

DATE: **March 8, 2021**

REGARDING: **Increase of Catalytic Converter Thefts, 2018 through December 2020**

PREPARED BY: **NICB Office of Intelligence and Analytics**

Introduction

The following report provides an analysis of available catalytic converter theft claims data for losses between January 1, 2018 and December 31, 2020. The data was isolated by Policy Type, Loss Type, and Loss Description. Policy Types included Personal Auto or Commercial Auto; the Loss Type was Comprehensive, Theft, or Vandalism; and the Loss Description included key words related to the theft of catalytic converters. It should be noted that in approximately 2016, many insurance companies began to classify catalytic converter thefts as “Partial Thefts” with no further information regarding the part stolen. Given the inability to confirm the stolen vehicle component, these thefts are not included in the following analysis. The 189 insurance companies that reported catalytic converter theft claims comprise 10% of the market. While this report only contains information on a portion of catalytic converter thefts, it provides valuable insight into the overall trend of the thefts.

Section 1	Highlights key findings
Section 2	Details the number of reported catalytic converter thefts by month
Section 3	Details precious metal prices
Section 4	Details the number of reported catalytic converter thefts by state
Appendix 1	Precious metal prices at week’s closing 1/1/2018 through 12/31/2020
Appendix 2	Reported catalytic converter thefts by state

SECTION 1: EXECUTIVE SUMMARY

Reported catalytic converter thefts have significantly increased since last year. In 2020, there were 14,433 reported thefts, representing a 326% increase from last year’s 3,389 reported thefts. While the thefts were trending upwards since mid-2019, the growth rate was significant in 2020. To illustrate this, the highest month for catalytic converter thefts in 2019 was in December at 578 reported incidents. The highest month for thefts in 2020 was also December at 2,347 reported incidents. This represents a 306% increase in recorded thefts. Alarmingly, this trend remained consistent for nearly every month to month comparison. Ten of the twelve months saw a 300+ percent increase, with February 2020 seeing a 665% increase compared to February 2019. The remaining two months, September and August, experienced a less dramatic, but significant, 200+ percent increase compared to the same months in 2019. This dramatic increase can be attributed to a number of inter-connected factors including crimes of opportunity in economically depressed periods, disruption of the supply chain, and public safety limitations.

Catalytic converters contain precious metals, most notable Rhodium, Platinum, and Palladium. Historically, catalytic converter thefts have increased when the price per ounce of these precious metals increase. There is a strong correlation between the price of Rhodium and the number of reported catalytic converter thefts. The price per ounce of Platinum and Palladium have changed at a similar trajectory; however, the price per ounce of Rhodium has increased more than 9 times the low of \$1,520 at market closing 1/19/2018, to a high of \$14,500 at market closing on 12/31/2020. Further, 18 of the 20 highest end-of-week closing prices from January 2018 to December 2020 occurred between September 2020 and December 2020. The remaining 2 of the top 20 highest weekly closing prices occurred on 2/21/2020 (\$11,100 per ounce) and 3/6/2020 (\$11,200 per ounce); immediately preceding COVID-19 shutdowns. The price of Rhodium dropped to \$2,000 per ounce on March 20, 2020.

Metal	Low	Date	High	Date
Platinum	\$608	3/20/2020	\$1,061	12/31/2020
Palladium	\$889	7/20/2018	\$2,614	2/21/2020
Rhodium	\$1,520	1/19/2018	\$14,500	12/31/2020

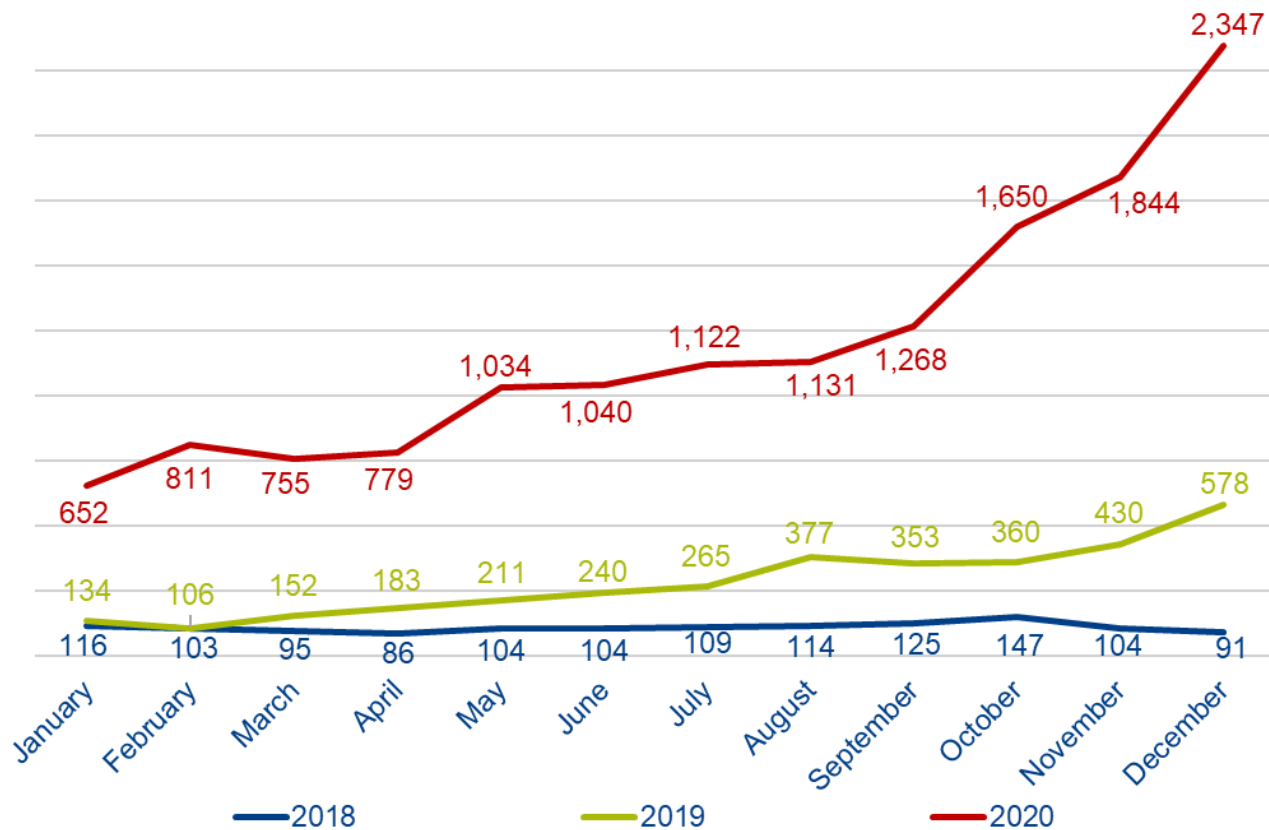
**Note - Although outside the date range of this report, it should be noted that the price per ounce of Rhodium reached \$18,500 on 2/3/2021, which indicates Catalytic Converter thefts will continue at inflated levels.*

California experienced the most reported catalytic converter thefts each year. Texas, the 2nd most impacted state, reported 10 times less thefts than California.

SECTION 2: Reported Catalytic Converter Thefts by Month

In 2018, there were an average of 108 reported catalytic converters thefts a month. Reported thefts were fairly consistent with a low of 86 in April and a high of 147 in October. In 2019, following a slight decrease from January to February, reported catalytic converter thefts steadily increased to the year's high of 578 in December. This represents a 535% increase from December 2018 with 91 reported incidents. In 2020, February was 665% higher than February 2019. March 2020 was the only month in which reported catalytic converter thefts decreased from the preceding month. Reported catalytic converter thefts more than tripled from January (652) to December (2,347).

REPORTED CATALYTIC CONVERTER THEFTS BY MONTH



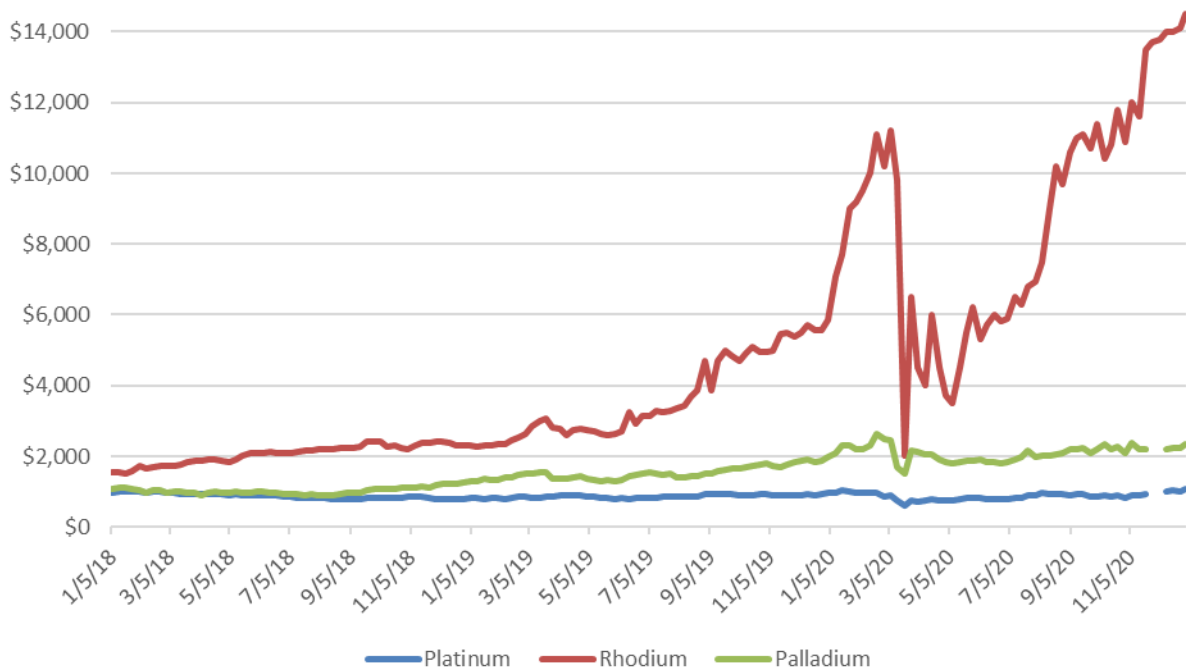
	2018	2019	2020
January	116	134	652
February	103	106	811
March	95	152	755
April	86	183	779
May	104	211	1,034
June	104	240	1,040
July	109	265	1,122
August	114	377	1,131
September	125	353	1,268
October	147	360	1,650
November	104	430	1,844
December	91	578	2,347
Total	1,298	3,389	14,433

Highest Rhodium Price Lowest Rhodium Price

SECTION 3: Precious Metal Prices

Catalytic converters contain precious metals, most notable Rhodium, Platinum, and Palladium. Historically, catalytic converter thefts have increased when the price per ounce of these precious metals increase. There is a strong correlation between the price of Rhodium and the number of reported catalytic converters thefts

PRECIOUS METAL PRICES PER OUNCE



The price per ounce of Platinum and Palladium have changed at a similar trajectory; however, the price per ounce of Rhodium increased more than 9 times the low of \$1,520 at market closing 1/19/2018 to a high of \$14,500 at market closing on 12/31/2020.

METAL	LOW	DATE	HIGH	DATE
Platinum	\$608	03/20/2020	\$1,022	01/17/2020
Palladium	\$889	07/20/2018	\$2,614	02/21/2020
Rhodium	\$1,050	09/29/2017	\$11,800	10/23/2020

Further, 18 of the 20 highest end-of-week closing prices between January 1, 2018 and December 31, 2020 were recorded the last 18 weeks of 2020. The other 2 highest end-of-week closing prices occurred on 2/21/2020 (\$11,100 per ounce) and 3/6/2020 (\$11,200 per ounce); immediately preceding COVID-19 shutdowns. The price dropped to \$2,000 per ounce on March 20, 2020.

TOP 20 RHODIUM PRICES (AT WEEK'S CLOSING)

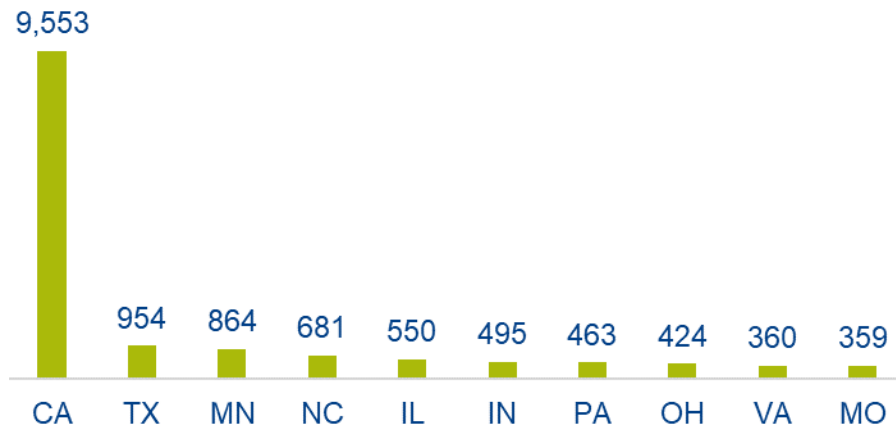
DATE	PRICE PER OUNCE	DATE	PRICE PER OUNCE
12/31/20	\$14,500	10/2/20	\$11,400
12/25/20	\$14,100	3/6/20	\$11,200
12/11/20	\$14,000	2/21/20	\$11,100
12/18/20	\$14,000	9/18/20	\$11,100
12/4/20	\$13,800	9/11/20	\$11,000
11/27/20	\$13,700	10/30/20	\$10,900
11/20/20	\$13,500	10/16/20	\$10,800
11/6/20	\$12,000	9/25/20	\$10,700
10/23/20	\$11,800	9/4/20	\$10,600
11/13/20	\$11,600	10/9/20	\$10,400

Palladium prices peaked in early 2020, reaching \$2,614 per ounce on 2/21/2020, and have been less than \$1,500 per ounce since 8/23/2019. With the exception of the 3/20/2020 plummet of Platinum to \$608 an ounce, prices have gently fluctuated between \$726 (4/3/2020) and \$1,061 (12/31/2020).

SECTION 4: Reported Catalytic Converter Thefts by State

California experienced the most reported catalytic converter thefts each year. Texas, the 2nd most impacted state, reported 10 times less thefts than California. California, Texas, Minnesota, North Carolina, Illinois, Indiana, Pennsylvania, Ohio, Virginia, and Missouri were the states with the most reported catalytic converter thefts from January 1, 2018 through December 31, 2020. Total thefts are reported below:

REPORTED CATALYTIC CONVERTER THEFTS JANUARY 1, 2018 THROUGH DECEMBER 31, 2020 COMBINED



TOP 10 STATES BY YEAR

<u>2018</u>		<u>2019</u>		<u>2020</u>	
STATE	THEFTS	STATE	THEFTS	STATE	THEFTS
CA	507	CA	1,687	CA	7,359
IL	117	MN	159	TX	769
PA	62	NC	153	MN	665
NC	58	IL	148	NC	470
MI	49	TX	147	IN	343
IN	45	IN	107	WA	320
MN	40	MI	102	OR	307
GA	39	PA	99	OH	305
VA	39	OH	88	MO	302
TX	38	VA	72	PA	302

Appendix 1: Precious Metal Prices

 = Top 20

Lowest Price

Highest Price

DATE	RHODIUM	PLATINUM	PALLADIUM
1/5/18	\$1,540	\$968	\$1,086
1/12/18	\$1,540	\$992	\$1,117
1/19/18	\$1,520	\$1,010	\$1,096
1/26/18	\$1,580	\$1,006	\$1,083
2/2/18	\$1,720	\$990	\$1,039
2/9/18	\$1,660	\$963	\$969
2/16/18	\$1,700	\$1,005	\$1,032
2/23/18	\$1,710	\$994	\$1,035
3/2/18	\$1,710	\$963	\$983
3/9/18	\$1,710	\$964	\$992
3/16/18	\$1,780	\$948	\$992
3/23/18	\$1,840	\$947	\$970
3/30/18	\$1,870	\$930	\$949
4/6/18	\$1,870	\$916	\$900
4/13/18	\$1,900	\$929	\$982
4/20/18	\$1,920	\$925	\$1,020
4/27/18	\$1,870	\$913	\$964
5/4/18	\$1,850	\$910	\$964
5/11/18	\$1,905	\$922	\$987
5/18/18	\$2,020	\$885	\$962
5/25/18	\$2,080	\$899	\$976
6/1/18	\$2,100	\$902	\$998
6/8/18	\$2,080	\$905	\$1,004
6/15/18	\$2,120	\$885	\$984
6/22/18	\$2,105	\$877	\$953
6/29/18	\$2,085	\$852	\$948
7/6/18	\$2,080	\$842	\$947
7/13/18	\$2,120	\$826	\$932
7/20/18	\$2,175	\$825	\$889
7/27/18	\$2,165	\$828	\$919
8/3/18	\$2,185	\$828	\$904
8/10/18	\$2,215	\$826	\$904
8/17/18	\$2,215	\$787	\$904
8/24/18	\$2,245	\$789	\$936
8/31/18	\$2,235	\$786	\$978
9/7/18	\$2,235	\$780	\$976
9/14/18	\$2,255	\$792	\$975
9/21/18	\$2,400	\$826	\$1,048

DATE	RHODIUM	PLATINUM	PALLADIUM
9/28/18	\$2,425	\$814	\$1,070
10/5/18	\$2,425	\$821	\$1,069
10/12/18	\$2,270	\$836	\$1,063
10/19/18	\$2,310	\$830	\$1,073
10/26/18	\$2,220	\$831	\$1,098
11/2/18	\$2,210	\$867	\$1,105
11/9/18	\$2,290	\$851	\$1,102
11/16/18	\$2,370	\$843	\$1,161
11/23/18	\$2,390	\$838	\$1,104
11/30/18	\$2,430	\$797	\$1,170
12/7/18	\$2,410	\$792	\$1,209
12/14/18	\$2,370	\$785	\$1,222
12/21/18	\$2,300	\$787	\$1,215
12/28/18	\$2,300	\$789	\$1,240
1/4/19	\$2,300	\$820	\$1,287
1/11/19	\$2,280	\$808	\$1,303
1/18/19	\$2,310	\$797	\$1,359
1/25/19	\$2,320	\$816	\$1,344
2/1/19	\$2,350	\$821	\$1,335
2/8/19	\$2,360	\$798	\$1,386
2/15/19	\$2,450	\$805	\$1,415
2/22/19	\$2,540	\$841	\$1,474
3/1/19	\$2,620	\$857	\$1,525
3/8/19	\$2,850	\$815	\$1,493
3/15/19	\$3,000	\$828	\$1,532
3/22/19	\$3,060	\$845	\$1,539
3/29/19	\$2,795	\$847	\$1,364
4/5/19	\$2,770	\$897	\$1,351
4/12/19	\$2,595	\$890	\$1,352
4/19/19	\$2,750	\$900	\$1,402
4/26/19	\$2,775	\$897	\$1,444
5/3/19	\$2,735	\$870	\$1,348
5/10/19	\$2,700	\$863	\$1,333
5/17/19	\$2,620	\$816	\$1,297
5/24/19	\$2,600	\$804	\$1,315
5/31/19	\$2,650	\$791	\$1,310
6/7/19	\$2,720	\$806	\$1,338
6/14/19	\$3,250	\$802	\$1,448

DATE	RHODIUM	PLATINUM	PALLADIUM
6/21/19	\$2,925	\$807	\$1,484
6/28/19	\$3,150	\$834	\$1,516
7/5/19	\$3,155	\$808	\$1,554
7/12/19	\$3,290	\$829	\$1,524
7/19/19	\$3,260	\$844	\$1,488
7/26/19	\$3,295	\$863	\$1,511
8/2/19	\$3,360	\$843	\$1,392
8/9/19	\$3,440	\$858	\$1,399
8/16/19	\$3,690	\$848	\$1,430
8/23/19	\$3,875	\$855	\$1,441
8/30/19	\$4,700	\$931	\$1,517
9/6/19	\$3,850	\$948	\$1,522
9/13/19	\$4,700	\$946	\$1,590
9/20/19	\$5,000	\$944	\$1,605
9/27/19	\$4,850	\$928	\$1,662
10/4/19	\$4,700	\$880	\$1,647
10/11/19	\$4,900	\$894	\$1,682
10/18/19	\$5,100	\$890	\$1,736
10/25/19	\$4,960	\$924	\$1,750
11/1/19	\$4,940	\$948	\$1,792
11/8/19	\$5,000	\$886	\$1,724
11/15/19	\$5,450	\$888	\$1,686
11/22/19	\$5,500	\$888	\$1,754
11/29/19	\$5,400	\$894	\$1,822
12/6/19	\$5,500	\$894	\$1,860
12/13/19	\$5,700	\$926	\$1,915
12/20/19	\$5,560	\$907	\$1,841
12/27/19	\$5,580	\$943	\$1,889
1/3/20	\$5,850	\$980	\$1,967
1/10/20	\$7,100	\$976	\$2,096
1/17/20	\$7,700	\$1,022	\$2,295
1/24/20	\$9,000	\$1,004	\$2,297
1/31/20	\$9,200	\$958	\$2,190
2/7/20	\$9,500	\$966	\$2,213
2/14/20	\$10,000	\$964	\$2,310
2/21/20	\$11,100	\$973	\$2,614
2/28/20	\$10,200	\$864	\$2,489
3/6/20	\$11,200	\$903	\$2,451
3/13/20	\$9,800	\$765	\$1,698
3/20/20	\$2,000	\$608	\$1,522
3/27/20	\$6,500	\$744	\$2,165

DATE	RHODIUM	PLATINUM	PALLADIUM
4/3/20	\$4,500	\$726	\$2,118
4/10/20	\$4,000	\$751	\$2,057
4/17/20	\$6,000	\$779	\$2,070
4/24/20	\$4,500	\$766	\$1,926
5/1/20	\$3,700	\$759	\$1,820
5/8/20	\$3,500	\$767	\$1,800
5/15/20	\$4,500	\$782	\$1,820
5/22/20	\$5,500	\$821	\$1,885
5/29/20	\$6,200	\$822	\$1,860
6/5/20	\$5,300	\$810	\$1,897
6/12/20	\$5,700	\$800	\$1,846
6/19/20	\$6,000	\$801	\$1,828
6/26/20	\$5,800	\$795	\$1,812
7/3/20	\$5,900	\$800	\$1,852
7/10/20	\$6,500	\$812	\$1,916
7/17/20	\$6,300	\$831	\$1,969
7/24/20	\$6,800	\$909	\$2,160
7/31/20	\$6,950	\$900	\$1,973
8/7/20	\$7,500	\$960	\$2,031
8/14/20	\$9,000	\$934	\$2,010
8/21/20	\$10,200	\$916	\$2,069
8/28/20	\$9,700	\$924	\$2,083
9/4/20	\$10,600	\$902	\$2,185
9/11/20	\$11,000	\$921	\$2,199
9/18/20	\$11,100	\$923	\$2,244
9/25/20	\$10,700	\$841	\$2,102
10/2/20	\$11,400	\$872	\$2,202
10/9/20	\$10,400	\$885	\$2,351
10/16/20	\$10,800	\$857	\$2,209
10/23/20	\$11,800	\$898	\$2,280
10/30/20	\$10,900	\$840	\$2,086
11/6/20	\$12,000	\$887	\$2,364
11/13/20	\$11,600	\$884	\$2,196
11/20/20	\$13,500	\$946	\$2,200
11/27/20	\$13,700		
12/4/20	\$13,800		
12/11/20	\$14,000	\$1,002	\$2,202
12/18/20	\$14,000	\$1,032	\$2,244
12/25/20	\$14,100	\$1,017	\$2,226
12/31/20	\$14,500	\$1,061	\$2,336

Appendix 2: Reported Catalytic Converter Thefts by State

Top 10 States					States 11-20				
STATE	2018-2020	2018	2019	2020	STATE	2018-2020	2018	2019	2020
AK	6	-	3	3	NC	681	58	153	470
AL	138	7	22	109	ND	12	-	1	11
AR	63	5	3	55	NE	66	8	7	51
AZ	147	3	17	127	NH	30	3	7	20
CA	9,553	507	1,687	7,359	NJ	85	14	15	56
CO	116	5	17	94	NM	57	2	13	42
CT	91	9	15	67	NV	110	2	12	96
DC	6	-	3	3	NY	223	29	34	160
DE	33	-	5	28	OH	424	31	88	305
FL	133	8	19	106	OK	50	1	2	47
GA	202	39	39	124	OR	334	2	25	307
HI	96	7	12	77	PA	463	62	99	302
IA	114	8	28	78	RI	25	-	8	17
ID	6	1	-	5	SC	223	16	47	160
IL	550	117	148	285	SD	23	1	3	19
IN	495	45	107	343	TN	144	5	21	118
KS	129	7	17	105	TX	954	38	147	769
KY	183	16	20	147	UT	106	3	6	97
LA	54	1	10	43	VA	360	39	72	249
MA	82	4	13	65	VT	15	3	3	9
MD	243	32	64	147	WA	357	20	17	320
ME	29	1	3	25	WI	181	20	46	115
MI	357	49	102	206	WV	65	1	8	56
MN	864	40	159	665	WY	1	-	-	1
MO	359	25	32	302	Canada	4	3	-	1
MS	63	1	9	53	Mexico	1	-	1	-
MT	14	-	-	14	TOTAL	19,120	1,298	3,389	14,433