limit on any Canadian highway is 100 km/h.

The province of Ontario has issued what is probably the first major all-metric highway map to be published in North America north of the Rio Grande. All distances shown on the map are only in kilometers. Included on the map is a graphical "Speed Conversion Chart" giving the miles per hour equivalents of kilometers per hour which are shown in increments of 10 km/h. The new map in conjunction with the new signs will do much to get Canadians accustomed to thinking metric.

Here in the States, according to the Metric Conversion Act of 1975, Public Law 94-168, a board of 17 members ought to be nominated by the President, to be confirmed by the Senate. The White House so far released 15 of those nominated. The two others are still under investigation. Following is the list of nominees with the category they represent as well as their backgrounds and metric experience if any:

Dr. Louis F. Polk, Dayton, Ohio, is a metrology expert and a retired vice president of the Bendix Corporation. He presently serves on the executive committee of the Fidelity Federal Savings of Dayton. He was chairman of the U.S. Department of Commerce's Metric Study from 1968 to 1971. Dr. Polk has been active in activities of the American National Standards Institute (ANSI) and is a former ANMC director.

#### Business

A.G. Weaver, Armonk, New York, is director of product safety for the IBM Corporation, and is an expert in engineering standards.

#### Standards

Sydney D. Andrews, Tallahassee, Florida, is director of the division of standards of the Florida Department of Agriculture. He is a past chairman of the National Conference on Weights and Measures and is chairman of the Florida Metric Council. Mr. Andrews is chairman of the ANMC Weights and Measures Sector Committee and also a member of the U.S. Metric Association. He has been actively promoting metrication for many years.

## Members At Large

Dr. Paul Block, Jr., is publisher of the Toledo Blade. He has been a professor of chemistry at the University of Toledo since 1950.

Sandra R. Kenney, Owings Mills, Maryland, is continuity director for the Maryland Center for Public Broadcasting. She has taught art in Ohio and Baltimore and has been associated with instructional television since 1970.

Joyce D. Miller, New York City, is a vice president and director of social services for the Amalgamated Clothing and Textile Workers Union. Ms. Miller is a national president of the Coalition of Labor Union Women and serves on the AFL-CIO standing committee on civil rights.

Glenn Nishimura, Little Rock, Arkansas, is executive director of Arkansas Consumer Research, and he is vice president of the Consumer Federation of America.

The list of nominees has been sent to the Senate Commerce Committee who must confirm them individually for membership to the U.S. Metric Board.

#### Construction

Francis R. Dugan, Cincinnati, Ohio, is president of the Dugan & Meyers Construction Company. He has held official positions at local and national levels with the Associated General Contractors of America including membership on its metric committee.

### Labor

Thomas A. Hannigan, Washington, DC, is assistant to the International Secretary of the International Brotherhood of Electrical Workers (IBEW). He served on the U.S. Metric Study 1968 to 1971. Mr. Hannigan is a member of the ANMC board of directors and its executive committee. He has a long record of

opposition to national metrication dating back to 1970.

Dr. Henry Kroeze, Brookfield, Wisconsin, is chairman of the Department of Engineering and Computer Science at the University of Wisconsin-Waukesha. He is a member of the Engineers Joint Council Metric Commission, the ANMC, and the USMA. Dr. Kroeze is a native of the Netherlands and a long time promoter of metrication on the local and national levels.

## Retailing

Dr. Satenig St. Marie, New York City, is a divisional vice president and director of consumer affairs for the J.C. Penney Company. She is a past president of the American Home Economics Association and a member of the ANMC consumer liaison committee.

### Science

Dr. Edward Ginzton, Palo Alto, California, is chairman of the Board of Varian Associates, a company engaged in research and development in the microwave electronics field. He had been a professor of electrical engineering at Stanford University.

## Small Business

Carl Beck, King of Prussia, Pennsylvania, is president of the Charles Beck Marine Corporation, who are manufacturers of machinery for the packaging and converting industries. He is active in the affairs of the National Small Business Association. Mr. Beck is a member of the

ANMC board of directors and its executive committee.

Roger Travis, Holbrook, Massachusetts, is president of Medi Inc., a manufacturer of disposable medical products. He is also president of the Smaller Business Association of New England.

### State and Local Government

Dr. Frank Hartman, Lansing, Michigan, is a federal liaison representative for the Michigan State Department of Education in Washington. He has been a high school teacher, principal, and superintendent of two school districts.

The Governors Conference also took some measure. A representative for each State has been appointed to represent the Governors Conference in what they call the "Interstate Metric Committee". Here is a list of its members:

#### Alabama

Aubrey Dismukes Division of Weights and Measures Dept. of Agriculture & Industries 1445 Federal Drive Montgomery 36130 (205) 832-6693

#### Alaska

Tony Motley, Commissioner
Dept. of Commerce & Economic
Development
Pouch D, Juneau 99811

#### Arizona

Richard Harris, Asst. Director Weights and Measures Division Commerce Department State Capitol, Phoenix 85007

### Arkansas

Sam Hindsman, Director Weights and Measures Division Commerce Department State Capitol, Little Rock 72201

### California

Valerie Antoine, Vice President U.S. Metric Association, Inc. 10245 Andasol Avenue Northridge 91323 (213) 363-5606

#### Colorado

Jack Kinstlinger, Executive Director Department of Highways 4201 East Arkansas Ave. Denver 80222 (303) 757-9201

#### Connecticut

Graham Waldron, Director Technical Services Division Department of Commerce State Capitol, Hartford 06115

#### Delaware

Dr. William J. Geppert State Supervisor of Mathematics Department of Public Instruction Townsend Building Dover 19901

#### Florida

Wayne C. Voigt, Asst. Director Division of State Planning State Capitol, Tallahassee 32304

## Georgia

Rick Cobb, Deputy Commissioner Division of Planning & Budget State Capitol, Atlanta 30334

#### Hawaii

George Mattimoe, Deputy Director Division of Weights & Measures 1428 S. King Street Honolulu 96814

#### Idaho

NGA Interstate Metric Committee Attn: Patricia Hawley Office of the Governor State Capitol, Boise 83720

### Illinois

NGA Interstate Metric Committee Attn: Sylvia Dennen Office of the Governor State Capitol, Springfield 62706

### Indiana

Richard Wiley Mathematics Consultant State House, Indianapolis 46204

#### Iowa

Thatcher Johnson Deputy Secretary of Agriculture Des Moines 50319

#### Kansas

John L. O'Neil
National Conference on Weights &
Measures
Department of Agriculture
P.O. Box 678, Topeka 66601

### Kentucky

NGA Interstate Metric Committee Attn: Frank Harscher Office of the Governor State Capitol, Frankfort 40601

#### Louisiana

Charles S. Johnson, Technical Administrator Weights and Measures Division Department of Agriculture Room 315, 1237 Murphy Street Shreveport, Louisiana 71101 (318) 424-6461

#### Maine

Arnold Johnson Curriculum Consultant Maine Education Department State House, Augusta 04333

## Maryland

Mrs. Audrey Buffington Consultant in Mathematics Division of Instruction Maryland State Dept. of Education P.O. Box 8717, BWI Airport Baltimore 21240

### Massachusetts

Terri Bergman State of Massachusetts Hall of the States, Suite 307 444 North Capitol Street Washington, D.C. 20001

### Michigan

Frank Hartman State of Michigan, Suite 314 Hall of the States 444 North Capitol Street Washington, D.C. 20001

#### Minnesota

Nathaniel Scott
Assistant Commissioner of
Administration
208 Administration Building
St. Paul 55155

## Mississippi

Dr. Charles E. Holladay Superintendent of Public Education Sillers State Office Building Jackson 39201 (601) 354-6933

### Missouri

J.W. Abbott, Deputy Director Department of Agriculture P.O. Box 630 Jefferson City 65101

### Montana

Gary L. Delano Administrator of Weights and Measures Division of Business Regulations 805 North Last Chance Gulch Helena 59601

### Nebraska

Steve Malone Chief of Weights and Measures Department of Agriculture P.O. Box 4844, State Capitol Building Lincoln 68509

#### Nevada

Mike Melner, Director Department of Commerce 201 South Fall Street Carson City 89701

## New Hampshire

None

## New Jersey

NGA Interstate Metric Committee Attn: John I. Degnan Office of the Governor State House, Trenton 08625

#### New Mexico

Jose R. Baca State Purchasing Officer Lamy Building Santa Fe 78503 (505) 827-2626

#### New York

NGA Interstate Metric Committee

Attn: James E. Introne

Assist. Secretary of the Governor for

Human Resources

Executive Chambers, Room 229 State Capitol, Albany 12224 (518) 474-2831

### North Carolina

Dr. Lynn Muchmore Director of State Planning Administration Building Raleigh 27611 (919) 829-4131

#### North Dakota

NGA Interstate Metric Committee Attn: George "Woody" Gagnon State Capitol, Bismarck 58505 (701) 224-2200

### Ohio

Colonel Thomas Grant, Director Ohio State Office 1150 Connecticut Avenue, N.W. #709 Washington, D.C. 20036 (202) 223-1725

#### Oklahoma

Keith English Oklahoma Department of Highways 200 N.E. 21st Street Oklahoma City 73105

#### Oregon

Leonard Kunzman, Director Department of Agriculture 635 Capitol Street, N.E. Salem 97310

## Pennsylvania

Ronald G. Lench, Secretary Department of General Services 515 North Office Building Harrisburg 17120 (717) 787-5996

#### Rhode Island

NGA Interstate Metric Committee Attn: William G. Dugan, Jr. Office of the Governor State House, Providence 02903

#### South Carolina

Matthew B. Burkley, Sr. Citizens Representative P.O. Box 1031 Charleston 29402

### South Dakota

Barbara J. McCandless
Asst. to Secretary for Policy
Development
Dept. of Commerce and Consumer
Affairs
State Capitol, Pierre 57501
(605) 224-3177

#### Tennessee

Eugene Holman
Deputy Director for Weights &
Measures
Department of Agriculture
Box 40627 Melrose Station
Nashville 37204

#### Texas

NGA Interstate Metric Committee Attn: Charles D. Travis Executive Asst. to the Governor State Capitol, Austin 78711

#### Utah

Eugene Wagner 375 West 400 South Salt Lake City 84101

#### Vermont

Leonard U. Wilson Director of State Planning State Capitol, Montpelier 05602

## Virginia

James F. Lyles
Supervisor, Weights & Measures
Department of Agriculture &
Commerce
Commonwealth of Virginia
Richmond 23219

## Washington

NGA Interstate Metric Committee Attn: Jason King Office of the Governor State Capitol 98501

## West Virginia

NGA Interstate Metric Committee Attn: Ed Rebrook III Office of the Governor State Capitol, Charleston 25305

#### Wisconsin

Professor John Leaman University of Wisconsin Engineering Department 929 N. 6th Street Milwaukee 53702

## Wyoming

None

### American Samoa

Mrs. Mere Betham Director of Education Office of the Governor Paga Pago 96799

### Puerto Rico

Max Trujillo Assistant Secretary Department of Consumer Affairs Box 41059, Minillas Station Santurce 00940

## Virgin Islands

NGA Interstate Metric Committee Attn: Peter de Zela Office of the Governor Government House Charlotte Amalie, St. Thomas 00801

Some states have taken actions in metrication on their own.

California passed a metric law. Formation of the California Metric Conversion Council was authorized with the passage of SB 1018 by the State Legislature. The bill, which was introduced by State Senator Alfred Alquist, was passed by a 33 to 2 vote in the State Senate and by a 70 to 7 vote in the Assembly. It automatically became law without the Governor's signature when he did not act upon it during the prescribed time limit.

The Council will consist of 10 members to be appointed by the Governor. The council will devise and carry out a broad program of planning, coordination, and public education in the use of the SI in California activities. Many California USMA (United States Metric Association)—members worked for the passage of the legislation.

## GM Passes Halfway Mark

At late July and early August 1977 meetings of the General Motors Board of Directors and corporate executives, Mr. Richard L. Terrell, vice chairman of GM, observed, "General Motors is in the midst of an ongoing conversion to the metric system-a conversion which has been paced, and accelerated, by our unprecendented redesign program. Chevette was our first U.S. metric car, the 1977 B/C redesign was metric, and so is the 1978 midsize program-all in keeping with our plan of going metric as new parts and new designs are released. In fact, with the introduction of our new midsize cars, we will be past the halfway mark-we'll be more metric than inches and pounds. And by 1982 or so, the conversion will be virtually complete.

"Meanwhile, it is going very smoothly and essentially at little or no cost."

In accordance with General Motors metrication policy, the 1978 "A" type cars are predominately metric and thus join the "B" and "C" cars which became metric last year and the "T" Chevette, introduced two years ago.

The General Motors practice is to "go metric" on those new parts and assemblies which require new tooling. The above cars have been extensively redesigned to reduce mass and to improve fuel economy. Thus, the cars contain a predominance of new metric parts. The General Motors automotive products are now more metric than customary.

## Postal Service Is Going Metric

Like other Federal units and private industry, the U.S. Postal Service (USPS) is gearing up to convert to the metric system of measurement. The "rule of reason" will apply to adoption of the SI in the Postal Service according to Deputy Postmaster General William F. Bolger. That is, the conversion will take place in an orderly manner, compatible with the voluntary conversion actions of postal customers.

In keeping with this policy, the USPS has committed itself to participate fully in the metric implementation efforts of the Federal government. The assistant Postmaster General for Research and Development, John F. Wise, is USPS's metric coordinator and chairman of the Postal Service's Metrication Board. That Board includes representatives from a number of Washington, DC, Headquarters organizations as well as a liaison person from each postal region.