

22nd APLMF Meeting
Honolulu, Hawaii

United States Economy Report
October 2015

Some Current Developments in U.S. Legal Metrology:

**Major issues on the Agenda of the National Conference
on Weights and Measures (NCWM) as of October 2015
and related national initiatives of the National Institute
of Standards and Technology (NIST).**



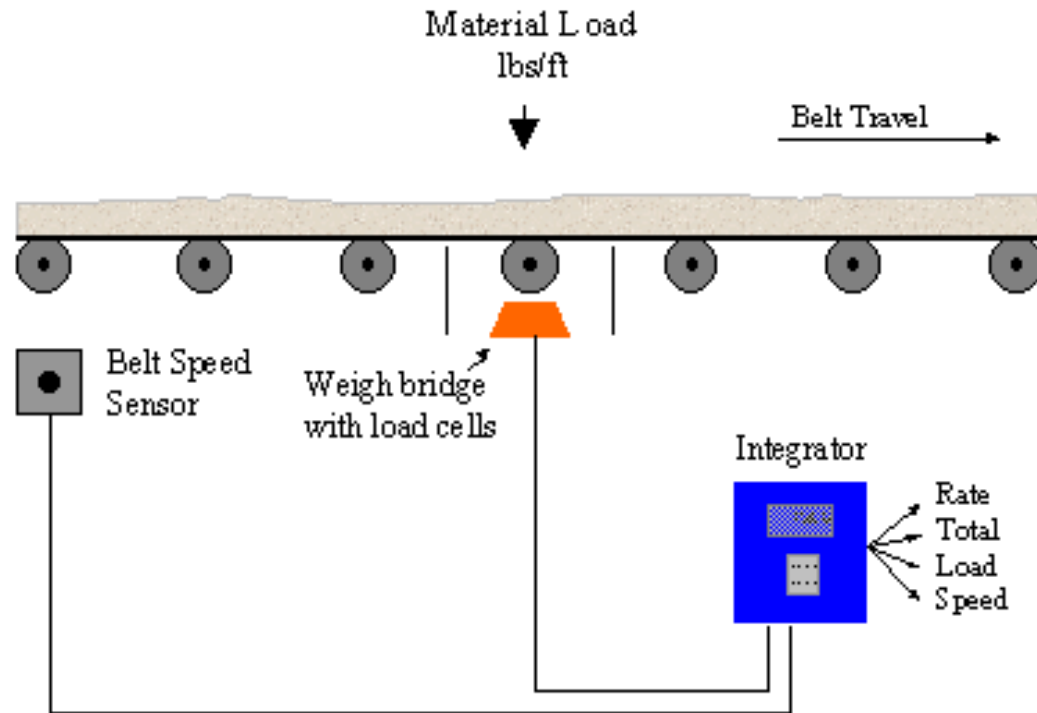
* Taximeters



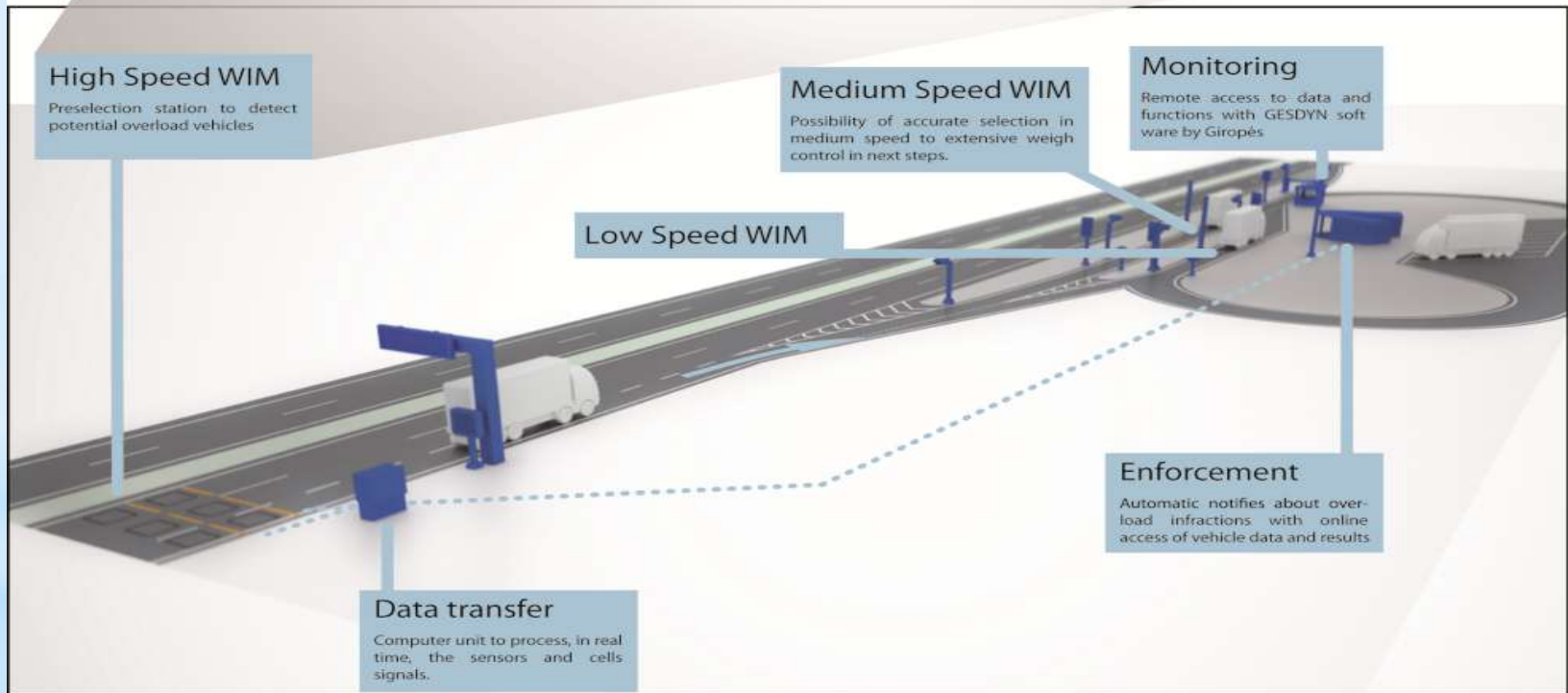
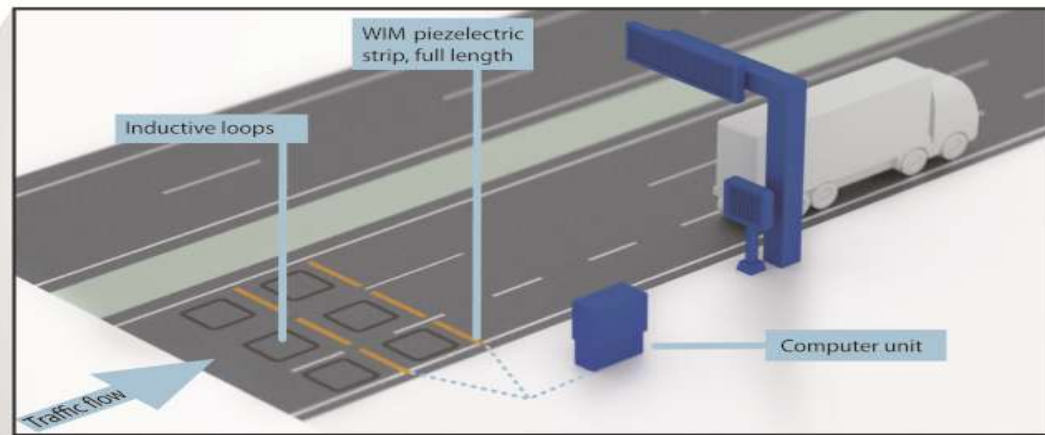
* Taxi -- Recorded Representation. – A printed receipt issued from a taximeter, whether through an integral or separate recording element, shall include as a minimum, the following information when processed through the taximeter system:

- * (a) date;
- * (b) unique vehicle identification number, such as the medallion number, taxi number, vehicle identification number (VIN), or permit number, or other identifying information as specified by the statutory authority;
- * (c) start and end time of trip;
- * (d) distance traveled, maximum increment of 0.1 kilometer (0.1 mile);*
- * (e) fare in \$;
- * (f) for multi rate taximeters, each rate at which fare was computed and the associated fare at that rate;
- * (g) additional charges/discounts in \$ (where permitted) such as extras any surcharges, telephone use, telecommunications charges, tip, discounts, credits, and taxes shall be identified and itemized; and
- * (h) total fare charge for service in \$ (total charge inclusive of fare, extras, and all additional charges);
- * (i) trip number, if available; and
- * (j) telephone number (or other contact information) for customer assistance.

Figure 1- Principle of Operation



*Belt-Conveyor Scales



* Weigh-in-Motion Truck Scales

Legal Metrology Issues related to Alternative-Fuel Vehicles:

- a. Compressed Natural Gas (CNG) and
Liquefied Natural Gas (LNG) Vehicles;**
- b. Electrical Vehicles;**
- c. Hydrogen Vehicles.**



* CNG Fuel Measurement Standards



* LNG Fuel Measurement Standards



* **Legal Metrology Issues concerning
Electrical Vehicle Charging**



* **Development of Hydrogen Fuel Measurement Standards**



* **Development of a new ANSI Standard for Gas Meters**



* Moisture Allowance

- Pasta & Noodle Products
- Other Products

* Unit Pricing

SG 43 301 012^R
030811 0 20662-00097 301

NEWMANS OWN SALSA HOT CNS
16 OZ Non-Member Price CS 17802

2.85 17.9¢
PER OUNCE

SAFEGWAY CLUB
SAFEGWAY CLUB PRICE

\$2.61

16.4¢ PER OUNCE

“the pricing of goods on the basis of cost per unit of measure”



*Unit Pricing

Food Marketing Institute annual survey shows that 70% of consumers use unit pricing when it is available.

Unit Price = $\frac{\text{Retail Price}}{\text{Net Quantity (by unit of measure e.g., oz or kg)}}$

EXAMPLE: 18 oz (510 g) jar of peanut butter @ \$3.49

$\frac{\$ 3.49}{18 \text{ oz}} = \$ 0.19 \text{ per oz}$

$\frac{\$ 3.49}{510 \text{ g}} = \$ 0.0068 \text{ per g}$ (g are prohibited by the UUPR, so use 100 g)
OR = $\$ 0.68 \text{ per } 100 \text{ g}$ ($\$ 6.80 \text{ per kg}$)



***How to Calculate**

Consistency of Units



Color Contrast

Format

Font Size

Abbreviations

“The Marketplace” Lack of Standardization and Uniformity

Unit Pricing Label

(Label is not to scale and for example purposes only.)

Print should be in black with a white background for all “blocks”. The unit price should have a color background. Use of upper and lower case for all text is recommended. Use correct abbreviations for units.

The words “Retail Price” or similar words should be printed above actual retail price.

Use correct display of dollars and cents.

Best Brand Filtered Water 16.9 FL OZ	
Retail Price \$ 1.05	Unit Price 6¢ per fl oz
Retailer barcode goes here along with other retailer data (order code, pack size, UPC number...)	

Retailer specific information should be less prominent (i.e., not bolded, smaller font size) than required information on the other three “blocks”. Exceptions can be made in instances where state requirements may dictate terms such as a WIC (Woman Infant Children) logo or when information such as the barcode (i.e., self-scan) is directly utilized by consumers’.

Words “Unit Price” should be above the actual unit price. Use the word “per” to link the price per unit. A color background should be provided in this block to help differentiate (contrast) it from the retail price. A white background is acceptable. Correct units and abbreviations must be used and must be uniform across all commodities of like products. Use correct display of dollars and cents.

* Unit Pricing

Best Practices Workgroup

* Objective -- Develop industry best practice standards.

* To reduce variation between retailers.

* Improve usability, accuracy and uniformity.

* Timeline

* 12/2011 - Announcement Sent to Stakeholders

* Industry Trade Associations were targeted (consumers groups & academia)

* 3/2012 - First Web Meeting

* 6/2014 - Final Draft

* 8 drafts over a two year period

* 2014 - Publish Online Guide

* Unit Pricing

NIST Special Publication 1181

Unit Pricing Guide

“A Best Practice Approach to
Unit Pricing”

Editor:
David Seftik

Carol Hockett, Chief
Office of Weights and Measures
Physical Measurement Laboratory

<http://dx.doi.org/10.6018/NIST.SP.1181>

December 2014



U.S. Department of Commerce
Penny Pritzker, Secretary

National Institute of Standards and Technology
Willie May, Acting Under Secretary of Commerce for Standards and Technology and Acting Director

Publish Online
Industry Guide

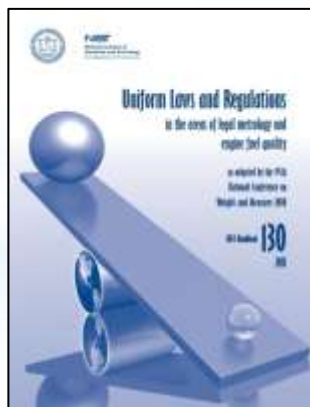
*Next Steps in Unit Pricing

Programs by Retailers to
Educate Consumers

Webinar(s)
- Educate Industry

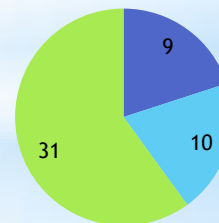


Application/Compliance
(Beta Testing/Modify Guide)



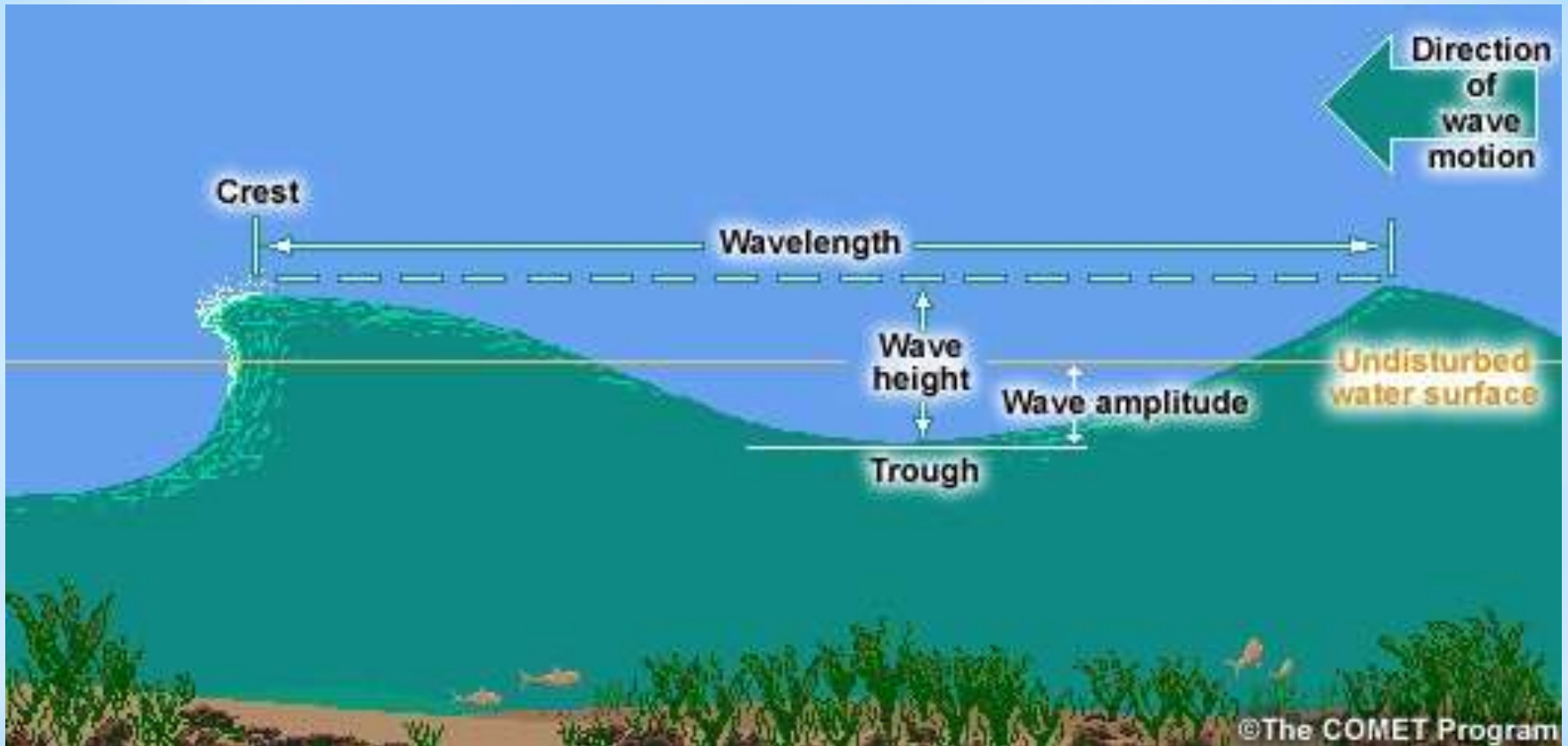
Update Model
Regulations

State Adoption



Evaluate
Uniformity

- Mandatory - state specific regulation.
- Voluntary - adopt Uniform Regulation from HB130.
- No Law or Regulation.



* **Wave Height**

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U.S. Department of Commerce

***Discussion / Questions?**