

TABLE 6-2

Employed college graduates, by sex, ethnicity, race, and major occupation: 2003–23

(Number)

Sex, ethnicity, race, and occupation	2003	2010	2013	2015	2017	2019	2021	2023 ^a
Both sexes	32,574,000	40,623,000	43,839,000	45,941,000	48,223,000	50,524,000	51,764,000	56,061,000
S&E occupations	4,588,000	5,374,000	5,766,000	6,407,000	6,769,000	7,466,000	7,894,000	8,711,000
Biological, agricultural, and other life scientists	421,000	602,000	638,000	631,000	610,000	698,000	794,000	813,000
Computer and mathematical scientists	1,930,000	2,396,000	2,653,000	3,156,000	3,419,000	3,774,000	4,031,000	4,573,000
Physical and related scientists	298,000	327,000	324,000	331,000	366,000	409,000	408,000	430,000
Social and related scientists	477,000	518,000	596,000	570,000	646,000	663,000	712,000	631,000
Engineers	1,463,000	1,531,000	1,554,000	1,719,000	1,728,000	1,921,000	1,949,000	2,263,000
Non-S&E occupations	22,831,000	28,282,000	30,566,000	31,667,000	33,183,000	34,165,000	34,349,000	36,097,000
Hispanic or Latino	1,710,000	2,898,000	3,394,000	3,786,000	4,280,000	4,803,000	5,307,000	6,016,000
S&E occupations	199,000	274,000	357,000	387,000	505,000	564,000	692,000	851,000
Biological, agricultural, and other life scientists	19,000	28,000	42,000	37,000	38,000	64,000	72,000	78,000
Computer and mathematical scientists	72,000	106,000	146,000	159,000	200,000	238,000	328,000	425,000
Physical and related scientists	12,000	13,000	17,000	17,000	29,000	27,000	32,000	38,000
Social and related scientists	21,000	30,000	48,000	55,000	95,000	77,000	81,000	84,000
Engineers	75,000	98,000	103,000	120,000	143,000	159,000	178,000	226,000
Non-S&E occupations	1,245,000	2,190,000	2,465,000	2,769,000	3,073,000	3,418,000	3,772,000	4,023,000
Not Hispanic or Latino								
American Indian or Alaska Native	131,000	118,000	130,000	117,000	121,000	182,000	126,000	112,000
S&E occupations	14,000	11,000	10,000	10,000	14,000	S	10,000	12,000
Biological, agricultural, and other life scientists	3,000	1,000	1,000	2,000	S	1,000	2,000	*
Computer and mathematical scientists	3,000	2,000	2,000	2,000	4,000	S	5,000	4,000
Physical and related scientists	1,000	1,000	*	1,000	S	1,000	1,000	D
Social and related scientists	2,000	S	3,000	2,000	S	S	1,000	S
Engineers	4,000	6,000	3,000	4,000	5,000	5,000	2,000	4,000
Non-S&E occupations	98,000	85,000	87,000	80,000	80,000	132,000	94,000	86,000
Asian	2,222,000	3,211,000	3,671,000	4,001,000	4,498,000	5,062,000	5,475,000	6,134,000
S&E occupations	624,000	968,000	996,000	1,321,000	1,338,000	1,543,000	1,665,000	1,771,000
Biological, agricultural, and other life scientists	60,000	112,000	117,000	114,000	126,000	157,000	167,000	148,000
Computer and mathematical scientists	331,000	536,000	572,000	813,000	840,000	955,000	1,064,000	1,107,000
Physical and related scientists	36,000	41,000	49,000	64,000	51,000	55,000	61,000	53,000
Social and related scientists	24,000	29,000	41,000	51,000	38,000	44,000	57,000	75,000
Engineers	173,000	251,000	217,000	279,000	283,000	331,000	316,000	388,000
Non-S&E occupations	478,000	796,000	910,000	871,000	1,042,000	1,151,000	1,264,000	1,664,000

TABLE 6-2

Employed college graduates, by sex, ethnicity, race, and major occupation: 2003–23

(Number)

Sex, ethnicity, race, and occupation	2003	2010	2013	2015	2017	2019	2021	2023 ^a
Non-S&E occupations	1,120,000	1,447,000	1,766,000	1,809,000	2,118,000	2,368,000	2,546,000	2,699,000
Black or African American	2,054,000	2,747,000	3,141,000	3,434,000	3,805,000	3,895,000	4,109,000	4,523,000
S&E occupations	200,000	251,000	275,000	308,000	382,000	379,000	399,000	487,000
Biological, agricultural, and other life scientists	12,000	20,000	19,000	16,000	20,000	23,000	32,000	30,000
Computer and mathematical scientists	102,000	141,000	162,000	162,000	242,000	214,000	242,000	294,000
Physical and related scientists	8,000	11,000	12,000	13,000	11,000	18,000	16,000	15,000
Social and related scientists	27,000	24,000	25,000	42,000	48,000	47,000	44,000	58,000
Engineers	50,000	54,000	57,000	74,000	62,000	77,000	65,000	90,000
S&E-related occupations	285,000	401,000	462,000	515,000	610,000	613,000	756,000	889,000
Non-S&E occupations	1,569,000	2,095,000	2,404,000	2,612,000	2,813,000	2,903,000	2,955,000	3,147,000
Native Hawaiian or Other Pacific Islander	90,000	119,000	133,000	182,000	137,000	129,000	136,000	42,000
S&E occupations	13,000	12,000	12,000	12,000	23,000	17,000	16,000	7,000
Biological, agricultural, and other life scientists	1,000	S	2,000	1,000	1,000	D	1,000	D
Computer and mathematical scientists	7,000	2,000	5,000	6,000	12,000	6,000	6,000	2,000
Physical and related scientists	D	*	*	D	S	S	S	D
Social and related scientists	D	S	1,000	S	S	2,000	S	D
Engineers	5,000	5,000	4,000	4,000	8,000	7,000	7,000	S
S&E-related occupations	21,000	28,000	24,000	21,000	16,000	30,000	36,000	10,000
Non-S&E occupations	56,000	79,000	97,000	149,000	97,000	82,000	83,000	24,000
White	25,973,000	30,946,000	32,698,000	33,495,000	34,435,000	35,269,000	35,373,000	37,670,000
S&E occupations	3,479,000	3,789,000	4,033,000	4,267,000	4,397,000	4,784,000	4,943,000	5,353,000
Biological, agricultural, and other life scientists	321,000	428,000	449,000	449,000	415,000	439,000	501,000	541,000
Computer and mathematical scientists	1,390,000	1,575,000	1,726,000	1,965,000	2,070,000	2,259,000	2,296,000	2,620,000
Physical and related scientists	237,000	257,000	242,000	233,000	265,000	300,000	288,000	311,000
Social and related scientists	394,000	427,000	467,000	407,000	451,000	480,000	513,000	392,000
Engineers	1,138,000	1,101,000	1,149,000	1,213,000	1,196,000	1,305,000	1,345,000	1,490,000
S&E-related occupations	4,022,000	5,208,000	5,380,000	5,676,000	5,726,000	6,053,000	6,412,000	7,159,000
Non-S&E occupations	18,472,000	21,948,000	23,285,000	23,552,000	24,313,000	24,432,000	24,018,000	25,158,000
More than one race	394,000	585,000	673,000	926,000	946,000	1,184,000	1,238,000	1,564,000
S&E occupations	60,000	69,000	84,000	103,000	109,000	158,000	169,000	230,000
Biological, agricultural, and other life scientists	6,000	8,000	9,000	12,000	9,000	14,000	19,000	16,000
Computer and mathematical scientists	24,000	34,000	40,000	50,000	52,000	88,000	89,000	122,000
Physical and related scientists	4,000	4,000	3,000	3,000	7,000	7,000	9,000	10,000
Social and related scientists	8,000	7,000	11,000	11,000	10,000	12,000	16,000	18,000
Engineers	18,000	17,000	20,000	27,000	31,000	37,000	36,000	63,000
S&E-related occupations	64,000	78,000	128,000	128,000	147,000	198,000	189,000	376,000

TABLE 6-2

Employed college graduates, by sex, ethnicity, race, and major occupation: 2003–23

(Number)

Sex, ethnicity, race, and occupation	2003	2010	2013	2015	2017	2019	2021	2023 ^a
Non-S&E occupations	270,000	437,000	462,000	695,000	689,000	829,000	880,000	959,000
Female	15,111,000	19,978,000	22,052,000	23,218,000	24,900,000	26,341,000	26,493,000	29,603,000
S&E occupations	1,203,000	1,486,000	1,681,000	1,818,000	1,966,000	2,193,000	2,300,000	2,586,000
Biological, agricultural, and other life scientists	164,000	292,000	311,000	302,000	292,000	337,000	367,000	405,000
Computer and mathematical scientists	552,000	602,000	673,000	833,000	919,000	975,000	1,053,000	1,214,000
Physical and related scientists	83,000	98,000	100,000	92,000	107,000	142,000	135,000	160,000
Social and related scientists	251,000	295,000	363,000	341,000	379,000	428,000	433,000	398,000
Engineers	154,000	200,000	235,000	250,000	269,000	310,000	312,000	409,000
S&E-related occupations	2,814,000	3,877,000	4,223,000	4,558,000	4,764,000	5,109,000	5,494,000	6,669,000
Non-S&E occupations	11,094,000	14,615,000	16,147,000	16,842,000	18,170,000	19,040,000	18,699,000	20,349,000
Hispanic or Latino	862,000	1,533,000	1,827,000	2,045,000	2,391,000	2,668,000	2,907,000	3,244,000
S&E occupations	57,000	84,000	120,000	117,000	154,000	182,000	206,000	251,000
Biological, agricultural, and other life scientists	10,000	15,000	25,000	18,000	24,000	33,000	36,000	32,000
Computer and mathematical scientists	18,000	33,000	39,000	39,000	49,000	49,000	75,000	100,000
Physical and related scientists	4,000	6,000	7,000	6,000	10,000	11,000	11,000	17,000
Social and related scientists	13,000	17,000	31,000	37,000	46,000	58,000	52,000	60,000
Engineers	12,000	13,000	18,000	17,000	26,000	31,000	33,000	42,000
S&E-related occupations	135,000	254,000	322,000	372,000	427,000	492,000	537,000	683,000
Non-S&E occupations	670,000	1,195,000	1,385,000	1,555,000	1,809,000	1,994,000	2,164,000	2,311,000
Not Hispanic or Latino								
American Indian or Alaska Native	71,000	50,000	65,000	63,000	68,000	121,000	71,000	48,000
S&E occupations	4,000	3,000	3,000	1,000	5,000	4,000	3,000	7,000
Biological, agricultural, and other life scientists	D	D	S	D	D	*	S	D
Computer and mathematical scientists	2,000	*	1,000	*	S	S	D	D
Physical and related scientists	1,000	*	*	D	D	D	D	D
Social and related scientists	D	*	S	S	1,000	*	*	S
Engineers	1,000	S	*	D	D	S	D	2,000
S&E-related occupations	12,000	13,000	22,000	18,000	16,000	15,000	17,000	7,000
Non-S&E occupations	55,000	34,000	40,000	44,000	47,000	101,000	51,000	34,000
Asian	999,000	1,359,000	1,687,000	1,882,000	2,142,000	2,457,000	2,682,000	3,082,000
S&E occupations	166,000	260,000	293,000	417,000	409,000	488,000	511,000	577,000
Biological, agricultural, and other life scientists	23,000	62,000	63,000	57,000	55,000	72,000	79,000	81,000
Computer and mathematical scientists	93,000	124,000	155,000	272,000	257,000	307,000	315,000	346,000
Physical and related scientists	13,000	13,000	16,000	16,000	16,000	15,000	19,000	16,000
Social and related scientists	11,000	15,000	24,000	32,000	26,000	30,000	32,000	53,000
Engineers	27,000	46,000	36,000	40,000	54,000	64,000	66,000	82,000

TABLE 6-2

Employed college graduates, by sex, ethnicity, race, and major occupation: 2003–23

(Number)

Sex, ethnicity, race, and occupation	2003	2010	2013	2015	2017	2019	2021	2023 ^a
S&E-related occupations	260,000	382,000	437,000	467,000	537,000	625,000	656,000	885,000
Non-S&E occupations	572,000	718,000	957,000	998,000	1,196,000	1,343,000	1,516,000	1,620,000
Black or African American	1,207,000	1,616,000	1,865,000	2,077,000	2,292,000	2,344,000	2,432,000	2,719,000
S&E occupations	80,000	108,000	110,000	104,000	168,000	135,000	144,000	175,000
Biological, agricultural, and other life scientists	6,000	9,000	11,000	10,000	9,000	12,000	19,000	16,000
Computer and mathematical scientists	45,000	71,000	65,000	50,000	109,000	70,000	83,000	96,000
Physical and related scientists	2,000	4,000	5,000	4,000	5,000	7,000	4,000	7,000
Social and related scientists	17,000	14,000	18,000	24,000	34,000	33,000	28,000	39,000
Engineers	10,000	9,000	11,000	16,000	11,000	12,000	10,000	16,000
S&E-related occupations	199,000	257,000	291,000	301,000	362,000	355,000	488,000	612,000
Non-S&E occupations	928,000	1,251,000	1,465,000	1,671,000	1,762,000	1,854,000	1,801,000	1,932,000
Native Hawaiian or Other Pacific Islander	38,000	52,000	57,000	75,000	67,000	51,000	65,000	20,000
S&E occupations	3,000	4,000	2,000	2,000	5,000	3,000	5,000	S
Biological, agricultural, and other life scientists	D	S	*	1,000	S	D	D	D
Computer and mathematical scientists	2,000	*	D	S	S	D	S	D
Physical and related scientists	D	D	D	D	*	D	D	D
Social and related scientists	D	S	*	S	S	S	S	D
Engineers	D	D	*	D	D	D	D	D
S&E-related occupations	12,000	11,000	12,000	14,000	9,000	9,000	S	7,000
Non-S&E occupations	23,000	37,000	43,000	59,000	52,000	40,000	42,000	11,000
White	11,734,000	15,036,000	16,169,000	16,582,000	17,391,000	18,005,000	17,710,000	19,625,000
S&E occupations	874,000	1,009,000	1,130,000	1,144,000	1,188,000	1,322,000	1,386,000	1,513,000
Biological, agricultural, and other life scientists	122,000	200,000	207,000	209,000	196,000	212,000	223,000	264,000
Computer and mathematical scientists	386,000	365,000	407,000	461,000	486,000	519,000	564,000	645,000
Physical and related scientists	61,000	72,000	71,000	64,000	72,000	105,000	98,000	116,000
Social and related scientists	204,000	244,000	279,000	240,000	266,000	296,000	307,000	233,000
Engineers	101,000	127,000	165,000	171,000	168,000	190,000	194,000	255,000
S&E-related occupations	2,158,000	2,911,000	3,063,000	3,313,000	3,314,000	3,491,000	3,649,000	4,242,000
Non-S&E occupations	8,702,000	11,115,000	11,976,000	12,125,000	12,889,000	13,192,000	12,676,000	13,870,000
More than one race	201,000	333,000	381,000	494,000	550,000	695,000	626,000	864,000
S&E occupations	19,000	18,000	23,000	31,000	37,000	58,000	45,000	63,000
Biological, agricultural, and other life scientists	3,000	3,000	3,000	7,000	4,000	6,000	9,000	11,000
Computer and mathematical scientists	7,000	7,000	5,000	9,000	15,000	28,000	14,000	26,000
Physical and related scientists	S	S	1,000	1,000	4,000	4,000	3,000	4,000
Social and related scientists	4,000	3,000	9,000	8,000	6,000	9,000	12,000	11,000
Engineers	3,000	3,000	4,000	6,000	8,000	10,000	8,000	11,000

TABLE 6-2

Employed college graduates, by sex, ethnicity, race, and major occupation: 2003–23

(Number)

Sex, ethnicity, race, and occupation	2003	2010	2013	2015	2017	2019	2021	2023 ^a
S&E-related occupations	38,000	50,000	76,000	73,000	99,000	121,000	129,000	233,000
Non-S&E occupations	144,000	265,000	282,000	390,000	414,000	516,000	452,000	569,000
Male	17,463,000	20,644,000	21,787,000	22,723,000	23,323,000	24,183,000	25,271,000	26,458,000
S&E occupations	3,385,000	3,888,000	4,084,000	4,590,000	4,803,000	5,274,000	5,594,000	6,126,000
Biological, agricultural, and other life scientists	257,000	310,000	328,000	329,000	319,000	361,000	427,000	408,000
Computer and mathematical scientists	1,378,000	1,795,000	1,980,000	2,323,000	2,500,000	2,799,000	2,979,000	3,360,000
Physical and related scientists	215,000	229,000	224,000	239,000	259,000	267,000	273,000	270,000
Social and related scientists	226,000	223,000	234,000	229,000	266,000	235,000	279,000	233,000
Engineers	1,309,000	1,331,000	1,319,000	1,469,000	1,459,000	1,612,000	1,636,000	1,855,000
S&E-related occupations	2,341,000	3,089,000	3,285,000	3,309,000	3,507,000	3,785,000	4,028,000	4,584,000
Non-S&E occupations	11,736,000	13,667,000	14,418,000	14,824,000	15,013,000	15,125,000	15,649,000	15,748,000
Hispanic or Latino	847,000	1,365,000	1,566,000	1,741,000	1,889,000	2,135,000	2,401,000	2,771,000
S&E occupations	142,000	191,000	237,000	270,000	351,000	382,000	485,000	600,000
Biological, agricultural, and other life scientists	9,000	13,000	17,000	18,000	14,000	30,000	37,000	45,000
Computer and mathematical scientists	54,000	73,000	107,000	120,000	151,000	189,000	254,000	325,000
Physical and related scientists	8,000	7,000	11,000	10,000	19,000	17,000	21,000	22,000
Social and related scientists	9,000	13,000	16,000	19,000	S	19,000	28,000	24,000
Engineers	63,000	85,000	86,000	103,000	118,000	128,000	145,000	184,000
S&E-related occupations	130,000	179,000	249,000	257,000	275,000	328,000	307,000	459,000
Non-S&E occupations	576,000	995,000	1,080,000	1,214,000	1,263,000	1,424,000	1,608,000	1,712,000
Not Hispanic or Latino								
American Indian or Alaska Native	61,000	68,000	65,000	55,000	53,000	62,000	55,000	64,000
S&E occupations	10,000	7,000	7,000	9,000	9,000	S	7,000	6,000
Biological, agricultural, and other life scientists	3,000	*	1,000	2,000	*	S	D	*
Computer and mathematical scientists	2,000	2,000	1,000	1,000	S	S	S	S
Physical and related scientists	D	S	*	*	S	1,000	1,000	D
Social and related scientists	S	D	2,000	S	S	S	*	D
Engineers	3,000	4,000	3,000	4,000	3,000	3,000	2,000	S
S&E-related occupations	8,000	9,000	10,000	9,000	12,000	14,000	5,000	6,000
Non-S&E occupations	43,000	52,000	48,000	37,000	32,000	31,000	43,000	52,000
Asian	1,223,000	1,852,000	1,984,000	2,118,000	2,357,000	2,605,000	2,793,000	3,051,000
S&E occupations	457,000	708,000	702,000	904,000	929,000	1,055,000	1,154,000	1,194,000
Biological, agricultural, and other life scientists	37,000	50,000	54,000	57,000	70,000	86,000	88,000	67,000
Computer and mathematical scientists	238,000	412,000	417,000	541,000	583,000	648,000	749,000	761,000
Physical and related scientists	23,000	27,000	33,000	48,000	35,000	40,000	42,000	37,000
Social and related scientists	13,000	13,000	17,000	19,000	12,000	14,000	25,000	22,000

TABLE 6-2

Employed college graduates, by sex, ethnicity, race, and major occupation: 2003–23

(Number)

Sex, ethnicity, race, and occupation	2003	2010	2013	2015	2017	2019	2021	2023 ^a
Engineers	146,000	205,000	181,000	239,000	228,000	268,000	250,000	307,000
S&E-related occupations	218,000	414,000	472,000	404,000	505,000	525,000	608,000	779,000
Non-S&E occupations	548,000	729,000	809,000	811,000	923,000	1,025,000	1,031,000	1,078,000
Black or African American	847,000	1,131,000	1,275,000	1,358,000	1,513,000	1,551,000	1,677,000	1,804,000
S&E occupations	119,000	143,000	165,000	204,000	214,000	244,000	255,000	313,000
Biological, agricultural, and other life scientists	7,000	11,000	8,000	7,000	10,000	11,000	12,000	14,000
Computer and mathematical scientists	57,000	70,000	96,000	112,000	132,000	144,000	159,000	198,000
Physical and related scientists	6,000	7,000	7,000	9,000	6,000	11,000	12,000	8,000
Social and related scientists	10,000	10,000	8,000	19,000	14,000	14,000	16,000	20,000
Engineers	40,000	45,000	46,000	58,000	51,000	65,000	55,000	74,000
S&E-related occupations	86,000	144,000	171,000	213,000	248,000	257,000	268,000	277,000
Non-S&E occupations	641,000	844,000	939,000	941,000	1,051,000	1,049,000	1,154,000	1,215,000
Native Hawaiian or Other Pacific Islander	52,000	67,000	75,000	107,000	70,000	78,000	70,000	22,000
S&E occupations	11,000	9,000	9,000	9,000	19,000	14,000	11,000	6,000
Biological, agricultural, and other life scientists	D	S	1,000	D	*	D	D	D
Computer and mathematical scientists	6,000	2,000	4,000	5,000	9,000	S	5,000	2,000
Physical and related scientists	D	*	D	D	D	D	S	D
Social and related scientists	D	D	D	*	D	*	*	D
Engineers	4,000	4,000	4,000	4,000	8,000	7,000	5,000	S
S&E-related occupations	9,000	17,000	12,000	8,000	7,000	S	18,000	3,000
Non-S&E occupations	33,000	41,000	53,000	90,000	45,000	42,000	41,000	13,000
White	14,239,000	15,910,000	16,529,000	16,913,000	17,044,000	17,264,000	17,663,000	18,045,000
S&E occupations	2,605,000	2,780,000	2,902,000	3,123,000	3,209,000	3,461,000	3,557,000	3,841,000
Biological, agricultural, and other life scientists	199,000	228,000	242,000	241,000	218,000	227,000	278,000	277,000
Computer and mathematical scientists	1,004,000	1,210,000	1,319,000	1,504,000	1,584,000	1,740,000	1,732,000	1,974,000
Physical and related scientists	176,000	184,000	170,000	169,000	194,000	196,000	191,000	195,000
Social and related scientists	190,000	183,000	188,000	168,000	186,000	185,000	206,000	159,000
Engineers	1,037,000	975,000	984,000	1,041,000	1,027,000	1,114,000	1,151,000	1,235,000
S&E-related occupations	1,864,000	2,297,000	2,317,000	2,363,000	2,412,000	2,562,000	2,763,000	2,917,000
Non-S&E occupations	9,770,000	10,833,000	11,309,000	11,427,000	11,423,000	11,240,000	11,343,000	11,287,000
More than one race	193,000	252,000	292,000	432,000	396,000	490,000	612,000	700,000
S&E occupations	41,000	51,000	61,000	72,000	73,000	100,000	124,000	167,000
Biological, agricultural, and other life scientists	3,000	5,000	6,000	5,000	5,000	7,000	S	5,000
Computer and mathematical scientists	18,000	26,000	35,000	41,000	38,000	60,000	76,000	96,000
Physical and related scientists	2,000	3,000	2,000	2,000	3,000	3,000	6,000	6,000
Social and related scientists	3,000	4,000	3,000	3,000	4,000	3,000	3,000	7,000

TABLE 6-2

Employed college graduates, by sex, ethnicity, race, and major occupation: 2003–23

(Number)

Sex, ethnicity, race, and occupation	2003	2010	2013	2015	2017	2019	2021	2023 ^a
Engineers	15,000	14,000	16,000	21,000	23,000	27,000	28,000	52,000
S&E-related occupations	27,000	29,000	52,000	56,000	48,000	76,000	60,000	143,000
Non-S&E occupations	126,000	172,000	180,000	305,000	276,000	313,000	429,000	390,000

* = suppressed when population estimate < 500. D = suppressed to avoid disclosure of confidential information. S = suppressed for reliability; coefficient of variation exceeds publication standards.

S&E = science and engineering.

^a The 2023 estimates by sex were based on responses to the question, "What sex were you assigned at birth, on your original birth certificate? 1. Male, 2. Female," which was a change from prior survey cycles. In 2021, the question was "What is your sex? 1. Male, 2. Female," and in 2019 and earlier years, the question was "Are you ... 1. Male, 2. Female."

Note(s):

Numbers are rounded to the nearest 1,000. Detail may not add to total because of rounding. Hispanic or Latino may be any race; race categories exclude Hispanic origin.

Source(s):

National Center for Science and Engineering Statistics, National Survey of College Graduates, 2023.