

Arizona Agriculture
Reaches the World

Citrus, Fruit and Vegetable Division

Annual Report July 1, 2021-June 30, 2022



AZDA
ARIZONA
DEPARTMENT
OF AGRICULTURE

ARIZONA DEPARTMENT OF AGRICULTURE
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ARIZONA DEPARTMENT OF AGRICULTURE

CITRUS, FRUIT & VEGETABLE DIVISION

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<https://agriculture.az.gov/about-us/divisions/citrus-fruit-vegetable-standardization>

The Citrus, Fruit and Vegetable Division as set forth in A.R.S. § 3-441 and A.R.S. § 3-481 provides produce licensing, collection of statistical data and fresh produce administrative assistance. Citrus, Fruit and Vegetable Division formerly monitored and enforced quality standards. Under the recommendation of the Citrus, Fruit and Vegetable Division Advisory Council, the Citrus, Fruit and Vegetable Division program has moved toward a food safety program instead of a produce quality program.

Statistical data is collected from Arizona Shippers, who are the first handlers of produce. Citrus, Fruit and Vegetable Division assists the Arizona Citrus Research Council (ACRC) and the Arizona Iceberg Lettuce Research Council (AILRC) in the collection of assessments and statistical data. ACRC and AILRC support the development of citrus and iceberg lettuce research programs and projects within the Arizona produce industry.

Citrus, Fruit and Vegetable Division assisted in the implementation and in the current administration of the State of Arizona's first marketing agreement. Arizona Leafy Greens Marketing Agreement (Arizona LGMA) provides food safety audits to the Arizona produce industry and is managed by the Arizona Leafy Greens Food Safety Committee. The Arizona Leafy Greens Food Safety Committee is made up of five signatory members, elected by all of the Arizona LGMA signatories. Arizona is the second largest leafy green producer in the United States. Arizona LGMA members represent 99.4% of leafy green products grown in Arizona.

Under a cooperative agreement with the United States Department of Agriculture (USDA), Citrus, Fruit and Vegetable Division manages the Federal-State Inspection Service which includes shipping point and terminal market inspections with offices in Phoenix, Nogales, and Yuma.

The Produce Safety Rule is administered under the guidance of Citrus, Fruit and Vegetable Division through a grant provided by the U.S. Food and Drug Administration (FDA). The Produce Safety Rule program provides the Arizona produce industry training, outreach, and inspection for compliance of the Produce Safety Rule component of the Food Safety Modernization Act.

This program is entirely industry funded through license fees and carton assessments and uses no general fund monies. We work closely with a governor appointed industry advisory council, which meets quarterly and advises the program supervisor on all issues pertaining to Citrus, Fruit and Vegetable Division.



Note: Acreage information is available at:

Arizona Agricultural Statistics

230 N. 1st Avenue, suite 302-A

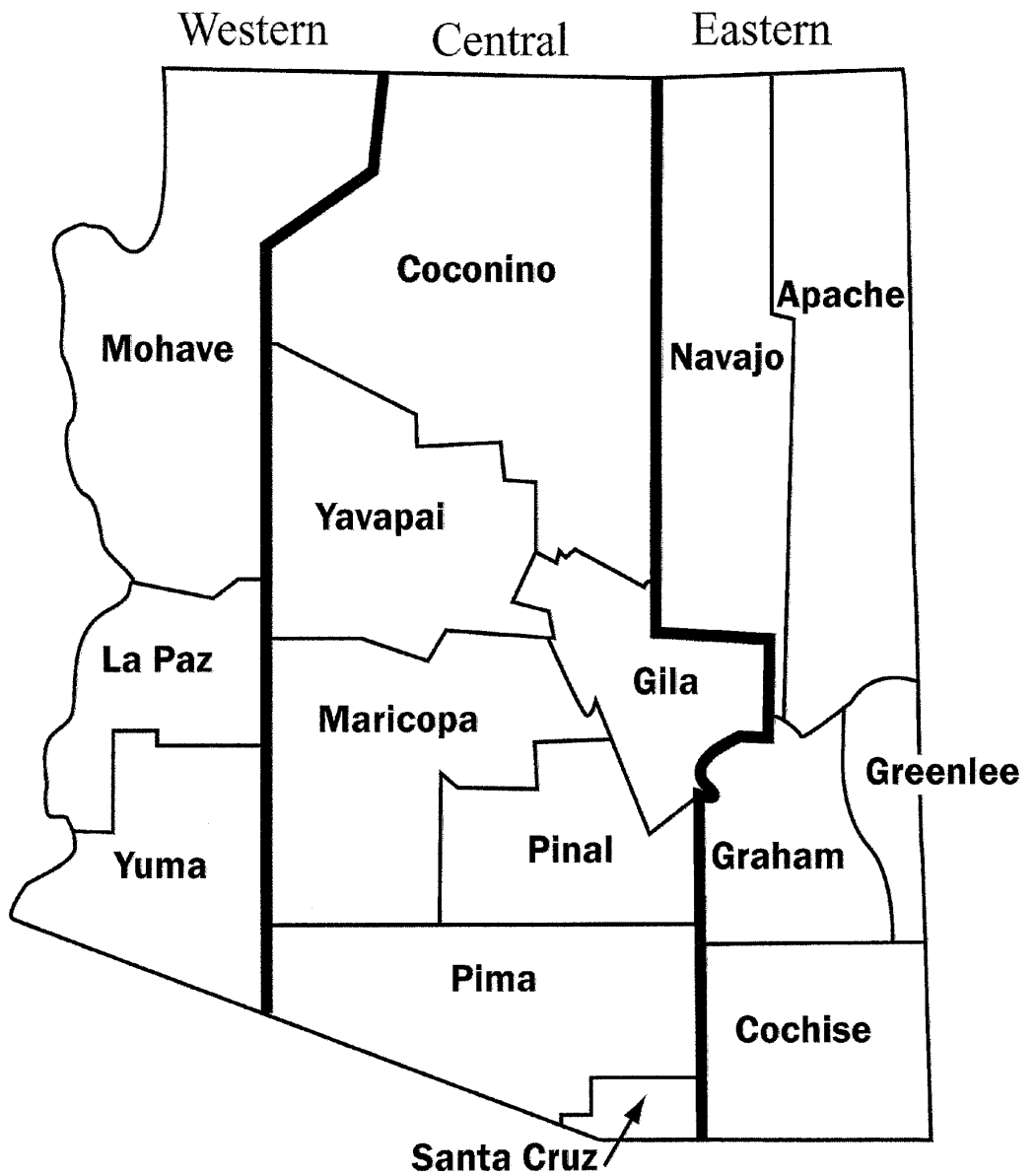
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Arizona Fresh Fruit & Vegetable Production District Map



**TOP TEN ARIZONA PRODUCE COMMODITIES
JULY 1, 2021 - JUNE 30, 2022**

Commodity	Package	Central	Western	Eastern	Total Arizona
Lettuce, Iceberg	Carton	291,612	20,623,352	0	20,914,964
Lettuce, Romaine	Carton	89,456	17,387,175	0	17,476,631
Spinach	Carton	77,799	8,232,949	0	8,310,749
Lettuce, Leaf	Carton	40,571	6,588,149	0	6,628,720
Cantaloupe	Carton	3,559,165	3,053,452	0	6,612,617
Broccoli	Carton	1,754,849	4,796,000	0	6,550,849
Cauliflower	Carton	68,960	4,150,470	0	4,219,430
Cabbage	Carton	415,770	3,458,784	0	3,874,554
Watermelon	Carton	879,551	2,648,357	0	3,527,908
Spring Mix	Carton	77,101	2,355,493	0	2,432,595

**TOTAL ARIZONA PRODUCTION
JULY 1, 2021 - JUNE 30, 2022**

Commodity	Package	Central	Western	Eastern	Total Arizona
<u>VEGETABLES</u>					
Anise	Carton	0	63,984	0	63,984
Artichoke	Carton	0	105	0	105
Arugula	Carton	0	743,829	0	743,829
Beets	Carton	30,501	98,267	0	128,768
Bok Choy	Carton	20,310	134,856	0	155,166
Broccoli	Carton	1,754,849	4,796,000	0	6,550,849
Brussel Sprouts	Carton	0	24,329	0	24,329
Cabbage	Carton	415,770	3,458,784	0	3,874,554
Cauliflower	Carton	68,960	4,150,470	0	4,219,430
Celery	Carton	78,590	2,317,486	0	2,396,076
Cilantro	Carton	220,661	1,063,605	0	1,284,266
Corn	Carton	287,222	0	0	287,222
Dandelion	Carton	14,054	9,117	0	23,171
Dill	Carton	0	1,340	0	1,340
Endive	Carton	0	15,905	0	15,905
Escarole	Carton	0	22,398	0	22,398
Frisee	Carton	0	1,695	0	1,695
Greens, Mixed	Carton	91,656	138,608	0	230,264
Herbs	Carton	3,233	2,466	0	5,699
Kale	Carton	107,153	626,129	0	733,282
Kohlrabi	Carton	4,555	3,164	0	7,719
Leeks	Carton	10,422	52,027	0	62,449
Lettuce, Boston	Carton	0	299,318	0	299,318
Lettuce, Iceberg	Carton	291,612	20,623,352	0	20,914,964
Lettuce, Leaf	Carton	40,571	6,588,149	0	6,628,720
Lettuce, Romaine	Carton	89,456	17,387,175	0	17,476,631

TOTAL ARIZONA PRODUCTION (continued)
JULY 1, 2021 - JUNE 30, 2022

Commodity	Package	Central	Western	Eastern	Total Arizona
<u>VEGETABLES continued</u>					
Napa	Carton	20,060	126,842	0	146,902
Onions, Dry	Carton	47,792	240,104	0	287,896
Parsley	Carton	126,364	409,491	0	535,855
Peas, English	Carton	0	6,080	0	6,080
Potatoes, Table	50 Lb Carton	362,554	0	0	362,554
Radicchio	Carton	0	55,885	0	55,885
Spinach	Carton	77,799	8,232,949	0	8,310,749
Spring Mix	Carton	77,101	2,355,493	0	2,432,595
Squash, Summer	Carton	925	0	0	925
Swiss Chard	Carton	24,926	88,064	0	112,990
Tomatoes	Carton	399,615	0	9,179	408,794
Turnips	Carton	17,287	22,816	0	40,103
Watercress	Carton	0	53,714	0	53,714
<u>FRUIT</u>					
Apples	Carton	0	0	17,249	17,249
Apples	Mfg Ton	0	0	2,299	2,299
Figs	Carton	13,561	0	0	13,561
Pears	Mfg Ton	0	0	62	62
<u>MELONS</u>					
Cantaloupe	Carton	3,559,165	3,053,452	0	6,612,617
Canary	Carton	7,399	539	0	7,938
Honeydew	Carton	966,192	585,635	0	1,551,827
Santa Claus	Carton	4,979	588	0	5,567
Specialty/Mixed Melon	Carton	93,101	282,160	0	375,261
Watermelon	Carton	879,551	2,648,357	0	3,527,908
<u>CITRUS</u>					
Lemons	Carton	0	1,802,029	0	1,802,029
Tangerines, Fairchild	Carton	0	16,862	0	16,862
Tangerines, Minneola	Carton	0	34,704	0	34,704
<u>CITRUS BY-PRODUCTS</u>					
Lemons	Ton	0	12,834	0	12,834
Tangerines, Fairchild	Ton	0	75	0	75
Tangerines, Minneola	Ton	0	509	0	509

FIVE YEAR PRODUCTION COMPARISONS

Comparison of Fresh Cartons

Commodity	Carton Size	2017-18	2018-19	2019-20	2020-21	2021-22
Anise	37 lbs.	88,480	94,755	89,095	118,645	63,984
Apples	40 lbs.	15,787	8,372	21,317	7,577	17,249
Artichoke	23 lbs.	0	0	0	0	105
Arugula	35 lbs.	750,841	534,096	543,320	501,673	743,829
Bean Sprouts	10 lbs.	1,104	280	1,911	0	0
Beets	35 lbs.	99,793	91,716	92,436	115,586	128,768
Bok Choy	38 lbs.	67,230	72,601	89,057	99,747	155,166
Broccoli	23 lbs.	5,553,281	6,227,550	6,418,031	6,352,021	6,550,849
Brussel Sprouts	25 lbs.	40,499	17,633	21,222	17,273	24,329
Cabbage	50 lbs.	3,297,703	3,978,812	3,474,608	3,202,687	3,874,554
Canary Melons	30 lbs.	0	0	0	6,419	7,938
Cantaloupes	40 lbs.	9,244,179	7,688,295	7,457,185	6,686,501	6,612,617
Cauliflower	25 lbs.	4,631,240	4,453,735	4,513,252	4,313,903	4,219,430
Celery	50 lbs.	4,017,663	1,841,509	2,110,514	1,991,520	2,396,076
Cilantro	20 lbs.	676,646	776,396	1,006,852	1,201,079	1,284,266
Corn, Sweet	50 lbs.	424,073	432,166	275,677	310,347	287,222
Daikon	40 lbs.	196	156	0	0	0
Dandelion/Dill	15 lbs.	36,289	35,064	31,494	24,306	24,511
Endive	30 lbs.	15,217	12,519	19,844	20,435	15,905
Escarole	30 lbs.	13,296	31,711	37,864	29,619	22,398
Figs	20 lbs.	27,508	31,219	30,917	14,524	13,561
Frisee	35 lbs.	866	2,959	7,142	8,359	1,695
Grapefruit	34 lbs.	11,488	20,360	0	0	0
Grapes	20 lbs.	0	9,464	0	0	0
Greens, Mixed	25 lbs.	101,885	119,420	120,201	187,783	230,264
Herbs	5 lbs.	36,384	22,735	14,917	5,696	5,699
Honeydew	30 lbs.	2,397,874	1,753,635	1,612,031	1,464,694	1,551,827
Kale/Flowering Kale	25 lbs.	757,520	793,565	694,816	628,743	733,282
Kohlrabi	20 lbs.	12,328	10,423	8,657	10,179	7,719
Leeks	30 lbs.	29,150	28,443	32,148	11,195	62,449
Lemons	40 lbs.	1,692,509	1,978,008	2,498,897	1,402,357	1,802,029
Lettuce, Boston	35 lbs.	533,763	450,652	415,223	356,753	299,318
Lettuce, Iceberg	50 lbs.	23,923,370	24,405,556	20,950,739	20,278,811	20,914,964
Lettuce, Leaf	35 lbs.	6,548,719	6,302,892	6,691,018	6,276,716	6,628,720
Lettuce, Romaine	40 lbs.	21,912,452	19,353,392	18,746,765	17,569,804	17,476,631
Napa	40 lbs.	101,122	120,564	120,220	109,613	146,902
Onions, Dry	50 lbs.	684,018	818,749	485,290	375,634	287,896
Onions, Green	13 lbs.	0	373	0	0	0
Oranges	40 lbs.	45,781	45,566	26,939	0	0
Parsley	21 lbs.	290,001	335,136	352,714	419,562	535,855
Pears	26 lbs.	621	4,397	0	0	0
Peas, English	25 lbs.	80	0	0	23	6,080
Potatoes, Table 50#	50 lbs.	511,105	268,135	354,637	263,111	362,554
Pumpkins	60 lbs.	1,783	0	0	0	0
Radicchio	35 lbs.	46,452	73,919	65,842	52,971	55,885
Santa Claus Melons	30 lbs.	0	0	0	7,887	5,567
Specialty & Mixed Melons	30 lbs.	522,651	575,126	318,462	611,144	375,261

Comparison of Fresh Cartons Continued

Commodity	Carton Size	2017-18	2018-19	2019-20	2020-21	2021-22
Spinach	25 lbs.	7,427,594	7,971,256	6,489,502	5,866,119	8,310,749
Spring Mix	35 lbs.	2,923,325	2,484,382	4,969,803	2,562,792	2,432,595
Summer Squash	30 lbs.	0	0	0	0	925
Swiss Chard	15 lbs.	155,005	147,510	126,833	118,609	112,990
Tangerines	40 lbs.	140,790	164,949	129,469	81,058	51,566
Tomatoes	30 lbs.	927,229	773,252	819,421	516,072	408,794
Turnips	50 lbs.	26,545	28,413	18,922	27,313	40,103
Watercress	8 lbs.	78,156	66,716	44,618	3,177	53,714
Watermelon	60 lbs.	4,747,176	4,131,909	3,433,622	3,359,659	3,527,908
Total Cartons		103,486,275	97,469,040	94,179,560	85,859,364	92,872,699

FIVE YEAR PRODUCTION MANUFACTURED TONS COMPARISONS

Comparison of Mfg. Tons

Commodity	2017-18	2018-19	2019-20	2020-21	2021-22
Apples	1,777	1,866	3,768	1,813	2,299
Grapefruit	11	0	0	0	0
Lemons	4,971	10,106	18,928	465	12,834
Oranges	93	0	203	0	0
Tangerines	1,120	1,365	2,749	28	585
Total Mfg. Tons	7,972	7,971	25,648	2,306	15,718

CFV LICENSING

A company desiring to transact business as a fruit or vegetable fruit dealer, citrus dealer, or shipper are required to apply for a license to the Citrus, Fruit and Vegetable Division. A license must be current prior to packing, shipping or wholesaling of produce. The citrus dealer licenses expire on August 1st and fruit or vegetable fruit dealer and shipper expire on September 1st of each year and must be renewed annually.

License Type	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022
Citrus Dealer	45	38	41	40	39
Produce Dealers	225	222	224	220	214
Shippers	150	147	139	133	130
Total	420	407	404	393	383

ORGANIC CERTIFICATION COST SHARE REIMBURSEMENTS

Organic operations may receive one reimbursement per certificate or scope of certification per year. The NOP currently recognizes four scopes of certification: crops, wild crops, livestock, and processing/handling. This means that clients with more than one certification scope may be eligible for more than one reimbursement.

Eligible operations will be reimbursed up to 50% of their organic certification costs, not to exceed \$500, for each NOP scope of organic certification. Any operation that is located within the United States and received organic certification on or between October 1, 2020 and September 30, 2021 may apply for reimbursement.

Fiscal Year	Certification Dates	Number of Reimbursements	Amount Reimbursed
FY 2011	October 1, 2010-September 30, 2011	32	\$ 31,989.22
FY 2012	October 1, 2011-September 30, 2012	43	\$ 35,888.48
<i>FY 2013</i>	<i>The USDA did not renew the Arizona grant for Organic Certification Cost Share Reimbursement for October 1, 2012-September 30, 2013.</i>		
FY 2014	October 1, 2013- September 30, 2014	48	\$ 40,897.37
FY 2015	October 1, 2014- September 30, 2015	58	\$ 67,727.27
FY 2016	October 1, 2015- September 30, 2016	60	\$ 41,273.58
FY 2017	October 1, 2016- September 30, 2017	91	\$ 67,794.83
FY 2018	October 1, 2017- September 30, 2018	98	\$ 67,491.37
FY 2019	October 1, 2018- September 30, 2019	80	\$ 47,038.15
FY 2020	October 1, 2019- September 30, 2020	80	\$ 36,961.79
FY 2021	October 1, 2020- September 30, 2021	76	\$ 37,215.00
Total		666	\$474,277.06

FEDERAL STATE INSPECTION SERVICE

The Arizona Federal-State Inspection Service, Fresh Produce Grade Inspection operates under a cooperative agreement between the United States Department of Agriculture and the Arizona Department of Agriculture. Citrus, Fruit and Vegetable Division has managed the program since 1996. The service is self supported with mandatory and voluntary inspection and certifications of fruits, vegetables and nuts and is funded entirely through user fees.

Inspection	Fiscal Year	Nogales	Phoenix	Yuma	Total
Market Inspections	FY 2020	30,138	598	472	31,208
	FY 2021	54,645	599	644	55,888
	FY 2022	40,147	182	202	40,531
Shipping Point Inspection	FY 2020	125	0	17	142
	FY 2021	445	0	29	474
	FY 2022	129	14	0	143
GHP/GAP Audits Statewide	FY 2020	30			
	FY 2021	17			
	FY 2022	10			

PRODUCE SAFETY RULE

In September of 2016, the Arizona Department of Agriculture and the Food and Drug Administration (FDA) entered into a five year cooperative agreement for the implementation of the Food Safety Modernization Act (FSMA) Produce Safety Rule (PSR). In August of 2018, the AZDA's Citrus, Fruit and Vegetable (CFV) Division gained primacy over the PSR.

During the last five years, the goal of the cooperative agreement was to develop and implement, a training and outreach program and a regulatory compliance and enforcement program for Arizona stakeholders covered under the PSR. The overarching goal of the Produce Safety Rule Program is to protect public health through the safe production of fresh fruits and vegetables. Ultimately, minimizing the risks of pathogen contamination is instrumental to preventing foodborne illnesses.

In June 2021, the Cooperative Agreement Program ended and our team had an opportunity to apply for another grant to continue the goals of the previous five year period. On June 28th, we received the award notification that the Arizona Department of Agriculture will be continuing to implement the Produce Safety Rule Program in the state of Arizona.

We believe it is important to align our program with the federal regulation to guarantee consistency nationwide. We continue to leverage the existing expertise, knowledge and resources in our state to provide education, training, and technical assistance to all produce farms. To better understand and assess the type of risks which occur during the growing, harvesting, packing and holding of fresh fruits and vegetables the AZDA continues to evaluate produce production in Arizona.

PSR FARM INVENTORY

In order to reach our goals and provide outreach, we will continue to establish and maintain an inventory of covered farms. This information will be shared quarterly with the FDA on an aggregate level throughout the next five year period. The AZDA recognized the importance of providing our partners with only the necessary data while protecting the privacy of our stakeholders, therefore we will continue to only share aggregate information. Farms are classified into sizes based on their average annual produce sales. Farms can be approved for an exemption based on criteria defined by the Food and Drug Administration. 2021 was the first year that farms received certification for either a Qualified Exemption or a Micro-Exemption.

Type of Farm	FY 2019	FY2020	FY2021	FY2022
Large Farms (Over 500,00 average annual produce sales)	143	109	124	121
Small Farms (250,000-500,00 average annual produce sales)	29	21	28	15
Very Small Farms (25,000-250,000 average annual produce sales)	31	36	44	17
Total Covered Farms	203	166	196	153
Certified Qualified Exempt (Under 500,000 average annual produce sales and shipping within 275 miles)	0	0	19	45
Certified Micro Exempt (Under 25,000 average annual produce sales)	0	0	19	149

PSR EDUCATION, TRAINING & TECHNICAL ASSISTANCE

Education before and while we regulate will continue to be the moto for the Produce Safety Rule Program. It is necessary to provide produce farmers with all the resources need to comply with the regulation. The Produce Safety Rule is the first ever federally mandated food safety standard thus technical assistance must be provided to ensure compliance. In 2022, there will be updates to the agricultural water section of the Produce Safety Rule and because of the changes made to the regulation there will be a need for additional training and outreach for farmers nationwide. We will also have to provide internal training for our inspectors once the rule is finalized.

The AZDA provides sub award funding to the University of Arizona’s Environmental Science Department for assistance from their cooperative extension staff that is well versed in food safety to assist in stakeholder trainings and technical assistance. We will continue to fund the sub awardee to provide assistance in order to satisfy the goals in the grant for the next five year period.

We made an effort to make training convenient for our industry by offering the mandatory, eight hour Produce Safety Alliance Grower Training course on a regular basis in different locations across Arizona. Additionally, a significant emphasis has been placed on enhancing individual farm technical assistance through our On-Farm Readiness Reviews. With the onset of COVID19, we adapted our training and outreach efforts to remote and online. Additional outreach was made through new online resources such as the AZDA Produce Safety Rule webpage, new social media accounts, an email listserv and the development of promotional videos.

Education, Training & Technical Assistance	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY2022	Total
PSA Grower Training Courses - ENG	1	4	10	7	30	12	64
PSA Grower Training Courses - SPA	1	2	1	2	0	2	8
Number of Participants - PSA	78	165	241	142	229	142	997
On Farm Readiness Reviews			25	46	38	16	125
Farm (Educational) Visits		20	21	42	45	53	181

PSR COMPLIANCE & ENFORCEMENT

In November 2019 the AZDA began regulatory inspections that reinforced our education and outreach of the Produce Safety Rule. Compliance and enforcement will ensure that we are providing the industry with the proper education, training and technical assistance to comply with the federal regulation and continue to improve upon their food safety practices. During 2021, routine inspections began for farms who had already received an initial inspection in the previous year. As routine inspections continue, inspectors will begin to determine the frequency of inspections based on food safety risks based on the Food and Drug Administration’s criteria.

PSR Inspections	FY 2020	FY 2021	FY 2022	Total
Initial Inspections	55	57	26	138
Reinspection	1	0	0	1
Routine		23	45	68
Total	56	80	71	207