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Vegetables and Pulses Outlook: April 2025

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Smaller Servings: Availability Reaches Record Low in 2024

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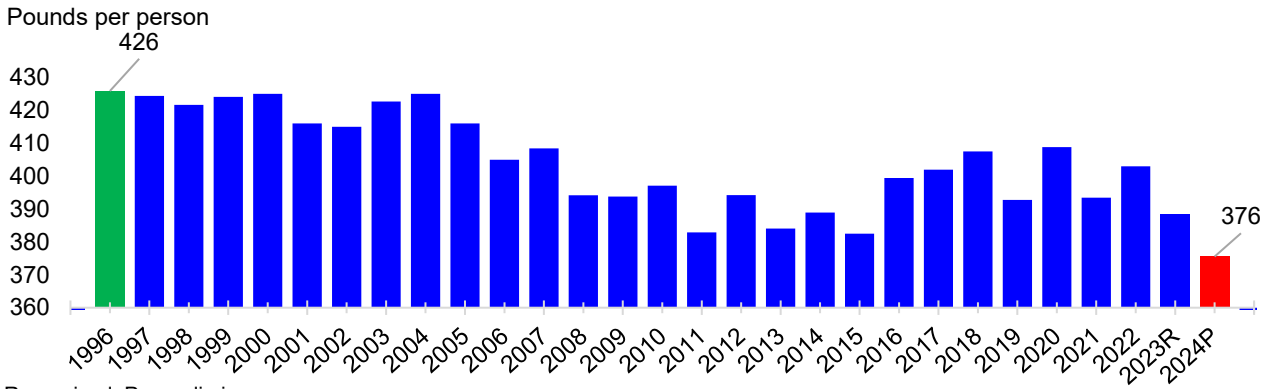
[Data tables are available in separate Excel file.]

In 2024, total U.S. per capita vegetable and pulse availability (a consumption proxy) fell to 376 pounds, marking the lowest level in over 35 years (since 1988). Since peaking at 426 pounds in 1996, availability has gradually declined, with notable dips over the past two decades. The 2024 availability total consists of fresh vegetables excluding melons (39 percent), processing vegetables (26 percent), potatoes (31 percent), pulses (3 percent), and mushrooms (1 percent)—a mix that has remained relatively consistent over time. Per capita availability has held steady for fresh vegetables and potatoes, declined gradually for processing vegetables, continued a slow upward trend for pulses, and remained stable for mushrooms despite a slight dip this year.

U.S. per capita vegetable and pulse availability slips again in 2024, hitting lowest point in over 35 years/1



R = revised, P = preliminary
1/ Annual per capita availability based on calendar year totals for fresh and processing vegetables (excluding melons), potatoes, pulses, and mushrooms.
Source: Computed by USDA, Economic Research Service.

Industry Overview

Per capita availability reflects the quantity available for consumption in the United States per person. It is often used to assess relative changes in the available consumption of agricultural products over time and among commodities, while controlling for changes in the population size.

Fresh vegetables: USDA, ERS preliminary per capita availability of fresh market vegetables for 2024 is 148 pounds per person, down 5 pounds from the previous year. The 2024 preliminary fresh vegetable availability (excluding potatoes) is about 9 pounds less per person than the previous 3-year average. A 4-percent decline in fresh market vegetable production, as shown in table a5, coupled with a 7-percent increase in export volumes, offset higher import volumes in 2024 (up 2 percent).

Processing vegetables: USDA, ERS estimated per capita availability of processing vegetables (excluding potatoes, sweet potatoes, and mushrooms) was 95.6 pounds per person in 2024, down 8 percent from a year earlier and down 15 percent from the previous 5-year average (2019–23). Per capita availability for major processing vegetables, such as tomatoes and sweet corn, declined year-over-year.

Potatoes: The USDA, ERS preliminary per capita availability of potatoes for calendar year 2024 is 117.2 pounds, almost unchanged from 2023 (116.9). In 2024, potato per capita availability was 3 percent higher than the previous 3-year average (113.5, 2020–22) and would be the highest potato per capita availability since 2018. The largest shares of potato domestic availability in 2024 on a fresh-weight basis are frozen products (59 percent), fresh table stock (29 percent), and potato chip products (18 percent).

Pulses: USDA, ERS preliminary per capita availability of dry pulse crops increased by 7 percent in calendar year 2024 to 11 pounds per person, rebounding from a decline the previous year. The largest year-over-year gains came from dry beans (up 30 percent) to almost 7 pounds per person, followed by lentils (up 95 percent) to almost 1 pound per person. The increases in dry bean and lentil availability more than offset 2024 declines in dry peas (down 34 percent) to 2 pounds per person and chickpeas (down 9 percent) to a little over 1 pound per person.

Mushrooms: The preliminary 2023/24 per capita availability for all mushroom products (including truffles) is 3.3 pounds per person, a 6-percent decline from 2022/23. The decline reflects reduced domestic production coupled with stagnant growth in net imports on a fresh-weight basis.

Table 1: U.S. vegetable and pulse industry at a glance/1, 2021–24

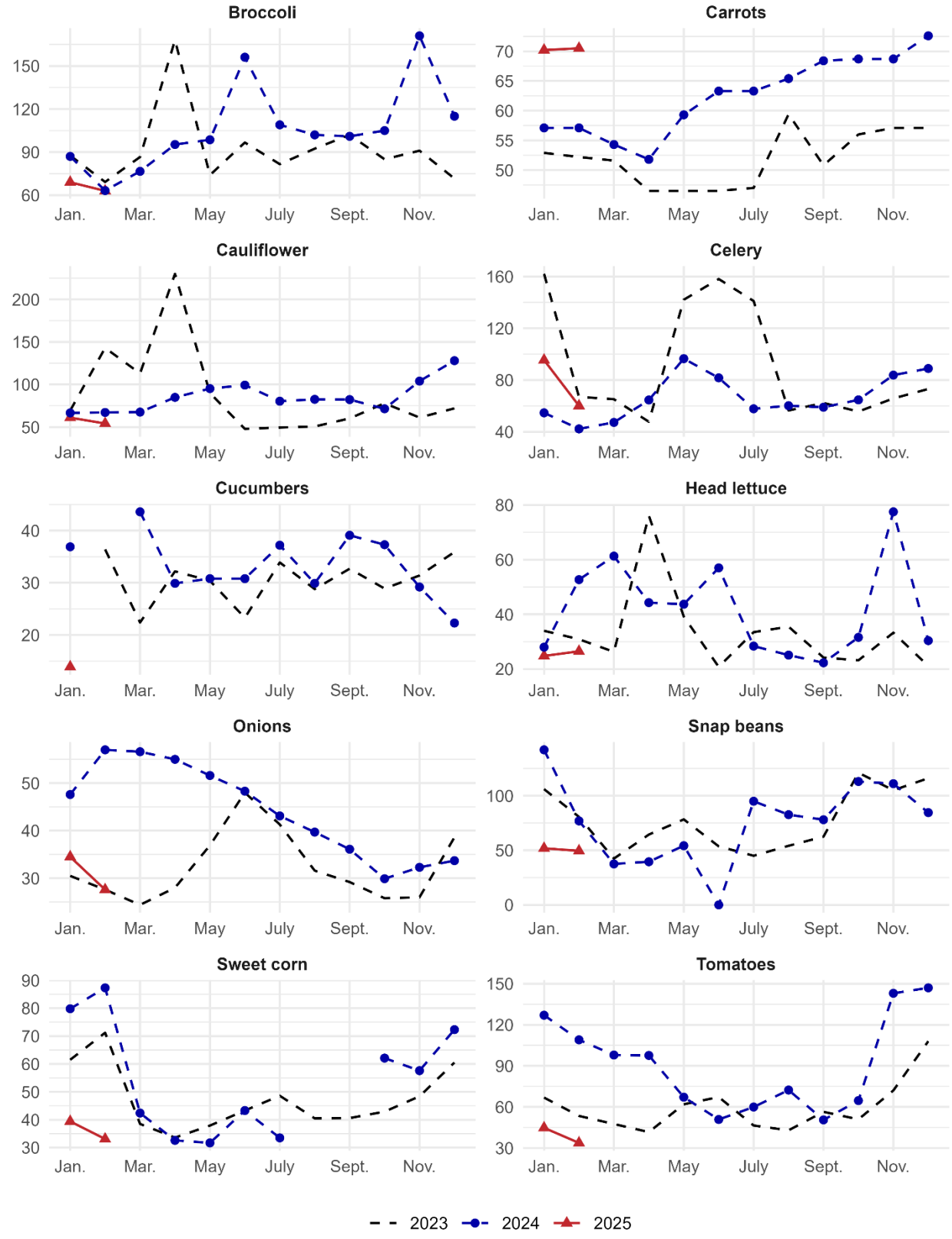
Item	Unit	2021	2022	2023	2024	Percent change 2023–24
Area harvested						
Vegetables, fresh and processing/2/7	1,000 acres	2,271	2,240	2,140	2,024	-5.4
Potatoes/8	1,000 acres	930	918	961	925	-3.7
Dry beans, dry peas, lentils, and chickpeas/3	1,000 acres	3,140	3,068	2,969	3,839	29.3
Mushrooms/4	1,000 acres	3.0	2.6	2.7	2.9	5.0
Total	**1,000 acres**	**6,344**	**6,228**	**6,073**	**6,791**	**11.8**
Production						
Vegetables fresh/2/7	Million cwt	304	309	305	291	-4.5
Vegetables processing/2/5	Million cwt	339	338	379	331	-12.9
Potatoes/8	Million cwt	413	402	440	420	-4.5
Dry beans, dry peas, lentils, and chickpeas/3	Million cwt	38	51	52	63	20.0
Mushrooms	Million cwt	7.6	7.0	7.2	6.6	-9.1
Total	**Million cwt**	**1,102**	**1,106**	**1,184**	**1,111**	**-6.1**
Crop value						
Vegetables fresh/2/7	$ millions	11,024	15,171	14,420	14,438	0.1
Vegetables processing/2/5	$ millions	1,970	2,507	3,180	2,407	-24.3
Potatoes/8	$ millions	4,204	5,166	5,393	5,079	-5.8
Dry beans, dry peas, lentils, and chickpeas/3	$ millions	1,312	1,603	1,651	1,903	15.3
Mushrooms/4	$ millions	1,064	1,018	1,128	1,088	-3.6
Total	**$ millions**	**19,573**	**25,466**	**25,772**	**24,915**	**-3.3**
Imports/6						
Vegetables fresh	$ millions	10,004	10,683	11,429	12,499	9.4
Vegetables processing/5	$ millions	3,869	4,394	4,441	4,893	10.2
Potatoes (including seed)	$ millions	2,022	2,534	3,093	3,315	7.2
Dry beans, dry peas, lentils, and chickpeas/3	$ millions	355	404	415	387	-7.0
Mushrooms	$ millions	595	664	629	654	4.0
Total	**$ millions**	**16,844**	**18,679**	**20,006**	**21,747**	**8.7**
Exports/6						
Vegetables fresh	$ millions	2,396	2,487	2,388	2,574	7.8
Vegetables processing/5	$ millions	1,538	1,617	1,627	1,811	11.3
Potatoes (including seed)	$ millions	1,869	2,082	2,291	2,318	1.1
Dry beans, dry peas, lentils, and chickpeas/3	$ millions	732	664	979	1,131	15.6
Mushrooms	$ millions	42	41	32	26	-19.2
Total	**$ millions**	**6,577**	**6,892**	**7,317**	**7,860**	**7.4**
Per capita availability						
Vegetables fresh	Pounds	157.5	160.4	153.1	148.1	-3.3
Vegetables processing/5	Pounds	111.6	114.1	104.4	95.6	-8.4
Potatoes/8	Pounds	112.8	112.8	116.9	117.2	0.3
Dry beans, dry peas, lentils, and chickpeas/3	Pounds	7.9	12.0	10.5	11.2	7.2
Mushrooms/9	Pounds	3.7	3.6	3.6	3.3	-6.3
Total	**Pounds**	**393.5**	**403.0**	**388.4**	**375.5**	**-3.3**

Hundredweight (cwt) = 100 pounds. $ millions = million U.S. dollars.
1/ Total values rounded.
2/ Utilized production excluding melons.
3/ Includes Austrian winter and wrinkle seed peas where applicable.
4/ Mushroom area equals Agaricus total fillings (multiple mushroom crops).
5/ Includes canned, frozen, and dried. Excludes potatoes, pulses, and mushrooms.
6/ All international trade data are expressed on a calendar year basis.
7/ Includes both fresh and processed sweet potatoes.
8/ Includes both fresh and processed.
9/ The mushroom crop year (July–June) ends with the year listed (e.g., 2024 = 2023/24).
Source: USDA, Economic Research Service calculations based on data from USDA, National Agricultural Statistics Service data and U.S. trade data from U.S. Department of Commerce, Bureau of the Census.

Figure 1

Grower prices for selected fresh-market vegetables, 2023–25

Cents per pound



Source: USDA, Economic Research Service based on data from USDA, National Agricultural Statistics Service.

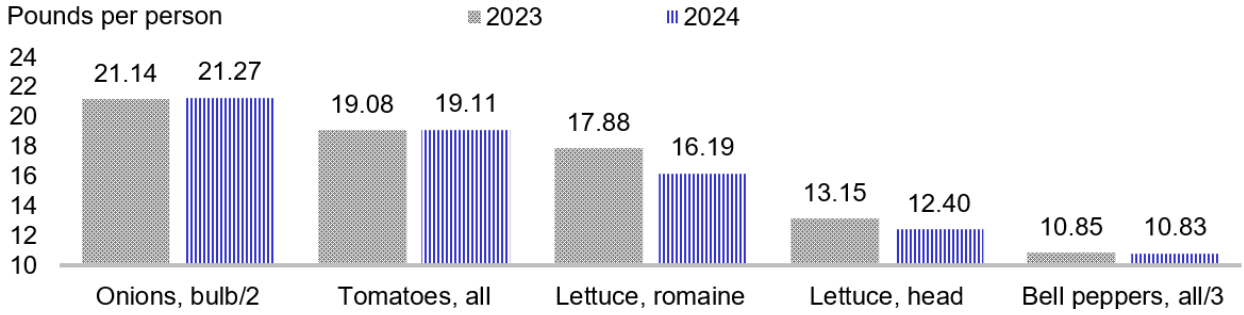
Fresh Market Vegetables

Vegetable Consumption Drops in 2024

Preliminary USDA, ERS data indicates that the domestic availability of fresh vegetables (which is a proxy for consumption but does not account for food loss) was 148 pounds per person in 2024, a 3-percent decrease from availability in 2023 (table a4).

The fresh vegetable crops with per capita availability of 10 pounds or more in 2024 are onions (up by 1 percent with 21 pounds), tomatoes (up slightly by 0.1 percent with 19 pounds), romaine/leaf lettuce (down by 9 percent with 16 pounds), iceberg/head lettuce (down by 6 percent with 12 pounds), and bell peppers (slight decrease with less than a quarter of a percent with almost 11 pounds) from the previous year (figure 2).

Figure 2
Per capita availability for major fresh vegetable crops per person annually/1



1/ Calendar year annual per capita availability per person.
2/ Fresh bulb onion production excludes dehydrated product, with all California production assumed to be for dehydration.
3/ Bell peppers, all includes both fresh-market and processing production.
Source: USDA, Economic Research Service.

The per capita availability of lettuce (head and romaine) decreased by 6 and 9 percent respectively to a total of 28.6 pounds of lettuce in 2024. The lettuce availability trends are the result of declines in both production and imports coupled with increases in exports. Despite the declines, per capita availability of romaine (including leaf) lettuce are rising from an average of 6 pounds in the 1990s, 10 pounds in the 2000s, 13 pounds in the 2010s, and 17 pounds in the 2020s. This contrasts with the long-term per capita availability for iceberg lettuce, which dropped 6 percent from the previous year to a record low of 12.4 pounds in 2024. Iceberg/head lettuce availability has dropped from an average of 24 pounds in the 1990s to 20 pounds in the 2000s to 15 pounds in the 2010s and thus far 14 pounds in the 2020s. This shift may be due to the perception that romaine and leaf lettuces are more nutritious than iceberg lettuce.

From 2023 to 2024, the per capita availability of two Brassica crop types, broccoli and leafy greens (kale, collards, mustard, and turnip greens), are both down by 4 percent while the

availability of other Brassicas, cauliflower and cabbage, rose by 7 and 1 percent, respectively. The per capita availability in 2024 of other non-Brassica crops with per capita availability less than 10 pounds but above 5 pounds were cucumbers (down by 2 percent with 8 pounds), carrots (down by 14 percent with 7 pounds), sweet potatoes (up by 5 percent with 5.6 pounds), squash (down by 2 percent with 5 pounds), and pumpkins (down by 11 percent with 5 pounds).

Reduced Harvests: Declines in Fresh Vegetable Output

In 2024, the production of the top five fresh vegetables, excluding potatoes, decreased by 5 percent from the previous year (table 2 and table a5). This decrease was driven by declines in planted acreage, and lower yields compared to the previous year. Decreases in the production of lettuce (down 6 percent), tomatoes (down 9 percent), carrots (down 16 percent), and pumpkins (down 11 percent) offset increases in the production of onions (up 3 percent). The national supply of select fresh-market vegetables dropped by 2.1 percent in 2024. Domestic production of select fresh-market vegetables, which are predominantly field-grown and which constitute almost two-thirds of the fresh-market supply, decreased by 3.8 percent in 2024 (table a5). Beyond the leading five vegetables, production decreased for sweet corn, broccoli, bell peppers, spinach, garlic, radishes, cucumbers, snap beans, greens (kale and mustard), artichokes, asparagus, and sweet potatoes.

Table 2. Annual U.S. production of top fresh-market vegetables, 2021–24

Commodity	2021	2022	2023	2024p	Change 2023–24
	Million pounds				*Percent*
Lettuce, all	9,856	9,812	10,288	9,698	-5.7
Onions, bulb/1	6,378	6,073	6,340	6,545	3.2
Tomatoes/2	2,076	2,139	2,174	1,980	-8.9
Carrots	2,278	2,498	2,316	1,955	-15.6
Pumpkins/3/4	2,213	2,300	2,088	1,865	-10.7
Top 5 fresh total	**22,801**	**22,822**	**23,206**	**22,043**	**-5.0**

p = preliminary.
1/ USDA, Economic Research Service (ERS) projection of fresh production which excludes California dehydrated onions.
2/ USDA, ERS projection includes fresh greenhouse production (see April 2024 outlook special article on fresh market tomatoes).
3/ USDA, ERS projection includes projections for NASS annual program non-surveyed States.
4/ Includes processed production.
Source: USDA, Economic Research Service based on data from USDA, National Agricultural Statistics Service (NASS) annual estimates, USDA, NASS Census.

Lettuce:

- In 2024, U.S. lettuce (head, romaine, and leaf lettuce) utilized production fell 6 percent from 2023. The year-over-year decline is attributed to a 9-percent reduction in harvested acres in California. In terms of share, romaine accounted for the most harvested acres (39 percent) followed by head lettuce (36 percent) and leaf lettuce (25 percent). Average grower prices

for head lettuce (up 15 percent) and leaf lettuce (up 9 percent) were unable to offset a decline in romaine prices (down 11 percent), which led to a decrease in the value of production from $4.8 billion in 2023 to $4.6 billion in 2024.

- Fresh lettuce export volume rose from 705 million pounds in 2023 to 732 million pounds in 2024 despite lower domestic production. Imports of fresh lettuce in 2024 totaled 727 million pounds, 14 percent lower than 2023 and the smallest annual volume since 2018. Almost all import volume came from Mexico (92 percent) and Canada. In the first two months of 2025, lettuce import volumes continued to trend lower than in the same period last year (down 15 percent) with import unit values up 6 percent.

- In the first three months of 2025, domestic shipment volume for iceberg lettuce was down 4 percent from last year, while romaine was down less than 1 percent from 2024. FOB and advertised retail prices reported by USDA, AMS during this period were lower year over year for both conventional iceberg and romaine.

Onions:

- USDA, ERS estimates onion production by excluding California production, as the California onion market is assumed to be mostly dehydrated onions, from the total USDA, NASS reported onion total. After excluding California's production, domestic production of fresh market onions increased to 6.5 billion pounds in 2024, a 3.2-percent increase from 2023's 6.3 billion pounds. Fresh bulb onion per capita availability increased to 21.3 pounds per person in 2024, less than 1 percent higher than the 21.1 pounds available per person in 2023. Onion per capita availability is the highest of the fresh market vegetables (excluding potatoes).
- In 2024, import volume for onions, shallots, and onion sets increased 1.3 percent from a year before. Volumes from Mexico, the primary supplier, were lower year-over-year but were more than offset by higher volumes from other major suppliers, specifically Peru and Canada. In the first two months of 2025, import volumes were 42 percent higher than the same period in 2024, with higher volumes from Mexico and Peru. Export volume for onions, shallots, and onion sets increased by 20.3 percent year-over-year in 2024 with higher domestic production in the major producing States of Washington, California, and Oregon. In the first two months of 2025, export volumes were 29.5 percent lower than the same period in 2024. Export volume typically peaks in the fall in line with the domestic fall/winter onion season.

- In the first three months of 2025, domestic shipment volume for dry bulb onion varieties decreased by 4 percent with lower shipments from the major producing States of Washington and Oregon. Total shipments in the first quarter of 2025 were up 2 percent. The FOB shipping-point price for conventionally grown dry yellow onions averaged 16 cents per pound, down 55 percent from a year earlier. The USDA, AMS *Market News* weekly national advertised retail price for yellow storage onions averaged 90 cents per pound through March 2025, up 3 percent year-over-year. Average retail prices for red onions and white onions were lower in early 2025 than a year before, but both were higher than yellow onions at $1.29 and $1.09, respectively.

Tomatoes:

- USDA, ERS estimates fresh tomato production to have declined by nearly 9 percent in 2024 from the previous year. This includes estimated greenhouse output, which helped offset a sharper 15-percent drop in field-grown utilized production reported by USDA, NASS. Greenhouse tomatoes represent a growing share of domestic supply. The value of production fell only 4 percent, with higher grower prices increasing 12 percent year-over-year. Tomato harvested acres and yields decreased in both California and Florida. High temperatures in California in July 2024 accelerated tomato growth in the San Joaquin Valley, and supply gaps were reported later in the season.

- USDA, ERS estimates fresh tomato imports accounted for 72 percent of domestic supply in 2024. Almost all import volume came from Mexico (90 percent) and Canada (9 percent). This means imports from Mexico alone accounted for 65 percent of fresh tomato domestic supply last year. Fresh tomato import volume in 2024 totaled 4.7 billion pounds, the largest on record and 15 percent higher than 2023. About 60 percent of fresh tomato imports were identified as greenhouse grown. For greenhouse tomato imports in 2024, round tomatoes represented the largest category by value (25 percent), followed by grape (23 percent), roma (17 percent), and cherry (4 percent), with the remainder consisting of unspecified varieties. In the first two months of 2025, fresh tomato import volumes were up 14 percent by value and 0.03 percent by volume compared to the same period last year.

Carrots:

- Carrot availability in 2024 declined by 14 percent to 7 pounds per person (table a4). This decline in 2024 was driven by a decline of nearly 16 percent in production at almost 2 billion pounds coupled with a 12-percent increase in carrot exports that offset a 2-percent increase

in carrot imports. Historically, fresh carrot per capita availability peaked during 1995–99, averaging 11 pounds per person. This five-year high was largely driven by a spike in 1997, when availability reached a record 14 pounds amid the initial popularity of fresh-cut products.

- Fresh carrot import volume exceeded export volume by 451 million pounds. Calendar year 2024 marks the 17th consecutive year (since 2009) that the United States has been a net importer of fresh-market carrots. As with most fresh-market vegetables, the import share of availability of fresh carrots has trended higher with greater import volume over time. Imports accounted for 22 percent of domestic availability during 2020–24, which is the largest share on record and more than double that of 2000–04, during which only 8 percent of availability was imported. Over the past 3 years, the leading suppliers of fresh carrots to the U.S. market are Mexico (56 percent), Canada (37 percent), and Israel (5 percent). Import volume in 2025 is running 1 percent above a year earlier through February 2025 (table a9).
- Fresh carrots in 2024 increased by 12 percent to 196 million pounds. However, fresh carrot exports have declined since peaking during 2000–04 with 11 percent supplies exported. During 2020–24, an average of 7 percent of fresh carrot supplies were exported. The top U.S. markets for fresh carrot exports over the past 3 years are Canada (90 percent) and Mexico (8 percent). Export volume in 2025 is running 11 percent below a year earlier through February 2025 (table a9).
- Conventionally grown carrots averaged 50 cents per pound through January–March 2025, nearly 3 percent below the 52 cents per pound from the previous year during the same period. These FOB prices reflect carrots with no size or variety specified. Organic carrot FOB prices averaged 83 cents per pound over the same 3-month period in 2025, creating a significant price premium of 65 percent over conventional carrots (table a6).
- Baby peeled carrot retail prices reported by USDA, AMS *Market News* averaged $1.30 per pound through March 2025, down almost 3 percent year-over-year (table a7).

Pumpkins:

- Pumpkin availability in 2024 declined by 11 percent to 5 pounds per person (table a4). This decline in 2024 was primarily driven by an 11-percent reduction in domestic production. The reduced availability was compounded by a 12-percent increase in exports and a slight decline (less than half a percent) in imports. Historically, per capita availability of pumpkins peaked in 2022 at 6.4 pounds, which is 20 percent above 2024 level of 5 pounds per person.

- Pumpkin grower prices surged to $19.30 per cwt in 2024, according to USDA, NASS. When adjusted for inflation (2017=100), pumpkin prices rose by 27 percent from the previous year, marking the largest annual gain in both nominal and inflation-adjusted terms since 1992.
- Pumpkins are grown in each of the 50 States and fresh-market pumpkins accounted for 85 percent of all pumpkins grown on U.S. farms, up from 81 percent in 2017, according to the 2022 Census of Agriculture. Based on census-reported harvested acreage, the States with the most commercial fresh market harvested acreage are Indiana (10 percent), Texas (8.5 percent), Illinois (8.1 percent), while all other States each harvest less than 8 percent. Commercial harvest acreage intended for the pumpkin processing market differs with 90 percent in Illinois, North Carolina (3 percent), and all other States harvest less than 2 percent.
- Given the broad geographic distribution identified by Census acreage and to better reflect national coverage, USDA, ERS expands annual pumpkin production estimates (fresh and processed) using USDA, NASS survey data and Census acreage to approximate a more comprehensive national production total for all 50 States, including the 37 additional States not reported in the annual survey program.

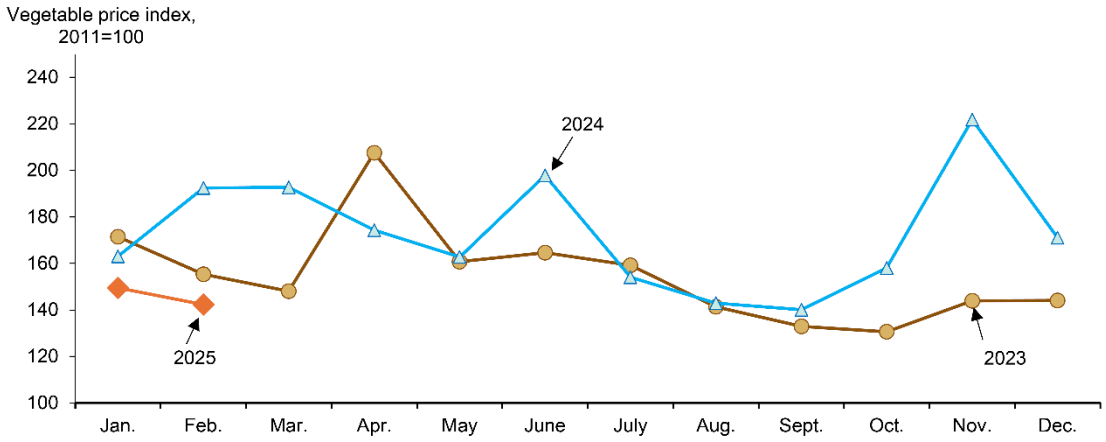
- According to annual estimates by USDA, ERS, domestic pumpkin production represents more than 95 percent of total pumpkin supply. In 2024, USDA, ERS estimates U.S. commercial growers produced an annual total of 1.9 billion pounds of pumpkins—11 percent less than the previous year and 19 percent less than 2022, which was the peak pumpkin production year (table a5).
- The United States is a net importer of fresh-market pumpkins. Imports accounted for 5 percent of domestic availability during 2020–24, which is the largest share on record and more than double that of 2000–04, during which only 2 percent of availability was imported. Over the past 3 years, the leading suppliers of fresh pumpkins to the U.S. market are Canada (54 percent), Costa Rica (33 percent), Panama (7 percent), and Mexico (3 percent). Import volume in 2025 is running 21 percent above a year earlier through February 2025.
- Pumpkin exports are grouped with squash and gourds in trade data. USDA, ERS estimates that pumpkins account for half of this combined category. U.S. exports of fresh pumpkins have declined since peaking during 2015–19 with an average of 37 million pounds exported. During 2020–24, 22 percent of fresh pumpkin supplies were exported.

Vegetable Prices Climb in 2024 Then Ease in Early 2025

In 2024, the domestic annual vegetable price index, computed by USDA, National Agricultural Statistics Service, increased by 11 percent from the previous year to 173.5 (2011=100). This is the second-highest level recorded since 1990, just below the 2022 peak of 175. This increase was largely due to decreased production, which lowered supplies and boosted shipping-point prices for key vegetables like tomatoes, lettuce, and cucumbers. In contrast, grower prices for fresh vegetables in early 2025 were lower than a year ago. January 2025's index dropped by 8 percent year-over-year to 150, and February's index settled at 142, marking a 26-percent decline from the previous year (figure 3).

Figure 3

Monthly vegetable price index trends lower in early 2025



Source: USDA, Economic Research Service based on data from USDA, National Agricultural Statistics Service, *Agricultural Prices*.

In February 2025, declining grower price trends year-over-year were observed for tomatoes (down 69 percent), sweet corn (down 62 percent), onions (down 52 percent), iceberg lettuce (down 50 percent), snap beans (down 36 percent), cauliflower (down 19 percent), and broccoli (down slightly by 0.3 percent) (figure 1). Rising price trends year-over-year were also observed with celery (up 42 percent) and carrots (up 23 percent). However, significant year-over-year increases from 2023 to 2024 in tomatoes (up 104 percent), onions (up 107 percent), and iceberg lettuce (up 71 percent) preceded some of the sharper declines from 2024 to 2025, softening the impact and tempering the year-over-year contrast (figure 1).

Shifts in Trade: Rising Imports Continue to Offset Export Gains

U.S. trade of fresh market vegetables, excluding sweet potatoes, is driven by trade with Canada and Mexico. In 2024, the volume of fresh vegetable imports (20.3 billion pounds) significantly exceeded that of exports (5.2 billion pounds), highlighting the United States's strong reliance on imported fresh vegetables (table a9). For calendar year 2025 through February, fresh vegetable import volume (excluding potatoes) has increased 2.1 percent, while exports recorded a 6.8-percent decrease year-over-year.

California’s Reservoirs are Fuller than Usual

In 2024, extreme summer heat strained vegetable and pulse-producing plants. If conditions are similar in 2025, growers may need to increase irrigation rates to prevent yield losses. In California, where many fresh and processing vegetables are grown, snow surveys taken on April 1 are critical measurements for water managers because snowpack supplies about 30 percent of California’s water needs. On April 1, 2025, California’s Department of Water Resources (DWR) estimated that snowpack in the Sierra Nevada Mountain range contained four percent less water than normal, and 22 percent less than last year. However, state reservoirs contained approximately 17 percent more water than normal, similar to the 116 percent stored on April 1, 2024. In 2025, the California State Water Project expects to allocate 40 percent of requested water supplies. This is the same percentage allocated in 2024, but far less than the 100 percent allocated in 2023. The U.S. Department of the Interior, Bureau of Reclamation owns and operates the Central Valley Project (CVP), a major source of irrigation for agricultural producers as far north as Shasta county and as far south as Kern. As of April 1, Reclamation announced most CVP contractors had 100 percent of requested water allocated. While the U.S. Department of Commerce, National Oceanic and Atmospheric Administration (NOAA) forecasts that most of California will be drought free through July 2025, drought is expected to persist in the San Joaquin Valley, California’s south coast, and the southeast interior.

Input Prices

Average Input Prices Paid by Vegetable and Pulse Producers Have Not Changed Much Since 2022

From 2020 to 2022, extreme weather events, the Russia-Ukraine war, and supply chain disruptions associated with the Coronavirus (COVID-19) pandemic drove a 26-percent increase in the average prices paid by vegetable producers for inputs. From 2022 to 2024, average prices changed much less, increasing by less than a percentage point in 2023 and in 2024 (table 3). Current estimates suggest vegetable producers paid 0.5 percent less, on average, for inputs in the first two months of 2025 than they did in January–February of 2024. This decrease was driven by reductions in the price of diesel, interest, and wage rates, which fell by anywhere from 1.2 percent (gasoline) to 7.5 percent (diesel) year over year.

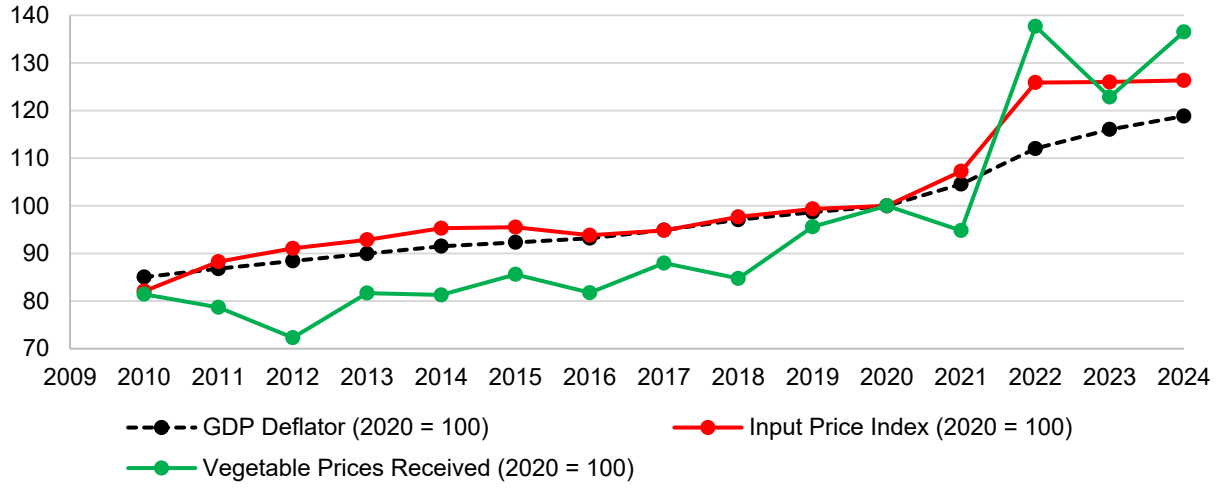
Table 3: Selected U.S. indices of prices paid by farmers, 2022–25

Input	Annual average			January–February average		
	2022	2023	2024	2024	2025	Change/1
						Percent
Seeds and plants	131.7	138.7	138.7	138.7	138.7	0.0
Fertilizer, nitrogen	167.8	115.4	103.4	105.3	107.8	2.4
Fertilizer, potash/phosphate	145.6	104.2	106.1	106.6	108.9	2.2
Chemicals, insecticides	120.5	114.6	105.5	104.9	105.8	0.9
Chemicals, herbicides	177.9	150.7	138.7	138.0	139.1	0.8
Chemicals, fungicides/other	116.6	115.0	105.9	105.3	106.2	0.9
Fuels, diesel	112.9	97.8	87.3	91.7	84.8	-7.5
Fuels, gasoline	104.4	97.0	91.5	87.1	86.0	-1.2
Farm machinery	152.6	162.9	165.2	164.2	166.2	1.2
Farm supplies	142.1	144.4	142.8	142.9	144.3	1.0
Custom services	126.0	141.2	143.5	143.5	143.5	0.0
Buliding materials	163.6	165.0	166.8	166.9	168.2	0.7
Cash rent	126.1	137.5	140.3	140.3	143.3	2.1
Interest	131.6	153.5	158.0	158.0	149.6	-5.3
Taxes	146.2	152.7	161.6	161.6	169.6	5.0
Wage rates	156.9	165.5	171.0	174.2	170.8	-2.0
Crop sector/2	139.3	139.6	138.5	138.6	143.3	3.4
Vegetable sector/3	142.3	142.5	142.9	144.1	143.4	-0.5

1/ First two months (January–February) change from 2024 to 2025.
2/ Input items common to the production of all crops (including food grains, feed grains and hay, tobacco, oil-bearing crops, fruits and nuts, commercial vegetables, and potatoes and dry beans).
3/ Input items common to vegetable production weighted by 2006 vegetable farm expenses derived from the 2006 Agricultural Resource Management Survey.
Source: USDA, Economic Research Service using data from USDA, National Agricultural Statistics Service.

Figure 4 illustrates changes in the U.S. Department of Labor, Bureau of Labor Statistics (BLS) Price Index for Gross Domestic Product, the USDA, ERS Vegetable Input Price Index, and the USDA, NASS Index for Vegetable Prices Received from 2010 to 2024. To facilitate comparisons, each index has been rescaled such that it equals 100 in 2020, the year the COVID-19 pandemic started.

Figure 4
Vegetable input prices increased more quickly than prices received by vegetable producers from 2010 to 2020, but less quickly than prices received from 2021 to 2024



Source: USDA, Economic Research Service using data from the USDA, National Agricultural Statistics Service and the U.S. Department of Labor, Bureau of Labor Statistics.

From 2010–19, inflation was very low (historically speaking), under 2 percent per year (figure 4). Over this time period, the average price paid by vegetable producers for inputs increased more quickly than inflation (2.1 percent per year) and vegetable prices (1.9 percent per year). Input prices increased every year except for 2016. Producer prices increased in only half of these years; they fell in 2011, 2012, 2014, 2016, and 2018.

During the COVID-19 pandemic, from 2020–2023, input prices increased by an average of 6.3 percent per year, far faster than the Price Index for Gross Domestic Product over the same period (4.2 percent). Producer prices grew by an average of 8.5 percent per year, driven by a 45-percent increase in 2022.

In 2024, average input prices increased by less than half a percentage point year over year, while prices received by vegetable producers rebounded by approximately 11 percent, following an 11-percent decrease the year before. In the first quarter of 2025, input prices were 0.5 percent lower than they were in Q1 2024.

Data from the 2006 Agricultural Resource Management Survey (ARMS) suggest that wages are the largest cost faced by most commercial vegetable growers, accounting for about a third of total expenses. In 2018 and 2019 (before the pandemic), wages increased by approximately 6 percent per year. In 2022 and 2023, years in which inflation averaged 8.0 and 4.1 percent (respectively), average wage rates rose by 7.4 percent and 5.5 percent. Subsequently, the rate of wage growth has slowed, averaging approximately 3 percent in 2024, the smallest increase since 2017. In 2025, Adverse Effect Wage Rates (AEWR), which are set by the Department of Labor and applicable to H-2A participants, are expected to increase by 4.5 percent (from approximately $17 to $17.74 per hour) in 2025. However, changes in these rates are heavily dependent on location. The AEWR will only increase by 1.1 percent in California, but by almost 10 percent in Florida.

From 2021 to 2022, the prices of diesel and gasoline increased 115 and 75 percent (respectively), rebounding from dips in prices that followed the onset of the COVID-19 pandemic. From 2023 through 2024, U.S. crude oil production increased, and the price of diesel and gasoline dropped by 23 percent and 12 percent, respectively. According to the U.S. Energy Information Administration's (EIA), Brent crude oil prices are expected to continue decreasing in 2025, in part because of further increases in U.S. crude oil production. Retail gasoline prices are expected to fall by approximately 3 percent.

Because fossil fuels are used to produce many agrochemicals, changes in fuel prices tend to be correlated with changes in the price of fertilizer. Average annual nitrogen prices increased dramatically over the course of the pandemic, by over 30 percent in 2021 and nearly 85 percent in 2022. Following a 41-percent drop in the price of natural gas in 2023 (EIA Short-Term Energy Outlook), nitrogen prices dropped by 37 percent. In 2024, nitrogen-based fertilizer prices dropped by 10 percent, following a 14-percent decrease in the price of natural gas. In their March 2025 Short-Term Energy Outlook, the EIA projects that natural gas prices will nearly double in 2025 (from 2.20 dollars per million BTU to 4.20), because of increases in global demand for natural gas (for electricity generation) and low natural gas inventories. This may put upward pressure on fertilizer prices moving forward.

Like fuel and fertilizer prices, pesticide (i.e., herbicide, insecticide, and fungicide) prices have decreased relative to their pandemic-related highs in 2022. Throughout 2023 pesticide shortages eased as COVID-19 related restrictions and precautions loosened. Pesticide prices continued to drop in 2024. Average herbicide prices in 2024 were 22 percent lower than they

had been in 2022. Insecticides and fungicides were 12 and 9 percent lower than in 2022, on average.

On average, the prices of building materials rose by approximately 16 percent in 2021 and 2022. In 2023, prices of building materials rose by less than 1 percent, in part because high interest rates continued to decrease demand and put downward pressure on building supply prices. Building supply prices increased by approximately 1 percent in 2024.

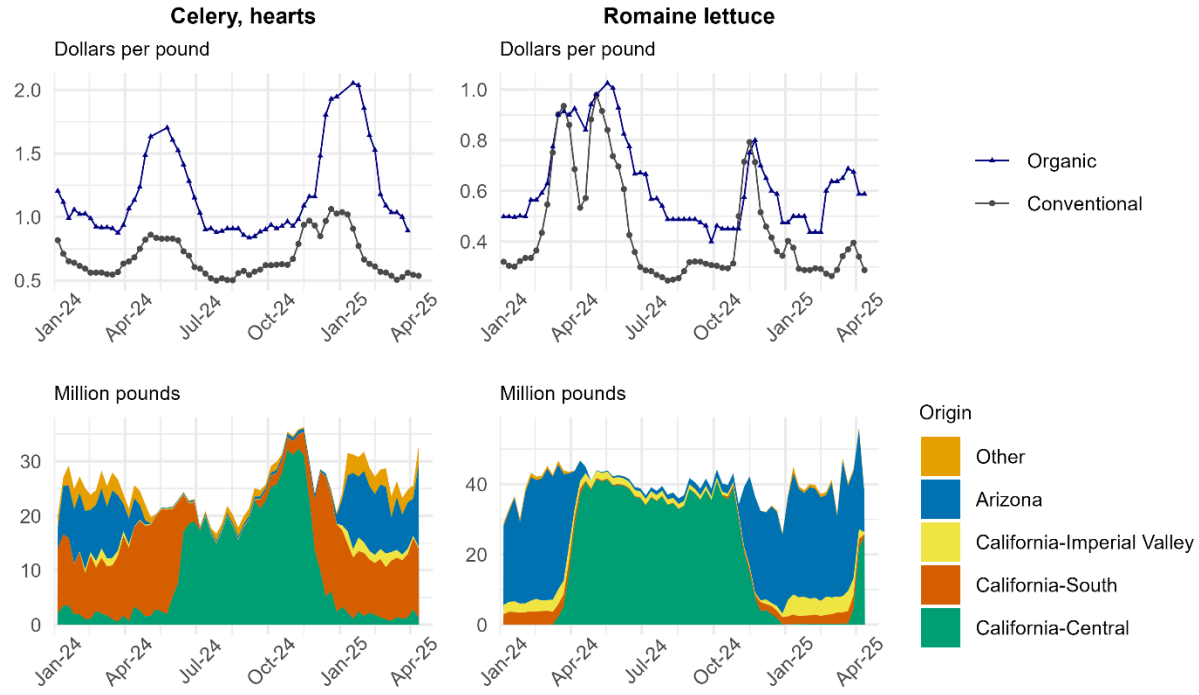
The recently released 2025 Iowa Farm Custom Rate Survey, which is administered every February by Iowa State University, indicates that the cost of many custom services have not changed much relative to 2024. The costs associated with tillage, harvesting forage, fertilizer applications, and bin rental all increased by approximately 1 percent or less year over year. The costs of other custom services, including machine rental costs, the costs of harvesting/hauling, and the costs of planting, increased substantively. However, not all of these costs are applicable to specialty crop producers. NASS data indicates that the average price of custom services increased by 1.6 percent from 2023 to 2024.

Organic and Greenhouse Vegetables

FOB Prices Down in Early 2025

In the first 13 weeks of 2025, organic and conventional Free-on-board (FOB) prices for fresh-market vegetables were generally lower compared to prices observed during the same period last year (table a6). FOB prices for organic and conventional cauliflower in the first quarter of 2025 were down 11 and 16 percent, respectively. During April, domestic FOB prices for romaine lettuce and celery were lower compared to the same period last year with larger shipment volumes from Arizona offsetting lower mid-month volumes from Central California (figure 5). Leafy green production typically transitions from Western Arizona and Southern California to Central California (San Joaquin Valley and Salinas/Watsonville area) during March and April, but the exact timing depends on weather and market conditions. In comparison, celery harvest shifts later, with Central California becoming the main domestic supplier in June. These seasonal fresh vegetable production shifts on the West Coast tend to coincide with short-term decreases in weekly domestic shipment volume and an increase in FOB prices.

Figure 5
Weekly average domestic FOB prices and shipments vary with the season



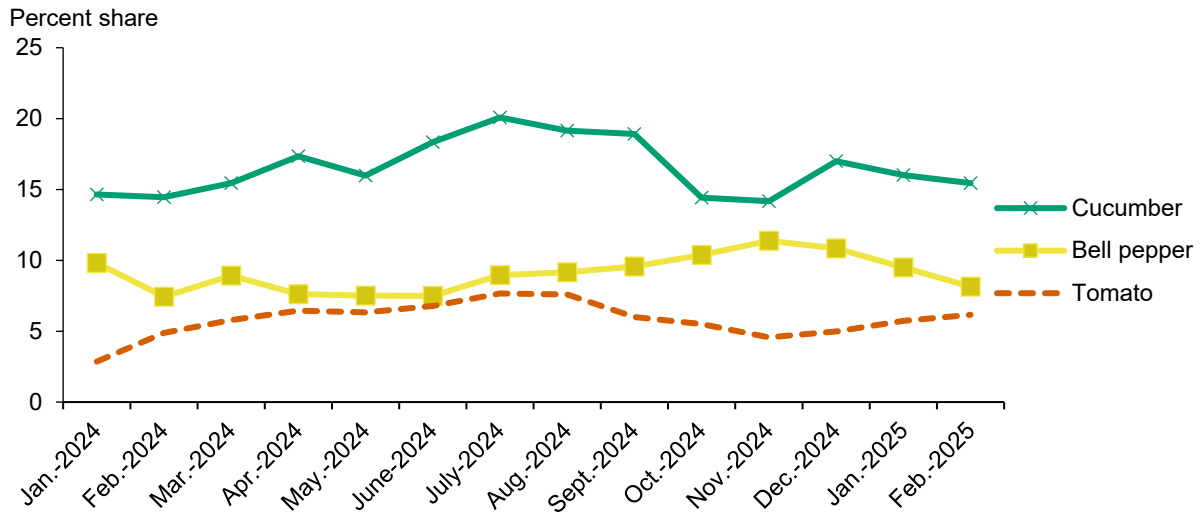
FOB = Free-on-board.
Note: Movement data for celery and romaine lettuce includes both conventional and organic and all cuts (hearts and unspecified). The "other" domestic origin for celery includes Florida and Michigan. The "other" domestic origin for romaine lettuce includes Florida.
Source: USDA, Economic Research Service based on data from USDA, Agricultural Marketing Service, *Market News* shipping-point prices and movement data.

Cucumbers Led Organic Vegetable Imports in 2024

The U.S. Department of Commerce, Bureau of the Census reports organic and greenhouse trade for some fresh vegetables and pulse crops (table a10 in the fresh vegetable appendix). In terms of organic fresh vegetable import volume in 2024, cucumbers totaled 227 million pounds followed by tomatoes (200 million pounds), squash (115 million pounds), and bell pepper (109 million pounds). Zucchini was the top organic squash variety by import volume (54 percent), followed by yellow straight-necked (16 percent), butternut (11 percent), and spaghetti squash (8 percent). Zucchini was also the top conventional squash variety by import volume (37 percent). The majority of fresh squash imports (both organic and conventional) originate in Mexico, with supplies usually peaking in the winter and spring months. In the first 2 months of 2025, total fresh zucchini import volume was 28 percent lower than the same period last year, with import unit values down for organic (47 percent) and conventional zucchini (34 percent).

In 2024, the top 3 fresh vegetables by import value for both conventional and organic were tomatoes, cucumbers, and bell peppers. As a share of total monthly import value for these three vegetables throughout 2024, organic cucumbers maintained the highest share, ranging between 14 and 20 percent (figure 6). During 2024, monthly import value of fresh organic tomatoes accounted for 3 to 8 percent of total fresh tomato import value, while organic bell peppers ranged between 7 and 11 percent. More than 70 percent of organic import value and volume for tomatoes, cucumbers, and bell peppers were designated as greenhouse-grown in 2024.

Figure 6
Organic share of top 3 fresh vegetable imports by value in 2024



Source: USDA, Economic Research Service calculations using U.S. Department of Commerce, Bureau of the Census.

Processing Vegetables

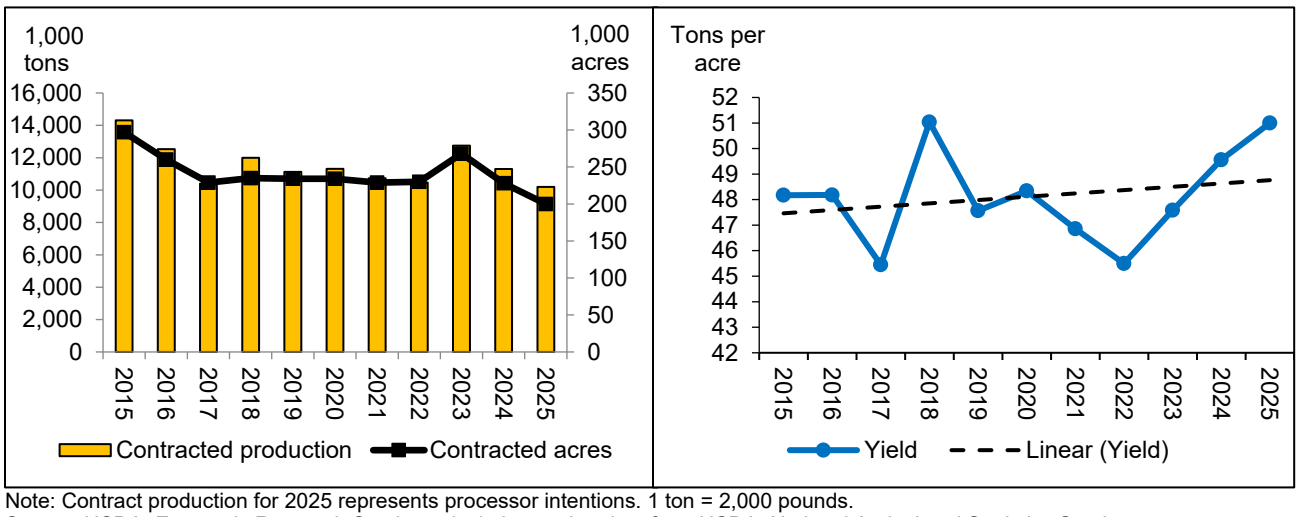
Many U.S. producers grow vegetables intended for canning, freezing, drying, or pickling. Vegetables grown for processing tend to have thick skins, uniform shapes, and other properties that make harvesting or processing easier. Tomatoes account for approximately 6 out of every 10 pounds of processed vegetables produced and almost 50 cents out of every dollar in value.

Inventories Continue to Rise, Depressing Prices and Forecasted Production for Processing Tomatoes in 2025

Data from the 2022 Census of Agriculture indicates that processing tomatoes are grown in nearly every State. However, 94 percent of harvested acreage is in California, where the climate is warm and the risk of damage from freezing temperatures is low. Processing tomato seeds can be planted from late January through June in California. Transplants, which are grown in greenhouses, can be planted in early March. Processing tomatoes are typically harvested from June through October. Virtually all processing tomatoes are irrigated.

The *California Processing Tomato Report* published by USDA, NASS in January 2025 indicated that processors expect contracted planted acres of processing tomatoes to drop from 228 thousand acres in 2024 to 200 thousand acres in 2025 (a 12-percent reduction), and that contract production would drop 10 percent, from 11.3 million short tons to 10.2 million short tons (figure 7).

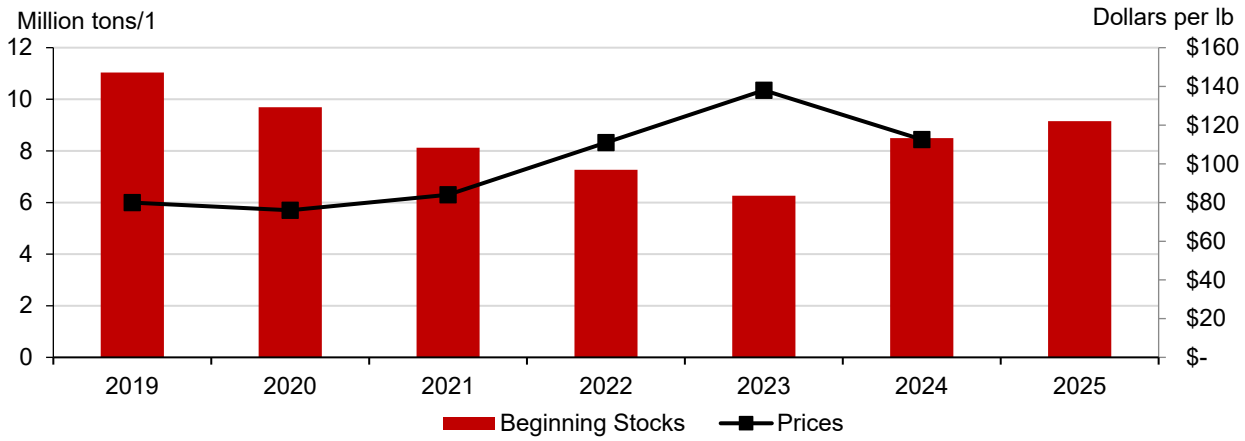
Figure 7
California contracted processing tomato production forecast to fall to the lowest level in a decade, 2015–25



Note: Contract production for 2025 represents processor intentions. 1 ton = 2,000 pounds.
Source: USDA, Economic Research Service calculations using data from USDA, National Agricultural Statistics Service.

Changes in contract acreage tend to be driven by growers' and processors' expectations about prices. In 2023, the California Tomato Growers Association (CTGA) and processors agreed to the highest base contract price in over a decade, $138 per ton for conventionally grown tomatoes. During the 2023 growing season, inventories of processed tomato products grew. This put downward pressure on contract prices in 2024, which fell by 18 percent, to $112.50 per ton. As of April 1, 2025, the CTGA agricultural producers and processors have not agreed on a base price. However, inventories of processed tomato products were 8 percent higher in January 2025 than in January 2024, and as high as they had been since before the pandemic (figure 8).

Figure 8
In 2024 and 2025, beginning stocks for processed tomato products rebounded from 21st century lows to pre-pandemic levels



1/ Inventories reflect estimated carry-in on January 1. Weights are reported on a fresh weight equivalent basis.
Source: USDA, Economic Research Service based on data from the California League of Food Processors and the California Tomato Growers Association.

Currently, market prices advertised online by major tomato processors are lower than they were at their peak in 2023. In April 2025, bulk (55-gallon drum) tomato paste prices ranged from 58 cents to 84 cents per pound, depending on the percentage of natural tomato soluble solids. Recent spot prices are 3 to 8 percent lower than those recorded last April, and a 28-percent decrease from spot prices in April 2023.

The most recent trade data available (through February 2025) from the U.S. Census Bureau indicates that net exports of processed tomatoes (i.e., exports minus imports) were approximately 2 percent higher from January through February 2025 than during the same period in 2024. Over the course of the last 5 years, net exports of processed tomatoes have ranged from approximately 1.3 million to 2.18 million tons in fresh weight equivalents, between 13–19 percent of domestic production.

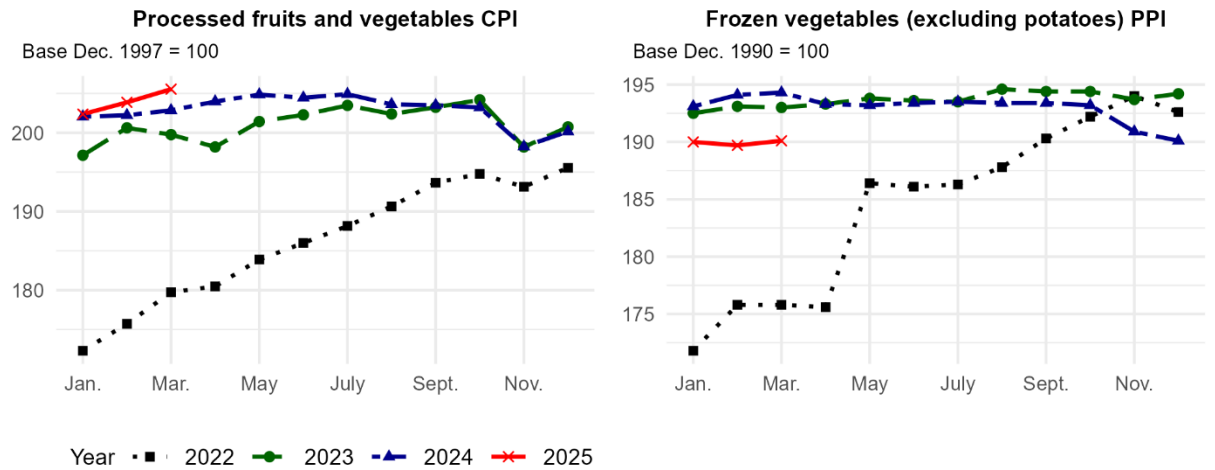
Processed Vegetable Prices: Modest Changes, Mixed Directions

Price trends for processed vegetables in early 2025 reflect a mix of modest increases and declines across categories. While the Producer Price Index (PPI) for processed vegetables remains above previous year's levels for several products, the pace of increase has slowed. The PPI measures average prices received by domestic producers for their output, offering insight into wholesale pricing trends. The Consumer Price Index (CPI), which tracks average retail prices by consumers, also shows signs of leveling with smaller increases than those seen in 2022 and 2023. Together, these indicators suggest that while inflationary pressures persist for certain processed vegetable products, overall price movements have become less volatile. The following are other highlights for processed vegetables:

PPI: The frozen vegetables PPI rose 0.4 percent during the same period, driven by a 1.9-percent increase in the frozen potato PPI. Excluding potato products, the frozen vegetable PPI fell 2.0 percent from Q1 2024 and 1.5 percent from the same quarter in 2023 (figure 9). The canned vegetables and juices PPI fell 1.7 percent from Q1 2024 to Q1 2025, with the PPI for canned catsup and other tomato-based sauces falling 1.7 percent and canned vegetables falling 1.2 percent. The dried and dehydrated fruits and vegetables PPI fell 2.6 percent from Q1 2024 to Q1 2025.

CPI: The processed fruits and vegetables CPI rose 0.8 percent from Q1 2024 to Q1 2025, in contrast to the fresh vegetable CPI, which fell 2.1 percent (figure 9). The canned vegetable CPI rose 1.1 percent from Q1 2024 to Q1 2025, while frozen vegetables fell 1.4 percent. The olives, pickles, and relishes CPI rose 4.6 percent during the same period.

Figure 9
U.S. consumer and producer price indices for selected processed vegetables, 2022–25



Source: USDA, Economic Research Service based on data from U.S. Department of Labor, Bureau of Labor Statistics.

Processed Vegetable Trade Values and Volumes Up in 2024

The value of processed vegetable imports rose year over year in all market segments in 2024. The total value of processed vegetable imports was $8.03 billion, a 10-percent increase year over year and the highest on record. Two market segments make up nearly 90 percent of processed vegetables by value: frozen vegetables (51 percent) and prepared or preserved vegetables (39 percent). The United States imported 22.86 billion pounds (fresh-weight basis) of processed vegetables in 2024, a 5-percent increase year-over-year but 2 percent lower than 2022's record high volume.

- The value of frozen vegetable imports surpassed $4 billion for the first time in 2024, an 8-percent increase from $3.77 billion a year prior. Of the 10.13 billion pounds (fresh-weight basis) of frozen vegetable imports, two-thirds were frozen potato products, and most of this group was frozen french fries (about 81 percent). Frozen broccoli and cauliflower import volume decreased in 2024, while frozen sweet corn, snap bean, and spinach volumes increased.
- In 2024, the value of prepared or preserved vegetable imports surpassed $3 billion for the first time, a 14-percent increase from $2.73 billion a year before. Of the 6.26 billion pounds (fresh-weight basis) of prepared or preserved vegetable imports, 46 percent were tomato products, mostly consisting of tomato sauces (about 82 percent). Prepared or preserved potato, bell pepper, and artichoke import volumes increased in 2024, while cucumber and mushroom volumes decreased.
- The value of dried or dehydrated vegetable imports was $767 million in 2024, an increase of 6 percent year over year. Of the 6.35 billion pounds of dried or dehydrated vegetable products, about 63 percent were potato products and mostly potato starch (about 80 percent).
- In 2024, the value of vegetable juice imports surpassed $100 million for the first time, up 40 percent from $76 million a year before.

The value of processed vegetable exports rose to $3.8 billion, a 6 percent year-over-year increase from $3.59 billion. Two market segments make up over 90 percent of processed vegetables by value: frozen (47 percent) and prepared or preserved (43 percent). The United States exported 15.52 billion pounds (fresh-weight basis) of processed vegetables in 2024, up 8 percent year over year and the highest export volume since 2019.

- The value of frozen vegetable exports was $1.79 billion, a 3-percent increase from $1.74 billion a year before. Of the 4.69 billion pounds (fresh-weight basis) of frozen vegetable

exports, about 84 percent were potato products, mostly consisting of frozen french fries (about 87 percent). Frozen sweet corn exports, which make up about 8 percent of frozen vegetable export volume on a fresh-weight basis, fell in 2024. Frozen sweet potato export value rose 274 percent between 2023 and 2024, driven by increased shipments to the European Union.

- In 2024, the value of prepared or preserved vegetable exports was $1.65 billion, a 10-percent increase from $1.5 billion a year before. Of the 8.66 billion pounds (fresh-weight basis) of prepared or preserved vegetable exports, about 85 percent were tomato products, mostly consisting of pastes (about 58 percent) and sauces (about 22 percent).
- The value of dried or dehydrated vegetable exports decreased in 2024, with lower export volumes of potato products, such as flakes and flour.
- The value of vegetable juice exports increased in 2024, with higher export volumes of both tomato and mixed vegetable juices.

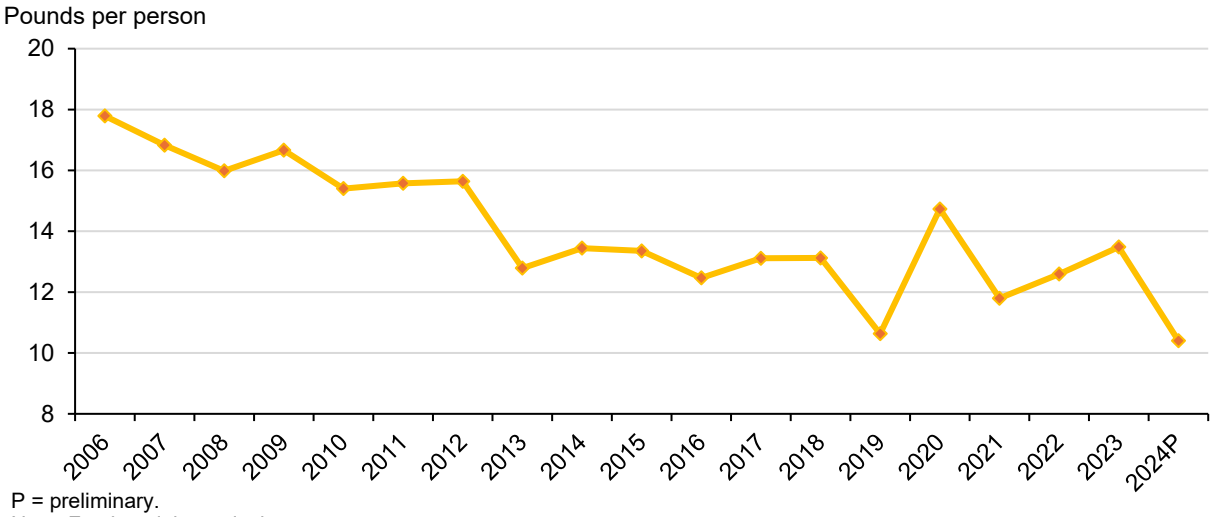
Processing Vegetable Per Capita Availability Plunges to Record Lows in 2024

USDA, ERS preliminary estimates indicate that 95.6 pounds of processing vegetables on a fresh-weight basis (excluding mushrooms, potatoes, and sweet potatoes) were available per person in 2024. This estimate represents an almost 9-pound decrease from 2023 and the lowest per capita availability since records began in 1970. Four vegetables make up 75 percent of processing per capita availability on average in recent years (2021–23): tomatoes (53 percent), sweet corn (12 percent), chili peppers (7 percent), and snap/green beans (3 percent). Per capita availability for three of the top four processing vegetables declined in 2024.

- **Tomatoes:** Per capita availability of processing tomatoes was estimated at 48.2 pounds per person in 2024, a 4.5-pound decrease from 2023 and the lowest per capita availability on record since 1970. Planted acreage decreased in California, the top producing State.
- **Sweet corn:** Processed sweet corn per capita availability was estimated at 10.4 pounds per person in 2024, a 3-pound decrease from 2023. Planted acreage decreased in Washington and Minnesota, the top two producing States. Annual per capita availability of processed sweet corn (canned and frozen) was between 17 and 21 pounds per person from 1970 to 2006 but has trended lower in the last decade, falling below 12 pounds in 3 of the last 6 years (figure 10).

Figure 10

Processed sweet corn per capita availability reached record lows in 2024



P = preliminary.
Note: Fresh-weight equivalent.
Source: USDA, Economic Research Service calculations based on data from USDA, National Agricultural Statistics Service, and U.S. Department of Commerce, Bureau of the Census.

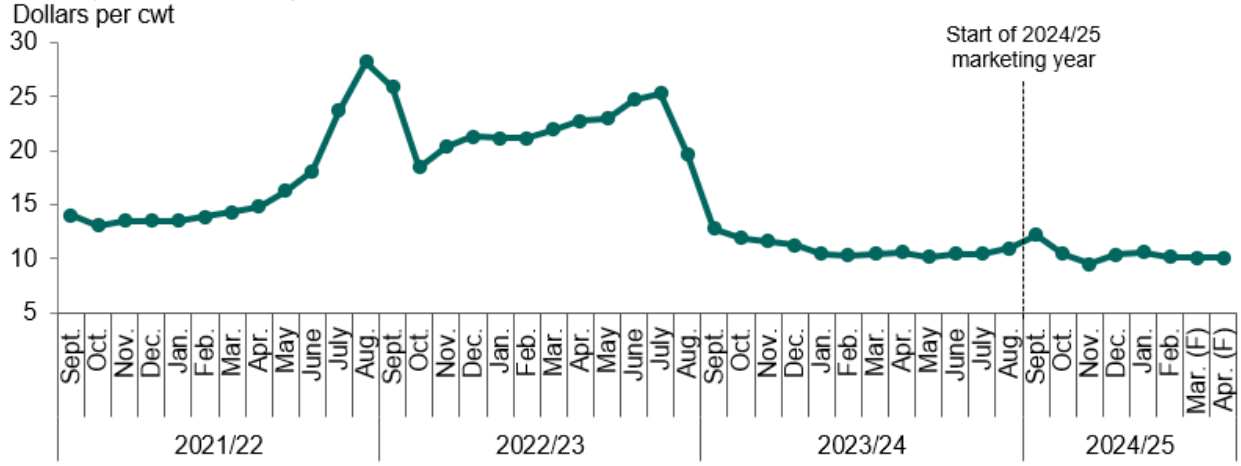
- **Chili peppers (all uses):** Per capita availability for chili peppers was estimated at 7.8 pounds per person in 2024, an increase of about one-fifth of a pound and the second highest on record behind 8 pounds per person in 2021. Chili pepper import volume has increased more than 10-fold since the 1980s.
- **Snap/green beans:** Per capita availability of snap/green beans was estimated at 3 pounds per person in 2024, a year-over-year decrease of two-thirds of a pound. This represented the lowest per capita availability since records began in 1960. Production of snap beans for the processing market fell below 1 billion pounds for the first time since the 1960s. In Wisconsin, the top producing State, processing snap bean production decreased 37 percent year over year in 2024 on decreased acreage and lower yields.

Potatoes

Stagnant Prices Weigh on 2025 Planting Decisions

Following a large fall harvest in 2023, U.S. potato growers reduced production in 2024. Between 2023 and 2024, in the top 13 potato States there were year-over-year declines in planted acres (down 4 percent), harvested acres (down 4 percent), production volume (down 5 percent), and yield (down 1 percent). In part, these reductions were due to softer open-market prices, higher late-season storage volumes, and an excess of contracted processing potatoes in 2023. Fresh potato grower prices fell sharply at the start of the 2023/24 marketing year (September 2023) and have remained relatively flat through the first eight months of the 2024/25 marketing year (September–April) (figure 11). Monthly fresh potato retail prices, as reflected by Bureau of Labor Statistics (BLS) Consumer Price Index (CPI), have also plateaued with January–March 2025 average prices down 1 percent from a year ago.

Figure 11
Monthly fresh potato grower prices continue to remain flat in 2024/25



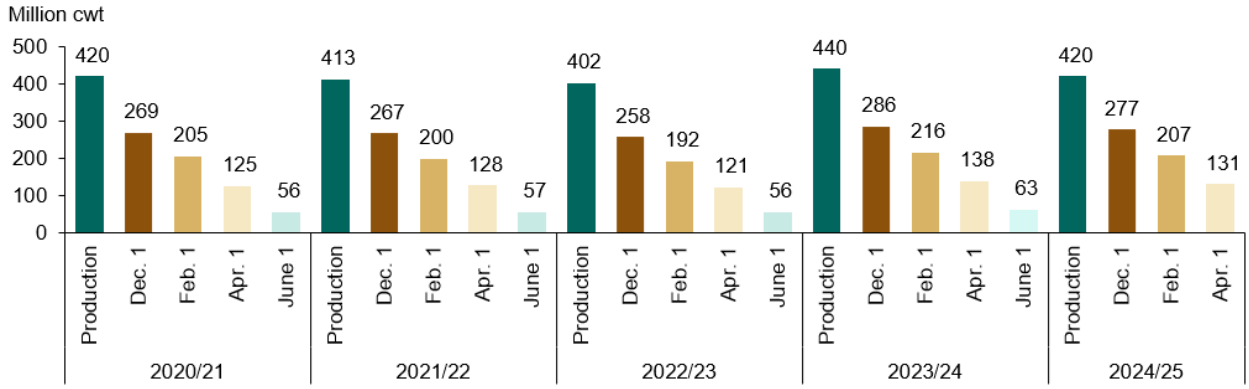
F = Forecast. Cwt = hundredweight.
Note: Potato marketing year starts in September and ends in August of the following year.
Source: USDA, Economic Research Service based on data from USDA, NASS, *Agricultural Prices*; March and April 2025 forecasts based on ERS calculations from USDA, AMS *Market News* shipping-point data.

Potato stocks and usage in 2024/25: Potato stocks, which include processor holdings and most of the seed to plant the following year's crop, were 6 percent lower in April 2025 compared to the same month last year but 8 percent higher than two years ago (figure 12). As a percent of production, April stocks represented 31 percent of the total 2024/25 crop, which is similar to previous seasons at this time of the year. Processing potato usage for the 2024/25 marketing year through February was 3 percent less than the 3-year average. Frozen potato product volume in storage in February 2025 was higher than last year (up 3 percent), while the monthly producer price index (PPI) for frozen potato production (mostly french fries) during March was

unchanged for the fifth month in a row. Slower potato chip processing demand was also observed in USDA, AMS *Market News* movement data, with chipping potato shipment volumes from January through mid-April 2025 lagging 11 percent behind last year and 5 percent behind the same period in 2023.

Figure 12

Potato production and stocks: top 13 potato-producing States in the last 5 seasons



Cwt = hundredweight.
Note: Potato marketing year starts in September and ends in August of the following year.
Source: USDA, Economic Research Service based on data from USDA, NASS, *Potato Stocks.*

Fresh potato (table stock) shipment volumes from January through mid-April 2025 lagged 1 percent behind last year but 2 percent ahead of the same period in 2023. During this period, the share of shipment volume by variety was similar to last year, with Russet accounting for 70 percent followed by yellow (14 percent) and round red varieties (10 percent). While Russet volume in 2025 was down 1 percent year over year, yellow shipments were up 3 percent with increased volume from Colorado offsetting lower volumes from Idaho, Wisconsin, and Michigan.

U.S. fresh potato and frozen french fry exports up in first half of MY 2024/25: U.S. exports of fresh potatoes (excluding seed) in the first half of marketing year 2024/25 (September–February) rose 2 percent by volume and 1 percent by value compared to the same period last season (table C13). Year-over-year increases to Taiwan and Japan offset declines to Mexico, Canada, and South Korea. U.S. fresh potato export volume to Mexico fell 4 percent from the same period last year, but at 284 million pounds was the second-highest on record and 151 percent higher than the 2019/20–2021/22 average. In mid-2022, USDA announced regulatory changes that expanded market access for U.S. fresh potato exports to Mexico. During the first 12-month marketing year with expanded market access (2023/24), the U.S. exported a record high 546.5 million pounds of fresh potatoes to Mexico, accounting for 46 percent of total fresh potato exports.

Globally, the United States is both a major exporter and importer of frozen french fries. U.S. frozen french fry exports rose 1 percent in the first half of the 2024/25 MY. Despite the increase, season-to-date french fry export volume was the second lowest (behind 2023/24 MY) since 2010/11 MY. Increased frozen french fry export volume to top destinations Japan, Mexico, South Korea, and Canada offset a 27-percent decline to the Philippines (down 16.8 million pounds). The United States has continued to be a net importer of frozen french fries each month since May 2021, with Canada accounting for the majority of imports.

Planted acreage expectations in 2025: Given the weaker fresh grower prices and expected decline in contracted acreage, USDA, ERS expects 2025 potato planted acres to decrease by about 2 percent in the 13 NASS surveyed States[1] from last year. If realized, this reduction in planted potato acreage would be approximately 10,000–15,000 acres less than 2024's 930,000 planted acres. Excluding 2024, there have been 7 other times planted acres fell by 3.5 percent or more year over year since 2000 in these States, with 6 of those 7 times followed by an upward adjustment in planted acres. However, industry reports indicate that contracted potato acreage in the Pacific Northwest will be reduced in 2025 as processors try to balance supply with demand. Idaho accounted for one-third of U.S. potato acreage last year, followed by Washington at 17 percent. USDA, NASS will publish its planted acreage estimate for potatoes in its June *Acreage* report.

Potato producers consider more than fresh-market prices and processing contracts ahead of planting season. Prices for alternative commodities like wheat and corn, irrigation availability, and crop rotation limitations are some of the other considerations with deciding to plant potatoes. USDA, ERS will cover the USDA, NASS *Acreage* report, State-level crop conditions, and fall potato production expectations in its July 2025 *Vegetable and Pulses Outlook*.

Spring potato planting progress: Weekly progress reports by the USDA, NASS indicate that potato planting is behind last year but similar to the 5-year average in the Pacific Northwest and Wisconsin. For the week ending April 20, 2025, planting progress was 22 percent in Idaho (5-year average is 22 percent), 50 percent in Washington (5-year average is 45 percent), 60 percent in Oregon (5-year average is 58 percent), and 14 percent in Wisconsin (5-year average is 14 percent). Potato planting in the Pacific Northwest is typically finished by mid-May, while States in the Northcentral part of the country finish around the beginning of June.

[1]The 13 NASS surveyed States include California, Colorado, Florida, Idaho, Maine, Michigan, Minnesota, Nebraska, North Dakota, Oregon, Texas, Washington, and Wisconsin.

Pulse Crops:
Dry Beans, Peas, Lentils, and Chickpeas

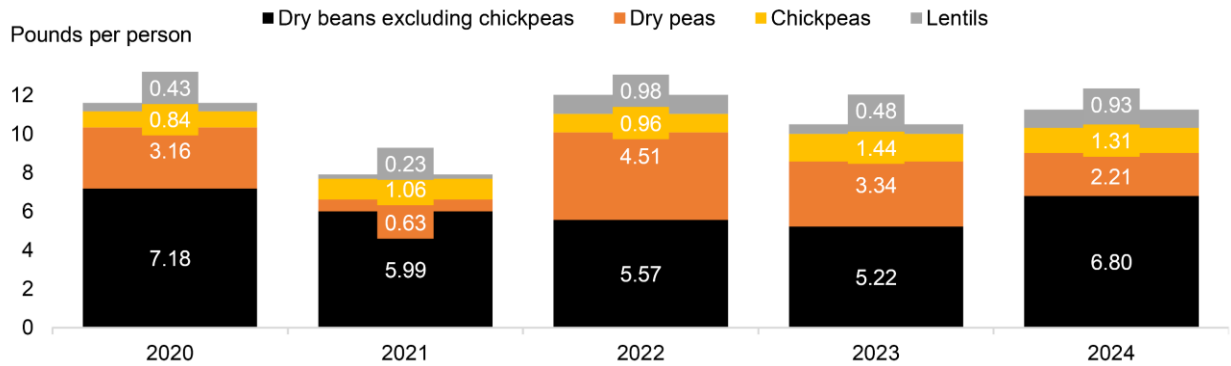
Upcoming July Vegetables and Pulses Outlook

The upcoming July 2025 *Vegetables and Pulses Outlook*, a USDA, ERS addition which began in 2024, will again primarily focus on potatoes and pulses. The upcoming July issue represents a more targeted scope compared to the more comprehensive coverage of all vegetables and pulses in the April and December outlook editions.

Pulse Crop Per Capita Availability Rises by 7 Percent in 2024, With Dry Beans Leading

Preliminary estimates for per capita availability in 2024 for pulses rose by 7 percent to 11.2 pounds per person. This increase was driven by a 30-percent increase in the per capita availability of dry beans (excluding chickpeas) to 6.8 pounds per person, along with a 95-percent increase in the availability of lentils to 0.9 pounds per person. This increase offset the decrease in dry pea availability of 34 percent, which fell to 2.2 pounds per person and a decrease in chickpea per capita availability of 9 percent to 1.3 pounds per person in 2024 (figure 13).

Figure 13
U.S. dry pulses: Per capita availability/1, 2020–24



1/ Calendar year annual domestic availability per person.
Source: USDA, Economic Research Service.

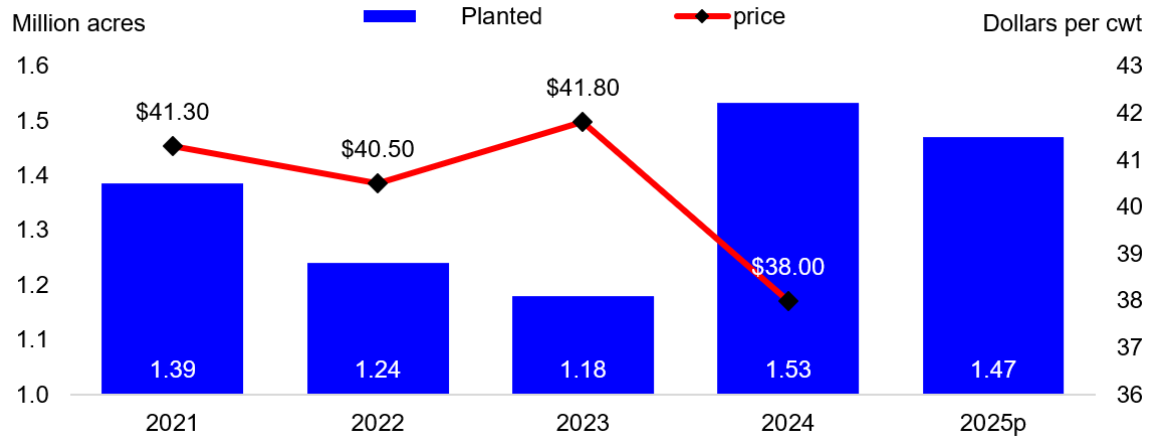
The rise in dry bean demand in 2024 is dominated by the top 5 dry bean types: pintos (3.3 pounds, representing 48 percent of total dry bean availability), black beans (1.9 pounds with 28 percent of the total), navy beans (with less than half a pound, representing a 6-percent share), and small reds and kidney beans (each with less than a third of a pound, representing 5 and 4 percent shares, respectively, of total dry bean availability).

Dry Pea and Bean Acreage Expected to Decline in 2025, While Lentil and Chickpeas Rise

The USDA, NASS March 2025 *Prospective Plantings* report indicates that growers of dry edible peas and beans excluding chickpeas plan to seed 8 and 4 percent less, respectively, in 2025 than the previous year, while lentil and chickpea growers plan to seed 18 and 12 percent more, respectively, in 2025.

Dry edible bean acreage and price: Dry edible bean growers intend to plant 1.47 million acres in 2025, a 4-percent decrease from 2024 but a 12-percent increase over the previous 3-year average (2022–24 = 1.3 million acres) (figure 14 and table d14). Expected acreage reductions in North Dakota, Nebraska, and Washington offset projected gains in Minnesota, Idaho, and Colorado. The season average marketing year price for dry beans declined 9 percent in 2024 to $38.00 per cwt from the previous year, as expanded acreage contributed to increased supply.

Figure 14
U.S. dry edible bean planted area and season-average marketing year price/1, 2021–25



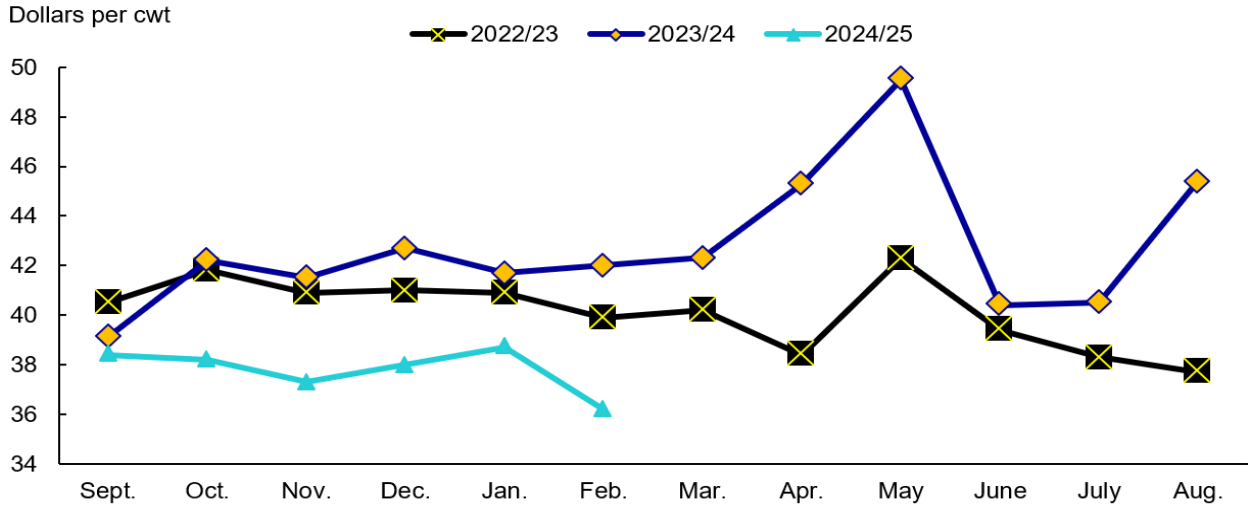
Cwt = hundredweight, a unit of measure equal to 100 pounds.
Note: The marketing year for dry beans begins in September and ends in August of the following year.
1/Acreage in 2025 represent prospective planting acres.
Source: USDA, Economic Research Service based on data from National Agricultural Statistics Service, *QuickStats*.

Chickpeas, lentils, and dry edible pea acreage: In 2025, overall chickpea acreage is expected to increase by 12 percent to 0.56 million acres with projected increases in all 3 surveyed States (Washington, Idaho, and North Dakota). Large chickpea acreage is expected to increase by 20 percent to 0.44 million acres offsetting the expected 9 percent decline in small chickpea acreage at 0.13 million acres. Lentil area is anticipated to increase by 18 percent to 1.1 million acres. Dry edible peas are expected to decrease by 4 percent to 1.5 million acres (tables d15–d19). Expected dry pea acreage reductions in Montana, North Dakota, and Nebraska offset projected gains in Idaho and Washington.

Pulse Grower Prices in 2024/25 Below Previous Year

Production, yield, and world demand influence markets for pulse crops. The all-dry bean nominal grower price, excluding chickpeas, for the 2024/25 marketing year through February 2025 averaged 9 percent below the 2023/24 crop year (figure 15). The decline in grower prices likely influenced growers to plant less in 2025 following elevated production and imports in 2024. With planting expectations down by 4 percent for 2025 from the previous year but planting acreage still 12 percent above the previous 3-year average, combined with elevated stock levels, domestic supplies of dry beans may only decline marginally in comparison to the previous year. However, increases in export levels, which remain near record levels despite the current decline of 7 percent below the previous crop year (table d20), could reduce supply and support grower prices toward the latter half of the marketing year.

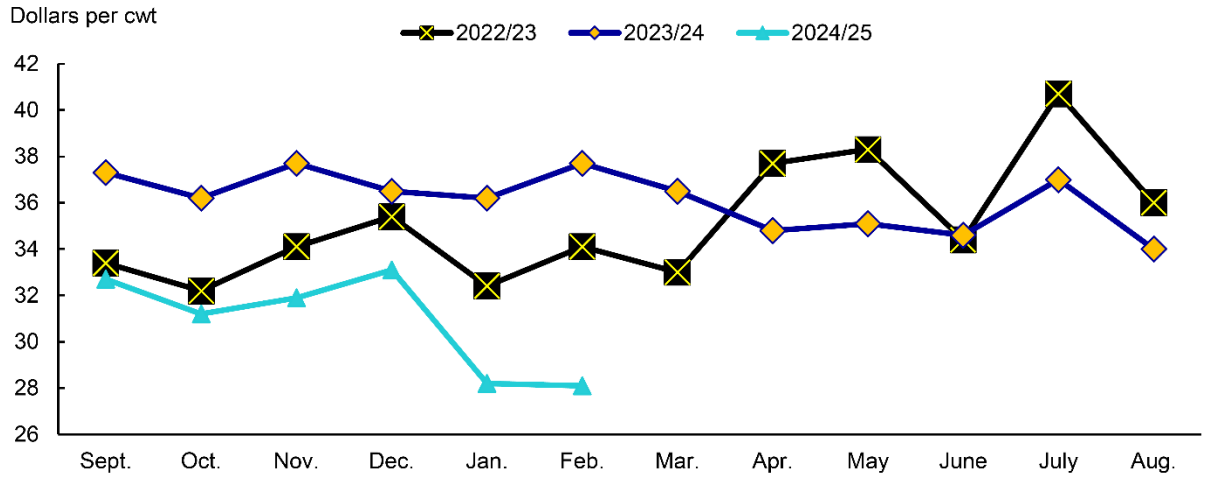
Figure 15
U.S. dry edible beans: Average monthly grower price



Cwt = hundredweight, a unit of measure equal to 100 pounds.
Note: The marketing year for dry beans begins in September and ends in August of the following year.
Source: USDA, Economic Research Service based on data from National Agricultural Statistics Service, *QuickStats.*

The all-chickpea nominal monthly grower prices of $30.87 per cwt for the 2024/25 marketing year through February 2025 averaged 16 percent below prices during the same September–February period in 2023/24 (figure 16). Increases in planted acres could drive all-chickpea domestic supplies upward and sustain downward pressure on prices. Assuming trade through February 2025 is indicative of the remainder of the year, net chickpea exports are not expected to have a significant effect on domestic availability or prices.

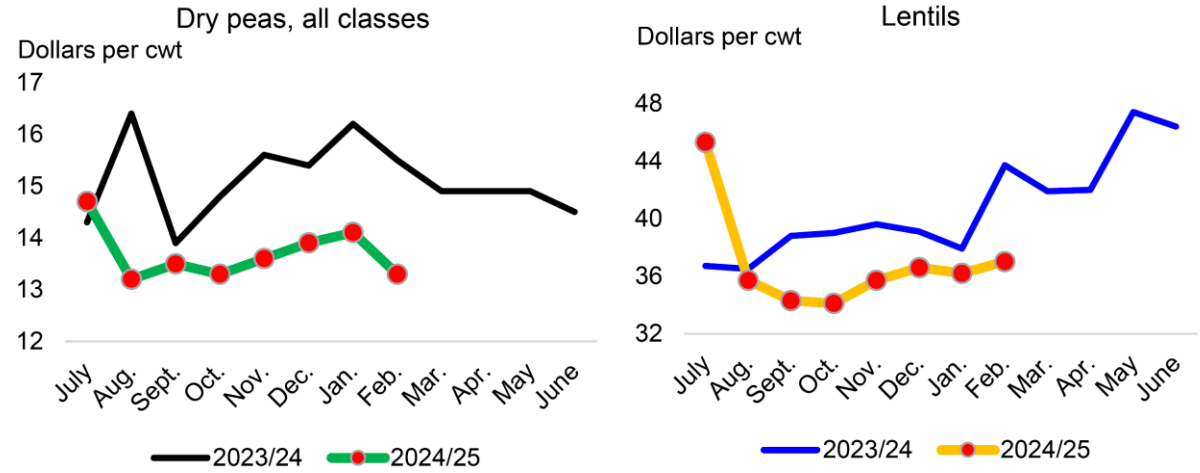
Figure 16
U.S. chickpeas: Average monthly grower price



Cwt = hundredweight, a unit of measure equal to 100 pounds.
Note: The marketing year for chickpeas begins in September and ends in August of the following year.
Source: USDA, Economic Research Service based on data from National Agricultural Statistics Service, *QuickStats.*

Dry pea and lentil nominal grower prices for the 2024/25 marketing year through February 2025 averaged 10 percent below the 2023/24 crop year (figure 17). ERS estimates dry pea domestic supply will decrease by 8 percent in 2024/25 with year-over-year declines in production (down by 7 percent) and imports (down by 49 percent).

Figure 17
U.S. dry edible pea and lentils: Average monthly grower price



Cwt = hundredweight, a unit of measure equal to 100 pounds.
Note: The marketing year for dry peas and lentils begins in July and ends in June of the following year.
Source: USDA, Economic Research Service based on data from National Agricultural Statistics Service, QuickStats.

Lentil nominal grower prices for the 2024/25 marketing year through February 2025 averaged 5 percent below the same July–February period in the 2023/24 crop year (figure 17). USDA, ERS estimates that the domestic supply of lentils will increase (up by 35 percent) in 2024/25 as the increase in production (up by 59 percent) will offset the decline in imports (down by 20 percent) from the previous year.

Trade Highlights for Pulses in 2024/25

The United States is typically a net exporter of pulse crops. The dry bean and chickpea marketing year spans September–August of the following year, while the dry pea and lentil marketing year spans July–June. Below are the pulse crop trade highlights for all four pulse crop types from the start of their respective marketing months in 2024 through February 2025 (tables d20–d25 in the appendix).

Dry bean net exports year-over-year through February 2025 declined from 424 million to 383 million pounds from 2023/24 to 2024/25. Despite the decline, the U.S. remains a net exporter of dry beans, exporting 563 million pounds of dry beans through February 2025 while importing 180 million pounds during the same period. Dry bean export volume of 1.12 billion pounds in 2023/24 was 50 percent above the 2022/23 marketing year level and was just 1 percent below the 1990/91 marketing year record high of 1.14 billion pounds.

Chickpea net exports year–over-year through February 2025 rose by 32 percent, from 47 million pounds in 2023/24 to 62 million pounds in 2024/25. The United States regained its chickpea net export status in 2023/24 after being a net importer of chickpeas during the 2022/23 marketing year, when imports exceeded exports by 13 million pounds.

Dry pea net exports year-over-year through February 2025 rose by 40 percent, from 336 million pounds in 2023/24 to 472 million pounds in 2024/25. Dry pea export volume of 736 million pounds in 2023/24 was 29 percent above the 2022/23 marketing year level.

Lentil net exports year-over-year through February 2025 rose by 51 percent, from 326 million pounds in 2023/24 to 491 million pounds in 2024/25. Lentil export volume of 499 million pounds in 2023/24 was 20 percent above the 2022/23 marketing year level.

Suggested Citation

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