



United States  
Department of  
Agriculture

Grain Inspection,  
Packers and  
Stockyards  
Administration

# **2005 Annual Report to Congress**

## **Federal Grain Inspection Service**

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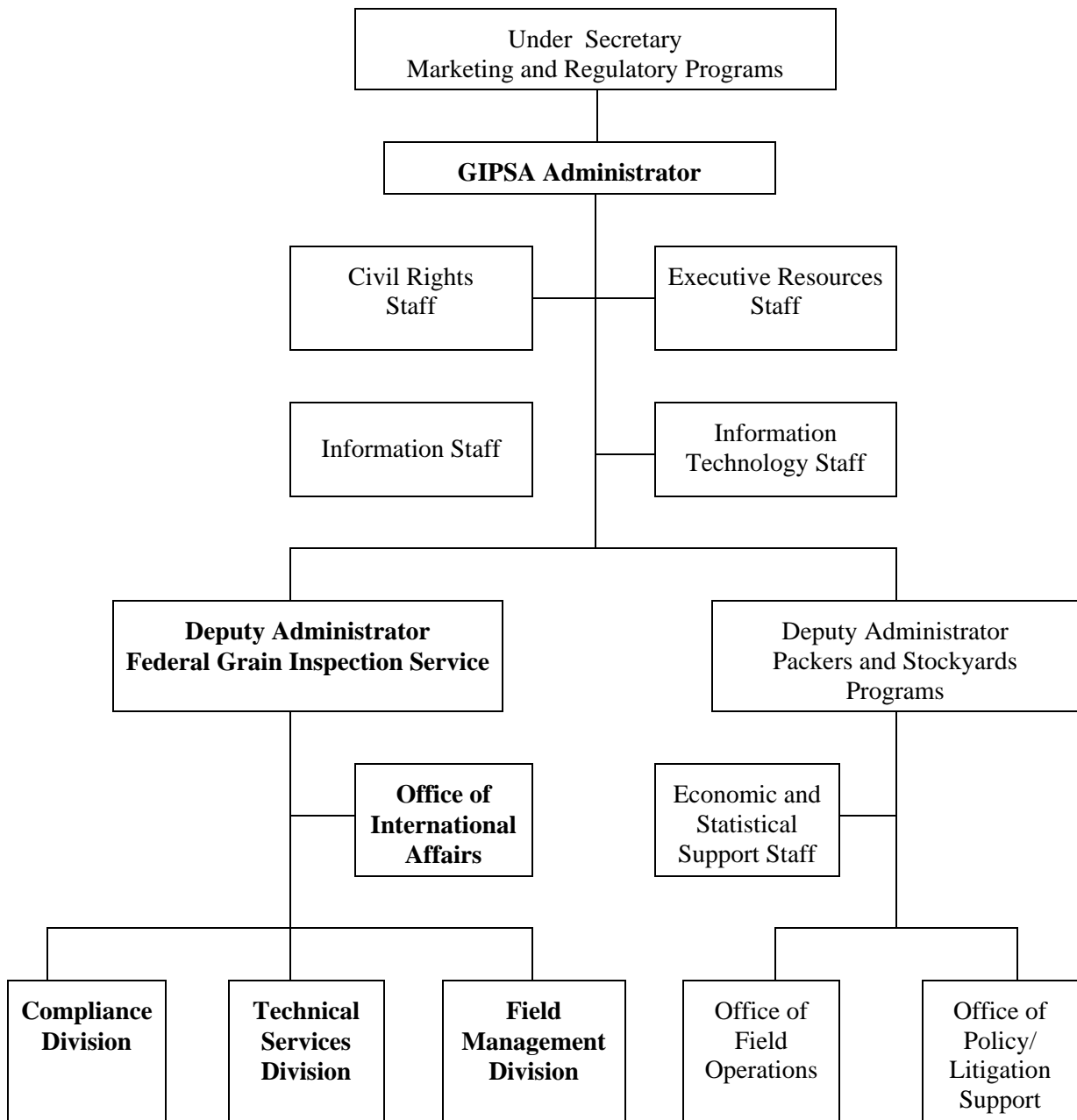
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# **Organizational Structure and Functions**

## GIPSA's Organizational Structure



# Federal Grain Inspection Service

A Federal grain inspection entity was instituted by Congress in 1976 to manage the national grain inspection system, which initially was established in 1916, and to institute a national grain weighing program. The goal of creating a single Federal grain inspection entity was to ensure development and maintenance of uniform U.S. standards, to develop inspection and weighing procedures for grain in domestic and export trade, and to facilitate grain marketing.

## Activities Under the U.S. Grain Standards Act

GIPSA administers uniform, national grain inspection and weighing programs established by the U.S. Grain Standards Act, as amended (hereinafter, the Act). Services under the Act are performed on a fee basis for both export and domestic grain shipments. The Act requires generally that export grain be inspected and weighed; prohibits deceptive practices and criminal acts with respect to the inspection and weighing of grain; and provides penalties for violations.

In administering and enforcing the Act, GIPSA:

- establishes and maintains official U.S. grain standards for barley, canola, corn, flaxseed, oats, rye, sorghum, soybeans, sunflower seed, triticale, wheat, and mixed grain;
- promotes the uniform application of official U.S. grain standards by official inspection personnel;
- establishes methods and procedures, and approves equipment for the official inspection and weighing<sup>1</sup> of grain;

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<sup>1</sup> Official Inspection. The determination by original inspection, reinspection, and appeal inspection and the certification by official personnel of the kind, class, quality, or condition of grain under standards provided for in the Act; or, the condition of vessels and other carriers or receptacles for the transportation of grain insofar as it may affect the quality of such grain under other criteria approved by the Secretary. (The term "officially inspected" shall be construed accordingly.)

Official Weighing. (Class X Weighing). The determination and certification by official personnel of the quantity of a lot of grain under standards provided for in the Act, based on the actual performance of weighing or the physical supervision thereof, including the physical inspection and testing for accuracy of the weights and scales, the physical inspection of the premises at which weighing is performed, and the monitoring of the discharge of grain into the elevator or conveyance. (The terms "official weight" and "officially weighed" shall be construed accordingly.)

- provides official inspection and weighing services at certain U.S. export port locations,<sup>2</sup> and official inspection of U.S. grain at certain export port locations in eastern Canada along the St. Lawrence Seaway;
- delegates qualified State agencies to inspect and weigh grain at certain U.S. export port locations;
- designates qualified State and private agencies to inspect and weigh grain at interior locations;
- licenses qualified State and private agency personnel to perform inspection and weighing services;
- provides Federal oversight of the official inspection and weighing of grain by delegated States and designated agencies;
- provides review inspection services<sup>3</sup> of U.S. grain in the United States and at certain export port locations in eastern Canada;
- investigates, in cooperation with the USDA Office of Inspector General, alleged violations of the Act and initiates appropriate corrective action;
- monitors the quality and weight of U.S. grain as received at destination ports, and investigates complaints or discrepancies reported by importers; and
- helps U.S. trading partners develop and improve their grain inspection and weighing programs.

### **Mandatory Services**

Under provisions of the Act, most grain exported from U.S. export port locations must be officially weighed. A similar requirement exists for inspection, except for grain which is not sold or described by grade. Intercompany-barge grain received at export port locations also must be officially weighed. And, the Act requires that all corn exported from the United States be tested for aflatoxin prior to shipment, unless the contract stipulates that testing is not required.

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<sup>2</sup> Export Port Locations. Commonly recognized ports of export in the United States or Canada, as determined by the Secretary, from which grain produced in the United States is shipped to any place outside the United States. Such locations include any coastal or border location, or any site in the United States that contains one or more export elevators and is identified by FGIS as an export port location.

<sup>3</sup> Review Inspection Service. A reinspection, appeal inspection, or Board appeal inspection service performed when discrepancies are alleged between the true quality of the grain and the inspection results.



Mandatory inspection and weighing services are provided by GIPSA on a fee basis at 38 export elevators (including 4 floating elevators). Six delegated States provide official services at an additional 16 export elevators under GIPSA oversight. Under a cooperative agreement with GIPSA, the Canadian Grain Commission provides official services, with GIPSA oversight, at seven locations in Canada that transship U.S. grain for export.

Grain exporters shipping less than 15,000 metric tons of grain abroad annually are exempt from mandatory official inspection and weighing requirements. Grain exported by train or truck to Canada or Mexico also is exempt from official inspection and weighing requirements. Further, official inspection and weighing requirements do not apply to high-quality specialty grain exported in containers. High-quality specialty grain is defined as grain sold under contract terms that specify all factors exceed the grade limits for U.S. No. 1 grain, except for the factor test weight, or specify “organic” as defined by 7 CFR Part 205. This definition expires July 31, 2010.

**Permissive Services**

Official inspection and weighing of U.S. grain in domestic commerce are performed upon request and require payment of a fee by the applicant for services. Domestic inspection and weighing services are provided by 56 designated agencies that employ personnel licensed by GIPSA to provide such services in accordance with regulations and instructions.

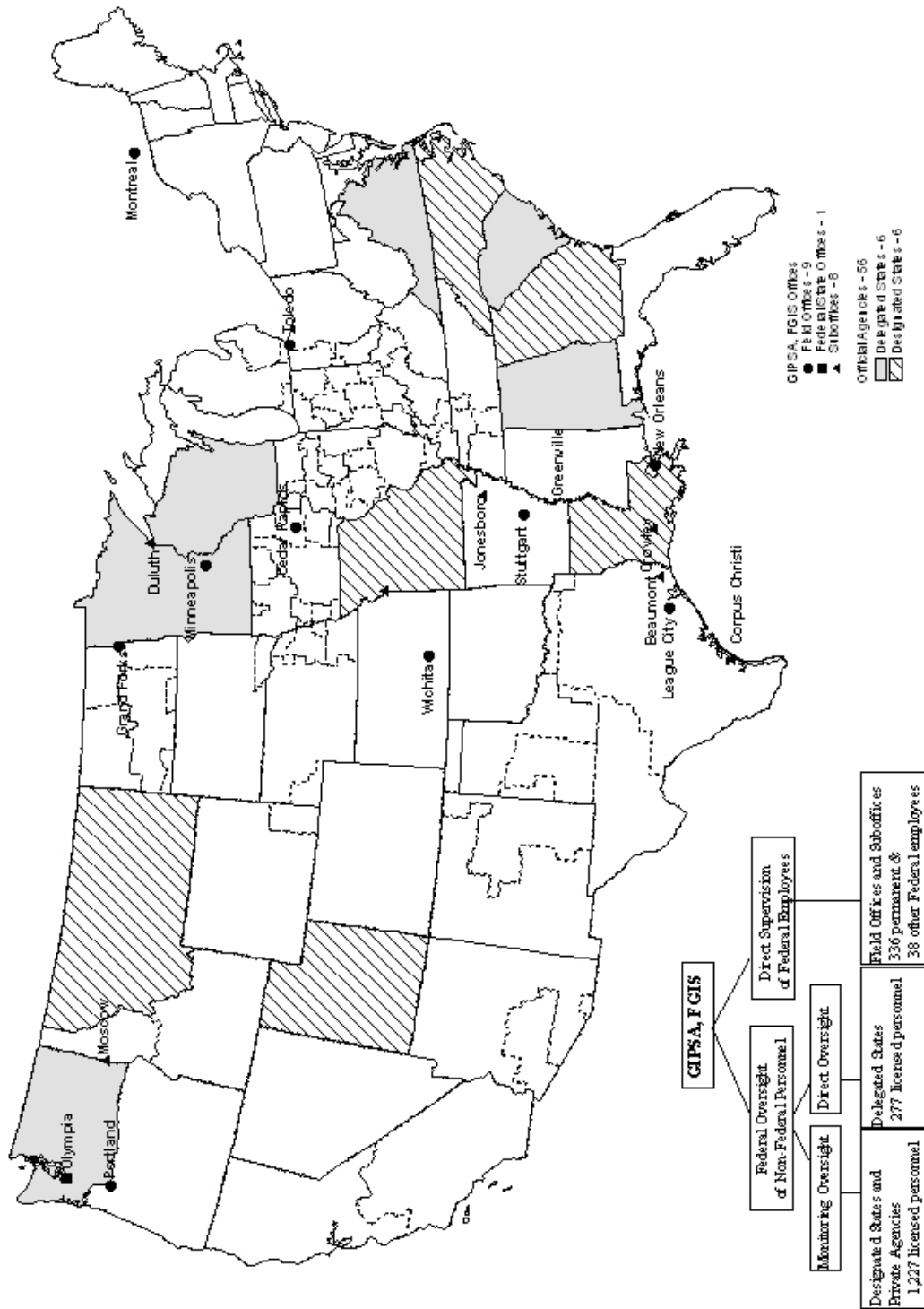
**Activities under the Agricultural Marketing Act**

Under the Agricultural Marketing Act of 1946 (hereinafter, the AMA), GIPSA administers and enforces certain inspection and standardization activities related to rice, pulses, lentils, and processed grain products such as flour and corn meal, as well as other agricultural commodities. Services under the AMA are performed upon request on a fee basis for both domestic and export shipments by either GIPSA employees or individual contractors, or through cooperative agreements with States.

**FGIS Structure**

FGIS is comprised of 476 full-time, permanent employees and 47 part-time, intermittent, or other employees located at a headquarters unit, a technical center, 10 field offices, 1 Federal/State office, and 7 suboffices. FGIS' headquarters is located in Washington, DC. The Technical Center is in Kansas City, MO. Field offices are located in Stuttgart, AR; Sacramento, CA; Montreal, Canada; Cedar Rapids, IA; Wichita, KS; New Orleans, LA; Minneapolis, MN; Kansas City, MO; Grand Forks, ND; Portland, OR; League City, TX; Toledo, OH; and Olympia, WA; thus ensuring the availability of official inspection and weighing services anywhere in the United States and eastern Canada.

# Official Inspection and Weighing Service Providers



**Provision of Inspection and Weighing Services by State**

State	Grain			Commodities		
	State Agencies		Private Designated Agencies	GIPSA Locations	State/Private Agencies	GIPSA Locations
	Delegated	Designated				
Alabama	•	•			•	
Alaska						
Arizona			•		•	
Arkansas			•	•		•
California			•	•	•	
Colorado			•			•
Connecticut						
Delaware						
Florida						
Georgia		•		•	•	
Hawaii						
Idaho			•	•	•	•
Illinois			•	•	•	
Indiana			•			
Iowa			•	•		•
Kansas			•	•		•
Kentucky			•			
Louisiana		•		•	•	•
Maine						
Maryland				•		•
Massachusetts						
Michigan			•			•
Minnesota	•			•	•	•
Mississippi				•	•	
Missouri		•		•	•	•
Montana		•			•	•
Nebraska			•		•	•
Nevada						
New Hampshire						
New Jersey						
New Mexico			•			
New York						•
North Carolina		•			•	
North Dakota			•	•	•	•
Ohio			•	•		•
Oklahoma			•			•
Oregon		•		•	•	•
Pennsylvania						
Rhode Island						
South Carolina	•	•				
South Dakota			•			•
Tennessee			•			
Texas			•	•	•	•
Utah		•				•
Vermont						
Virginia	•	•				
Washington	•	•		*	•	•
West Virginia						
Wisconsin	•				•	•
Wyoming			•		•	•

\* Federal/State office.

## Outlook 2006

### **Wet Gluten Test for Wheat**

The ability to differentiate crop type and quality is a key to meeting customers' needs and maintaining American agriculture's share of the international market. To make the value of wheat more transparent for the producer and buyer, GIPSA is working to develop predictive tests that provide information on end-use quality characteristics. The agency established a reference laboratory, and is now investigating rapid field tests for functionality and varietal identification of wheat. Wheat gluten strength is a key area of focus. Gluten strength affects mixing characteristics, dough strength and stability, and water absorption in foods ranging from breads to cakes to noodles to tortillas. Currently, GIPSA is working with stakeholders to develop a near-infrared transmittance (NIRT) wet gluten rapid test, and is investigating existing physical test methods for gluten strength. This approach addresses both genetic and environmental impacts on wheat quality. GIPSA plans to implement a rapid test for determining wet gluten content in May 2006.

### **Official U.S. Standards for Soybeans**

Researchers have long questioned the relationship of test weight per bushel to end-use functionality in soybeans. In November 2003, the USDA Grain Inspection Advisory Committee passed a resolution recommending that GIPSA propose removing test weight from the standards as a grade-determining factor, and report test weight results to the nearest tenth-pound per bushel. In FY 2006, GIPSA will publish a proposed rule in the *Federal Register* that is in accordance with the Advisory Committee's recommendation.

### **Official U.S. Standards for Sorghum**

GIPSA initiated a review of the U.S. Standards for Sorghum by publishing an Advance Notice of Proposed Rulemaking (ANPR) in the December 17, 2003, *Federal Register*. GIPSA received 35 comments from sorghum market participants including producers, sorghum market development groups, and exporters in response to the ANPR. In FY 2005, GIPSA completed an analysis of stakeholder comments, official inspection data, and other available information. In FY 2006, the Agency will publish in the *Federal Register* a proposed rule to amend the U.S. sorghum standards that will present a full range of views to allow further opportunity for public comment and justification for their views, including comments on terminology and grade limits for certain factors.

### **Corn Fermentable Starch Reference Method**

The use of corn for ethanol production has increased dramatically in recent years. According to the Renewable Fuels Association, there was a 133 percent increase in the use of corn for ethanol production, from 540 million bushels in 1995 to 1.26 million, between 1994 and 2004. The National Corn Growers Association has asked GIPSA to standardize a reference method and rapid tests to determine fermentable starch in corn, an indicator of corn's capacity to produce ethanol. The industry currently

uses two rapid tests based on two different reference methods. By establishing a single standardized reference method for the prediction of fermentable starch, GIPSA will facilitate the marketing of corn used for ethanol production.

**Amino Acid  
Reference Method**

The availability of essential amino acids, the building blocks of protein, is a measure of protein quality. Life science companies are developing soybeans and corn with modified amino acid profiles designed to address specific market needs – and especially for soybean meal nutrition in animal feed. Three products currently in development – high lysine soybeans, high-tryptophan soybeans, and high-methionine soybeans – are targeted for release between 2009 and 2011. The market needs accurate methods to measure these amino acids to capture the increased value of these new products as they are commercially introduced. In 2006, GIPSA will collaborate with the United Soybean Board and life science companies to investigate reference methods for evaluating amino acid profiles in soybeans.

**Pesticide Residue Method  
Development and Testing**

GIPSA continued to participate in the Pesticide Data Program, a cooperative effort of the U.S. Department of Agriculture, the U.S. Environmental Protection Agency, and 10 participating States to monitor pesticide residue levels in fruits, vegetables, grain, and milk. GIPSA tests all grain and grain-related products, and develops new methods of analysis when necessary. In FY 2005, GIPSA developed and validated new methods for wheat and soybeans, and analyzed 307 wheat flour, 698 soybean, and 420 wheat samples. In FY 2006, GIPSA will develop two new methods for the analysis of peanut butter, and analyze about 730 wheat grain, 330 soybean, and 450 peanut butter samples.

**Rice Equipment Evaluation**

GIPSA is exploring new technology to improve its rough rice inspection program. Rice laboratory milling equipment has remained essentially unchanged since its development in the early 1950s. Rice laboratory milling equipment includes a rice sheller, which removes the hulls from the rice, and a rice miller, which removes the bran layers from the rice. Rice laboratory milling equipment is essential in determining critical milling yield determinations in rough rice.

The increasing difficulty in obtaining quality parts for existing equipment that meet GIPSA specifications has accelerated GIPSA's collaborative efforts with the rice industry to identify new and better methods and technologies for determining quality factors in rice that predict milling yield.

During FY 2005, two major rice mills asked GIPSA to test a new multiple-use instrument that performs rice milling and shelling operations in a single operation. To date, GIPSA has performed initial testing of the PAZ-1-DT Testing Rice Mill, manufactured by the Rodson Zaccaria Company.

GIPSA also is exploring the use of near-infrared reflectance technology to determine the factor "degree of milling" in rice samples. GIPSA is collaborating with the University of Arkansas Rice Quality Laboratory

(RQL) to determine the correlation between GIPSA's visual assessment of Degree of Milling (DOM) and surface lipid measurements (either by wet chemistry or near-infrared spectroscopy (NIR)). DOM refers to the extent with which rice has been milled to remove the bran layer(s), and is an indicator of milling quality and the economic value of head rice yield and oil content. The RQL has developed a feasible reference method and is collecting NIR spectral data to develop an NIR calibration to predict DOM. If a field trial scheduled to begin early in FY 2006 is successful, GIPSA may replace the longstanding visual appraisal method with an objective measurement system. This academic partnership has potential to improve the accuracy and reliability of the rice DOM quality assessment.

## Providing the Market with Terms and Methods for Quality Assessments

### **Wheat and Barley Protein Measurement program,**

In FY 2005, GIPSA used artificial neural network (ANN) technology to streamline and improve the accuracy of the wheat protein testing

and to offer, for the first time, a barley protein testing service. The wheat calibration allowed GIPSA to replace six separate calibrations for each of the major market classes of wheat with a single calibration.

The ANN calibration was developed by GIPSA in collaboration with organizations representing Europe and Australia. It improves the international consistency of wheat protein determinations, which, in turn, facilitates the marketing of grain among these markets. In addition, the new calibration makes it easier for the commercial sector to align its instruments with the official system. The ANN calibration also improves the efficiency of the official system's standardization process by replacing six different calibrations for different types or classes of grain and different instrument parameters with a single calibration.

GIPSA conducted an outreach program, providing the results of a field study and impact analysis to the U.S. grain industry prior to the implementation of the new calibration to preclude any market disruptions due to its introduction.

Official wheat and barley protein services using ANN technology facilitates the marketing of these grains by providing a fair, accurate, and transparent third-party determination, backed by a national quality control process, and standardized instrumentation, reference samples, calibration, and procedures.

The switch from the previous partial least squares (PLS) protein measurement technique to a “global” ANN calibration culminated years of research, analysis, and pilot testing.

### **Wheat Functionality: Protein Quality Assessments**

The market needs accurate test methods to differentiate the intrinsic functional qualities of wheat that impact the end products made from it. By providing that information, GIPSA will enhance the value and marketability of U.S. wheat by optimizing the use of U.S. wheat for specific end uses, and providing value transparency from the producer to the processor.

In FY 2005, GIPSA validated and adopted three widely used, internationally recognized reference methods that assess various aspects of protein quality in wheat: the Farinograph reference method to measure water absorption and dough strength; the Glutomatic reference method for

wet gluten quantity; and the Alveograph reference method to measure dough strength. GIPSA is cooperating with U.S. Wheat Associates and the USDA Agricultural Research Service to develop, evaluate, and standardize potential rapid, field-compatible testing methods for determining wheat end-use quality.

### **Low-Linolenic Soybeans**

Life science organizations and breeders are developing new varieties of grains that are designed to meet new labeling requirements, and be more nutritious for human and animal consumption. For example, soybeans with lower linolenic acid levels were introduced during 2004. “Low-lin” soybeans produce oil that has half the linolenic acid level of commodity soybean oil, making it more stable and reducing or precluding the need for hydrogenation – the process that creates unhealthy trans fats in foods.

A 2006 Food and Drug Administration requirement for trans fatty acid content labeling may well drive significant growth in the production of low-linolenic soybeans. The market needs standard quality assessment methods to capture the full value of this emerging product. GIPSA is partnering with the United Soybean Board and others in the soybean industry to ensure that standardized methods are available when needed.

During 2005, GIPSA verified and adopted an American Oil Chemists’ Society (AOCS) gas chromatographic method as a reference method to measure levels of various fatty acids in soybeans, including linolenic acid. Adoption of a reliable reference method was a crucial step towards developing rapid tests for fatty acid contents of soybeans and other grains.

### **Soybean Rust Fungicides**

Asian Soybean Rust, a serious fungal disease that can cause significant crop losses, was introduced in the United States during crop year 2004. To address the appearance of soybean rust, the Environmental Protection Agency (EPA) approved emergency exemptions for use of specified chemicals to treat it. The EPA, USDA, and the American Soybean Association are collaboratively monitoring the increased use of fungicides to combat this new pathogen. GIPSA participated in the development of a nationwide soybean collection plan and analytical methods, and the analysis of soybean samples for fungicides. GIPSA, in cooperation with the USDA Agricultural Marketing Service, is conducting a special study of soybeans for pesticide residues, focusing on samples collected in Southern States in which compounds to control soybean rust will be/are first used. The project will also include some compounds requested by the American Soybean Association for marketing purposes in South America. This 3-month project will be completed December 2005. In FY 2005, GIPSA also developed a method to determine 14 different fungicide active ingredients, and will, in FY 2006, analyze 300 soybean samples from the 2005 crop.

### **Mycotoxin and Biotechnology Test Kit Approvals**

The grain industry needs fast, reliable tests to detect the presence of biotechnology-derived grains and oilseeds and mycotoxin-contaminated grain. To ensure that reliable, rapid tests are commercially available, GIPSA provides a test kit performance verification/approval program. In FY 2005, GIPSA evaluated 10 mycotoxin rapid test kits including 6 qualitative aflatoxin rapid test kits and 4 quantitative aflatoxin rapid test kits. Five qualitative and two quantitative aflatoxin test kits met



performance criteria and received GIPSA Certificates of Performance. Four biotechnology rapid test kits for glyphosate-tolerant corn and soybeans met performance criteria and received Certificates of Performance. In FY 2006, GIPSA will continue to evaluate submitted qualitative and quantitative mycotoxin and biotechnology test kits.

#### **U.S. Standards for Wheat**

On February 18, 2005, GIPSA published a final rule in the *Federal Register* announcing changes to the U.S. Standards for Wheat. Effective May 1, 2006, GIPSA will amend the wheat standards to change the definition of contrasting classes in Hard Red Winter wheat and Hard Red Spring wheat such that Hard White wheat is not a contrasting class but is considered as wheat of other classes. GIPSA also will revise its current policy to classify all Hard White wheat kernels as Hard White wheat, regardless of seed coat color. For samples that challenge the standard visual inspection process, an alkali test developed by the USDA Agricultural Research Service will be used to distinguish between Hard White and Hard Red wheat kernels. These changes were developed based on comments and feedback from the U.S. wheat industry. The early publication of the final rule provides the grain industry over 1 year to prepare for the changes. GIPSA has shared the standards and policy changes with other USDA agencies, numerous media outlets, producer and trade associations, and various State grain and feed and wheat-affiliated associations to encourage the market to take appropriate measures to keep wheat classes separate. The new standard and policy will ensure the purity of both the Hard White and the Hard Red classes, which is essential to promote market growth and meet the needs of those making high-quality wheat products for consumers around the world.

#### **U.S. Standards for Feed Peas**

In response to a request from the U.S. Dry Pea and Lentil Council (USDPLC) and other industry representatives, GIPSA began developing standards for feed peas. Feed peas are yellow or green dry peas that are intended for feed purposes. Both Canada and Australia have standards for feed peas, which the USDPLC and GIPSA are using as a guide to establish U.S. standards. During FY 2005, GIPSA and the USDPLC held several meetings to discuss various quality issues directly related to the proposed standards. GIPSA expects to finalize the standards within calendar year 2005.

#### **U.S. Standards for Beans**

In July 2005, GIPSA amended the U.S. Standards for Beans to remove the special grade designation "off-color" from the standards. Removing the off-color designation from the official standards will better align them with current processing and marketing needs and facilitate the marketing of beans from many different regions.

#### **Standardizing Commercial Grain Inspection Equipment**

In FY 2005, GIPSA continued to participate in an ongoing cooperative effort among GIPSA, NCWM, Inc., and the National Institute for Standards and Technology (NIST) to standardize commercial inspection equipment by serving as the sole evaluation laboratory for grain inspection equipment under NCWM, Inc.'s National Type Evaluation Program (NTEP). In FY 2005, GIPSA collected grain moisture meter calibration data for five instrument models as part of the ongoing NTEP calibration program. Calibrations developed in this program provide

traceability back to the official GIPSA moisture program and air oven reference method, and can be used in the majority of moisture meters used in commercial transactions throughout the United States. Under a formal interagency agreement, GIPSA will continue to support the NTEP grain moisture calibration data collection program through 2009.

During FY 2005, GIPSA's NTEP laboratory evaluated the test weight feature on two grain moisture meter models and one near-infrared protein and oil analyzer model. The near-infrared analyzer uses the same barley and wheat protein calibrations as GIPSA's official inspection program.

In FY 2006, GIPSA will again collect grain moisture meter calibration data for five NTEP models and plans to finalize NTEP testing for one near-infrared analyzer that offers protein, oil, and moisture results, the test weight feature on one current NTEP grain moisture meter model, and one grain moisture meter model with test weight feature. GIPSA testing activities will be expanded as needed to address new applications for NTEP evaluation.

#### **Reference Method Analyses**

GIPSA maintains reference methods for protein, moisture, oil, fatty acid composition, and mycotoxins. These methods are used to maintain the accuracy of current testing in the official inspection system and as the basis for development of new rapid field methods. The protein, moisture, oil, and fatty acid reference analyses support the near infrared transmittance (NIRT) for protein testing, moisture meter, and nuclear magnetic resonance (NMR) instruments for oil testing that are used for rapid inspection by the official inspection system. The mycotoxin reference analyses support the evaluation and standardization of test kits for official and commercial grain inspection. In FY 2006, GIPSA will continue to provide quality reference method analyses in support of the development of new testing methods and in the maintenance of accurate field testing for the official inspection system.

#### **Moisture Measurement Methods**

GIPSA is working to improve the overall accuracy and consistency of grain moisture measurements for U.S. market participants and our international customers. Based on research that GIPSA conducted between 1999 and 2001, the Agency developed a Unified Moisture Algorithm, a single calibration that can be used for 15 grain types that provides prediction accuracy equal to that of individual grain calibrations available on current moisture meter designs. GIPSA extended data collection to include 53 grain types, including minor grains, beans, pulses, and oilseeds. GIPSA subsequently met with manufacturers to assess their interest in the development of prototype meter designs that will employ the moisture algorithm and identify how best to support and encourage manufacturer efforts. As commercial development of a prototype meter using the single moisture algorithm was undertaken, the Agency supported research to define test cell design and performance parameters. In FY 2005, one manufacturer introduced a new moisture meter based on the GIPSA-developed algorithm and several others were actively

developing compatible instruments. In FY 2006, GIPSA will continue to support research efforts and prototype meter development, and will continue to expand the calibration database as part of a long-term effort to develop and implement this new technology.

### **ISO Registration**

The International Organization for Standardization (ISO) represents the national standards institutes and organizations of more than 100 countries, including the American National Standards Institute (ANSI). The American Society of Quality, the European Standards Institute, and the Japanese Industrial Standards Committee are a few of the major quality organizations that have endorsed ISO Standards, which are becoming the de facto standards across industries throughout the world. GIPSA maintained ISO 9000:2000 registration for its primary reference methods (protein, oil, and moisture) and its Pesticide Data Program to enhance international credibility and acceptance of its results.

### **Biotechnology**

GIPSA continues to partner with international organizations such as the Codex Alimentarius Commission, International Organization for Standardization (ISO), AOAC International, American Association of Cereal Chemists (AACC), Institute for Reference Materials and Measurements (IRMM), and National Institute for Standards and Technology (NIST) to facilitate the harmonization of testing for biotechnology-derived grains and oilseeds.

**Proficiency Program.** GIPSA expanded its internationally recognized Proficiency Program, which enables organizations testing for the presence of biotechnology-derived grains to identify deficiencies and improve testing methodologies to enhance the accuracy and reliability of testing for biotechnology-derived events. In FY 2005, 115 organizations voluntarily participated in the program, 70 percent of which were from Africa, Asia, Europe, South America, and other areas outside the United States.

**Bt10 Method Verification.** Between 2001 and 2004, Bt10, an unapproved biotechnology event in corn, was introduced into some commercial corn varieties. GIPSA evaluated and confirmed the performance of a method to determine the unapproved event. Subsequently, Japan requested testing of all U.S. corn shipments at origin for the unapproved Bt10 event. GIPSA's work contributed to the harmonization of methods being used to monitor for this event and helped maintain open markets for U.S. corn, especially in Japan.

**IRMM Reference Materials Testing:** GIPSA is working to harmonize reference materials with the European Commission's Institute for Reference Materials (IRMM) to minimize potential trade disruptions between the two markets. For more than 3 years, GIPSA has offered a Biotechnology Proficiency Program to organizations testing for biotechnology-derived grains to help improve the accuracy and reliability of testing for biotechnology-derived events. It is important to confirm that the GIPSA proficiency samples and the newly introduced IRMM reference materials provide consistent results. In addition, GIPSA is collaborating with the IRMM to determine the feasibility of using

plasmids as reference materials in lieu of ground grain. GIPSA will also continue collaborative efforts with IRMM and with NIST to standardize reference materials into FY 2006.

**Visual Reference Material**  
tool

GIPSA's Visual Reference Image (VRI) system serves as the primary tool to ensure standardization of GIPSA's subjective quality control program. In FY 2005, GIPSA began developing technology to supplement printed VRI with Web-based digitally displayed VRI. In FY 2006, GIPSA will test the technology at 13 field offices.

**U.S./Mexico**  
and  
**Standardization Projects**

Mexico is the United States' second most valuable customer for grain oilseed exports. GIPSA has been working with Mexico's private and public grain sectors to promote the use of U.S. sampling and inspection methods to minimize differences in test results between GIPSA's export certificates and the receiver. During FY 2005, GIPSA, with assistance from the American Association of Grain Inspection and Weighing Agencies and USDA cooperators, conducted seminars at three major grain importing locations in Mexico to promote the official inspection system and educate buyers on grain contracting, U.S. grain standards, sampling, and inspection procedures.

GIPSA and Mexico's Ministry of Agriculture established a Government-to-Government Consultative Grain Industry Group as a technical-level forum, open to the public, to address cross-border grain trade issues and standardize Mexico's sampling and inspection methods to mirror GIPSA's. Mexican officials have asked GIPSA to continue holding grain marketing seminars throughout Mexico and provide technical assistance in setting up a grain reference laboratory in Reynosa, Mexico, mirrored after GIPSA's.

GIPSA organized a team comprised of agency officials, as well as representatives of the USDA Animal and Plant Health Inspection Service and USDA Foreign Agricultural Service to visit key Mexican border inspection offices to discuss Mexico's inspection and clearance process for U.S. grain shipments to Mexico, and to explain our national inspection system and quality control programs. Mexican officials plan to send local inspectors to the United States to learn more about GIPSA's sampling and inspection procedures.

**International Briefings**

GIPSA personnel frequently meet with delegations visiting from other countries to brief them on the U.S. grain marketing system, our national inspection and weighing system, U.S. grain standards, and GIPSA's mission. Many of these delegations are sponsored by USDA cooperator organizations like U.S. Wheat Associates and U.S. Grains Council, which arrange visits to grain production areas, GIPSA field offices, onsite laboratories at export grain elevators, and the Agency's Technical Center in Kansas City, Missouri, where delegations sometimes receive technical training on analytical testing procedures and grain inspection methods and procedures.

Briefings are tailored to address each group's specific interests. Presentations include explanations of the various services available from GIPSA, the Agency's use of the latest technology to provide grain traders with accurate and reliable inspection and weighing information and, for importers or potential importers new to the U.S. grain market, information on contracting for the quality they desire. These briefings foster a better understanding of the U.S. grain marketing system and the official U.S. grain standards and the national inspection system, and enhance purchasers' confidence in U.S. grain.

## **International Outreach**

In FY 2005, GIPSA continued to respond to customers' needs for technical assistance overseas. Exporters, importers, and end users of U.S. grains and oilseeds, as well as other USDA agencies, USDA cooperator organizations, and other governments, frequently ask for GIPSA personnel to travel overseas. These activities include representing the Agency at grain marketing and grain grading seminars, meeting with international governments and grain industry representatives to resolve grain quality and weight discrepancies, helping other countries develop domestic grain and commodity standards and marketing infrastructures, assisting importers with quality specifications, and training local inspectors in U.S. inspection methods and procedures.

Such activities typically have been funded through various programs administered by the Foreign Agricultural Service, Farm Service Agency, directly by USDA cooperators, or by GIPSA. The 1995 amendment to the U.S. Grain Standards Act provided GIPSA the authority to charge and be reimbursed for travel, salary, and related expenses when a customer requests our consultative expertise. The authority to recover costs for providing consultative services has enhanced the Agency's ability to facilitate marketing of U.S. grains, oilseeds, and related commodities.

During fiscal year 2005, GIPSA helped install and checktest laboratory equipment to inspect and grade wheat in Yemen; conducted wheat grading and inspection seminars in El Salvador and Tunisia; worked with Algerian grain buyers to address Karnal bunt concerns; met with Peruvian officials to discuss the effects of their new rice import regulations; developed sample collection procedures for Japan's Ministry of Agriculture, Forestry and Fisheries; participated in several international meetings on implementing the Biosafety Protocol; and continued to work with Chinese officials to discuss biotechnology, the Biosafety Protocol, and their impact on trade.

We also directed efforts to reopen Iraqi grain markets to the United States for the first time since 1999, leading to wheat sales of \$107 million in 2005. On five occasions, a GIPSA technical specialist monitored and provided on-site technical inspection expertise for wheat shipments, from their departure point in the United States to their arrival in Syria and final destination in Baghdad.

During fiscal year 2005, GIPSA placed a representative in Asia on a 3-month temporary duty assignment, then a subsequent 4-month

assignment, to work proactively with overseas customers and their Governments on issues related to grain trade. GIPSA's presence in the

region allows the Agency to effectively address immediate and long-term issues in the region, promote a better understanding and adoption of U.S. sampling and inspection methods to minimize differences in results, and develop and strengthen personal relationships with customers, USDA cooperators, and Government officials.

**Summary of Briefings with  
Visiting Trade and  
Governmental Teams  
In Fiscal Year 2005**

Algeria	Japan
Argentina	Jordan
Australia	Kenya
Brazil	Korea
Commonwealth of Independent States	Latvia
Canada	Malaysia
Chile	Mexico
China	Morocco
Denmark	Nigeria
Czech Republic	Oman
Ecuador	Paraguay
Egypt	Peru
Finland	Philippines
France	Romania
Guatemala	Russia
Germany	Senegal
Ghana	South Africa
Hungary	Swaziland
Indonesia	Taiwan
Iraq	Thailand
Ireland	Tunisia
Italy	Turkey
	Uruguay
	Yemen

**Summary of Activities  
Involving International  
Travel in Fiscal Year 2005**

<i>Purpose</i>	<i>Number of Travelers</i>	<i>Country Visited</i>	<i>Dates of Visit</i>
1. To provide export services on shipments of U.S. grain.	1	Canada	10/07 – 10/17/04
2. To participate in a 2-month regional assignment to address immediate and long-term issues.	1	China, Malaysia, Singapore, Indonesia, Thailand, Philippines, Vietnam, Japan	10/25 - 12/17/04
3. To participate in a workshop on capacity building and exchange of experience relating to the documentation requirements of the Biosafety Protocol.	1	Germany	10/30 – 11/04/04
4. To provide export services on shipments of U.S. grain.	1	Canada	11/07 – 11/21/04
5. To meet with government and private sector officials and begin discussions to help Serbia develop grades and standards for grains and fresh produce.	1	Serbia	11/14- 11/19/04
6. To give a presentation on U.S. soybean standards and GIPSA's quality control programs at the American Soybean Association's Latin America Conference; and to give a presentation at the Annual APPAMEX (Mexican grain importer association)/NAEGA (North American Export Grain Association) Grain Trade Forum.	1	Mexico	11/15 - 11/21/04



*Continued*

<i>Purpose</i>	<i>Number of Travelers</i>	<i>Country Visited</i>	<i>Dates of Visit</i>
7. To participate in grain marketing seminars in several locations in Mexico.	1	Mexico	11/28 – 12/04/04
8. To attend a workshop on biotech testing methodologies and risk assessments; also gave a presentation on the status of testing for biotech attributes in grain, and a hands-on testing demonstration.	2	China	12/12-12/18/04
9. To participate in bilateral discussions on agricultural biotechnology and to discuss the Biosafety Protocol.	1	Japan	01/10-01/14/05
10. To provide export services on shipments of U.S. grain.	1	Canada	01/26/05-02/03/05
11. To give presentation at a National Grain Trade Council meeting regarding GIPSA's outreach activities in Mexico and differences in grain inspection procedures between the United States and Mexico.	1	Mexico	02/02-2/05/05
12. To provide export services on shipments of U.S. grain.	1	Canada	02/16-02/20/05
13. To attend a hemispheric meeting to discuss approaches to satisfying documentation requirements of the Biosafety Protocol.	1	Argentina	02/20/05-02/24/05
14. To participate in a meeting of the North American Biotech Initiative (NABI).	1	Mexico	03/06-03/10/05
<i>Continued</i>			

<i>Purpose</i>	<i>Number of Travelers</i>	<i>Country Visited</i>	<i>Dates of Visit</i>
15. To advise flour millers on the installation and checktesting of wheat inspection and grading equipment. Also provided wheat grading and equipment training to Yemen authorities.	1	Egypt, Yemen	03/09-03/28/05
16. To participate in a 2-month regional assignment to address immediate and long-term issues.	1	China, Malaysia, Singapore, Taiwan	03/09/05 – 05/04/05
17. To participate in a Technical Experts Group meeting to discuss documentation requirements of the Biosafety Protocol.	1	Canada	03/15-03/18/05
18. To observe inspection activities performed by Iraqi Grain Board inspectors on a shipment of U.S. wheat.	1	Syria, Iraq	03/28-04/14/05
19. To participate in the meeting of the CODEX Committee on Methods of Analysis and Sampling as the alternate U.S. delegate.	1	Hungary	04/03/05 – 04/08/05
20. To give a wheat grading seminar for importers.	1	Dominican Republic	04/19-04/21/05
21. To observe inspection activities performed by Iraqi Grain Board inspectors on a shipment of U.S. wheat.	1	Syria, Iraq	05/11-05/23/05
22. To visit several Mexican border inspection offices to discuss Mexico's inspection and clearance process for U.S. grain shipments.	1	Mexico	05/15-05/24/05
23. To witness vessel fumigation at the request of the exporter.	1	Mexico	05/18-05/19/05

*Continued*

Purpose	Number of Travelers	Country Visited	Dates of Visit
24. To meet with the U.S. grain trade representatives to explain new quality and phytosanitary inspection procedures, and to provide export services on shipments of U.S. grain.	4	Canada	05/23-05/26/05
25. To participate in the second meeting of the Conference of the Parties serving as the Meeting of the Parties to the Cartagena Protocol on Biosafety (COP-MOP 2).	1	Canada	05/27-06/04/05
26. To provide export services on shipments of U.S. grain.	1	Canada	06/01-06/05/05
27. To participate in the U.S. Wheat Associates' Southeast Asian Buyers Conference with presentations on progress in rapid prediction of wheat quality.	1	Vietnam	06/03-06/12/05
28. To observe sampling activities performed by Iraqi Grain Board inspectors on a shipment of U.S. wheat.	1	Syria	06/17-06/25/05
29. To discuss GIPSA's inspection and certification programs at a North African regional wheat marketing seminar.	1	Tunisia	06/18-06/22/05
30. To attend the Canadian Grain Commission Conference on technical and trade issues regarding variety identification.	3	Canada	06/27-07/01/05
<i>Continued</i>			

Purpose	Number of Travelers	Country Visited	Dates of Visit
31. To participate in a 2-month regional assignment to address immediate and long-term issues.	1	Hong Kong, Malaysia, the Philippines, Singapore, Vietnam, Japan, and Thailand	07/18-09/30/05
32. To participate in a meeting of the North American Biotech Initiative and to discuss implementation of the Cartagena Protocol.	1	Mexico	07/20-07/22/05
33. To make a site visit to Montreal Field Office.	4	Canada	07/24-08/05/05
34. To observe sampling activities performed by Iraqi Grain Board inspectors on a shipment of U.S. wheat.	1	Syria	07/28-08/08/05
35. To participate in bilateral meetings of the U.S.-China High Level Biotechnology Joint Working Group, and to discuss biotech regulatory policy, technical cooperation, and information exchange.	1	China	08/14-08/20/05
36. To conduct wheat grading seminars at the request of U.S. Wheat Associates.	1	El Salvador	08/22-08/25/05
37. To make a technical presentation on sampling and detection of grains produced through modern biotechnology.	1	Germany	09/04-09/09/05
38. To observe sampling activities performed by Iraqi Grain Board inspectors on a shipment of U.S. wheat.	1	Syria	09/04-09/23/05
<i>Continued</i>			

Purpose	Number of Travelers	Country Visited	Dates of Visit
39. To participate in a joint meeting of the North American Biotech Initiative and the biotechnology group of the South American Agricultural Council.	1	Argentina	09/20-09/23/05
40. To discuss the effects of new rice import regulations.	1	Peru	09/26-09/28/05

## Protecting the Integrity of U.S. Grain and Related Markets

### **Alleged Violations**

At the beginning of FY 2005, GIPSA was addressing 12 cases involving alleged violations of the USGSA and the AMA pending further action. During FY 2005, GIPSA opened 5 cases relating to alleged violations of applying improper procedures and exporting grain without obtaining official services. GIPSA took administrative action to close 6 cases during the year, including sending cautionary letters to 4 grain companies; closed one due to insufficient facts to determine if a violation occurred. Ten cases were pending at the end of the fiscal year.

### **Registration**

The USGSA requires that all persons who buy, handle, weigh, or transport grain for sale in foreign commerce register with GIPSA. During calendar year 2005, GIPSA issued 97 Certificates of Registration to individuals and firms involved in foreign commerce grain business.

### **Compliance Reviews**

Compliance reviews are independent third-party reviews of GIPSA's grain inspection and weighing field operation, which includes Federal, State, and private laboratories. During FY 2005, GIPSA conducted onsite compliance reviews of 2 GIPSA offices, 2 Federal/State offices, 4 State departments of agriculture, and 18 private agencies. Review teams evaluated customer satisfaction, including potential service delivery discrimination, management effectiveness and efficiency, and procedural compliance. GIPSA found no instances of service delivery discrimination. All identified noncompliance items were corrected. None of the findings during the onsite compliance reviews appear to have affected the overall integrity of the national inspection system.

### **Delegation and Designation Program**

GIPSA oversees 56 official agencies that are designated under the USGSA, as amended, to provide permissive official inspection and/or weighing services at domestic locations. Of these, 6 are States that are also delegated to provide mandatory official inspection and weighing services at export locations. Delegations are permanent unless GIPSA or the State terminates the agreement.

During FY 2005, one State voluntarily canceled both its delegation and designation due to financial considerations. The intermittent need for export services within that State will be met by the local GIPSA field office. Through a competitive process, GIPSA selected two private official agencies to provide domestic services within the State. A second State voluntarily canceled its designation. Through a competitive process, GIPSA designated an existing private official agency to provide domestic services within the State.

Under the triennial renewal process, 20 official agency designations automatically terminated in FY 2005. GIPSA renewed 18 of the 20 for full 3-year terms after reviewing their performance. One official agency was designated for 1 year due to repeat non-compliances, and one State

was designated for 18 months due to poor management. GIPSA designated an official private agency in a previously unassigned area where a need for official services was demonstrated.

**Conflicts of Interest**

At the beginning of FY 2005, three designated official agencies were operating with discretionary conflict-of-interest waivers. All three agencies remain designated with these waivers.

**Drug-Free Workplace**

As each designated official agency becomes eligible for designation renewal, it must certify to GIPSA that it provides a drug-free workplace. Each of the 20 agencies renewed in FY 2005 and the new agencies that were designated in FY 2005 provided this certification.

**Exception Programs**

During FY 2005, GIPSA continued to operate three exception programs to gather information on the effect of allowing more than one designated official agency to inspect or weigh grain in a single geographic area.

The timeliness-of-service exception program allows official agencies to provide service to facilities located outside of their assigned geographic area on a case-by-case basis when official service cannot be provided within established timeframes. During FY 2005, two facilities used the timely service exception.

The nonuse of the service exception program allows official agencies to offer their service to facilities outside their assigned area if no official service has been provided during the previous 3 months. During FY 2005, 107 facilities received 261,148 inspections under this program. This included 522 for barges, 73,719 for railcars, and 186,907 other inspections (e.g., trucks, containers, and Starlink™ testing).

The barge exception program allows customers shipping grain in barges to select any official agency to probe-sample and inspect the grain. During FY 2005, two facilities received five barge inspections under this program.

**International Complaints**

GIPSA administers a grain quality and weight discrepancy process. When an importer of U.S. grain reports a quality or weight discrepancy, GIPSA analyzes samples retained on file from the original inspection and samples submitted from destination (if the buyer chooses to submit them) to evaluate whether the discrepancy was due to differences in samples or procedures, or to an actual change in quality from the time of the original inspection. The process verifies whether the original inspection and weighing service provided at the time of loading was correct, based on all available information. GIPSA then issues a report of its findings and provides suggestions to avoid similar discrepancies in the future.

Occasionally, a particular buyer or importing country reports repeated discrepancies that cannot be resolved by a shipment-by-shipment review under this process. In such cases, GIPSA may institute collaborative sample studies or joint monitoring activities to address the discrepancy in a more comprehensive manner.

In FY 2005, GIPSA received 10 quality complaints and 1 weight



complaint from importers on grains inspected under the U.S. Grain Standards Act, as amended. These complaints involved 456,069 metric tons, or about 0.4 percent by weight, of the total amount of grain exported during the year. This compares to 4 quality and 0 weight complaints received in FY 2004, representing about 0.1 percent of grain exports by weight.

To provide more of a historical perspective, in the last 5 years, GIPSA received an average of 11.2 complaints per year, representing about 0.3 percent of U.S. grain exports by weight. Fifteen years ago (1985 to 1989), we received an average of 47.8 complaints per year, or about 1.9 percent of U.S. grain exports by weight.

**Summary of Complaints  
Reported by Importers on  
Inspection and Weighing  
Fiscal Year 2005**

<i>Complainant</i>	<i>Grain</i>	<i>Number of Complaints</i>	<i>Nature of Complaint</i>
<b>Africa and Middle East</b>			
South Africa	Wheat	1	Infestation
Sudan	Sorghum	1	Infestation
Syria	Soybeans	1	Foreign material
Yemen	Wheat	2	Damaged kernels
<b>Asia</b>			
Japan	Wheat	1	Odor
Korea	Corn	2	Moisture, broken corn and foreign material
Taiwan	Wheat	1	Short weight
<b>South America</b>			
Chile	Wheat	1	Damaged kernels total
Peru	Wheat	1	Rust Scale
<b>TOTAL</b>		<b>11</b>	



## Providing Official Grain Inspection and Weighing Services

**Protein Testing Services** On May 1, 2005, GIPSA implemented an Artificial Neural Network (ANN) wheat calibration for official wheat protein testing on all classes of wheat. The technology improves the efficiency, accuracy, and consistency of official domestic and international grain quality measurements --especially for protein extremes and diverse sample types (i.e., frost damaged kernels, bleached kernels). On July 1, 2005, GIPSA offered its first barley protein testing service using the ANN calibration.

**Process Verified Program** GIPSA established a process verification program to support the market's move toward increased use of identity preservation and similar marketing mechanisms to meet changing consumer demands. Quality management systems are becoming increasingly important as customers seek more information about non-content factors, and as more value-enhanced grains enter the commercial market for which rapid tests are not available or cannot meet the full needs of buyer and seller. To complement these systems, GIPSA has developed a voluntary, fee-based "Process Verified Program" for grains and related commodities. Under the program, an organization develops its own quality management system and verification points to meet its customers' demands, add value to the product, and make its business unique among competitors. Through audits and reviews, GIPSA verifies that an organization is measuring up to its own requirements. Successful completion of GIPSA verification permits a company or organization to market its process or product as "*USDA Process Verified.*"

The service is voluntary and modeled on the Agricultural Marketing Service's (AMS) existing programs that are used for breed identification, branded products, and origin of livestock. GIPSA has further established continuity with the AMS program by working with them under a Memorandum of Understanding to perform audits and provide billing. Two grain handlers and two feed mills have been approved under the USDA Process Verified Program.

In FY 2005, GIPSA continued working with the Iowa, Illinois, and Missouri Corn Growers Associations to develop production protocols to market grain under GIPSA's voluntary Process Verified Program. Protocols were designed to market specialty crops and to document processes used to produce commodity corn to meet ever-increasing requirements of various outlets using quality management systems.

**Grain Inspection Automation** During FY 2005, GIPSA completed the final phase of accuracy testing for  
**at Export Elevators** a prototype automated grain inspection system in Destrehan, Louisiana. The prototype was developed by GIPSA in collaboration with the North American Export Grain Association (NAEGA). GIPSA completed the

testing, which involved a side-by-side comparison with established inspection operations. The system demonstrated acceptable accuracy for use in the official inspection system for the factors broken corn and foreign material and moisture in corn, and dockage, moisture, and protein. However, operational considerations, including system durability and the unavailability of spare parts for the system, preclude its use for routine shiplot loading. The system documentation and specifications are available for further study and commercial development of the system at other locations.

### **Short Voyage Fumigation**

The U.S. Environmental Protection Agency requires that grain shipments fumigated with aluminum phosphide, the industry-standard fumigant, must be exposed to the fumigant for a minimum of 72 hours. To facilitate the marketing of grain, GIPSA published procedures allowing the “infested” designation to be removed from the quality certificate for waterborne shipments of 5 days or less duration that have been properly fumigated but determined to contain live insects injurious to stored grain. In cooperation with the grain industry, GIPSA is continuing research into methods and fumigants that allow the fumigant to reach desired concentration levels quickly.

### **AMA Review Inspection Regulatory Change**

In August 2002, GIPSA proposed amending the regulations under the USGSA to allow requests for reinspection and appeal inspections on one or more grade or condition factors. All comments received supported the change, and a final rule was published in October 2003.

During the comment period for the proposal, GIPSA received requests from associations involved with graded commodities inspected under the authority of the Agricultural Marketing Act of 1946 (AMA), as amended, to extend this proposal to include graded rice and pulses. In response, GIPSA drafted a proposal to amend regulatory provisions of part 868 of the AMA to allow interested parties to specify which quality factor(s) should be redetermined during the appeal or Board appeal inspection service. The docket was finalized and published in the *Federal Register* on July 7, 2005. The comment period ended on September 6, 2005. GIPSA anticipates that the final rule will be published shortly.

### **Processed Commodities Testing**

GIPSA operated a user-fee funded program that primarily tested U.S. Department of Agriculture-purchased processed grain products (e.g., wheat flour, corn soy blend, corn syrup, and vegetable oil) for compliance with contract specifications. In 2000, USDA’s Farm Service Agency (FSA), GIPSA’s largest customer for laboratory testing services, implemented a new program that switched from end-item testing of finished product characteristics to monitoring manufacturing processes to determine if suppliers of the USDA food aid programs produce and provide the desired products to food aid recipients.

Since the implementation of FSA’s new program, GIPSA’s user-fee laboratory activities supporting USDA purchases have declined below the level necessary to financially justify continued daily operations. Consequently, GIPSA adjusted its laboratory resources to reflect the significant decline in demand for processed commodity analytical testing services, limiting the availability of certain tests. To ensure cost-effective

commodity testing services are available when needed, GIPSA expanded partnerships with other Federal, State, and commercial laboratories that offer such services. These partnerships make it possible for customers to continue to obtain GIPSA-certified results if requested.

### **Educational Material**

GIPSA provides educational materials and grading aids to its customers through various outlets, at industry meetings and trade shows, and to the public through the GIPSA website. In FY 2005, GIPSA developed inspector calibration content for corn, soybeans, white wheat classification, and wheat sprout damage. In FY 2006, GIPSA will refine the content of existing materials, and develop grading tutorials for rice inspection.

**Inspection Program Data  
Fiscal Years 2003-2005**

Item	Fiscal Years		
	2003	2004	2005
Quantity of Grain Produced <sup>1</sup> (Mmt) <sup>2</sup>	371.9	405.0	461.8
Quantity of Grain Officially Inspected (Mmt)			
Domestic	136.1	135.8	137.0
Export by GIPSA	71.6	76.3	69.9
by Delegated States	19.9	24.4	25.8
by Designated Agencies	<u>5.0</u>	<u>4.9</u>	<u>6.9</u>
Total	232.6	241.4	239.6
Delegated States/Official Agencies			
Delegated and Designated States	7	7	6
Designated States	6	6	5
Private Agencies	<u>43</u>	<u>43</u>	<u>45</u>
Total	56	56	56
State/Private Agency AMA Agreements	20	18	18
Number of Official Original Inspections			
GIPSA	95,580	101,578	98,593
Delegated States/Official Agencies	<u>2,426,699</u>	<u>2,477,141</u>	<u>2,754,233</u>
Total	2,522,279	2,578,719	2,852,826
<i>(continued)</i>			

<sup>1</sup> Source: USDA World Agricultural Supply and Demand Estimates. This figure includes production of wheat, corn, sorghum, barley, oats, and soybeans.

<sup>2</sup> Million metric tons.

Item	Fiscal Years		
	2003	2004	2005
Number of Grain Reinspections			
GIPSA	3,560	3,026	3,865
Delegated States/Official Agencies	<u>23,140</u>	<u>16,071</u>	<u>22,289</u>
Total	26,700	19,097	26,554
Number of Grain Inspection Appeals			
Field Offices	3,781	3,556	1,716
Board of Appeals and Review	<u>504</u>	<u>575</u>	<u>404</u>
Total	4,285	4,131	1,120
Number of Official Commercial Inspections			
GIPSA	8	0	25
Delegated States/Official Agencies	<u>713,375</u>	<u>789,996</u>	<u>977,946</u>
Total	713,383	789,996	977,971
Number of Wheat Protein Inspections			
GIPSA	20,025	24,446	21,599
Delegated States/Official Agencies	<u>424,851</u>	<u>431,829</u>	<u>444,053</u>
Total	444,879	457,130	465,652
Number of Soybean Protein and Oil Inspections			
GIPSA	16,232	12,957	16,688
Delegated States/Official Agencies	<u>20,345</u>	<u>16,657</u>	<u>16,677</u>
Total	36,577	29,614	33,365
Number of Grain Aflatoxin Inspections			
GIPSA	29,016	32,526	29,391
Delegated States/Official Agencies	<u>82,249</u>	<u>69,725</u>	<u>67,264</u>
Total	111,265	102,251	96,655
Number of DON Inspections			
GIPSA	9,524	10,601	11,027
Delegated States/Official Agencies	<u>37,976</u>	<u>34,060</u>	<u>77,117</u>
Total	47,500	44,661	88,144
<i>(continued)</i>			

Item	Fiscal Years		
	2003	2004	2005
Number of StarLink™ Tests			
GIPSA	1,785	2,167	2,588
Delegated States/Official Agencies	<u>37,863</u>	<u>27,304</u>	<u>21,219</u>
Total	39,648	29,471	23,807
Quantity of Rice Produced (Mmt) (milled)	9.1	10.5	10.0
Quantity of Rice Inspected (Mmt) (milled)	3.7	2.5	3.0
Number of Rice Inspections			
GIPSA	42,607	42,659	49,348
Cooperators	<u>2,535</u>	<u>1,578</u>	<u>4062</u>
Total	45,142	44,237	53,410
Number of Rice Appeals	246	189	125
Number of Rice Board of Review Appeals	19	10	22
Quantity of Pulses Produced (Mmt) (beans, peas, lentils)	1.4	1.5	2.0
Quantity of Pulses Inspected (Mmt)			
GIPSA	.3	.3	.5
Cooperators	<u>.1</u>	<u>.1</u>	<u>.1</u>
Total	.4	.4	.6
Number of Pulse Inspections			
GIPSA	13,569	11,265	12,771
Cooperators	<u>4,073</u>	<u>3,928</u>	<u>4,839</u>
Total	17,642	15,193	17,610
Number of Pulse Appeals	209	124	153
Number of Pulse Board of Review Appeals	5	16	12



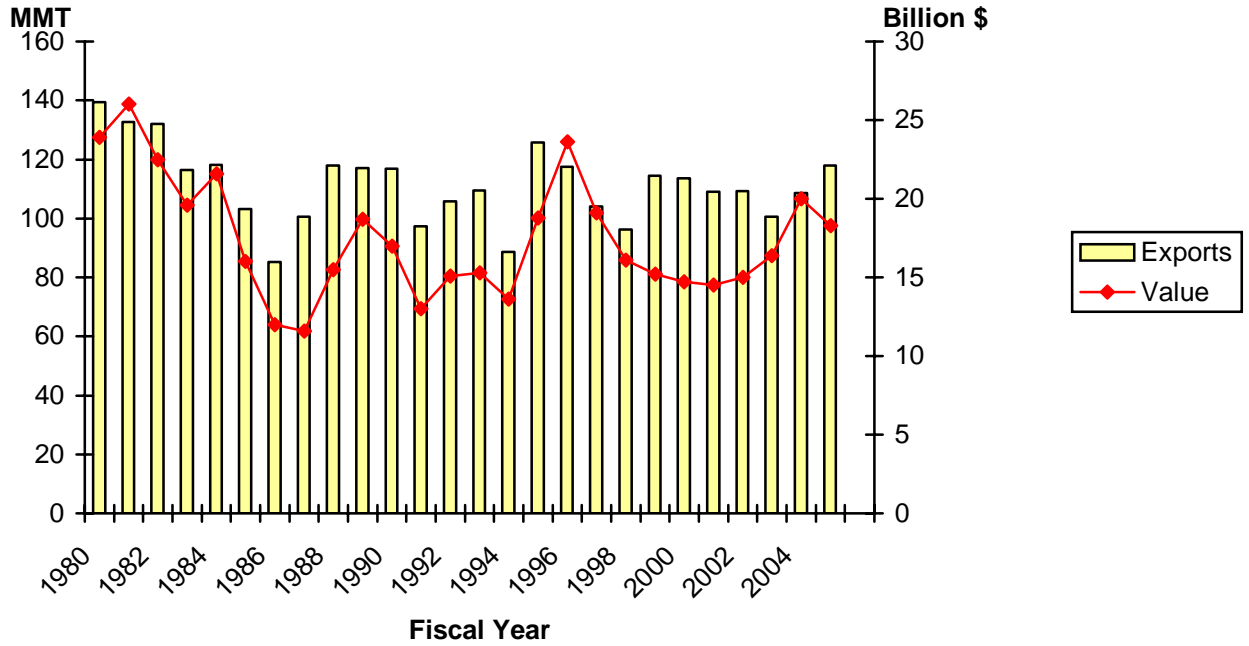
**Weighing Program Data  
Fiscal Years 2003-2005**

Item	Fiscal Years		
	2003	2004	2005
Official Weight Certificates Issued			
GIPSA			
Class X <sup>1</sup>	80,546	82,418	77,684
Class Y <sup>2</sup>	<u>5,153</u>	<u>3,562</u>	<u>4,037</u>
Total	85,699	85,980	81,721
Delegated States/Official Agencies			
Class X <sup>1</sup>	19,977	16,810	44,541
Class Y <sup>2</sup>	<u>110,272</u>	<u>106,978</u>	<u>99,029</u>
Total	130,249	124,886	143,570
Exported Grain Weighed (Mmt)			
GIPSA	71.6	76.4	69.8
Delegated States	<u>19.9</u>	<u>24.4</u>	<u>26.3</u>
Total	91.5	100.8	96.1
Number of Certified Scales in Service			
Export Elevators	240	230	210
Number of Scales Tested			
Railroad Track Scales	240	240	240
Hopper Scales	763	730	736
Vehicle Scales	70	75	120

<sup>1</sup> Class X weighing involves 100 percent supervision.

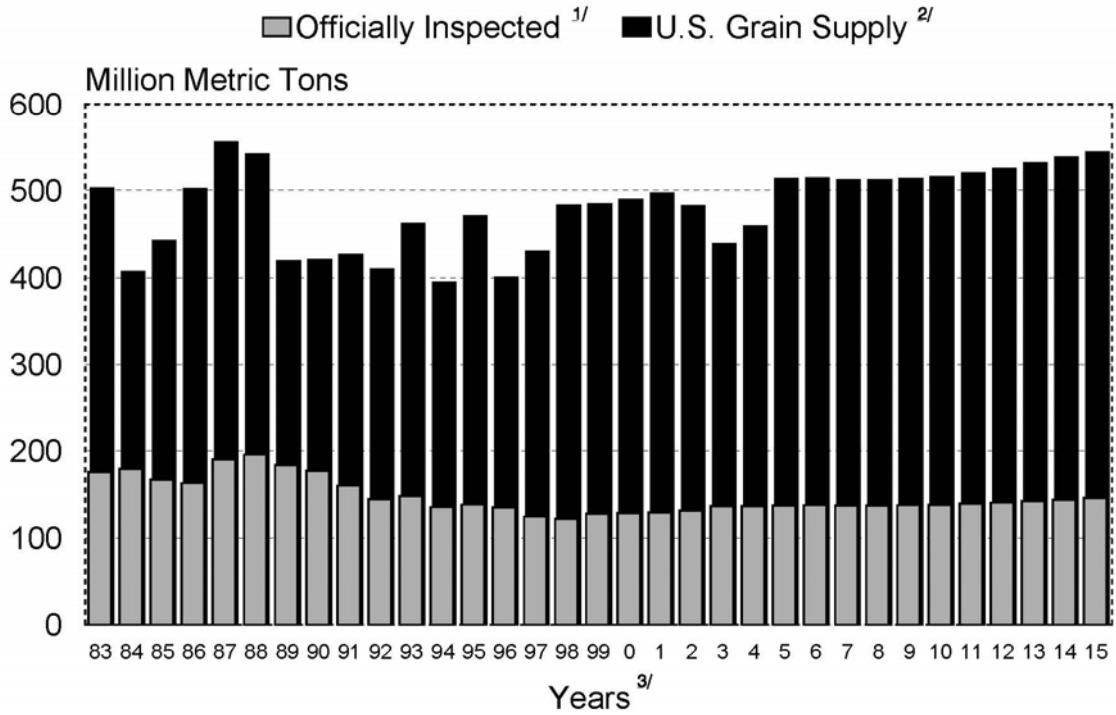
<sup>2</sup> Class Y weighing involves a minimum of 25 percent supervision.

## U.S. Grain, Oilseed, and Rice Exports: Volume and Value



Sources: FGIS Export Grain Inspection System and the USDA Economic Research Service

## U.S. DOMESTIC GRAIN INSPECTIONS



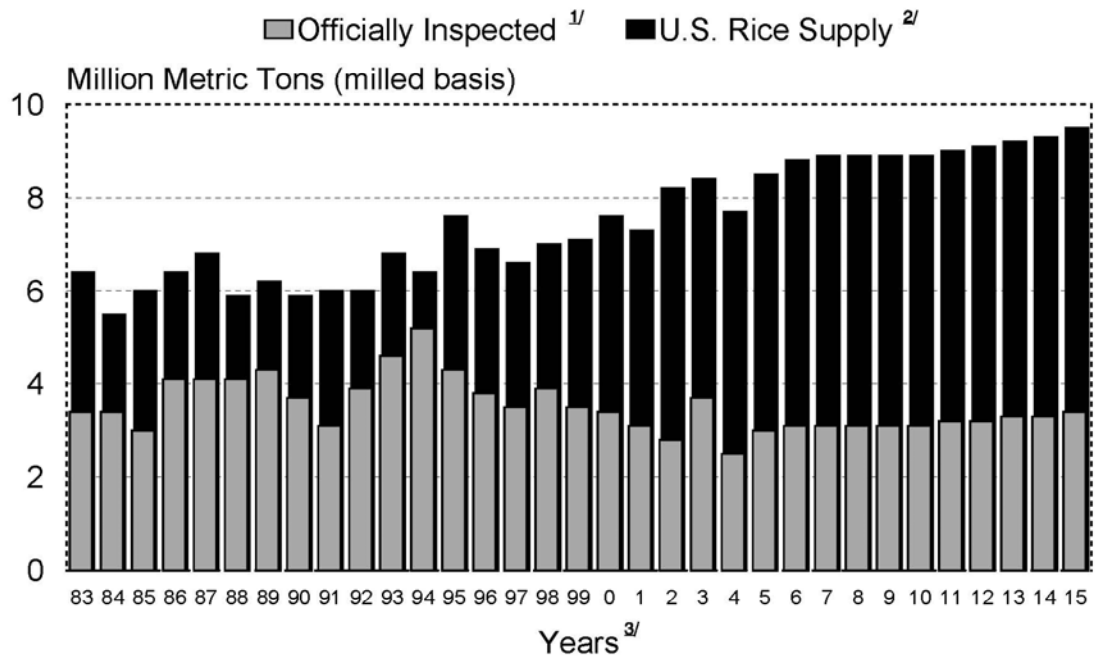
Source:

<sup>1/</sup> GIPSA, GIWIS for 1983 - 05 and 2005 inspection rate (26.7%) applied to estimated supplies for 2006-2015.

<sup>2/</sup> USDA, ERS market year figures for 1983 - 2003, WASDE (Oct. 12, 2005) for 2004-2006 and WAOB baseline projections for 2007-2015.

<sup>3/</sup> Domestic inspections are reported by fiscal years and U.S. grain supplies are by marketing years.

## U.S. RICE INSPECTIONS



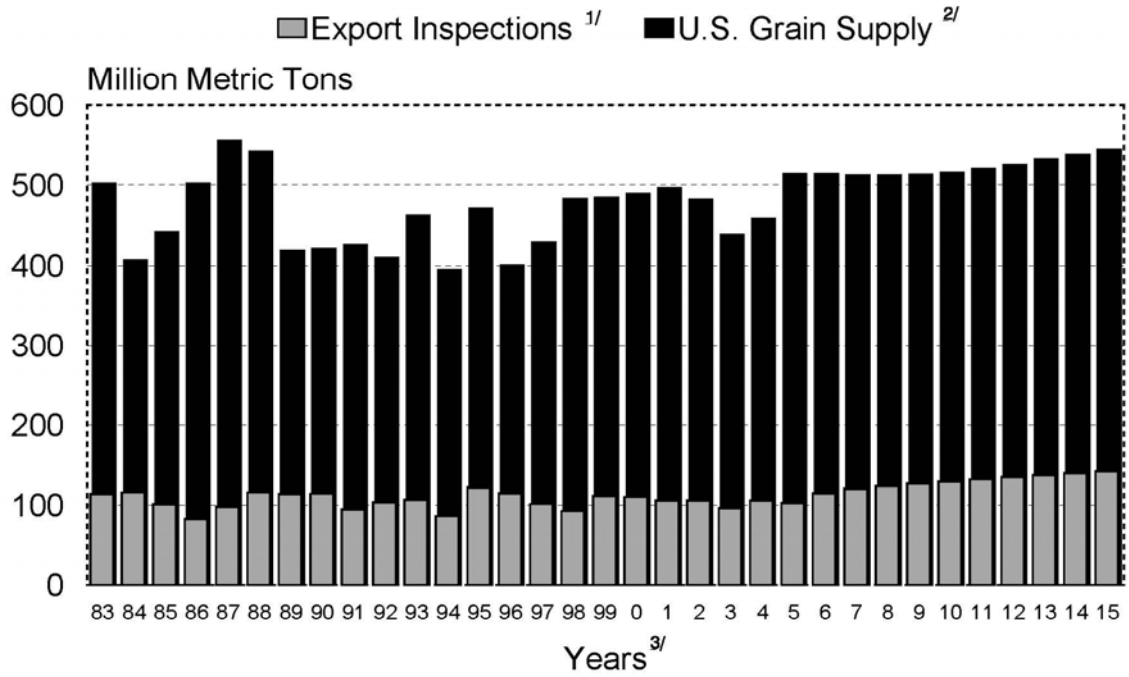
Source:

<sup>1/</sup> GIPSA, AMA Output Reports for 1983 - 05 and 2005 inspection rate (35.3%) applied to estimated supplies for 2006-2015.

<sup>2/</sup> USDA, ERS market year figures for 1983-2003, WASDE (Oct. 12, 2005) for 2004-2006, and WAOB baseline projections for 2007-2015.

<sup>3/</sup> Inspections are reported by fiscal years and U.S. rice supplies are by marketing years.

## U.S. EXPORT GRAIN INSPECTIONS



Source:

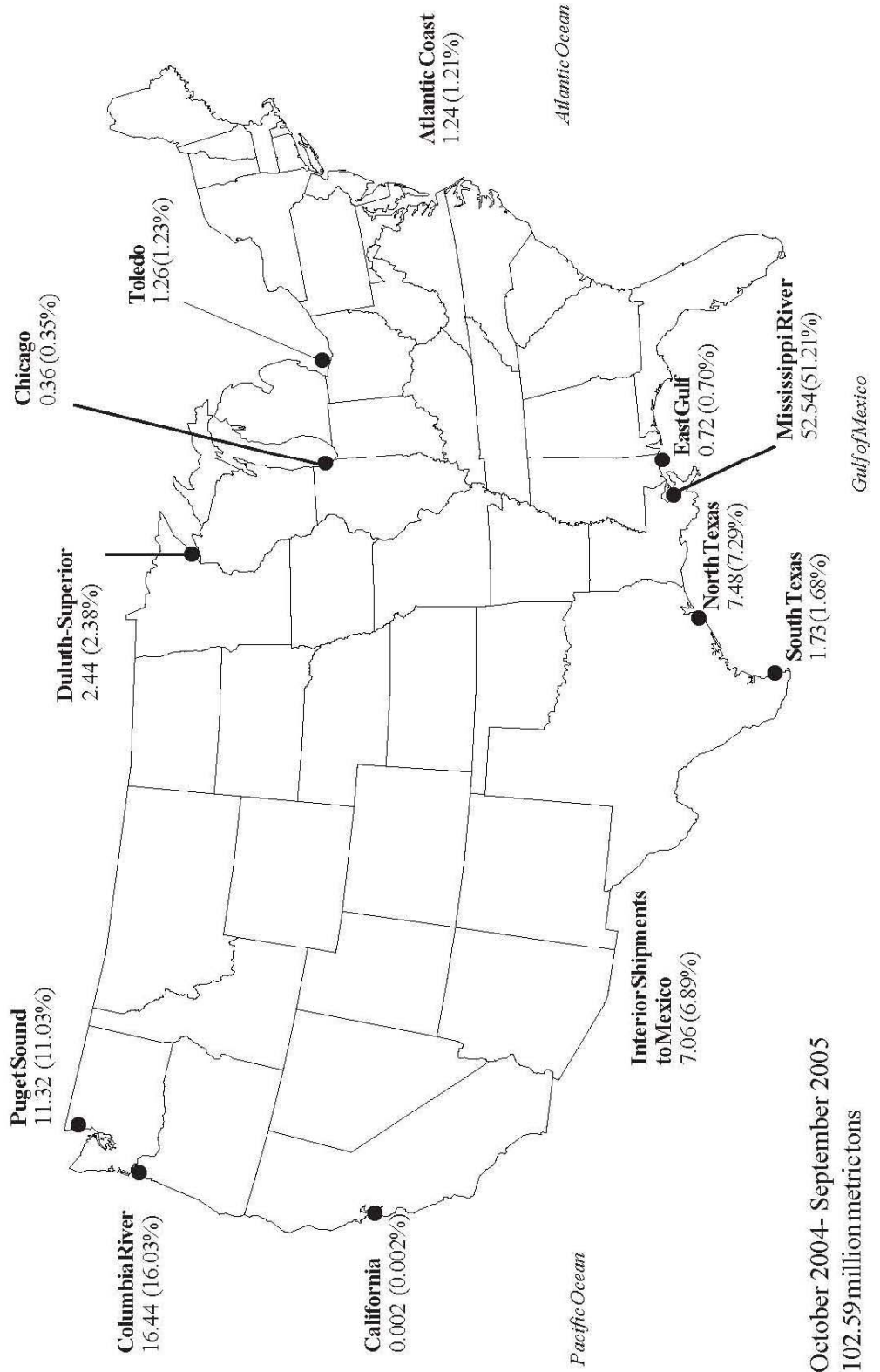
1/ GIPSA, EGIS for 1983 - 05, WASDE (Oct. 12, 2005) for 2006, and WAOB baseline projections for 2007-2015.

2/ USDA, ERS market year figures for 1983 - 03, WASDE (Oct. 10, 2005) for 2004-2006, and WAOB baseline projections for 2007-2015.

3/ Export inspections are reported by fiscal years and U.S. grain supplies are by marketing years.

# Volume of U.S. Grain Inspected for Export by Area Fiscal Year 2005

Million Metric Tons



October 2004- September 2005  
102.59 million metric tons

## Management Initiatives

### Reauthorization

On September 30, 2006, the President signed into law, S. 1752, which reauthorizes the United States Grain Standards Act through 2015. Specifically, the law reauthorizes several sections required for the continued operation of GIPSA's grain inspection program: authorization to collect inspection fees (Section 7(j)(4)); authorization to collect weighing fees (Section 7A(1)(3)); limitation on administrative and supervisory costs (Section 7D); authorization of appropriations (Section 19); and authorization of the Advisory Committee (Section 21(e)).

### Hurricanes Katrina and Rita

GIPSA grain inspection operations and personnel were impacted by Hurricanes Katrina and Rita. Through the superlative efforts of employees in New Orleans, with the support of a headquarters operations center, all agency employees were located, and, within 48 hours, inspection personnel were working with industry to get the export port operations online. Within a week, an alternate field office was set up and field office operations were responding to industry service requests. Local GIPSA employees, many of whose homes were lost or destroyed, were on duty. Within 3 weeks, the New Orleans Field Office was fully operational. GIPSA's Beaumont, Texas, and Crowley/Lake Charles, Louisiana, offices took direct hits from Hurricane Rita. The Crowley/Lake Charles office suffered moderate damage and was fully functional within a week. The Beaumont suboffice was severely damaged by Rita and closed for a month but is now fully operational. No service requests were denied as a result of the hurricanes – GIPSA personnel were on duty and ready to provide service as soon as the industry resumed operations.

GIPSA is proud of all of its employees' efforts and professionalism in the face of these catastrophic storms. Our local personnel showed fortitude and determination in addressing both the personal and work-related challenges engendered by the storms. Our headquarters and field employees across the country responded quickly and with equal determination to help our colleagues with administrative, logistical, communications, personal, and other needed support. And, together, GIPSA employees ensured uninterrupted service to American agriculture.

### Competitive Sourcing

GIPSA's competitive sourcing program remains on schedule. The Agency completed its FAIR Act Inventory on schedule and prior to the Department's targeted deadline. The inventory defines Inherently Governmental and Code "A" Commercial positions. GIPSA also completed its Fiscal Year 2006 – 2009 Competitive Sourcing "Green" plan in a timely manner.

During fiscal year 2005, GIPSA completed a feasibility study on the potential costs and benefits of outsourcing the rice inspection program. The study involved approximately 46 positions in Arkansas, Mississippi, and Louisiana. GIPSA presented the results of the study to the Department and the Office of Management and Budget (OMB). GIPSA found that a competitive sourcing study should result in a substantial savings over 5 years. However, an unexpected and significant reduction in the rice inspection program's workload occurred in August 2005. This change in service demand may invalidate the completed competitive sourcing study.

GIPSA plans to review and adjust the initial A-76 Feasibility Review based on new staffing requirements and program operations to determine whether competitive sourcing continues to offer potential savings to the rice inspection program and long-term savings to the rice industry.

**Enterprise Architecture**  
upon

GIPSA continues to modernize its entire application portfolio, based

results of its Enterprise Architecture effort to improve the efficiency and effectiveness of service delivery by streamlining business practices and improving customer service. The name of this program is the GIPSA Application Modernization (GAM). During FY 2005, GIPSA neared completion on 10 of the 29 GAM projects comprising GIPSA's Enterprise Architecture, including the following applications that will be used by or are specific to FGIS: eAuthorization System, Issue Tracking, Organization and Personnel, Agricultural Product Standards, Letter Generation, Website Redesign, Inspection & Weighing Certificates, and Inspection Data Warehouse. The applications are undergoing final testing prior to deployment. GIPSA's goal is to provide single data entry; online application of core business practices; and a national inspection data warehouse, accessible to our customers and business partners through the internet, for better, faster, more responsive service (customer self-service).

**Continuity of Operations  
Plan and Crisis Action Team**

GIPSA is continuing to work with the USDA Office of Crisis Planning and Management (OCPM) to refine the Department's Continuity of Operations Plan (COOP) and to support and staff the Department's Crisis Action Team (CAT). Last year, GIPSA updated its Supplement to the USDA Headquarters COOP Plan, which was initially issued in April 2003. The Agency's COOP and CAT representatives also participated in a number of USDA and Marketing and Regulatory Program-sponsored COOP exercises and training sessions, including a major government-wide exercise that was held in June 2005.

During FY 2005, GIPSA safety and health officers conducted site visits at GIPSA regional and field office duty points, reviewed local COOP plans and physical security measures, and participated in information-sharing sessions with office supervisors and employees.

**Homeland Security**

GIPSA continued to provide technical assistance to the USDA Homeland Security Office. Additionally, GIPSA participated on an FBI-led team that conducted a threat assessment of a major export grain elevator. This was the first of several joint FBI-USDA teams that were deployed to



assess the threat risk of key agricultural assets.

During FY 2005, the Agency continued to work with the National Food Laboratory Steering Committee to coordinate and integrate resources to support key components of the Food Emergency Response Network (FERN).

**Safety and Health Training**

In FY 2005, GIPSA recast its Safety and Health Training Program and established strict training requirements and guidelines, including mandatory and optional safety and health training requirements, requirements for specific groups of employees, and optional training methods. The goal of these program improvements is to decrease injuries, lower workers' compensation expenses, and prevent employee deaths and premature retirements.

**Summary of Reported  
Agricultural Dust Explosions  
Fiscal Years 2003 –2005**

	<b>2005</b>	<b>2004</b>	<b>2003</b>
Number of Explosions	10	6	6
Number of Injuries	3	3	7
Number of Deaths	1	0	2

**Reported Agricultural  
Dust Explosions  
FY 2005**

<b>Facility</b>	<b>Location</b>	<b>Date</b>	<b>Injuries</b>	<b>Fatality</b>
Farmers Cooperative	Lanesboro, IA	08/22/05	0	0
Southern States Cooperative	Winchester, KY	08/02/05	0	0
Anderson	Toledo, OH	07/01/05	0	0
Tyson Food Incorporated	Sebree, KY	06/06/05	0	0
United Harvest	Vancouver, WA	05/25/05	0	0
Hutchinson Coop	Hutchinson, MN	04/08/05	0	0
Pilgrims Pride	Arcadia, LA	01/25/05	1	0
ADM Milling Company	Enid, OK	01/24/05	1	1
Anderson Grain Elevator	Champaign, IL	10/06/04	0	0
Iams Company	Leipsic, OH	12/03/04	1	0



## Financial Information

### Fee Activity

**Supervision Fees.** GIPSA implemented a final rule in the *Federal Register* (70 FR 50149) on October 1, 2005, to increase fees assessed to delegated States and designated official agencies authorized by GIPSA to provide official inspection and weighing services to the U.S. grain industry. The fee adjustment was necessary to ensure GIPSA collects sufficient revenue to cover the current and future cost of supervising the performance of the official agencies. These fees (except for ship fees) were last amended in 1985. At that time, supervision fees were lowered an average 40 percent to systematically reduce an accumulated \$4.5 million reserve in retained earnings.

GIPSA regularly reviews its user-fee-financed programs to determine if the fees are adequate. GIPSA recognizes the need to reduce inspection and weighing supervision costs as much as possible before increasing fees and, therefore, has taken action through the years to minimize costs. GIPSA plans to further reduce future costs by initiating a transition to a central monitoring program. This action, scheduled for implementation in fiscal year 2008, should reduce overall operating expenses an estimated \$1.2 million. Implementing the central monitoring process, coupled with a new supervision fee, will help GIPSA attain an adequate 3-month retained earnings balance.

**Rice Inspection Program.** GIPSA's recent review of the rice program fees in light of competitive outsourcing requirements also identified a need to amend the fees to recover costs. Although GIPSA continues to seek cost-saving opportunities and implement appropriate changes to reduce its costs, the Agency has determined the existing rice service fees will not generate sufficient revenues to cover program costs while maintaining the Agency's 3-month operating reserve. During fiscal year 2006, GIPSA plans to propose a fee increase.

**Status of GIPSA Fee-Supported Accounts  
Fiscal Year 2005**

<b>Program</b>	<b>Revenue 09/30/05</b>	<b>Obligations 09/30/05<sup>7</sup></b>	<b>Profit/(Loss) 09/30/05</b>	<b>Trust Fund 09/30/05</b>
<b>US Grain Standards Act</b>				
Canadian Operations	\$ 392,102	\$ 315,171	\$ 76,931	\$ 75,347
Inspection & Weighing	28,462,684	27,859,164	603,520	(41,237)
Official Agencies	1,797,548	1,828,576	(31,028)	851,026
Registration	16,845	6,521	10,324	107,417
<b>USGSA Subtotal</b>	<b>\$ 30,669,179</b>	<b>\$ 30,009,432</b>	<b>\$ 659,747</b>	<b>\$ 992,553</b>
<b>Agricultural Marketing Act</b>				
Rice Inspection	4,392,124	4,694,756	(302,632)	476,072
Commodity Inspection	2,197,198	2,296,333	(99,135)	2,043,360
<b>AMA Subtotal</b>	<b>\$ 6,589,322</b>	<b>\$ 6,991,089</b>	<b>\$ (401,767)</b>	<b>\$ 2,519,432</b>
<b>Total Fiscal Year 2005</b>	<b>\$ 37,258,501</b>	<b>\$ 37,000,521</b>	<b>\$ 257,980</b>	<b>\$ 3,511,985</b>

**GIPSA's Appropriated Budget Authority  
Fiscal Years 2000-2005**

*Dollars in thousands*

<b>Appropriated Funds</b>	<b>FY 2000</b>	<b>FY 2001</b>	<b>FY 2002</b>	<b>FY 2003</b>	<b>FY 2004</b>	<b>FY 2005</b>
Budget Authority						
Federal Grain Inspection Service	\$11,505	\$14,195	\$15,244	\$15,244	\$16,939	\$17,491
Packers and Stockyards Programs	15,128 <sup>4</sup>	17,355 <sup>5</sup>	17,873	23,426	18,951	19,510
<b>Total Budget Authority</b>	<b>\$26,633</b>	<b>\$31,550</b>	<b>\$33,117<sup>6</sup></b>	<b>\$39,950<sup>7/5</sup></b>	<b>\$35,890<sup>6</sup></b>	<b>37,001<sup>8</sup></b>

4 Includes a \$200,000 transfer from the Office of the Secretary for mandatory price reporting activities.

5 Includes a \$199,560 permanent supplemental appropriation for mandatory price reporting activities included in Public Law 106-554.

6 Reduced by a rescission of \$51,071.

7 Reduced by a rescission of \$259,675.

5 Includes \$2 million that was reprogrammed to the FGIS Inspection and Weighing user fee account.

6 Reduced by a rescission of \$212,000 under H.R. 2673.

7 Unofficial; Official year-end data is delayed due to Hurricane Katrina disaster.

8 Reduced by a rescission of \$284,013 under P.L. 108-447.