

TABLE I
BLACK BEAR
HARVEST SUMMARY
 STATEWIDE
2022

RESIDENCY	VALID LICENSES	SPRING			FALL			ANNUAL			DAYS/ HARVEST	HUNTER SUCCESS
		HUNTERS	DAYS	HARVEST	HUNTERS	DAYS	HARVEST	HUNTERS	DAYS	HARVEST		
RESIDENT	5169	1969	13946	203	1997	15065	161	3345	29011	364	79.7	10.9%
NONRESIDENT	785	449	2358	101	271	1547	61	662	3905	162	24.1	24.5%
TOTAL	5954	2418	16304	304	2268	16612	222	4007	32916	526	62.6	13.1%

TABLE II
BLACK BEAR
 TEN-YEAR COMPARISON OF STATEWIDE HARVEST
 2013-2022

RESIDENCY	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
VALID LICENSES										
RESIDENT	3716	3718	4083	4187	4181	4191	4054	4824	4928	5169
NONRESIDENT	417	471	404	417	456	526	473	543	750	785
TOTAL	4133	4189	4487	4604	4637	4717	4527	5367	5678	5954
SPRING ACTIVE HUNTERS										
RESIDENT	1451	1141	1469	1425	1666	1363	1451	2079	2021	1969
NONRESIDENT	221	185	235	177	232	238	248	292	441	449
TOTAL	1672	1326	1704	1602	1898	1601	1699	2371	2462	2418
FALL ACTIVE HUNTERS										
RESIDENT	1771	1699	1961	1709	1997	1511	1808	2007	2203	1997
NONRESIDENT	201	198	176	163	198	185	214	234	291	271
TOTAL	1972	1897	2137	1872	2195	1696	2022	2241	2494	2268
ANNUAL ACTIVE HUNTERS										
RESIDENT	3222	2840	3430	3134	3663	3118	2747	3396	3467	3345
NONRESIDENT	422	383	411	340	430	496	441	492	693	662
TOTAL	3644	3223	3841	3474	4093	3614	3189	3888	4160	4007
SPRING HARVEST										
RESIDENT	148	174	175	199	220	195	194	247	194	203
NONRESIDENT	75	71	67	62	79	82	79	71	106	101
TOTAL	223	245	242	261	300	277	273	318	300	304
FALL HARVEST										
RESIDENT	133	114	169	152	123	137	133	166	191	161
NONRESIDENT	38	40	42	38	44	43	45	51	72	61
TOTAL	171	154	211	190	167	180	178	219	263	222
ANNUAL HARVEST										
RESIDENT	281	288	344	351	343	332	327	413	385	364
NONRESIDENT	113	111	109	100	123	125	124	122	178	162
TOTAL	394	399	453	451	467	457	451	537	563	526
SPRING DAYS										
RESIDENT	9523	8097	10422	9692	10583	9566	9891	13540	13951	13946
NONRESIDENT	1056	1244	1103	800	1076	1337	1156	1624	2477	2358
TOTAL	10579	9341	11525	10492	11659	10903	11048	15164	16428	16304
FALL DAYS										
RESIDENT	11669	12476	13640	11447	13120	11122	12386	15531	17600	15065
NONRESIDENT	1146	1173	918	752	1181	923	1114	1243	1572	1547
TOTAL	12815	13649	14558	12199	14301	12045	13500	16774	19172	16612
ANNUAL DAYS										
RESIDENT	21192	20573	24062	21139	23703	20688	22277	29071	31551	29011
NONRESIDENT	2202	2417	2021	1552	2257	2260	2270	2867	4049	3905
TOTAL	23394	22990	26083	22691	25960	22948	24548	31938	35600	32916
SPRING DAYS/HARVEST										
RESIDENT	64.3	46.5	59.6	48.7	48.1	49.1	51	54.8	71.9	68.7
NONRESIDENT	14.1	17.5	16.5	12.9	13.6	16.3	14.6	22.9	23.4	23.3
TOTAL	47.4	38.1	47.6	40.2	38.9	39.4	40.5	47.7	54.8	53.6
FALL DAYS/HARVEST										
RESIDENT	87.7	109.4	80.7	75.3	106.7	81.2	93.1	93.6	92.1	93.6
NONRESIDENT	30.2	29.3	21.9	19.8	26.8	21.5	24.8	24.4	21.8	25.4
TOTAL	74.9	88.6	69	64.2	85.6	66.9	75.8	76.6	72.9	74.8
ANNUAL DAYS/HARVEST										
RESIDENT	75.4	71.4	69.9	60.2	69.1	62.3	68.1	70.4	82	79.7
NONRESIDENT	19.5	21.8	18.5	15.5	18.3	18.1	18.3	23.5	22.7	24.1
TOTAL	59.4	57.6	57.6	50.3	55.6	50.2	54.4	59.5	63.2	62.6
SPRING HUNTER SUCCESS										
RESIDENT	10.20%	15.20%	11.90%	14.00%	13.20%	14.30%	13.40%	11.90%	9.60%	10.3%
NONRESIDENT	33.90%	38.40%	28.50%	35.00%	34.10%	34.50%	31.90%	24.30%	24.00%	22.5%
TOTAL	13.30%	18.50%	14.20%	16.30%	15.80%	17.30%	16.10%	13.40%	12.20%	12.6%
FALL HUNTER SUCCESS										
RESIDENT	7.50%	6.70%	8.60%	8.90%	6.20%	9.10%	7.40%	8.30%	8.70%	8.1%
NONRESIDENT	18.90%	20.20%	23.90%	23.30%	22.20%	23.20%	21.00%	21.80%	24.70%	22.5%
TOTAL	8.70%	8.10%	9.90%	10.10%	7.60%	10.60%	8.80%	9.80%	10.50%	9.8%
ANNUAL HUNTER SUCCESS										
RESIDENT	8.70%	10.10%	10.00%	11.20%	9.40%	10.60%	11.90%	12.20%	11.10%	10.9%
NONRESIDENT	26.80%	29.00%	26.50%	29.40%	28.60%	25.20%	28.10%	24.80%	25.70%	24.5%
TOTAL	10.80%	12.40%	11.80%	13.00%	11.40%	12.60%	14.10%	13.80%	13.50%	13.1%

TABLE II (continued) BLACK BEAR TEN-YEAR COMPARISON OF STATEWIDE HARVEST

RESIDENCY	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
FIREARM HARVEST										
RESIDENT	84.50%	81.40%	83.10%	82.90%	90.90%	82.20%	85.00%	84.50%	83.40%	84.8%
NONRESIDENT	82.40%	79.30%	87.20%	82.00%	81.70%	89.60%	80.60%	76.20%	78.70%	84.6%
TOTAL	83.90%	80.80%	84.10%	82.70%	88.00%	84.10%	83.60%	82.30%	81.70%	84.8%
ARCHERY HARVEST										
RESIDENT	14.10%	17.50%	16.00%	15.10%	8.40%	16.90%	13.50%	12.80%	15.60%	14.6%
NONRESIDENT	17.60%	20.70%	12.80%	15.00%	18.30%	10.40%	18.50%	20.50%	21.30%	14.2%
TOTAL	15.10%	18.40%	15.20%	15.10%	11.60%	15.10%	14.80%	14.50%	17.40%	14.5%
MUZZLOADER HARVEST										
RESIDENT	1.40%	1.10%	0.90%	1.40%	0.00%	0.90%	0.00%	0.20%	0.30%	0.6%
NONRESIDENT	0.00%	0.00%	0.00%	3.00%	0.70%	0.00%	0.00%	0.00%	0.00%	1.2%
TOTAL	1.00%	0.80%	0.70%	1.80%	0.40%	0.70%	0.00%	0.20%	0.20%	0.8%

TABLE I-H
BLACK BEAR
HARVEST, HUNTING PRESSURE, HUNTER SUCCESS
 BY HUNT AREA
2022

HUNT AREA	RESIDENCY	SPRING			FALL			ANNUAL			DAYS/ HARVEST	HUNTER SUCCESS
		HUNTERS	DAYS	HARVEST	HUNTERS	DAYS	HARVEST	HUNTERS	DAYS	HARVEST		
1 NORTHWEST BIGHORN	RESIDENT	62	386	14	22	129	6	78	515	20	25.8	25.6%
	NONRESIDENT	3	16	0	0	0	0	3	16	0	-	0.0%
	TOTAL	65	402	14	22	129	6	81	531	20	26.6	24.7%
2 BURGESS JUNCTION	RESIDENT	95	610	8	67	324	7	145	934	15	62.3	10.3%
	NONRESIDENT	26	100	6	6	10	12	32	110	18	6.1	56.2%
	TOTAL	121	710	14	73	334	19	177	1044	33	31.6	18.6%
3 PAINT ROCK	RESIDENT	50	229	1	39	117	3	78	347	4	86.8	5.1%
	NONRESIDENT	6	32	0	0	0	0	6	32	0	-	0.0%
	TOTAL	56	261	1	39	117	3	84	379	4	94.8	4.8%
4 STORY	RESIDENT	173	862	15	50	224	7	190	1085	22	49.3	11.6%
	NONRESIDENT	23	58	5	6	26	1	26	84	6	14.0	23.1%
	TOTAL	196	920	20	56	250	8	216	1169	28	41.8	13.0%
5 UPPER NORWOOD	RESIDENT	11	196	0	6	112	0	11	308	0	-	0.0%
	NONRESIDENT	0	0	0	0	0	0	0	0	0	-	0.0%
	TOTAL	11	196	0	6	112	0	11	308	0	-	0.0%
6 MAYOWORTH	RESIDENT	11	106	3	6	17	1	17	123	4	30.8	23.5%
	NONRESIDENT	3	13	1	0	0	0	3	13	1	13.0	33.3%
	TOTAL	14	119	4	6	17	1	20	136	5	27.2	25.0%
7 LARAMIE PEAK	RESIDENT	140	1113	10	84	431	11	190	1544	21	73.5	11.1%
	NONRESIDENT	23	168	8	10	10	6	29	178	14	12.7	48.3%
	TOTAL	163	1281	18	94	441	17	219	1722	35	49.2	16.0%
8 SNOWY RANGE	RESIDENT	185	1415	14	241	2199	9	375	3614	23	157.1	6.1%
	NONRESIDENT	58	397	7	32	162	3	81	559	10	55.9	12.3%
	TOTAL	243	1812	21	273	2361	12	456	4173	33	126.5	7.2%
9 SIERRA MADRE	RESIDENT	173	1717	17	246	1729	22	358	3446	39	88.4	10.9%
	NONRESIDENT	81	391	7	39	184	5	113	575	12	47.9	10.6%
	TOTAL	254	2108	24	285	1913	27	471	4021	51	78.8	10.8%
10 UINTA	RESIDENT	34	224	4	39	123	1	56	347	5	69.4	8.9%
	NONRESIDENT	3	23	0	10	68	1	10	90	1	90.0	10.0%
	TOTAL	37	247	4	49	191	2	66	437	6	72.8	9.1%
11 SMITH'S FORK	RESIDENT	112	1074	7	157	1287	6	213	2361	13	181.6	6.1%
	NONRESIDENT	26	120	8	16	78	0	36	197	8	24.6	22.2%
	TOTAL	138	1194	15	173	1365	6	249	2558	21	121.8	8.4%
12 PINE MOUNTAIN	RESIDENT	39	257	0	11	67	1	39	324	1	324.0	2.6%
	NONRESIDENT	6	145	0	6	42	0	6	187	0	-	0.0%
	TOTAL	45	402	0	17	109	1	45	511	1	511.0	2.2%
13 LANDER	RESIDENT	112	655	13	67	621	3	162	1275	16	79.7	9.9%
	NONRESIDENT	3	26	1	6	74	0	10	100	1	100.0	10.0%
	TOTAL	115	681	14	73	695	3	172	1375	17	80.9	9.9%
14 SOUTH PINEY	RESIDENT	45	470	6	84	727	4	101	1197	10	119.7	9.9%
	NONRESIDENT	3	19	0	3	10	0	3	29	0	-	0.0%
	TOTAL	48	489	6	87	737	4	104	1226	10	122.6	9.6%
15 PINEY-HORSE CREEK	RESIDENT	39	392	1	50	526	1	84	917	2	458.5	2.4%
	NONRESIDENT	6	32	2	6	36	1	13	68	3	22.7	23.1%
	TOTAL	45	424	3	56	562	2	97	985	5	197.0	5.2%
16 GREYS RIVER	RESIDENT	67	498	4	123	627	5	173	1124	9	124.9	5.2%
	NONRESIDENT	52	210	13	32	155	14	81	365	27	13.5	33.3%
	TOTAL	119	708	17	155	782	19	254	1489	36	41.4	14.2%
17 HOBACK	RESIDENT	56	241	5	50	224	8	101	464	13	35.7	12.9%
	NONRESIDENT	19	71	6	16	78	2	32	149	8	18.6	25.0%
	TOTAL	75	312	11	66	302	10	133	613	21	29.2	15.8%
18 FALL CREEK	RESIDENT	39	168	1	56	324	2	84	492	3	164.0	3.6%
	NONRESIDENT	3	16	1	19	103	3	23	120	4	30.0	17.4%
	TOTAL	42	184	2	75	427	5	107	612	7	87.4	6.5%

TABLE I-H (continued) BLACK BEAR HARVEST, HUNTING PRESSURE, HUNTER SUCCESS BY HUNT AREA

HUNT AREA	RESIDENCY	SPRING			FALL			ANNUAL			DAYS/ HARVEST	HUNTER SUCCESS
		HUNTERS	DAYS	HARVEST	HUNTERS	DAYS	HARVEST	HUNTERS	DAYS	HARVEST		
19 GREEN RIVER	RESIDENT	67	403	9	117	755	3	173	1158	12	96.5	6.9%
	NONRESIDENT	29	123	7	19	123	1	48	246	8	30.8	16.7%
	TOTAL	96	526	16	136	878	4	221	1404	20	70.2	9.0%
20 GROS VENTRE	RESIDENT	112	548	6	78	375	7	168	923	13	71.0	7.7%
	NONRESIDENT	6	29	4	10	36	3	16	65	7	9.3	43.8%
	TOTAL	118	577	10	88	411	10	184	988	20	49.4	10.9%
21 CONANT BASIN	RESIDENT	22	123	7	34	291	3	50	414	10	41.4	20.0%
	NONRESIDENT	16	129	2	6	32	0	19	162	2	81.0	10.5%
	TOTAL	38	252	9	40	323	3	69	576	12	48.0	17.4%
22 PACIFIC CREEK	RESIDENT	6	56	2	28	185	5	34	241	7	34.4	20.6%
	NONRESIDENT	3	97	1	6	120	0	6	216	1	216.0	16.7%
	TOTAL	9	153	3	34	305	5	40	457	8	57.1	20.0%
23 RAMSHORN	RESIDENT	11	112	0	67	565	2	78	677	2	338.5	2.6%
	NONRESIDENT	0	0	0	0	0	0	0	0	0	-	0.0%
	TOTAL	11	112	0	67	565	2	78	677	2	338.5	2.6%
24 DARBY CREEK	RESIDENT	17	78	3	6	22	5	17	101	8	12.6	47.1%
	NONRESIDENT	0	0	7	0	0	1	0	0	8	0.0	Inf%
	TOTAL	17	78	10	6	22	6	17	101	16	6.3	94.1%
25 NORTH ABSAROKA	RESIDENT	157	912	7	101	845	8	213	1757	15	117.1	7.0%
	NONRESIDENT	19	87	7	0	0	0	19	87	7	12.4	36.8%
	TOTAL	176	999	14	101	845	8	232	1844	22	83.8	9.5%
26 SOUTH ABSAROKA	RESIDENT	90	660	8	67	414	3	123	1074	11	97.6	8.9%
	NONRESIDENT	3	3	0	0	0	1	3	3	1	3.0	33.3%
	TOTAL	93	663	8	67	414	4	126	1077	12	89.8	9.5%
27 GRASS CREEK	RESIDENT	45	274	5	17	90	4	50	364	9	40.4	18.0%
	NONRESIDENT	3	6	0	3	3	1	3	10	1	10.0	33.3%
	TOTAL	48	280	5	20	93	5	53	374	10	37.4	18.9%
28 WIND RIVER	RESIDENT	0	0	0	34	213	0	34	213	0	-	0.0%
	NONRESIDENT	0	0	0	10	36	0	10	36	0	-	0.0%
	TOTAL	0	0	0	44	249	0	44	249	0	-	0.0%
29 SPREAD CREEK	RESIDENT	28	90	4	73	470	6	90	559	10	55.9	11.1%
	NONRESIDENT	3	10	0	10	52	0	13	61	0	-	0.0%
	TOTAL	31	100	4	83	522	6	103	620	10	62.0	9.7%
30 STAR VALLEY	RESIDENT	101	548	18	78	492	3	129	1041	21	49.6	16.3%
	NONRESIDENT	16	110	7	10	55	3	23	165	10	16.5	43.5%
	TOTAL	117	658	25	88	547	6	152	1206	31	38.9	20.4%
31 CROWHEART BUTTE	RESIDENT	0	0	0	6	45	0	6	45	0	-	0.0%
	NONRESIDENT	0	0	0	0	0	0	0	0	0	-	0.0%
	TOTAL	0	0	0	6	45	0	6	45	0	-	0.0%
32 CODY	RESIDENT	45	235	2	34	285	4	50	520	6	86.7	12.0%
	NONRESIDENT	10	29	0	0	0	0	10	29	0	-	0.0%
	TOTAL	55	264	2	34	285	4	60	549	6	91.5	10.0%
33 CASPER MOUNTAIN	RESIDENT	50	425	1	50	442	3	62	867	4	216.8	6.5%
	NONRESIDENT	0	0	0	0	0	3	0	0	3	0.0	Inf%
	TOTAL	50	425	1	50	442	6	62	867	7	123.9	11.3%
35 THE REST OF THE STATE	RESIDENT	39	313	8	62	503	8	95	817	16	51.1	16.8%
	NONRESIDENT	6	29	1	0	0	0	6	29	1	29.0	16.7%
	TOTAL	45	342	9	62	503	8	101	846	17	49.8	16.8%

TABLE I-MS
BLACK BEAR
SPRING HARVEST
 BY MANAGEMENT UNIT
2022

MANAGEMENT UNIT	HUNT AREA	FEMALE MORTALITY LIMIT	FEMALE HARVEST	MALE HARVEST	TOTAL HARVEST	HUNTERS	DAYS	DAYS/HARVEST	HUNTER SUCCESS
ABSAROKA	23		0	0	0	11	112	–	0.0%
	25		2	12	14	176	999	71.4	8.0%
	26	8	0	8	8	93	663	82.9	8.6%
	27		2	3	5	48	280	56.0	10.4%
	32	UNLIMITED	0	2	2	55	264	132.0	3.6%
	TOTAL	–	4	25	29	383	2318	79.9	7.6%
BIGHORNS	1	8	3	11	14	65	402	28.7	21.5%
	2		4	10	14	121	710	50.7	11.6%
	3	6	0	1	1	56	261	261.0	1.8%
	4		5	15	20	196	920	46.0	10.2%
	5		0	0	0	11	196	–	0.0%
	6	2	2	2	4	14	119	29.8	28.6%
	TOTAL	–	14	39	53	463	2608	49.2	11.4%
GREYS RIVER	11	5	5	10	15	138	1194	79.6	10.9%
	14		2	4	6	48	489	81.5	12.5%
	15		0	3	3	45	424	141.3	6.7%
	16	24	4	13	17	119	708	41.6	14.3%
	17		1	10	11	75	312	28.4	14.7%
	30		10	15	25	117	658	26.3	21.4%
	TOTAL	–	22	55	77	542	3785	49.2	14.2%
JACKSON	18		0	2	2	42	184	92.0	4.8%
	20		2	8	10	118	577	57.7	8.5%
	21		3	6	9	38	252	28.0	23.7%
	22	13	1	2	3	9	153	51.0	33.3%
	24		2	8	10	17	78	7.8	58.8%
	29		0	4	4	31	100	25.0	12.9%
	TOTAL	–	8	30	38	255	1344	35.4	14.9%
LARAMIE PEAK	33	3	0	1	1	50	425	425.0	2.0%
	7	5	6	12	18	163	1281	71.2	11.0%
	TOTAL	–	6	13	19	213	1706	89.8	8.9%
SIERRA MADRES	9	10	10	14	24	254	2108	87.8	9.4%
	TOTAL	–	10	14	24	254	2108	87.8	9.4%
SNOWY RANGE	8	9	7	14	21	243	1812	86.3	8.6%
	TOTAL	–	7	14	21	243	1812	86.3	8.6%
UINTA	10	2	0	4	4	37	247	61.8	10.8%
	12	1	0	0	0	45	402	–	0.0%
	TOTAL	–	0	4	4	82	649	162.2	4.9%
WIND RIVER	13	5	4	10	14	115	681	48.6	12.2%
	19	10	6	10	16	96	526	32.9	16.7%
	28	4	0	0	0	0	0	–	0.0%
	31	2	0	0	0	0	0	–	0.0%
	TOTAL	–	10	20	30	211	1207	40.2	14.2%
REST OF STATE	35	UNLIMITED	1	8	9	45	342	38.0	20.0%
	TOTAL	–	1	8	9	45	342	38.0	20.0%

TABLE I-MF
BLACK BEAR
FALL HARVEST
 BY MANAGEMENT UNIT
2022

MANAGEMENT UNIT	HUNT AREA	FEMALE MORTALITY LIMIT	FEMALE HARVEST	MALE HARVEST	TOTAL HARVEST	HUNTERS	DAYS	DAYS/HARVEST	HUNTER SUCCESS
ABSAROKA	23	12	2	0	2	67	565	282.5	3.0%
	25		4	4	8	101	845	105.6	7.9%
	26		1	3	4	67	414	103.5	6.0%
	27		1	4	5	20	93	18.6	25.0%
	32	UNLIMITED	0	4	4	34	285	71.2	11.8%
	TOTAL	–	8	15	23	289	2202	95.7	8.0%
BIGHORNS	1	8	5	1	6	22	129	21.5	27.3%
	2		4	15	19	73	334	17.6	26.0%
	3	4	1	2	3	39	117	39.0	7.7%
	4		6	2	8	56	250	31.2	14.3%
	5		0	0	0	6	112	–	0.0%
	6	2	0	1	1	6	17	17.0	16.7%
	TOTAL	–	16	21	37	202	959	25.9	18.3%
GREYS RIVER	11	5	3	3	6	173	1365	227.5	3.5%
	14		1	3	4	87	737	184.2	4.6%
	15	18	1	1	2	56	562	281.0	3.6%
	16		5	14	19	155	782	41.2	12.3%
	17		3	7	10	66	302	30.2	15.2%
	30		5	1	6	88	547	91.2	6.8%
	TOTAL	–	18	29	47	625	4295	91.4	7.5%
JACKSON	18	20	1	4	5	75	427	85.4	6.7%
	20		5	5	10	88	411	41.1	11.4%
	21		3	0	3	40	323	107.7	7.5%
	22		0	5	5	34	305	61.0	14.7%
	24		2	4	6	6	22	3.7	100.0%
	29		3	3	6	83	522	87.0	7.2%
	TOTAL		–	14	21	35	326	2010	57.4
LARAMIE PEAK	33	2	5	1	6	50	442	73.7	12.0%
	7	5	4	13	17	94	441	25.9	18.1%
	TOTAL	–	9	14	23	144	883	38.4	16.0%
SIERRA MADRES	9	9	9	18	27	285	1913	70.9	9.5%
	TOTAL	–	9	18	27	285	1913	70.9	9.5%
SNOWY RANGE	8	8	7	5	12	273	2361	196.8	4.4%
	TOTAL	–	7	5	12	273	2361	196.8	4.4%
UINTA	10	2	1	1	2	49	191	95.5	4.1%
	12	1	0	1	1	17	109	109.0	5.9%
	TOTAL	–	1	2	3	66	300	100.0	4.5%
WIND RIVER	13	5	1	2	3	73	695	231.7	4.1%
	19	8	1	3	4	136	878	219.5	2.9%
	28	4	0	0	0	44	249	–	0.0%
	31	2	0	0	0	6	45	–	0.0%
	TOTAL	–	2	5	7	259	1867	266.7	2.7%
REST OF STATE	35	UNLIMITED	2	6	8	62	503	62.9	12.9%
	TOTAL	–	2	6	8	62	503	62.9	12.9%

TABLE III
BLACK BEAR
LICENSE DATA SUMMARY
 STATEWIDE
2022

RESIDENCY	LICENSE HOLDERS	NUMBER SURVEYED ^a	USABLE RESPONSES	RESPONSE RATE
RESIDENT	5169	5036	924	18.3%
NONRESIDENT	785	701	243	34.7%
TOTAL	5954	5737	1167	20.3%

^a All unique license holders with a valid email address were surveyed