



Agriculture and Markets

2019 Annual Report



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Overview

The New York State Department of Agriculture and Markets (the Department) promotes New York agriculture and its high-quality and diverse products, fosters agricultural environmental stewardship, and safeguards the State's food supply, plant industry, land, and livestock to ensure the viability and growth of New York's agricultural industries.

Approximately 20% of New York's land area, or nearly 7 million acres, is farmland. The State is home to nearly 33,500 family farms producing some of the world's best food, helping to drive the economy. New York is a major agricultural state, ranking in the top ten in production of 30 commodities. It is the second largest producer of apples, snap beans, and maple syrup. It ranks third in cabbage, grapes, and dairy, which is the largest segment of the State's agricultural sector. Section 164 of the Executive Law directs the Department to annually submit a report of its activities to the Governor and the Legislature. This 2019 Annual Report outlines Department actions through its central administration and programmatic divisions, including the divisions of agricultural development, animal industry, food safety and inspection, land and water, milk control and dairy services, plant industry, weights and measures, the Food Laboratory, and the Great New York State Fair.

Administration

Staffing

The Department's permanent administrative staff of 60 full-time employees perform the fiscal management, human resources, legal services, special projects, and executive management functions for the agency. All agency administration staff are located in the Albany headquarters.

Counsel's Office

Counsel's Office provides legal advice and representation to Department officers in connection with the exercise of their powers and duties under New York State and applicable federal law. Specifically, the division:

- Advises on issues arising under State and federal law and responds to requests of governmental entities for interpretation of the Agriculture and Markets Law (AML);
- Develops and coordinates the Department's legislative program, including the drafting of proposals and support memoranda, negotiation of bill language, and the research and analysis of bills relevant to the Department's work;
- Develops regulations and represents the Department in rulemaking proceedings;
- Represents the Department in administrative, judicial and other proceedings, both seeking to enforce the AML and responding to challenges to the Department's actions;
- Administers and collects civil penalties;
- Provides advice regarding procurement issues and best contracting practices;
- Prepares, reviews, and negotiates contracts, grants, and memoranda of understanding;
- Provides legal support services to the State Soil and Water Conservation Committee;
- Represents the interests of agricultural resources and farmers in proceedings before the Public Service Commission;
- Conducts investigations concerning, among other things, possible violations of the Agriculture and Markets Law, Department personnel matters and ethics issues;
- Performs risk analyses; and
- Responds to requests for Department records in conformance with the Public Officers Law.

In 2019, the Division completed the following:

Litigation and Contested Matters	374	Regulations	12
Adjudicatory Proceedings	118	Ethics Law Reviews	155
Contracts	1018	FOIL Requests	334
Opinions	70	Miscellaneous	13
Legislation	2	Penalty Litigation	274
Notices of Intent	90		

Fiscal Management

The Division of Fiscal Management provides financial and office services to support the programs and employees of the Department. The division ensures that State and other resources allocated to the Department are used effectively and in accordance with applicable laws and regulations. Fiscal Management administers all agency budget development, coordination, and execution activities, and all fiscal and business management services. Specifically, the division:

- Prepares the annual agency budget request;
- Assigns appropriated funds and prepares fiscal plans;
- Performs revenue accounting, fiscal monitoring, and budget execution;
- Reviews and processes contracts, purchases, and travel vouchers;
- Manages all agency spending and reporting requirements for the Minority and Women Owned Business Enterprises program and the Service-Disabled Veterans Business Development program;
- Acts as a liaison with the Business Services Center regarding the agency payroll;
- Performs office services such as fleet management and space and telecomm planning;
- Completes federal grant applications, billings, and indirect cost proposals; and
- Manages inventory systems and procedures to safeguard physical assets.

In 2019, the division completed the following:

Contracts Processed	1,116	Travel Approvals	3,400
Vouchers Processed	7,536	Size of Vehicle Fleet	176
MWBE Vendor Spending	37%		

Human Resources

The Division of Human Resources Management facilitates the Department's core mission by ensuring that the workforce is competent and productive. This is accomplished through the administration of Civil Service Law, rules and regulations, negotiated agreements, and other State and federal laws.

Major responsibilities include recruitment, position classification, exam development, labor relations, training, and health and safety. Specifically, the division:

- Manages agency recruitment and terminations;
- Classifies jobs to ensure equitable salary distribution based on position requirements;
- Administers disciplinary processes and procedures;
- Develops examinations with the Department of Civil Service;
- Develops succession plans to ensure agency goals are continually met;
- Administers the Performance Evaluation Program;
- Presents or arranges for employee training;
- Administers compliance with the Americans with Disabilities Act, processes Reasonable Accommodation requests, researches Family Medical Leave Act issues, advises staff on Paid Family Leave Act eligibility, and manages the Ethics Law reporting system;
- Administers State and Department attendance and leave policies; and
- Liaises with the Business Services Center regarding health benefits, retirement, payroll, and administration of time and attendance.

In 2019, the division completed the following:

New Hires/Appointments (Permanent)	85	Reasonable Accommodations	12
Separations (Permanetn)	28	Training Referrals	94
Exam Development	11	Staff Trained – Mandatory issues	All
Temporary Separations	58	Temporary Hires	68
Classification Actions	93		

Agricultural Development

Staffing

The Division of Agricultural Development has a permanent staff of 23. Four are based in Brooklyn, one in Rochester, and the rest are located in Albany.

Licenses

Farm Products Dealer

The division manages one license: the Farm Products Dealer license. Farm products dealers are businesses that annually buy or receive, to resell, at least \$20,000 worth of farm products from New York producers. In 2019, the Division licensed 332 farm products dealers.

Licensed dealers are required to file security in the form of a bond or letter of credit with the Department. In the event of bankruptcy by a farm products dealer, or failure to provide timely payment, affected farms may file a claim with the Department to recover these funds. After review, eligible claims are paid from the bond or letter of credit provided by the farm products dealer. There were no claims in 2019.

If claims exceed an individual dealer's security, additional financial coverage is provided by the Agricultural Producers Security Fund, funded by fees paid by the farm products dealers. The size of the Agricultural Producers Security Fund was over \$2.9 million at the end of the 2019-20 license period, \$116,000 higher than the year prior.

Programs

Taste NY

The Taste NY program experienced continued growth in 2019 and was highly successful in raising the visibility of New York's high-quality food and agricultural products. Through Taste NY events, retail locations and other attractions in 2019, Taste NY helped more than 1,800 local companies reach consumers across the State and the globe.

With an increasing presence at attractions across the State, Taste NY vendors saw gross revenues of more than \$21.6 million in 2019, up from \$17.8 million in 2018. Taste NY products are now available in over 70 locations, including:

- 11 New York State Welcome Centers
- Stand-alone markets, such as Todd Hill, Grand Central Station and Front Street
- Thruway Travel Plazas
- State parks
- Airports
- Train stations
- Concessions at sports and entertainment venues
- New York State Office of Trade and Tourism in San Juan, Puerto Rico

The Department built upon the success of its regional business-to-business Taste NY networking events that were first held in 2018 by hosting two new events in 2019 in the Adirondacks and Southern Tier regions. These events help connect New York farms and food and beverage businesses with buyers from institutions, retail locations, restaurants, bars, and distributors.

The exposure from Taste NY continues to help the farms and companies participating in the program to reach more customers, increase online sales, and expand the processing capacity of their businesses. Taste NY's food and beverage businesses also support the State's farmers by using New York grown and produced ingredients in their products.

New York State Grown & Certified

Governor Cuomo announced the creation of New York State Grown & Certified (NYS G&C) in his 2016 State of the State address. The program markets New York's farmers who are already producing some of the world's best products and helps consumers easily identify foods that are produced to higher food safety and environmental standards. Accomplishments include enrollment in the program of a total of 3,013 farms representing over 775,000 acres of farmland, and the announcement of new commodities, including processed products and honey. The program includes 26 dairy processors processing milk from over 2,142 dairy farms. Additional program highlights include:

- The NYS G&C Agricultural Producers Food Safety Grant Program continues to administer \$4 million in funding to help producers complete projects that improve food safety on their farms and fulfill the food safety requirements of the NYS G&C program. Eighty-nine projects totaling \$3,434,000 have been funded.
- The NYS G&C Marketing Grant Program partnered with TOPS Friendly Markets to develop a marketing campaign highlighting NYS G&C produce in stores. This included in-store displays, a public Corn-Boil event, and newspaper and radio ads.

Risk Management Agency (RMA) Crop Insurance Education

New York was awarded funding for the RMA program in 2019-20. Cornell University continued to provide crop insurance education opportunities to give producers complete information to make informed decisions whether to utilize available crop insurance and risk management tools. The division provided program support to Cornell University by staffing major trade shows and responding to inquiries.

Farm Product Marketing Order Program

The Department's Farm Product Marketing Order Program funded 17 research projects using over \$494,000 from assessments collected from New York State apple, onion, and cabbage growers. In addition to research, the Marketing Order Program funded \$2.1 million for the promotion and marketing of apples as well as \$10,047.86 for New York tart cherry marketing. Services for the Apple and Sour Cherry Marketing Order programs were provided by the New York Apple Association, through contracts administered by the Department.

Farm-to-School Coordinating Committee

The Farm-to-School Coordinating Committee had its largest meeting to date in 2019 with over 65 people gathering to discuss issues related to farm-to-school programs. The Farm-to-School Coordinating Committee brings together stakeholders from across the State to share best practices to advance partnerships with local producers and to increase the use of local foods in schools.

FreshConnect Check Program

The Fresh Connect Check (FCC) Program provides incentive checks for the purchase of eligible foods at any operating farmers' market or farm stand in New York. For every \$5 in SNAP EBT benefits a customer exchanges for SNAP EBT tokens, the market manager may issue a \$2 FCC. Veterans, servicemembers, and their immediate family members may receive FCCs through the Division of Veterans' Services on a first-come, first-serve basis, while supplies are available. Checks may be spent on any SNAP-eligible food item. In 2019, checks were issued at 132 farmers' markets, farm stands, and mobile markets, amounting to almost \$460,992 in revenue for over 1,024 farmers' market vendors and farm stand operators.

Wood Products Development Council

Established by statute in 2008, the Wood Products Development Council is tasked with supporting the practice of forestry and the manufacture of wood products. The Council works to improve public understanding and appreciation of New York's forests and forest products, and to direct attention and funding to programs and ventures that sustain existing forest product markets and promote the development of new markets. Funding was doubled from the prior year as part of the 2019-20 budget in the amount of \$200,000 to support operations. In 2019, the Council convened quarterly and made strategic decisions that invested in workforce development, youth education and outreach, forest economy research and more.

Concord Grape Summit

The Governor convened a Concord Grape Industry Summit on April 12, 2018 at the Grape Discovery Center in Westfield, Chautauqua County. Farmers, researchers and industry leaders met with State and local officials to discuss industry growth challenges and explore new opportunities for growth. During the summit, several initiatives were announced to help strengthen the industry, including expanding research, investing in new product and new market development, and expanding marketing and promotional programs. Grant programs resulting from the summit continue to promote the Concord grape industry, including a program to increase consumption of New York grape juice in schools with one distributor reporting new sales of over half a million cases. Funding also supported a marketing initiative for Concord grapes, targeting winemakers and using the Wine and Grape Foundation's new brand, *Boldly NY*. The Department also administers the Vineyard Improvement Program that has cost-shared the removal of 140 acres of under-performing Concord vines and replanting of other grapes or agricultural crops. \$65,000 in grant funds has been awarded.

New York State Council on Hunger and Food Policy

The Commissioner chairs the State's Council on Hunger and Food Policy. Launched by the Governor in 2016 to address food insecurity statewide, this Council advises the State on programs and policies and it facilitates interagency coordination to address food insecurity. In 2019, the Council conducted two meetings at which representatives of state agencies, non-profit organizations, academia, and agricultural industries came together to address hunger in New York State and improve access to healthy locally grown food. Over the course of the year, the Council delivered internal updates on ongoing projects, provided input on newly proposed produce sourcing strategies, exchanged expertise with Banco Alimentos de Puerto Rico (the only food bank in Puerto Rico), and more.

Federal Activity

Specialty Crop Block Grant Program

The Department operated 29 projects using over \$3.68 million in federal funds from the USDA Specialty Crop Block Grant Program. Projects aim to improve the profitability and competitiveness of New York's specialty crop industries. Roughly half the funding supported scientific research focusing on improving pest management across multiple crops, improving the storage of apples, and diversifying marine aquaculture. The remainder of the funds supported marketing projects to promote New York crops. Staff and producer associations exhibited at industry tradeshows in Anaheim, California; Miami, Florida, and Chicago, Illinois. Funding also assisted growers in attaining their farm food safety certifications. A new 2019 project with Cornell University focused specifically on helping small and medium farms design wash/pack systems according to high food safety standards.

Federal State Marketing Improvement Grant

The Department, in partnership with Cornell University, received a competitive federal State Marketing Improvement Grant to support the Concord grape industry. The \$455,000 project will create new products using Concord grapes to send to market and conduct economic market research to better understand supply chain issues, emerging market opportunities, and consumer preferences. In 2019, Cornell's Food Venture Center began working with a brand-new Concord product, a high-quality puree.

USDA Specialty Crop Multi-State Program

The Department continued to administer an award of \$684,000 from the USDA Specialty Crop Multi-State Program. This program combines the efforts of staff at Cornell University and Virginia Tech to develop control strategies for foodborne illness in specialty crop processing facilities.

Food Export USA–Northeast

The Department is a member of Food Export USA-Northeast, a non-profit organization that promotes the export of food and agricultural products from the northeast region of the United States. Nearly 450 New York State food suppliers used the Market Access Program (MAP) funding through Food Export USA-Northeast to help offset the cost of exhibiting at some of the larger international tradeshows. In 2019 total export sales exceeded \$84 million. New York State suppliers also took advantage of several Food Export USA-Northeast trade missions, traveling to markets in the United Kingdom, Kuwait, United Arab Emirates, Japan, South Korea, Australia, Mexico, Canada, China, Brazil, Poland, Ireland, and South Asia.

Farmers' Market Nutrition Program

In 2019, Farmers' Market Nutrition Program (FMNP) benefits were distributed to 321,348 families through the Special Supplemental Nutrition Program for Women, Infants, and Children (WIC). Additional benefits were distributed to 132,002 low-income seniors for the purchase of locally grown fresh fruits and vegetables. Over 900 farmers participate in FMNP at over 405 farmers' markets, 384 farm stands, and 11 mobile market trucks that stop at over 159 unique locations. The program generated over \$4,998,276 million in direct sales to participating farms.

Supplemental Nutrition Assistance Program

The Supplemental Nutrition Assistance Program (SNAP) is the core feeding program for low-income, at-risk populations in the U.S. SNAP participants shop using an Electronic Benefit Transfer (EBT) card. The New York State Wireless EBT Program, administered in partnership with the Farmers Market Federation of New York, has successfully promoted the use of SNAP at farmers' markets and farm stands across New York State through technical assistance, training, and cost-sharing activities. In 2019, SNAP sales at over 165 direct marketing venues (farmers' markets, farm stands, green carts, community supported agriculture programs, and mobile markets) amounted to nearly \$2.7 million.

Aid-to-Localities

Local and County Fairs

The Department awarded a fourth round of \$5 million in funding in 2019 to county and youth fairs across the State through the Agricultural Fairgrounds Infrastructure Improvement Program, bringing the State's investment in local and county fairs to \$20 million. Projects will improve permanent or temporary facilities used to house or promote agriculture on their fairgrounds. Repair or replacement of water systems, restrooms, and storm water management systems on the fairgrounds were also eligible for funding in the 2019 grant year. Fifty-two local fairs are each awarded \$96,153, building on the total \$15 million allocated through the 2016, 2017, and 2018 programs.

Farm-to-School Grant Program

The Farm-to-School Grant Program awarded a total of \$1.5 million to 18 recipients to increase the volume and variety of locally produced farm products purchased for school meal programs, and 120,000 students in 144 school districts will benefit from this round of funding. The Farm-to-School Grant Program was created to connect schools with local farms and food producers to strengthen local agriculture, improve student health, and promote regional food systems awareness.

Vital Brooklyn

The Department achieved major milestones in the Governor's Vital Brooklyn initiative, supporting access to fresh, healthy, local food in Central Brooklyn:

- In partnership with the United Federation of Teachers, the first five of 12 youth-led farm stands were launched at Community Learning Schools. These sites offer fresh food boxes available for sale and pick-up directly on site at schools, making it a convenient and affordable way for families and neighbors to purchase fresh, local foods.
- Mobile food access units are an important means for reaching those who are often most in need of fresh, healthy food. Establishing mobile markets is more flexible and less expensive than constructing and operating full-scale grocery stores. In 2019, the Department announced awardees of the second round of funding for this program. Three entities were awarded approximately \$250,000 in round two.
- The Department funded a Food Insecurity Screening Pilot Program in 2019. This pilot program, led by SUNY Downstate, conducted food security assessments with more than 300 seniors in Central Brooklyn. The program also worked to integrate that screening process into the broader healthcare services, training students and staff on how to use the screening tool and how to refer patients as needed to dietary and nutritional counseling and

local food access resources. The pilot program screened seniors at 12 Central Brooklyn community health fairs in 2019 and supported more than 350 seniors with additional benefits to make fresh fruits and vegetables more affordable.

- In 2019, the Central Brooklyn Hub Feasibility Study was completed. The yearlong study led by Stuyvesant Restoration Corporation recommended a “Hub & Spoke” food hub model, whereby a central aggregation and distribution facility (the “hub”) works with additional food supply chain infrastructure (the “spokes”) in and around Central Brooklyn. The study was conducted with hundreds of constituents around Central Brooklyn, beginning in November 2018 through August 2019.

Community Gardens and Urban Farms

The Department, through funding and technical assistance, supports the viability of community gardens and urban farms statewide. The Community Gardens Grant Program provided \$500,000 to 22 entities to support capacity building and infrastructure at community growing sites. The projects ran from August 2018 through January 2020. Project activities included building new garden sheds, installing new or repairing raised garden beds, installing new or updating existing water access points for the gardens, running youth education programming, and more.

New York Logger Training Program

The Department provided \$150,000 in support of the New York Logger Training, Inc., program, which will assist loggers and the forest products industry to remain compliant, competitive, and safe through focused training and business assistance. The comprehensive program focuses on careful risk selection, cost containment, effective claim management, and vigilance in loss prevention to reduce the frequency and severity of injuries.

New York Farm Viability Institute

The Department oversaw \$1.9 million in research projects under a State-funded, multi-year contract with the New York Farm Viability Institute (NYFVI). NYFVI is an independent, nonprofit organization led by volunteer farmers that is funded primarily by New York State. By implementing agricultural research and education programs, NYFVI helps New York’s farmers become more profitable to improve the long-term economic viability and sustainability of New York farms, the food system, and the communities they serve. In addition to core research funding, NYFVI administers \$60,000 in funding for the New York State Berry Association research projects and \$75,000 for NY Corn and Soybean Growers Association research projects.

Animal Industry

Staffing

The Division of Animal Industry (DAI) has a permanent staff of 36 employees, including field and central office veterinarians, animal health inspectors, a director, and support staff.

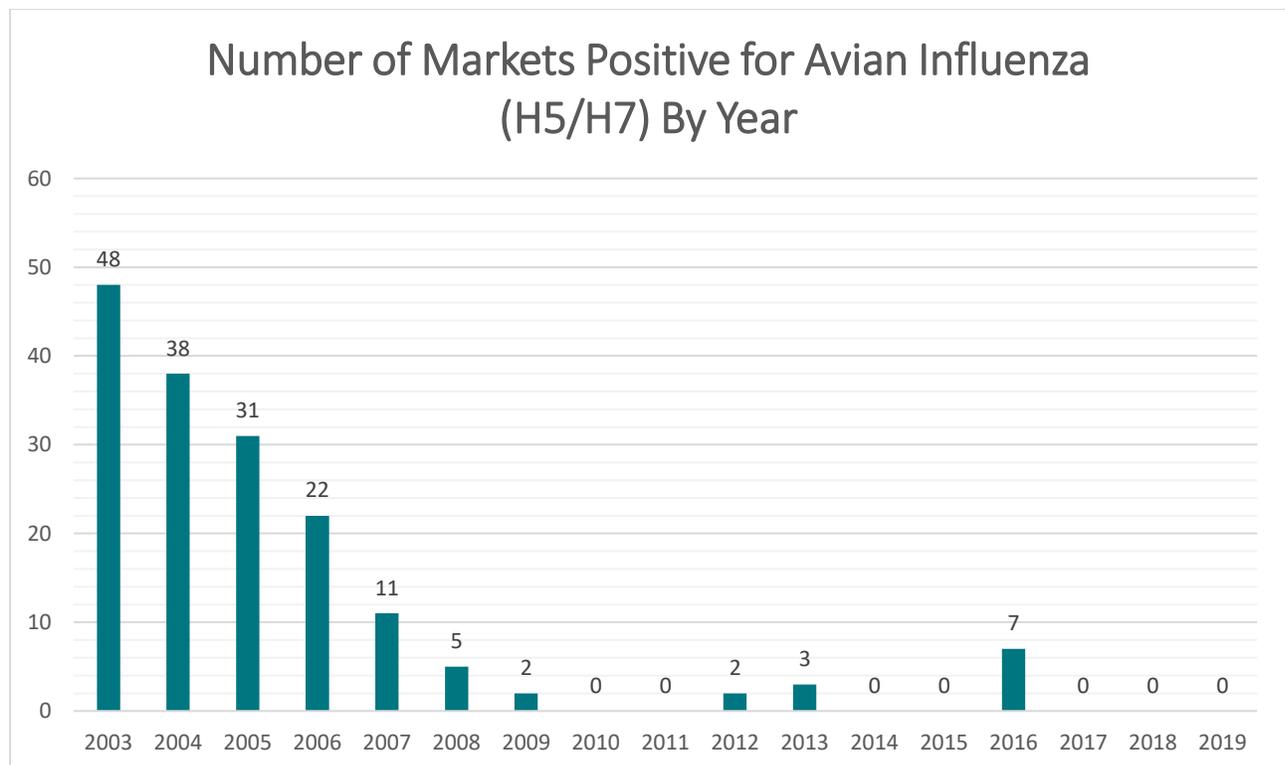
Licenses and Inspections

At the end of 2019 there were 241 licensed pet dealers in New York, which is a slight decrease from the previously reported total of 258. The division performed 365 pet dealer inspections in 2019 and investigated 36 consumer complaints.

In 2017, the pet dealer law was amended to clarify the definition of exempted entities. Previously, not-for-profit dog and cat rescue organizations were unregulated. There are an estimated 300 to 500 rescue organizations in New York. As of November 2018, all rescues must register with the Department. As of December 2019, 430 rescue organizations have registered, 65 have closed, and four have filed as pet dealers.

2018 Avian Influenza (AI) Surveillance

New York has 86 live bird markets (LBMs): one in Schenectady, one in Buffalo, and 84 in or near New York City. The division is active in reducing the threat of Avian Influenza types H5 and H7 in the markets. The division's success is reflected in the chart shown below.



AI Testing in Other Poultry Sectors (non-LBM):

AI testing continues in commercial egg-layer flocks, backyard flocks, exhibition flocks, raised-for-release upland game bird flocks, and egg-type multiplier flocks. Live bird markets and poultry dealers are inspected and tested at least once per quarter. During each inspection, poultry health is evaluated and records are reviewed for compliance with New York State regulations.

Poultry dealer facilities are inspected once per month and cleaned and disinfected at least three times per year. Distributor vehicles are inspected if their trucks are curbside at markets when inspections are occurring. All routine inspections are unannounced except for cleaning and disinfection inspections.

Domestic Animal Health Permits and Livestock Markets

Domestic Animal Health Permits (DAHP) are issued to livestock and poultry dealers. Department laws and regulations require dealers to properly identify animals and record the details of all transactions to allow for tracing to the point of origin and disposition. DAI veterinarians and animal health inspectors conducted 381 DAHP inspections on 322 DAHP holders in 2019.

Field staff also inspect livestock markets to determine compliance with Department laws and regulations. In general, market inspections are performed quarterly and consist of a facility inspection, evaluation of cleaning and disinfection procedures, and an inspection of animal identification and recordkeeping practices. DAI field veterinarians and animal health inspectors performed 117 livestock market inspections at 32 markets.

NYS Cattle Health Assurance Program (NYSCHAP)

NYSCHAP is an integrated disease prevention program whose purpose is to increase herd health, productivity, and profitability while boosting food safety, public health, and consumer confidence in dairy and beef products. As of December 2019, there were 643 participating farms in NYSCHAP: 465 dairy, 80 beef, 74 sheep and goat farms, and four other farms.

NYSCHAP covers approximately 40% of dairy cows and 11% of dairy farms in New York (623,000 dairy cows and 4,190 dairy herds based on 2018 stats). In 2019:

- There were 72 new enrollments (23 dairy, 16 beef, and 33 sheep and goat herds);
- There were 405 NYSCHAP visits;
- There were 14 outreach activities that promoted NYSCHAP, including presentations and articles published on herd health, biosecurity, disease identification, prevention and control, animal care and food safety, and drug residue avoidance; and
- Approximately 42% of milk produced in New York was from NYSCHAP farms (based on 14.8 billion pounds of milk being produced in New York in 2018).

In 2019, DAI performed:

- 117 livestock market inspections in 32 markets;
- 370 municipal shelter inspections;
- 673 dog control officer inspections;
- 381 domestic animal health permit inspections; and
- 12 foreign animal disease investigations.

Federal/Interstate Activity

DAI was awarded \$710,933 in federal grant funding for animal health programs, drug residue prevention, and animal disease traceability efforts in 2019.

Interstate Movement of Livestock

Staff examine Certificates of Veterinary Inspection (CVIs) for animals imported and exported in and out of the State. In 2019, Division of Animal Industry clerks processed a total of 12,489 certificates of veterinary inspection for animals imported into New York and 10,661 CVIs for animals exported.

The following table shows the distribution by species:

EXPORTS		IMPORTS	
Bovine	2,282	Bovine	2158
Equine	7,050	Equine	7479
Swine	546	Swine	554
Ovine	201	Ovine	239
Caprine	191	Caprine	254
Cervid	35	Cervid	4
Camelidae	190	Camelidae	135
Avian	92	Avian	527
Canine /Feline	59	Canine /Feline	849
Exotics	15	Exotics	290

Aid-to-Localities

The Department administers an US Food and Drug Administration (FDA) contract for judicious antibiotic use and drug residue avoidance initiatives. DAI completed the following deliverables under this contract in 2019:

- Continuing education meetings for veterinarians were held around the State, presenting information on the new Veterinary Feed Directive, drug usage, and drug residue avoidance.
- Farmer meetings/webinars continue to be held around the State covering topics such as the new Veterinary Feed Directive, judicious antibiotic drug usage, drug residue avoidance, and the NYSCHAP program.

Other outreach included:

- DAI has been working with the New York State Veterinary Diagnostic Laboratory to provide educational meetings to both farmers and veterinarians to help them combat Salmonella Dublin.
- DAI continues to work with livestock industries to address the safe and ecologically sound disposal of livestock mortalities. Meetings continue with affected industries, primarily dairy and equine, and DAI continues to work with the rendering industry and waste disposal industry to try to solve this problem.

Food Laboratory

Staffing

In 2019, the Food Laboratory had 36 permanent staff. Senior staff at the Food Laboratory have degrees in the natural sciences with majors in biology, chemistry, environmental, microbiology, or other related fields. Additionally, temporary staff scientists work under the supervision and direction of Food Laboratory personnel.

Licenses and Accreditations

The Food Laboratory holds the ISO/IEC 17025:2017 accreditation and additional criteria established by the AOAC-I ALACC. In 2019, the Food Laboratory performed testing on 67 chemistry proficiency samples (600 analyses with 98% acceptable results), 39 microbiological proficiency samples (12 analyses with 100% acceptable results), and three Pesticide Data Program (PDP) proficiency rounds (30 compounds reported with 90% acceptable results). Participation in proficiency testing programs is necessary to maintain the laboratory's ISO accreditation status through the American Association for Laboratory Accreditation.

Analytical Tests and Outcomes

In 2019, the Food Laboratory received 19,809 samples and performed approximately 433,497 analytical tests on various food, feed, industrial hemp, and fertilizer products to determine compliance with regulatory standards, adulteration with inferior or substitute ingredients, undeclared or non-permitted preservatives, heavy metals, color additives, contamination with filth, spoilage, tetrahydrocannabinol (THC), and foodborne pathogenic bacteria. Approximately 94% were found to be properly labeled and/or free of contamination or adulteration. A total of 234 recalls were triggered by laboratory test results.

In accordance with the Food Laboratory's USDA cooperative agreement under the PDP, the laboratory received 1,757 samples, which resulted in the analysis of 376,740 analytes to detect for pesticide residues. From those, 624 violations for pesticide residue were detected by the Food Laboratory. This nationwide program is in its 29th year and has 10 participating states, including New York. In 2019, five New York samples were tested for pesticides as consumer complaints and none were found violative.

The Food Laboratory also performed analytical testing on samples received from various external sources. These included samples involved in foodborne illness investigations requested by the NYS Department of Health and the FDA, as well as from neighboring states (Vermont) unable to perform specific analyses.

In accordance with the National Conference of Interstate Milk Shipments (NCIMS) Split Sample Program, the Food Laboratory prepared 115 proficiency samples for the dairy laboratories certified by the Department's Division of Milk Control and Dairy Services. In addition, 15 states contracted with the Food Laboratory to have 56 proficiency samples prepared and shipped to certified dairy laboratories within their respective states. Additionally, the laboratory also provided 153 sets of antibiotic residue samples to the same laboratories.

Source of Sample	Number of Samples Received	Number of Samples Reported	Number of Tests
Total	19,809	19,744	433,497
PDP program	1757	1794 ^a	376,740
Food Safety Inspection staff	2589	2610 ^a	56,757 ^{ab}
MCDS staff	15,024	14,903	
Plant Industry staff	247	229 ^a	
Other ^c	192	208 ^a	

^a Includes results from samples collected at end of 2018.

^b Number represents number of testing for division of FSI, MCDS, PI and Others.

^c Others: other New York State departments, State/Federal agencies or proficiency testing providers

Number of Samples Received (excluding PDP and Liquor authority)	Number of Tests Performed (excluding PDP and Liquor Authority) ^a	Number of Violations
Total	18,401	56,735
Microbiology ^b	13,471	29,153
Chemistry ^c	4570	27,582

^a Includes results from samples collected at end of 2018.

^b Microbiology testing includes: total aerobic plate counts, total coliforms, *Escherichia coli*, *E. coli* O157:H7 and other enterohemorrhagic *E. coli*, *Salmonella enterica*, *Listeria monocytogenes*, *Campylobacter coli*, *C. jejuni* and *C. lari*, *Shigella* spp. *Staphylococcus aureus*, enterotoxin, yeasts, molds, presence of antimicrobials in dairy products, verification of pasteurization, and proficiency testing.

^c Chemistry testing includes: standards of identity and nutritional labeling, adulteration, the presence of undeclared and potentially harmful allergens, preservatives and artificial colors, specific chemical hazards such as heavy metals, aflatoxins, antibiotic residues, and the identification of impurities, foreign material, proficiency testing analysis request, and plant industry related analysis,

Number of Samples Tested for Division of Plant Industry	Number of Violations
Total	229
Fertilizer	47
Lime	0
Industrial hemp (THC only)	116

*Determination of violation for industrial hemp is at discretion of Division of Plant Industry

Aid-to-Localities

In 2019, the Food Laboratory, through the Rapid Response Team and Food Emergency Response Network, played an integral role in investigating several local and multi-state outbreaks of foodborne disease, including *L. monocytogenes* and *Salmonella* sp., in coordination with local and state health offices.

Federal/Interstate Activity

The Food Laboratory managed cooperative agreements with the USDA Agricultural Marketing Service to support the PDP and with the FDA to maintain the laboratory's ISO accreditation and whole genome sequencing program.

Food Laboratory staff participated in three National Partnership for Food Protection workgroups and helped implement significant components of the Food Safety Modernization Act.

To improve collaboration and integration of sample collection and the analysis of data between state and federal governments, the Food Laboratory was selected to spearhead the Mutual Reliance Pilot. The goal of the pilot is to establish a process for data acceptance by the FDA. In 2019, two products from China (sweet potatoes and licorice) and one from Thailand (rattan shoots) with excessive levels of sulfites were included in the import alert after FDA accepted the samples and laboratory information for regulatory action. The violative products had more than 10 mg of sulfites per serving. Salmon fillets from Russia contaminated with *L. monocytogenes* were also included in the import alert.

Continued Research

As a leader in food laboratory analytical testing and method development, the Food Laboratory participated in working groups and committees in the Association of Official Analytical Communities International, International Association of Food Protection, Association of Public Health Laboratories, Association of Food and Drug Officials, American Association of Feed Control Officials, and American Association of Plant Control Officials.

The Food Laboratory was an active member of the Center of Excellence on Food Research to establish dietary reference intake levels for emerging food additives and to determine safe limits of contaminants such as environmental chemicals, heavy metals, and suspected carcinogens.

Food Safety and Inspection

Staffing

The Division of Food Safety and Inspection (FSI) has a permanent staff of 151; 98 are field-based positions and the rest are assigned to offices in Albany, Buffalo, Rochester, Syracuse, New Windsor, Hauppauge, and Brooklyn.

Licenses	Number Issued Annually
20-c food processing establishments	21,626
Article 28 retail food store	4,782
Article 28 food warehouse	1,564
Slaughterhouse	142
Food salvager	22
Refrigerated warehouse	48
Inedible meal disposal plant and vehicles	10
Inedible meat transportation service and vehicles	14
Pet food brands registration	602
Feed tonnage	419
Feed facility registration	382
Commercial feed license	121
Home processors registrations	986

Inspections and Samples

Division food inspectors perform inspections at over 30,000 regulated food establishments on a routine basis. Inspectors performed 30,056 on-site inspections in 2019 and 74.2% of those inspections were found to be in substantial compliance.

Food inspectors collect routine and for-cause food samples at regulated food establishments. Inspectors submitted 2,514 food samples to the Food Laboratory in 2019 with 13% of those samples found to be in violation.

Food inspectors executed over 2,203 food seizures (for adulterated or misbranded food items), resulting in over 316,238 pounds of food seized and over 237,799 pounds of adulterated foods destroyed.

Inspectors investigated 2,220 consumer complaints in 2019.

The Farm Products Unit conducted produce grading inspections, inspected over 139 million pounds of produce and issued over 3,976 certificates in 2019 on behalf of USDA.

Food safety inspections	30,056
FDA contract inspections (Revenue Generated)	270 (235,690)
BSE inspections	0
Compliance rate (% passing inspections)	74.2%
Consumer complaint	2,220
Investigations food seizures	2,203

Food seized (lbs.)	316,238
Number of food samples	2,514
No. of food samples that were violative/rate (%)	337/13%
Number of feed samples	509
No. of feed samples that were violative	19
Number of food recalls	222
Number of hearings requested	87
Number of injunctions requested	48
Number of penalties issued (revenue generated)	3,837 (\$1,912,461)
Licensing revenue (Human Food)	\$4,945,812.50
# Licenses processed	14,441
Licensing/registration revenue (Animal Food)	\$1,319,600
# Licenses/registrations processed	1,105
Terminal market inspection certificates (pounds graded, and revenue generated)	53,408,125 (\$452,420.08)
Shipping point inspection certificates (pounds graded and Revenue Generated)	86,849,213 (\$155,653.26)
Pesticide Date Program Sampling	1,512 (\$232,444.01)
County of origin labeling audits	297 (\$198,600.00)
Good agricultural practices audits	232 (\$188,315.00)
Poultry voluntary residence grading (153,282 cases of eggs graded)	144,281 (\$160,321.89)
Poultry grading (292,407 lbs.)	5,684 (\$13,043.19)
Poultry shell egg surveillance (80,627 cases of eggs inspected quality)	94,437 (\$45,246.00)
Quality control	1 (\$8,113.05)
Shipping point contract inspections	0
NYS branding law (6 establishments)	2 (\$1,650.00)
Total FSI Revenue	\$9,021,636.84

Aid-to-Localities:

In 2019:

- 12 educational presentations were provided to food industry groups and local regulatory agencies.
- 303 industry compliance sessions were provided to food establishment operators. These educational sessions are intended to assist food establishments that are struggling to comply with regulatory inspections.
- FSI hosted meetings with industry groups, craft beverage producers, maple syrup producers, and the Food Industry Alliance. The meetings were held to discuss emerging regulatory challenges.
- Staff met with Cornell Cooperative Extension Cornell Institute for Food Safety, the Manufactured Foods Regulatory Program Alliance, and the Produce Safety Alliance. The primary focus of the meeting was education and outreach for agricultural food industries in New York.
- Produce safety outreach included:
 - Attendance at multiple Produce Safety Alliance trainings (PSA);

- Attendance at several On Farm Readiness Reviews (OFRRs) – OFRRs are non-regulatory farm visits designed to assist with the interpretation of the produce safety rule;
- Distribution of NYS produce safety rule documentation; and
- Publication of media advertisement regarding the availability of produce safety resources.

The Division's Notice of Inspection was modified to include a letter grade. Each letter, "A," "B," or "C" correspond to the results of the most recent sanitary inspection. A letter grade of "A" means that no critical deficiencies were found, and the food safety program in place is working. "B" indicates that critical deficiencies were found but corrected at the time of inspection; there is room for continuous improvement in the food safety program. A letter grade of "C" indicates that critical deficiencies were found but were not or could not be corrected, and there is a need for immediate corrective action.

Federal Activity

The division conducts manufactured food inspections for FDA under a contract agreement. It conducted 240 inspections under the 2019-2020 contract.

The Manufactured Foods Regulatory Program Standards (MFRPS) is a quality management system intended to create nationwide consistency between state and FDA inspection programs. FDA provides the Department with funding annually to support conformance with standards established by FDA and states.

The Rapid Response Team program is intended to improve state and federal response to all hazardous food emergencies. FDA provides the Department with funding annually to support staff, training, and program development.

New York State adoption of the Food Safety Modernization Act, Produce Safety Rule, and Preventive Controls for Human Food Rule occurred in the summer of 2017. This enables the Department to complete food and produce safety inspections under the new regulatory regime. The Produce Safety program established an on-farm produce inspection unit within the Division of Food Safety. Six inspectors joined the unit and produce safety inspections are expected to begin in the 2019-2020 growing years.

The Farm Products Unit conducted grading, sampling and auditing programs on behalf of USDA under USDA cooperative agreements.

Programs

The division employs a progressive enforcement program to encourage compliance with food safety laws and regulations. Enforcement tools include food seizure, warning letters, civil penalties, education sessions, license revocation, and injunctive actions. The Department pursued 27 license revocation hearings and 48 injunction actions in 2019.

Land and Water

Staffing

The Division of Land and Water Resources has 19 permanent and six temporary staff. The primary title series is the Environmental Analyst (Agriculture) with grades ranging from SG 18 to SG 27. Approximately half of the staff are field based, with the remaining staff in Albany or Rochester.

Programs

The division administers programs to prevent or reduce water pollution, enhance soil health, mitigate greenhouse gas emissions from agriculture, and increase agricultural and community resiliency to a changing climate, in partnership with the New York State Soil and Water Conservation Committee (State Committee). Staff assisted 58 Soil and Water Conservation Districts in a wide array of operations, programs, and project areas in 2019. Division field-based staff work closely with Conservation District staff to prioritize decisions for the advancement of conservation programming. Staff in the Albany office have primarily focused on providing operational and technical support through the development of training modules, training events, direct research, and thorough administrative support. Monthly reports are provided regionally to articulate program deadlines, funding opportunities, State Committee policies, and significant achievements.

Division staff work with the State Committee to deliver four programs: the New York State Agriculture Nonpoint Source Abatement and Control Program for the implementation of best practices to address on-farm pollution concerns, the Agricultural Environmental Management (AEM) Program for conservation planning purposes, the Climate Resilient Farming Program to mitigate greenhouse gas emissions and help farms adapt to a changing climate, and the State Aid to Districts Program, designed to help Conservation Districts increase and maintain capacity to carryout natural resource management programs.

The Division helps maintain viable agricultural lands and farm operations and the production of crops, livestock, and livestock products through its Agricultural District program and the Farmland Protection programs. It administers AML Article 25-AA (Agricultural Districts) and AML Article 25-AAA (Agricultural Protection and Development).

Each agricultural district in the state is reviewed every eight years. As of January 2020, there are 167 agricultural districts, providing benefits to 26,448 farms. In 2019, 14 agriculture reviews were completed, and 37 counties provided annual inclusions to 72 agricultural districts.

During 2019, the division processed numerous formal and informal responses to requests for review of local laws and ordinances. It conducted nine formal investigations and completed two sound agricultural practice investigations. Additionally, the division processed 90 Notices of Intent and 15 waivers to minimize adverse impacts on agriculture from commercial utility projects. This represents a 100% increase, predominantly due to the siting of commercial solar arrays on agricultural lands within agricultural districts.

Since 2011, the Agricultural and Farmland Protection Program has protected over 40,092 acres of viable agricultural lands from conversion to non-farm uses through perpetual agricultural conservation easements. Total acres protected to date are 79,600.

The division is also statutory party under Article VII and Article X of the Public Service Law for the mitigation of agricultural impacts resulting from the construction of major gas pipelines, industrial wind turbines, solar photovoltaic energy generation, and electric power line facilities. In 2019, six gas pipeline segments, 11 electrical transmission segments, 12 wind turbine fields, and 38 solar energy arrays were active. These energy generation projects represent more than 50,000 MW of renewable energy.

Environmental Protection Fund (EPF) Program Highlights

The division administers 14 unique grant solicitations on an annual or semi-annual basis supported by the EPF. Active grants in 2019 include:

- **Farmland Protection Implementation.** Awarded \$26.1 million for the purchase of perpetual conservation easements on viable agricultural land; also announced a \$15 million Request for Applications to purchase perpetual conservation easements on transitioning farm operations undergoing a business or ownership transition.
- **Farmland Protection Planning.** Awards totaling \$150,000 for the development of farmland protection plans were provided to Chautauqua County, Onondaga County, and Seneca County.
- **Agricultural Environmental Management (AEM).** The 2019 (Year 14) AEM Base Funding Program provided \$3.2 million in reimbursement of Conservation District technical assistance to farmers. Conservation Districts spent 55,400 hours providing technical assistance for 531 new farms, 398 environmental resource assessments, 319 farm plans, implementation of 211 conservation practices, and 623 AEM evaluations.
- **Climate Resilient Farming Grant Program.** In July 2019, \$2.3 million was awarded to 20 different Conservation Districts for Round 4 of the Climate Resilient Farming Grant Program. Projects were funded on 24 farms to reduce impact on climate change (mitigation) and to help farms be more resilient to the impacts of climate change (adaptation). Funding addressed manure storage cover and flare, water management, and soil health. In 2019, Districts and the State Committee staff worked together to close-out five CRF contracts.
- **Agriculture Non-Point Source Pollution Prevention (AgNPS).** In October 2019, grants were awarded to 33 Conservation Districts under Round 25 of the AgNPS Program, providing \$16.3 million in state funds to 132 farms. Presently, the State Committee is overseeing 177 active contracts, representing \$60 million in agricultural conservation efforts. In 2019, Districts and State Committee Staff worked together to close-out 49 AgNPS contracts.
- **State Aid to Districts Program.** Nearly \$10 million was awarded to all 58 Conservation Districts under the annual State Aid to Districts Program. This is the largest amount of state aid ever provided to Conservation Districts. A Conservation District that earned full Part A reimbursement received a \$6,000 conservation project, and those that met all performance measures received a total \$165,595.23. Part C awards have never been so high with a total maximum earned at \$99,595.23. This indicated a positive trend that more Districts are meeting and exceeding performance measures.

Additional Highlights

Concentrated Animal Feeding Operations (CAFO) Manure Storage Program

In May 2019, Round 3 of the CAFO Waste Storage and Transfer System Program awarded \$9 million to Soil and Water Conservation Districts for work on 24 farms. This program makes available \$50 million for manure storage and transfer systems on regulated CAFOs.

NYS Soil and Water Conservation Committee Strategic Plan

The 2019-2023 State Committee Strategic Plan was approved in July 2019. The Strategic Plan recognizes three major areas (Conservation District Operations/Technical Services/Program Delivery, Comprehensive Natural Resource Management, and Cooperative Conservation), begins with a goal, and continues with objectives to meet those goals. The goals reflect an overarching, long-term vision for how the Committee and Districts can grow in that area. The goal is refined into an achievable framework through measurable objectives for the 2019 – 2023 planning horizon. The Strategic Plan can be found on the State Committee website at: <https://agriculture.ny.gov/soil-and-water/about-soil-water-conservation-committee#reports-and-publications>.

(Revised) Agricultural Environmental Management Base Program

Developed in 2019 and launched January 1, 2020, the State Committee made a new non-competitive cost-share component available for the AEM Base Program. This program allows Conservation District Boards to prioritize projects for funding without having to compete for limited resources. In addition to the cost-share component, technical assistance reimbursement is available: \$220,000 will be available for a two-year period for a District that has a certified AEM Planner on staff; \$170,000 will be available for a two-year period for a District that has a Certified Crop Advisor or NRCS Certified Planner on staff; and \$130,000 will be available for all other Districts.

Milk Control and Dairy Services

Staffing

The Division of Milk Control and Dairy Services (MCDS) has a permanent staff of 52, 40 of whom are in the Dairy Products Specialist title series (ends at a SG-23). Most of the staff are field based; 14 are assigned to the Albany headquarters. Staff also oversee and evaluate 96 Certified Milk Inspectors (CMIIs), who provide direct oversight to New York's nearly 4,000 dairy farms.

Licenses

The Division licenses milk plant operators, producer cooperatives, milk distributors, haulers, and brokers. The number of issued and active licenses is as follows:

Licenses	Number Issued and Active
Milk Dealers (haulers, brokers, bargaining cooperatives)	454
Plant Operators	108
Operating Cooperatives	17
Frozen Dessert Handler	170
Frozen Dessert Manufacturer	168
Part 2 Processing Permits	336
Milk Receivers	3,782
Bacteria Licenses	892
Processing Plant Superintendents	336

Certified Milk Inspectors	96
Equipment Installers	248
Import Milk Permits	103

Inspections and Samples

Per the Pasteurized Milk Ordinance (PMO), each fluid plant, manufacturing plant, and wholesale frozen dessert plant must be inspected every 90 days. Staff performed 5,622 on-site inspections in 2019: 2,887 milk plant sanitary and pasteurizer inspections and 1,181 milk receiver inspections and bulk vehicle inspections.

Per the PMO, every milk and dairy product must be sampled every month. MCDS staff submitted 14,917 product samples in 2019. Of those, 14,046 were sampled for regulatory analyses with public health significance and were submitted to the State Food Laboratory for testing.

In addition, every dairy farm in New York State is inspected at least twice a year by a CMI that is certified by the Department. In 2019, CMIs conducted approximately 15,000 dairy farm inspections, reviewing sanitary conditions of farms, health of cows, and health of the farm employees. The Department conducted 693 evaluations of CMI proficiency in 2019.

Division Laboratory Evaluation Officers conduct full on-site evaluations once every two years in 92 milk testing laboratories. Each lab is also inspected every six months to ensure the accuracy of sample testing.

By regulation, any person who installs equipment on a dairy farm or in a milk plant must register with the Department. They are responsible for technical installations and meeting applicable construction and fabrication requirements of the PMO, and dairy material and design requirements, such as 3-A Sanitary Standards.

Aid-to-Localities

The Division does not administer aid-to-localities grants.

Federal/Interstate Activity

The division administers the PMO through a cooperative agreement with FDA and the National Conference on Interstate Milk Shipments (NCIMS). MCDS staff is continuously engaged in dairy regulatory policy in the United States. NCIMS is the controlling authority for Grade A dairy products, dairy farm regulations, dairy plant regulations, technical dairy processing equipment, and approved processes nationally.

New York participated in several other regulatory discussions with groups, including the Interstate Milk Shippers Program, Dairy Practices Council, FDA Northeast Dairy Equipment Review Committee, National Association of Dairy Regulatory Officials, 3-A Sanitary Dairy Equipment Standards, and the National Mastitis Council. The division's presence at meetings is vital to ensure the changes proposed meet and address New York's interests and initiatives.

The impact of dairy on the New York economy makes participation in the NCIMS vitally important to achieve the Department's mission to strengthen the dairy industry.

Programs

The Milk Producer Security Fund provides an option for dealers to provide required security by depositing a fee to a fund administered by the Department. In 2019-20, this fund secured the milk purchases of about 50 licensed dealers. The fund balance as of March 31, 2020 was \$11.6 million.

Western New York Milk Marketing Order (WNYMMO)

The WNYMMO is responsible for setting the producer prices and value of milk marketed in the western third of New York State that is not otherwise covered by the Federal Milk Market Order. This order was initiated at the request of dairy producers to ensure the orderly marketing of milk in this area by requiring that all producers be paid uniformly for their milk, regardless of the value of the product produced.

Dairy Promotion Order

The New York State Dairy Promotion Order collects 10 cents per hundredweight of milk produced in New York State from producers to fund marketing and research projects approved by a board of New York dairy producers. This assessment is a one-to-one offset from dairy producers' 15 cent per hundredweight obligation to the federal milk marketing order. During the last year, over \$14.9 million was collected to fund these marketing and research programs.

Statistics

Staff process about 4,400 monthly statistical reports annually to tabulate information on the health and activity of New York's dairy industry. From this information, the division published an annual statistical bulletin. These reports are used by the USDA's National Agricultural Statistics Service to ensure that its own data is complete and accurate. Additionally, this information is used to generate other statistical reports, on demand, as requested by agricultural economists and government decision makers to ensure that economic development, regulatory, and public policies are having their desired outcome. There is no other source of reliable information on this largest segment of the agricultural economy of the State.

Education and Outreach

In 2019, the division:

- Provided an annual weeklong training for new CMIs at Cornell and annual outreach to about 85 CMIs in four locations across New York.
- Presented seven Processing Plant Superintendent seminars to over 350 permitted facilities.
- Conducted three office conferences on compliance and enforcement corrective action plans.
- Continued investigations into companies illegally selling raw milk, raw milk products, and other foods. These investigations include collaboration with the USDA, FDA, New York State Department of Health, and the New York City Department of Health and Mental Hygiene.

In conjunction with Cornell University Department of Food Science and Extension, the division:

- Conducted four hands-on pasteurization training courses; and
- Educated dairy laboratory staff in four regional seminars covering approximately 92 industry laboratories.

Plant Industry

Staffing

The Division of Plant Industry consists of 44 permanent employees, including office staff and field staff. The division also hires up to 91 seasonal employees (Assistant Horticultural Inspector 1s and 2s) to work on survey and eradication programs.

Plant Inspection and Licensing

As part of the Division of Plant Industry's mission to prevent and control insects and diseases of plants and trees, New York's horticultural inspectors conducted over 4,500 nursery grower and dealer inspections, certified both domestic and foreign shipments to leave the state, and issued 53 quarantine orders to stop the movement of plant material suspected of harboring insect or disease pests. Inspection activities in 2019 are summarized as follows:

Nursery Grower inspections	2,330
Nursery Dealer inspections	2,138
Active Nursery Growers	2,746
Active Nursery Dealers	5,992
Shipment inspections (incoming domestic)	26
Shipment inspections (incoming foreign)	36
Shipment inspections (outgoing domestic)	464
Shipment inspections (outgoing foreign)	393
Total plants inspected	3,795,259

Aid-to-Localities

The division administered eight research contracts with Cornell University, one with the New York State Turfgrass Association, and one with the Chautauqua County Beekeepers Association.

Federal/Interstate Activity

The division manages 14 cooperative agreements with the USDA. These include both plant-pest surveys as well as control activities such as containment or eradication.

Division staff participate in several committees of the Eastern and National Plant Boards. In 2019, Dickman Farms in Auburn, NY completed the process to become certified in the Systems Approach to Nursery Certification Program (SANC). SANC is an audit-based approach where regulated entities identify critical control points and best practices that help to avoid pest problems in the plant production facility rather than relying on "snapshot in time" inspections. Participation in these organizations and programs helps the Department regulate businesses in efficient, effective, and innovative ways.

Plant Regulatory and Quarantine Programs

Industrial Hemp Agricultural Research Pilot Program

The New York State Industrial Hemp Agricultural Research Pilot Program has grown significantly since its inception in 2016. At the end of 2019, the program had over 550 research partner growers, 74 research partner processors, and 24 combined grower/processor research partners. During the 2019 growing season, Division of Plant Industry staff performed over 1,200 hemp inspections.

As the federal regulatory landscape changes, the New York State Industrial Hemp Agricultural Research Pilot Program will evolve. The Agricultural Improvement Act of 2018 removed industrial hemp (*cannabis sativa* with a THC content of 0.3% or less on a dry weight basis) from the federal Controlled Substances Act, which will eliminate some previous barriers to entering and navigating the industry. In October 2019, the USDA Agricultural Marketing Service issued an interim final rule regarding state involvement in the regulation of hemp production. The Department submitted comments regarding the interim final rule to regulate hemp in a more practical manner.

European Cherry Fruit Fly

In 2019, quarantine and regulated areas were expanded to all of Erie County and Niagara County and a portion of Orleans County due to positive detections for European Cherry Fruit Fly (ECFF, *Rhagoletis cerasi*). Plant dealers and nurseries within the quarantine and regulated areas were inspected with no positive detections. ECFF trapping was conducted in 29 counties by Department personnel. 1,191 traps (860 in commercial orchards) were placed with a total of 9,193 servicings; no positive *Rhagoletis cerasi* were detected outside Niagara County. Eleven traps located in orchards in Niagara County placed by division personnel had positive detections for *Rhagoletis cerasi*. Of those, only one orchard trap had ECFF caught more than once. An additional 1,121 traps caught ECFF in parks, along roadways and in other unmanaged areas primarily in Niagara County, some in Orleans County, and a few in Erie County. The USDA was responsible for conducting trapping for ECFF in Niagara, Erie and Orleans Counties at 11,576 sites outside of orchards. Honeysuckle, *Lonicera* sp., a ubiquitous invasive plant, is an alternate host for ECFF making eradication extremely challenging. There has been no evidence of cherry fruit infested with ECFF in New York.

Asian Longhorned Beetle Eradication

The Asian Longhorned beetle (ALB) is a dangerous pest of hardwood trees. Native to China, Japan, and Korea, the insect likely was transported into North America in solid wood packing materials used for international shipping. The first North American infestation was discovered in Brooklyn in 1996, and infestations have subsequently been found in Long Island, New Jersey, Illinois, Massachusetts, Ohio, and Ontario, Canada. In these areas, tens of thousands of trees have been cut down to prevent the spread of ALB.

Through a cooperative effort, and the help of program contractors, the New York ALB program has declared eradication in Brooklyn and Western Queens. This follows the eradication successes in Manhattan, Staten Island, Eastern Queens and Islip, Long Island. Now all areas of New York City have been cleared of ALB, and the only quarantine remaining in New York is in Central Long Island.

- Total area under regulation is 53 square miles in the Central Long Island area.
- Monitoring 788 General Compliance Agreements and 18 Nursery/Garden Center

Agreements.

- 1,290 site inspections were made in 2019 along with 152 vehicle inspections. Four quarantine orders and four limited permits were issued to permit controlled movement.
- The ALB program continues to prioritize outreach, education, and training to bring awareness and understanding of this destructive pest to the public's attention. Fourteen on-site compliance trainings were provided; 48 individuals and 23 companies/organizations were trained.

Golden Nematode Quarantine and Management Program

The Golden Nematode (GN) is a destructive potato pest that threatens the State's potato industry and other soil-bearing crops. GN is extremely difficult to eradicate. New York is the only state in the US that has a certifiable incidence of this pest. Since the 1940s, New York State has maintained an effective and comprehensive control program to minimize its spread to other areas and to protect the export of New York potatoes, nursery stock, and other agricultural commodities that encounter soil. Program activities include:

- Sanitized farm and construction equipment (838 power washed, and 13 steam heat treated) to prevent the spread of GN through the movement of soil.
- Collected leaf samples for DNA analysis to confirm that the Resistant Variety Crop Rotation was adhered to.
- Since 2010, the Department, in cooperation with the USDA, continues to make progress toward the goal to de-regulate 90% of the currently regulated acreage. A revision to the GN quarantine was submitted in November 2019 that will reduce the regulated acreage in the Towns of East Hampton and Riverhead by over 70 acres. To date over 1,186,639 acres have been removed from the GN quarantine with 101,995 acres remaining. Work is continuing to reduce this regulated acreage further.
- Systematic soil surveys are conducted in potato-producing areas of New York to determine if new introductions of GN are present and to confirm that currently regulated fields remain without detectable levels of GN cysts. In 2019, soil samples were taken in seed potato production fields, at potato grader stations, in fields considered for deregulation, and fields known to be infested or exposed to infestation. In eight New York counties, a total of 2,154 samples from 71 fields comprised of 899.49 acres were sampled and all were found to be negative for signs of Golden Nematode.

Plum Pox Virus (PPV) Quarantine and Eradication Program

In cooperation with the USDA and Cornell University, the Department is using a multi-tiered approach of survey, control, and education to eradicate PPV from New York. Division of Plant Industry personnel planned, coordinated, and conducted the survey for the commercial stone fruit orchards, border survey, and woodlots survey this past year. No PPV-positive trees were found in the 2019 survey.

With the conclusion of the 2019 survey, there have now been four consecutive years of negative test results for the regulated area in Ulster and Orange Counties. There is no longer a regulated area in those counties. This region is still part of the nursery stock regulated area of those counties. The propagation ban for Niagara County remains unchanged.

As part of the eradication survey, program staff surveyed 577 commercial stone fruit blocks totaling over 288 acres in three counties for a total of 49,162 leaf samples collected. All samples tested negative.

A border survey was conducted for the eighth year in a row by division personnel. This was an intense survey of woodlots and residential properties along the Niagara River. The target survey area started at Fort Niagara State Park and ran south along the Niagara River to Buckhorn Island State Park (northern section of Grand Island). The Niagara River separates New York (Niagara County) from Canada (Province of Ontario). Across the Niagara River within Ontario, Canada is a stone fruit growing region for Canada. The PPV is known to occur in this region.

Spotted Lanternfly

Spotted Lanternfly (SLF, *Lycorma delicatula*), is a planthopper native to China, India, and Vietnam. SLF is known to utilize more than 70 plant species, including cultivated grapes, apples, stone fruits, other fruit trees, the invasive tree of heaven, and many species of hardwood trees.

SLF is expected to have a negative impact on agriculture, forest product, and recreation industries in areas of infestations. SLF was first detected in the United States in Berks County, Pennsylvania in 2014, and established populations have since been confirmed in Delaware, New Jersey, Maryland, Virginia, and West Virginia. Strategies for monitoring and control of SLF are still in development, as this pest has been established as an invasive species in the United States for fewer than five years, and its biology is still not well understood.

To date, no SLF established populations have been confirmed in New York. One dead SLF was found in Delaware County in 2017. A total of 16 SLF detections were confirmed in 2018 and in 2019 a total of 30 SLF detections were confirmed.

The SLF Response Team established an external quarantine on September 9, 2018 to help prevent the transport of SLF into New York from areas it is established. The quarantine regulates various articles that originate from quarantined areas or have traveled through quarantined areas, including living spotted lanternfly; tree and plant materials; yard and landscaping waste; remodeling and construction waste; firewood; packing materials; and outdoor household items such as lawn mowers, grills, patio furniture, and stone. A part of the SLF Response Team's detection strategy has been to inspect various regulated articles to make sure they comply with the quarantine. In 2019, a total of 857 inspections were conducted. Checkpoints accounted for 179 of the total inspections. Checkpoints contributed to 903 vehicles being screened with 58 rejections issued.

As a part of survey efforts, 30 sticky band traps were deployed by the Response Team to capture SLF in high risk areas of New York State. The traps were taken down in late fall with no positives found. In addition to trapping, a total of 2,550 grids were surveyed and found negative for populations of SLF. This accounts for over 630,000 acres surveyed.

To increase public knowledge on SLF, outreach efforts began in March 2018. Several outreach materials were created for SLF including factsheets, a Conservationist article, press releases, SLF websites, a variety of SLF brochures, temporary tattoos, bumper stickers, social media posts, and presentations. More than 50,000 people were reached through 64 presentations and webinars to various stakeholder groups and the public throughout New York State.

Oak Wilt

Oak Wilt was confirmed in 2016 by New York State Department of Agriculture and Markets and the New York State Department of Environmental Conservation (NYSDEC) in Suffolk, Kings, and Ontario Counties. Additionally, in 2017 Oak Wilt was confirmed again in Schenectady County after efforts were made to eradicate the pathogen in 2008.

In response to current detections, the NYSDEC has enacted a protective zone within the following counties of New York: Suffolk, Kings, Ontario, and Schenectady. NYSDEC is currently conducting visual surveys, collecting leaf samples of symptomatic material for diagnostic, and eradicating infected material to control the spread of the pathogen within each protective zone. AGM authorizes the movement of oak nursery stock out of a protective zone under a compliance agreement and a limited permit issued by a Horticultural Inspector from the Division of Plant Industry. In 2019, the division issued 33 compliance agreements and limited permits in Suffolk County to establishments shipping oak nursery stock out of the Suffolk County protective zone. In addition, horticultural inspectors completed inspections of sales records and field surveys of oak nursery stock during the summer of 2019.

Phytophthora Ramorum Nursery Survey

A survey was conducted of a nursery location that was determined to be high-risk for *Phytophthora ramorum* based on prior detections of the pathogen. The survey was conducted during the period May through July 2019 and consisted of water baiting traps, visual surveys, leaf sampling, and an environs survey of the nursery. At the nursery, a water-baited trap yielded an inconclusive detection; subsequent visual surveys did not produce a positive detection in host plant material at the nursery. Additionally, an environs survey was conducted which returned negative results for *Phytophthora ramorum*.

Beech Leaf Disease Survey

In 2019, New York received reports of Beech leaf disease in several neighboring states; a survey of beech nursery stock was planned for nursery grower and dealers across New York State. Twenty-five horticultural inspectors completed visual surveys of beech nursery stock for symptoms of Beech leaf disease. In total, just over 4,000 host trees were surveyed at just about 470 sites with no positive detections found. The Division of Plant Industry along with NYSDEC Division of Land and Forests surveyed for the presence of the beech leaf disease on public lands across the state. For 2019, five New York counties were confirmed for the presence of Beech leaf disease from suspect samples confirmed by the official identifier, Cornell University Plant Disease Diagnostic Clinic.

Commodity Inspection, Sampling, and Analysis

New York State Seed Testing Laboratory

The New York State Seed Testing Laboratory (NYSSTL) received 632 service samples consisting of 130 species. Samples were submitted from 67 New York growers, and one grower each in California and North Carolina.

Service sample testing consisted of:

	Number of Tests 2018	Number of Tests 2019
Germination	624	665
Purity	123	107
Cold Test	65	64
Fluorescence Test		6
Moisture	5	18
Seed Count	3	16
Rush	5	1

Service samples by crop category are as follows:

	2017	2018	2019
Ag	49.60%	36.75%	37.40%
Flower	2.99%	13.09%	21.55%
Lawn	7.37%	12.15%	1.90%
Range/Restoration	1.79%	2.05%	0.32%
Tree	0.00%	0.63%	0.00%
Vegetable	38.25%	35.33%	38.83%

NYSSTL received 347 regulatory samples for testing. Twelve samples were received and forwarded to the USDA Federal Seed Laboratory in Gastonia, North Carolina for Trueness-to-Variety testing. Four samples were received, analyzed, and forwarded to the USDA Federal Seed Laboratory for regulation of the Federal Seed Act. Two analysts were hired at the end of the year.

Seed Inspection, Sampling and Certification (A&M Law, Article 9)

Agriculture and Markets Law provides for the inspection, sampling and analysis of seed that is offered or exposed for sale in New York. The division works closely with Cornell University's New York Seed Improvement Project to certify seed. The designation of seed as certified indicates that it is of a known variety produced under strict standards to maintain varietal purity.

In 2019, 348 seed samples were taken. 310 samples were analyzed and 78% of the samples were found to be accurately labeled. Approximately 46 seed labelers were sampled. There were 401 seed inspections performed.

Seed	Turf/Lawn	Flower	Ag	Vegetable
Samples Analyzed	58	3	221	28
Samples in compliance with labeling	46	3	165	27
Samples with Violations	12	0	56	1

Fertilizer, Lime & Soil and Plant Inoculants (Article 10, 9A, 10A)

In 2019, 101 commercial fertilizer samples were obtained for analysis and comparison to their labeled guarantees. Fifty eight percent of the fertilizer products sampled were found to be compliant to their stated guarantees. In addition, 12 agricultural liming materials were also sampled for analysis.

	Fertilizer	Lime Brands	Soil and Plant Inoculants
Firms or Brands Licensed	562	181	668
Inspections Performed	368	185	70
Samples Taken	101	12	N/A

Ammonium Nitrate Inspection

There were 12 establishments registered as ammonium nitrate retailers. Ammonium nitrate retailers in state are subject to quarterly inspections by New York State horticultural inspectors. An annual inspection is done in conjunction with the New York State Department of Homeland Security and the New York State Police Counterterrorism Unit. All facilities in the State were inspected and found to be following the regulations.

Stop Sale Orders

109 Stop Sale Orders on products/distributors were issued at approximately 48 facilities in 2019.

Invasive Species and Noxious Weeds

Regulated Invasive Species

During 2019, there were 3,659 total grower and dealer inspections conducted by the division. Of this total number 417 had plants regulated as invasive species present. There were 11 prohibited plant violations at 10 locations. The compliance rate for the invasive plant aspect of Part 575 is 98% at regulated establishments. This is an indication of the excellent cooperation the division has had from the regulated community.

There were also 70 violations issued for regulated plants at 47 individual establishments. These were typically labeling violations. The Department is following up with reminder letters to all establishments found to be in violation of these regulations.

The Invasive Species coordinator has engaged with all the Partnerships for Regional Invasive Species Management (PRISMS) around the State. This has included attending 25 events and 20 PRISM meetings across the State.

Cooperative Agricultural Pest Survey

The 2019 Cooperative Agricultural Pest Survey (CAPS) program looked for ten invasive targets (three state targets and seven federal invasive targets on the Federal Priority Pest List). A total of six visual targets were surveyed by 25 horticultural inspectors across the State. The State visual targets were Boxwood Blight and Late Blight on tomato. The federal visual targets were Allium Leaf Miner, European Spruce Beetle, Groundnut Bud Necrosis, and Southern Bacterial Wilt. Visual surveys were completed by horticultural inspectors at nursery/greenhouse sites inspecting for pests and diseases on multiple host plants. Almost 2,200 sites and just over 5.5 million host plants across the state were surveyed. There were 27 specimens collected for determination resulting in detections of Boxwood Blight confirmed by the official identifier, the Cornell University Plant Disease Diagnostic clinic.

In addition, four other target species were surveyed; Large Pine Weevil, Pine Tree-Lappet, Silk Siberian Moth, and Pine Processionary Moth using a trap and lure to attract the pest. A total of 136 traps were deployed at 68 sites across the State. Horticultural inspectors submitted almost 2,500 specimens for determination. There were no positive target identifications made by the official identifier, the Cornell University Insect Diagnostic Lab.

All 2019 results were entered into the National Agricultural Pest Information System (NAPIS) program. Federal targets and State visual from the highest predicted impact pest lists were used to evaluate a targeted survey of various plant commodity groups for 2020.

Apiary Inspection and Honeybee Health

The 2019 apiary inspection season began in April and ran through November with three apiary inspectors covering all counties within New York State. During this period, the inspectors conducted 409 apiary inspections and inspected 9,104 colonies. In 2019, there were 114 cases of American Foul Brood (AFB) disease detected within sixteen beekeeping operations. All cases of AFB were properly abated. A two-mile perimeter survey around each affected bee yard was conducted. Local beekeeping clubs were notified and provided with information on identifying AFB in their colonies.

In 2019, efforts were stepped up to inspect nucleus colonies and queens produced in New York. There were 49 producers inspected, with 2,160 nucs and 4,034 queens found free of pests and diseases and certified to be sold. Apiary inspectors also issued 58 interstate certificates for the out of state movement of 41,041 colonies and 7,105 nucs for beekeepers.

The Department participated again this year in the National Honey Bee Survey. The State Apiarist selected 19 beekeepers who were sampled either one or two times during the season and samples were sent to the Beltsville Bee Lab for analysis. One of the most telling results within this year's sampling linked high levels of varroa mites with increased levels of Deformed Wing virus and Varroa Destructor virus.

Weights and Measures

The Division of Weights and Measures is responsible for assuring measurement accuracy and uniformity in commerce throughout New York State in accordance with Article 16 of the Agriculture and Markets Law. The Bureau works in cooperation with municipal offices of weights and measures throughout the State to assure accuracy in all commercial transactions based on weight or measure and to assure the quality of petroleum products offered for sale. These activities assure equity so that consumers get what they pay for and businesses enjoy a marketplace based on fair competition.

Staffing

The division has 22 permanent staff including 13 weights and measures specialists, four metrologists, a division director, an assistant director, and support staff.

Local Government

The division supervises the 60 municipal weights and measures programs to promote uniform enforcement of the provisions of Article 16 and exercises concurrent authority with them. The division evaluates each municipal program on an ongoing basis, provides feedback and assistance to municipal programs, and provides training to municipal officials. In 2019, the Bureau provided 3,107 hours of training to 136 inspectors from 56 municipalities.

Federal/Interstate Activity

- New York State Department of Environmental Conservation (DEC):
On March 5, 2020 the division supplied the DEC with the 2019 annual report of petroleum quality analysis relating to the Clean Air Act.
- National Workgroup on Taxi Meters and Transportation Network Measurement Systems:
The division worked on specifications and tolerances for taxi meters and transportation network systems.
- NYSERDA:
The Fuel-NY program involved frequent communication and collaboration with NYSERDA.
- National Conference on Weights and Measures:
The division made multiple proposals to revise national standards for commercial weighing devices, including a proposal to correct a problem impacting the jewelry industry.
- American Petroleum Institute:
The division continued to be an active member of the RP1637 workgroup for “Color Symbols for Petroleum Products” for gas station fill-ports.
- American Society for Testing and Materials (ASTM):
The division continued its involvement with ASTM as a member of the committee on “Petroleum Products, Liquid Fuels and Lubricants.”

Certifications

The division maintains three certifications:

- Certificate of Traceability from the National Institute of Standards and Technology (NIST);
- Certificate of Accreditation in accordance with ISO/IEC 17025 from the National Voluntary Laboratory Accreditation Program (NVLAP); and
- Type Evaluation, certified by the National Conference on Weights and Measures (NCWM).

Programs

Special Details

The division tests and certifies large-capacity vehicle scales, terminal rack meters, and liquefied petroleum gas truck meters on a fee basis. The division limits its device-testing to those devices that are generally not tested by municipalities because they cannot justify the cost of the special equipment, training, or facilities.

2019	# Tested	Revenue
Large-capacity vehicle scales	72	\$12,600
Terminal rack meters	95	\$21,000
Liquefied petroleum gas truck meters	1,049	\$105,700
Total	1,216	\$139,300

Police Axle-Weigh Scales

The division maintains a testing facility at its Western New York regional office for testing axle-weigh scales used by various police departments throughout the State to enforce roadway weight limits. In 2019, the Bureau tested 638 pairs of scales from 57 police agencies, for a total revenue of \$32,900.

Metrology Laboratory

The division provides measurement services through its Metrology Laboratory, accredited by NIST and NVLAP. The laboratory provides services that are traceable to national standards for mass, length, volume, and time. In 2019, the division conducted 226 tests for private industry customers (total of \$33,215 in revenue) and 63 tests for municipalities (\$24,405 in revenue).

Type Evaluation

The division maintains one of five national laboratories in the country that evaluate new weighing and/or measuring devices to determine if they are "Legal for Trade."

Type of Evaluation	# Evaluations	Revenue
By the NYS Lab	24	\$24,068
Other Labs	39	\$3,900
Total	63	\$27,968

Petroleum Quality

The division administers the Petroleum Quality Program to assure the quality of petroleum products dispensed in the State. Regulated products are sampled at both the retail and terminal levels. Municipal officials collect the samples at the retail stations and Department specialists collect samples at wholesale terminals.

Product	Samples Taken	# Significant Octane/Cetane Failures ¹	# Other Failures of Significance ²
Gasoline	9,551	132 (1.4%)	48 (0.5%)
Diesel	1,354	0 (0.0%)	48 (3.5%)

¹ Octane Tol. (0.7 for < 89 and 0.6 for >=89), Cetane (> -2.0), ² Ethanol (for (E10) > 11.0%, for (E0) > 1.0%), Vapor Pressure from 9/16 to 5/31 (>ASTM 4814 +0.35 psi), Diesel flash point (4/1 to 11/30, 1D min. 82 °F 2D min. 107 °F, 12/1 to 3/31, 1D and 2D min. 82 °F). All 2019 data has not been entered so the above data is not complete.

Weighmaster Licenses

The weighmaster license program is intended to provide a higher level of accountability in bulk transactions where the buyer is typically not present. By law, these transactions include bulk sales of coal, coke, feed for domestic animals, fertilizer, lime, and household goods (e.g. when hiring a moving company) but are also common in contract bulk sales. The division issued 3,131 weighmaster licenses in 2019 for total revenue of \$46,965.

Fuel-NY

To prepare for future emergencies and severe weather events, certain critical gas stations in the downstate area are required to have both a transfer switch and a plan for back-up power (generator). As of December 2019, 892 downstate retail gas stations were ready to deploy.

Milk Tank Poundage Charts

Municipal Weights and Measures test bulk milk tanks on farms and send the data to the division's central office. The test data is used to create a tank poundage chart that is used by both the farmer and processor to determine the amount of milk sold. In 2019, the division issued 185 bulk milk tank poundage charts.

New York State Fair

The annual Great New York State Fair, held for 13 days ending on Labor Day, preserves and enhances the agricultural legacy of the State of New York and promotes current and future agricultural awareness. The State Fair hosts statewide competitions in the breeding and showing of horses and livestock and the production of quality wine, vegetables, fruit, honey, maple syrup, flowers, forage, and grain. Likewise, the Fair also hosts competitions for the youth of New York State that include horses, livestock, horticulture, robotics, dogs, sports, talent, and general economics. In total, the Fair averages 38,000 entries into the various competitions during the 13 days of the Fair, where over 2,000 youth and 9,500 head of livestock will call the Fairgrounds home.

The annual Fair contributes extensively to the economy of the Syracuse area. The Fair adds in excess of an estimated \$100 million in revenue to the local economy every year. During Fair-time, all lodging in the area is booked to capacity.

The attendance at the State Fair hit a record 1.329 million people, or 103,000 people a day, in 2019.

Year-Round Events

The Fairgrounds are used extensively in the remaining 50 weeks of the year with over one million attendees participating in any of the almost 300 shows that the Fairgrounds host. The Fairgrounds consist of 375 acres with approximately 200 acres in the exhibition area. There are approximately 80 structures with 21 major exhibit buildings, livestock barns and stables, a 4,000-seat Coliseum, two open amphitheaters, and parking for 20,000 cars. Unveiled in 2018, the Exposition Center is 136,000 square feet with 110,000 square feet of expo space. It is the largest such space north of New York City between Cleveland and Boston.

The main facilities that are used during the non-Fair season are the Center of Progress Building, the Horticulture Building, the International Building, the Exhibit Center, Chevy Court, the Coliseum, and related horse barns. The non-Fair shows include national and regional horse shows, trade shows, boat shows, home shows, car shows, concerts, antique shows, company parties and picnics, the Syracuse Nationals Auto Show, weddings, and other events. The Coliseum hosts national, regional, and local horse shows April through October.