

State of Illinois
J.B. Pritzker, Governor

Department of Agriculture



BUREAU OF WEIGHTS AND MEASURES 2021 ANNUAL REPORT



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I. BUREAU DESCRIPTION

The Bureau of Weights and Measures' primary responsibility is to protect the citizens and merchants of Illinois through numerous and varied enforcement activities. The delivery of full weights and measures and the elimination of fraud and misrepresentation in commercial transactions have been objectives of this program since its inception.

Weights and Measures inspectors protect both the buyer's and seller's interests by providing equity in the marketplace. Inspectors examine and test, with certified standards, every weighing and measuring device used commercially in the state of Illinois. In addition, inspectors check weigh various prepackaged commodities, review commodity labels for compliance, investigate consumer complaints about shortages or unfair practices and educate the buyer and seller generally as to their rights provided by the Weights and Measures Law.

Bureau staff perform device inspections, motor fuel quality testing and metrology calibrations. The Bureau licenses anyone who installs or repairs commercially used weighing or measuring devices through the Registered Serviceperson Program.

The following sections describe the program areas within the Bureau of Weights and Measures.

Device Inspections are performed on all commercially-used weighing and measuring devices within the state. The basis and statutory authority for all inspection activities are found in the Illinois Weights and Measures Act.

In 2021, Products and Standards Inspectors from the Bureau of Weights and Measures performed over 131,009 device inspections statewide.

Petroleum Products Quality Sampling is the method by which the Bureau annually collects samples of petroleum products for quality analysis by a contract laboratory. Sampling is conducted to determine octane rating, volatility and water content of petroleum products as well as to determine the presence of oxygenates such as ethanol. A significant percentage of the samples collected are gasoline. To enhance the motor fuel testing program, The Bureau has purchased four 'Wilks' brand biodiesel analyzers to analyze the percentage of soy oil in diesel fuel samples. Wilks Enterprise offers rugged, portable, easy-to-use analyzers for the Biofuels Industry. They can be operated by personnel having little or no technical knowledge and provide measurement data in less than one minute. Having these biodiesel analyzers allows the Bureau to screen a large volume of samples at a very small cost.

Prepackaged Commodity Inspections are conducted at regular, unannounced intervals by the Bureau. Prepackaged commodities such as store-packaged meats, delicatessen items, boxed cereals, specialty coffee, bulk candies, milk, fabric softener and motor oil are inspected to ensure the accuracy of the net quantity statement. A consumer only pays for the net weight of the product, not the wrapping and packaging material. Consumer complaints regarding product shortages or unfair sales practices are investigated.

The Metrology Standards Laboratory maintains custody and safekeeping of the Illinois primary standards of mass and volume. These are standards to which all other standards and testing equipment are compared. The laboratory is recognized by the National Institute of Standards and Technology (NIST).

The laboratory provides measurement services for enforcement of weights and measures regulations in legal metrology by testing and calibrating all working standards used by the inspection staff as well as providing services for Illinois' business, industry, education, and government agencies in scientific metrology by testing and calibrating working standards used in trade, commerce and manufacturing.

The calibration of the standards and testing equipment used by the inspection staff and city sealers is performed on an annual basis. The calibration of a Registered Service Company's standards and testing equipment is performed once every two years. The laboratory has established a continuous process of quality maintenance and improvement that has enabled it to grow in professional stature and to offer improved services in responding to Illinois' industry calibration needs, as well as the support of trade and the maintenance of equity in the marketplace. Strict environmental conditions are maintained in the laboratory to ensure accuracy and to comply with current requirements.

The Grain Moisture Meter Laboratory prepares field samples of corn, soybeans and soft red winter wheat to establish known moisture content by using the official USDA air-oven method. These samples are then utilized in field inspections to measure the accuracy of moisture measuring devices currently used by grain producers and elevator operators throughout the state of Illinois. Illinois farmers and other members of the grain trade depend on accurate measurement of moisture content of grain offered for sale at elevators and inland terminals. Bulk Grain Processing is the method by which the Grain Moisture Meter Laboratory processes bulk grain samples collected from various farmers and elevators. By obtaining a variety of bulk samples, the laboratory is able to develop samples using a variety of grain types with varying moisture levels. Moisture content of prepared samples for field inspections typically ranges from 10-22%. The laboratory prepares a new set of samples every three weeks, which allows inspectors to receive a new set of samples on a timely basis.

Moisture meters used by grain producers and elevator operators are inspected on an annual basis prior to the fall harvest season. There are 1,112 state inspected moisture meters used within the state of Illinois.

The Registered Service Person Program consists of Bureau-licensed companies and individuals who sell, install or repair commercially-used weighing and measuring devices. Before becoming licensed, service persons are examined on their proficiency and understanding of applicable regulations. Licenses are renewed annually. Bureau personnel provide initial and on-going training to licensees. A registered serviceperson in good standing may place a commercially used device into service and the device may be used in trade or commerce. There were 234 service companies and 992 technicians registered in 2021.

The City Sealers Program grants cities with a minimum population of 25,000 the authority to certify commercially-used weighing and measuring devices. To be recognized, a city sealer must participate in annual training sponsored by the Department and must submit an annual report to the Department. The Bureau provides technical training and support to city sealers. Currently the Bureau has taken back all City Sealer locations. The Bureau has submitted requested legislation to do away with the City sealer program and allow Chicago to be responsible for all weights and measures in the city proper, but it was rejected. Currently, the only municipality in the City Sealer program is Cicero.

II. BUREAU STRUCTURE

The Bureau of Weights and Measures is strategically organized to make the most efficient use of staffing to manage the sizeable workload.

The Bureau Chief directs a team of two Program Managers, an Administrative Assistant, and Metrologist. The Bureau Chief administers and develops procedures for the statewide weights and measures and motor fuel quality programs. The Bureau Chief also administers various programs related to weights and measures such as the City Sealer Program, the Registered Serviceperson Program and the National Type Evaluation Program (NTEP). Additionally, the Bureau Chief serves as the state representative to the National Conference on Weights and Measures, the American Society of Testing and Materials and various regional and national technical committees.

Program Managers supervise Products and Standards Inspectors located throughout Illinois. In addition to their supervisory responsibilities, each Program Manager specializes in a specific program area, such as scales, liquid measuring devices, and motor fuel quality. These areas of specialization allow each Program Manager to focus on the technical issues within the Bureau, providing synergy among the management team. Program Managers are centralized in Springfield, Illinois.

Products and Standards Inspectors are responsible for performing the various inspections throughout the state of Illinois. There were a total of 27 Products and Standards Inspectors in 2021 performing inspections.

The Administrative Assistant is responsible for overseeing the Bureau budget, personnel issues, supplies, inventory, purchasing and performing general support functions for the Bureau Chief. The support staff manages the paperwork generated from keeping inspection records that include more than 131,009 devices annually. The support staff is also responsible for maintaining records of motor fuel quality sampling, registered repair companies, registered servicepersons, consumer complaints and equipment calibrations. The support staff provides clerical support to the Moisture Meter and Metrology Laboratories.

The Metrologist coordinates and supervises the operations and activities of the Metrology Standards Laboratory and its staff of two Metrology Associates. The Metrologist and associates work as a team to achieve the objectives of the Laboratory, which include the maintenance of the state standards and the provision of metrological measurement services suited to the needs of the inspectors, registered servicepersons and Illinois industry. The Metrologist is responsible for the administrative and technical operations of the Laboratory.

The Metrologist and inspectors are responsible for internal audits, maintaining and analyzing statistical data and control charts, participating in proficiency tests and maintaining the Laboratory's quality manual. The Metrologist and the inspectors participate in national and regional measurement assurance programs sponsored by the National Institute of Standards and Technology (NIST).

The Moisture Meter Laboratory is responsible for acquiring, cleaning, storing and establishing moisture contents of grain samples used in testing commercial moisture meters and for providing grain samples to the grain inspectors and GIPSA for federal evaluation of new moisture meters and near infrared equipment.

Bureau Organizational Chart

Doug Rathbun
Bureau Chief

Program Managers

Springfield Office Staff

Lenny Goebel
Meters & Large Scales

Vacant
Scales & Pumps

Vacant
Metrologist

Ed Gray
Admin. Assistant

Products and Standards Inspectors

Steve Carter
Derek Davis
Tyler Griswold
Kevin Helm
Brenden Jostes
George Luttrell
Zachary Miller
Autumn Nagy
Ivan Palamore
Jeff Piazza
John Spiller
Cody Williams
Vacant
Vacant
Vacant
Vacant

Erik Beckner
Andrew Goetsch
Ricky Henley
Devon Hinegardner
Sue Johnson
Scott Miller
Alex Nevarez
Bob Pankala
Julie Reifschneider
Terry Repp
Garrett Russell
Christopher Schuler
David Taulbee
Jeff Tubacki
Jeanneen Wilson
Vacant
Vacant

Karl Cunningham
Brad Lowery
John Satterlee
Vacant

Mae Emerick
Jared Howland
Vacant

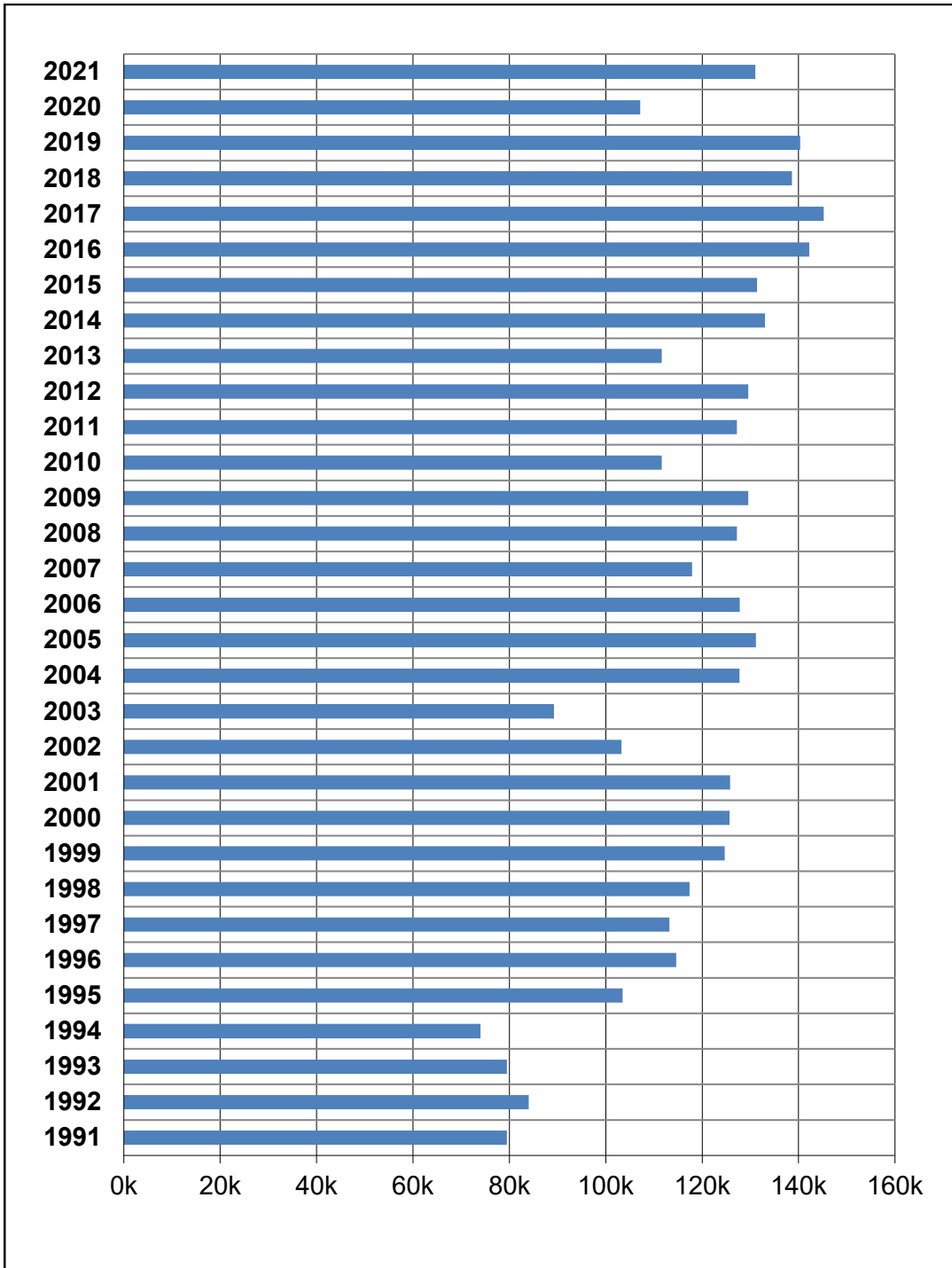
III. BUREAU STATISTICS

DEVICE INSPECTION SUMMARY

Weights and Measures Products and Standards Inspectors performed 131,009 weighing and measuring device inspections in calendar year 2021.

Device Type	Inspected Devices
Small Scales	19,395
Small Scales Dual	4,148
Small Scale Triple	144
Small Scale Quad	1
MF Dispenser	97,229
Large Meter	330
Motor Fuel Meter	1,569
LPG Meter	833
LPG Scale	35
Grain MM	1,112
Grain MMS	851
Large Scale	4,446
Livestock Scale	54
Law Enforcement Scale	538
Railroad Scale	118
Mass Flow Meter	168
Belt Conveyor Scale	3
ADM Hopper	35
TOTALS	<hr/> 131,009

Device Inspections Performed 30 Year History



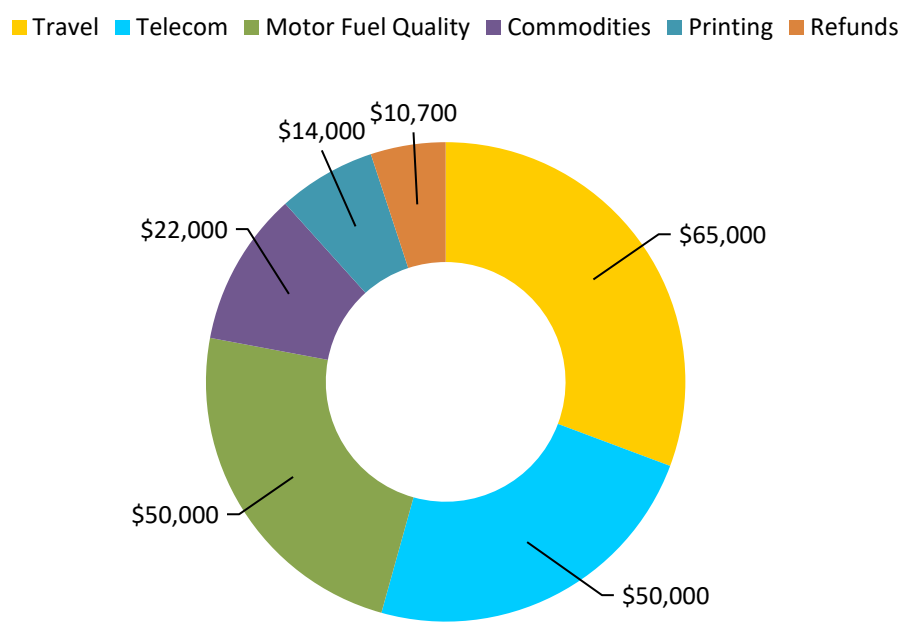
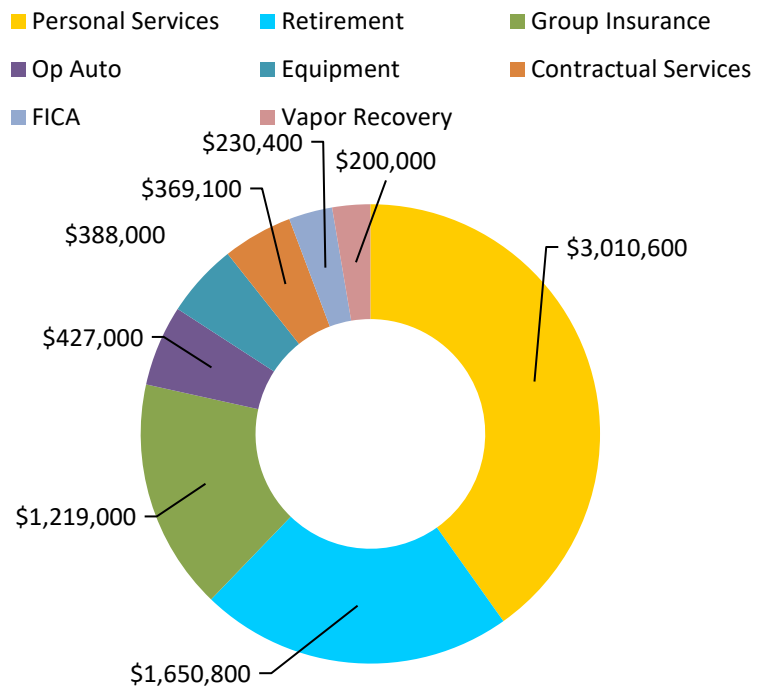
Appropriations and Funding - \$7,706,600

The Bureau of Weights and Measures uses No GRF funding as part of its appropriated budget.

All operations are primarily funded through inspection fees. Any excess funding is returned to the Weights and Measures fund. Currently the Bureau is in a negative cash flow situation.

Appropriations-Funding 2021

Personal Services	\$3,010,600
Retirement	\$1,650,800
Group Insurance	\$1,219,000
Op Auto	\$427,000
Equipment	\$388,000
Contractual Services	\$369,100
FICA	\$230,400
Vapor Recovery	\$200,000
Travel	\$65,000
Telecom	\$50,000
Motor Fuel Quality	\$50,000
Commodities	\$22,000
Printing	\$14,000
Refunds	\$10,700
Total	\$7,706,600



Although the Bureau is budgeted at over seven million dollars, expenses are kept below that level primarily due to unfilled positions, inspectors on sick leave, and unpurchased equipment. Due to self-funding, monies not used are returned to the Weights & Measures Fund.

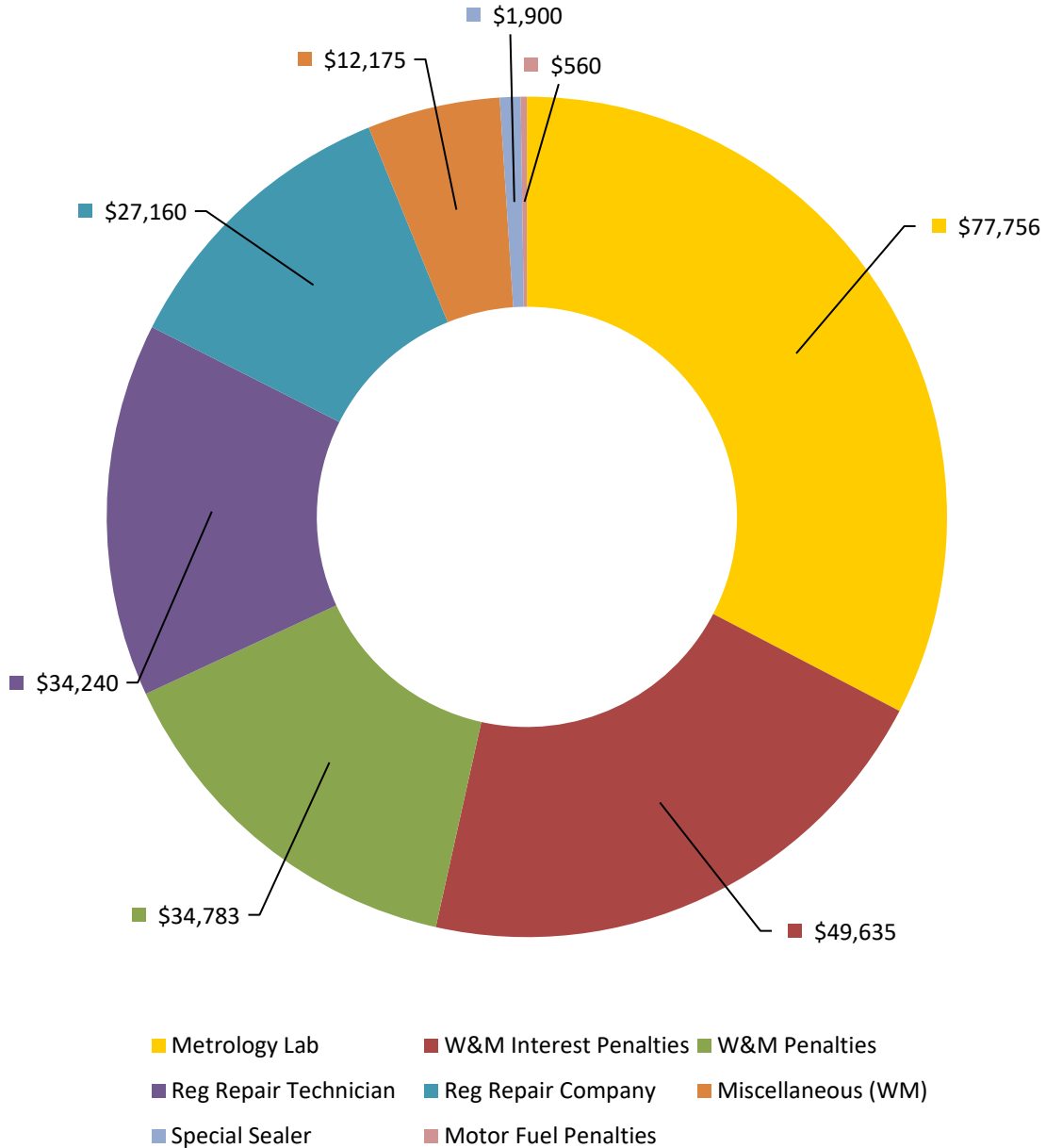
2021 Expenditures

Personal Services	\$	2,329,657
Retirement	\$	1,281,847
Group Insurance	\$	1,219,000
Equipment	\$	7,422
Op Auto	\$	423,965
Contractual	\$	186,919
FICA	\$	171,234
Vapor Recovery	\$	130,757
Travel	\$	5,531
Motor Fuel Quality	\$	27,314
Telecom	\$	28,105
Commodities	\$	14,613
Printing	\$	1,240
Refunds	\$	6,536
Total	\$	5,834,140

Bureau Fees Collected

2021 Calendar Year Revenues - \$5,169,023

In addition to the revenues in the chart below, inspection fees of \$4,930,814 were collected.



2020 Violations – 90 Total

Service Companies	28
Predominance	26
ADA Compliance	15
Pre-Packaged Commodities	9
Motor Fuel Quality	7
Labeling	3
Advertising	2
Total	90

