

DATE: April 18, 2019

REGARDING: 2018 US Watercraft Theft and Recovery (through 04/04/2019) (Public Dissemination)

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Introduction

This ForeCASTSM Report analyzes the 4,499 watercraft thefts and corresponding recoveries¹ with information reported to the US Federal Bureau of Investigation's (FBI) National Crime Information Center (NCIC). The 3 sections to this report consist of: an analysis of the watercrafts, a geographical analysis, and a temporal analysis. "Section 1: The Watercraft" analyzes 2018 watercraft thefts and recoveries by manufacturer, boat type², manufacturer and boat type combined, and boat type and propulsion type combined. "Section 2: Geographic Analysis" analyzes the 2018 watercraft thefts and corresponding recoveries by state, by boat type and state, then by county and city (excluding recovery records from outside of the US). "Section 3: Temporal Analysis" analyzes the 2018 watercraft thefts and corresponding recoveries by month, holiday, and the number of days between the theft date and recovery date from 01/01/2018 through 04/04/2019.

There will be a number of graphical representations throughout this report, including tables, charts, and maps. With the exception of the maps, 'Red' relates to theft information, while 'Blue' relates to recovery information. Additionally, all percentages, including those already mentioned, are rounded to the nearest whole number.

Executive Summary

There were a total of 4,499 Watercraft thefts in 2018, an 8% decrease in watercraft thefts from 2017. The watercraft stolen most often in 2018 was a "Yamaha – WaveRunner® personal watercraft (PWC)" (673 thefts), followed up by the "Bombardier Corp. PWC" (417 thefts). Of the 4,499 watercraft stolen in 2018, 1,733, or 39% were recovered through 04/04/2019. The highest number of watercraft thefts in 2018 took place in Florida (25%). The Top 3 watercraft theft counties were Miami-Dade County, Florida (282 thefts), Broward County, Florida (134 thefts), and Sacramento County, California (67 thefts). The Top 3 watercraft theft cities in 2018 were all located in Florida: Miami (203 thefts), Fort Lauderdale (68 thefts), and Tampa (64 thefts). Of the 1,733, recovered watercrafts from 01/01/2018 through 04/04/2019, 52% were recovered within 9 days of being stolen. The holiday with the most watercraft thefts in 2018 was Labor Day, with 26 thefts.

In the furtherance of watercraft theft awareness and prevention, the NICB brochure: "Boat Theft: Leave Thieves in Your Wake", suggests that boat owners should use a common sense approach to protecting their watercrafts. The suggested prevention methods tell boat owners to: "dock your craft in well-lit areas; secure your boat to the dock with a locked steel cable; remove expensive equipment from your boat when not in use; lock the boat's cabin, doors, and windows when not in use; remove registration or title papers in the craft; disable the boat when not in use by shutting off fuel lines and removing the battery or distributor cap; install an alarm system and a kill switch in the ignition system; use a trailer hitch lock after parking a boat on its trailer; park your trailer in a locked garage, secured boat storage facility, or a well-lit, fenced area; and ensure your marine insurance policy includes your equipment, boat, and trailer. Also, to be prepared for the possibility of a watercraft theft, NICB encourages boat owners to take photos of their boat, and to be sure that their boat and equipment are marked with a Hull Identification number (HIN), a serial number that uniquely identifies every boat and will ultimately help law enforcement with recovery efforts.

SECTION 1: The Watercraft

¹ A corresponding recovery is defined as recovery information that relates to its respective theft.

² The terms "watercraft" and "boat" will be used interchangeably throughout this report.

This section will provide an analysis of the 2018 watercraft thefts and recoveries in 4 ways: [1] by the Top 10 manufacturers; [2] the 13 boat types recognized by the NCIC; [3] the Top 10 manufacturers and boat type combinations; [4] and the boat type and propulsion type combinations.

2018 Watercraft Thefts and Corresponding Recoveries (through 04/04/2019) by Manufacturer

There were 687 different manufacturers identified in the 2018 watercraft theft and recovery data. The table below lists the top 10 manufacturers with theft along with recovery information in descending order by number of thefts. Totalling 1,863 thefts, the Top 10 manufacturers represent 41% of all watercraft thefts in 2018. The manufacturer with the largest number of stolen watercrafts was “Yamaha Motor Group., USA” with 673 thefts. Of the Top 10 manufacturers, “Sea Ray Boats Inc.” had the highest recovery rate of 57%, while both “Perception Kayaks Inc.” and “Sea-Doo” had the lowest recovery rate of 23%. An asterisk (*) represents that there was a tie in the top 10 thefts by Manufacturer.

2018 Watercraft Thefts and Corresponding Recoveries (through 04/04/2019) by Manufacturer

Manufacturer	Thefts	Recoveries	Recovery Rate %
Yamaha Motor Corp., USA	673	168	25%
Bombardier Corp.	417	150	36%
Tracker Marine L.P.	206	88	43%
Kawasaki Motors MFG.	122	37	30%
Bayliner Marine Corp	99	45	45%
Alumacraft Boat Co.	84	28	33%
Perception Kayaks Inc.	80	18	23%
Starcraft Marine LLC	62	33	53%
*Sea Ray Boats Inc.	60	34	57%
*Sea-Doo	60	14	23%

2018 Watercraft Thefts and Corresponding Recoveries (through 04/04/2019) by Boat Type

There are 13 boat types recognized by the NCIC³ and 3,196 of the 2018 theft records identified 1 of those types as the type of boat stolen. The remaining 1,303 provided a boat code not recognized by NCIC or did not provide a code at all. Of the 3,196 records with NCIC-recognized boat codes, 31%, or 986 were identified as “All Other”. Excluding the “All Other” category, the Top 5 stolen boat types comprised of 47% (2,118) of all 2018 watercraft thefts. The most frequently stolen watercraft was the “Personal Watercraft,” with 1,139 thefts. Of the Top 5 boat types, the “Sailboat” had the highest recovery rate of 64%, while “Personal Watercraft” had the lowest of 29%. An analysis of the number of thefts of each boat type per Top 10 Theft state is located on page 8 of this report.

The list below provides the number of thefts and recoveries per the top 5 boat types in 2018 in descending order by number of thefts, excluding the “All Other” category. The Top 5 stolen boat types are ranked and numbered, and a sample photo⁴ for each boat type is provided.

³ As noted in the Appendix, NCIC uses “Jet Ski” to describe all personal watercraft (PWC). “Jet Ski” is the trademarked brand name for Kawasaki Motors Corporation’s PWC. Thus, the term “Jet Ski” has been replaced with personal watercraft, or PWC, unless referring specifically to the Kawasaki product.

⁴ Pictures are not of actual stolen watercrafts; all images were found through Google Images to provide one general example of what each type of boat may look like.

1. Personal Watercraft
 - Thefts: 1,139
 - Recoveries: 333
 - Recovery Rate: 29%



2. Runabout
 - Thefts: 529
 - Recoveries: 246
 - Recovery Rate: 47%



3. Utility
 - Thefts: 279
 - Recoveries: 115
 - Recovery Rate: 41%



4. Cruiser
 - Thefts: 171
 - Recoveries: 83
 - Recovery Rate: 49%



5. Sailboat
 - Thefts: 33
 - Recoveries: 21
 - Recovery Rate: 64%



Thefts and Corresponding Recoveries (through 04/04/2019) by Manufacturer & Boat Type Combined

The table below ranks the Top 10 stolen manufacturer and boat type combinations along with recovery information, listed in descending order by number of thefts. Only records that identified a manufacturer and a NCIC-recognized boat type were included in the analysis. Totalling 1,271 thefts, the Top 10 manufacturer and boat type combinations comprised 28% of all watercraft thefts in 2018. The most frequently stolen combination in the Top 10 was the “Yamaha – WaveRunner® PWC”, with a total of 564 thefts. The combination with the highest recovery rate, in the Top 10, was “Tracker Marine, L.P. – Other” at 45% recovered. The lowest recovery rate in the top 10 was for the “Sea-Doo - PWC”, at a recovery rate of 19%.

2018 Watercraft Thefts and Recoveries (through 04/04/19) for the Top 10 Manufacturer & Boat Type Combinations

Manufacturer	Boat Type	Thefts	Recoveries	Recovery Rate %
1. Yamaha	PWC	564	140	25%
2. Bombardier Corp.	PWC	336	110	33%
3. Kawasaki Motors Mfg.	PWC	106	33	31%
4. Perception Kayaks Inc.	Other	60	15	25%
5. Tracker Marine L.P.	Other	51	18	35%
6. Sea-Doo	PWC	42	8	19%
7. Tracker Marine L.P.	Other	31	14	45%
8. Alumacraft Boat Co.	Other	30	13	43%
9. Bayliner Marine Corp	Runabout	27	12	44%
10. Tracker Marine L.P.	Runabout	24	8	33%

2018 Watercraft Thefts and Corresponding Recoveries (through 04/04/19) by Boat Type & Propulsion Type Combined

The table below ranks the Top 10 stolen boat type and propulsion type combinations, including the number of recoveries and recovery rate for each, listed in descending order by number of thefts. Only records that identified a boat type and a propulsion type recognized by the NCIC were included in the analysis. Totalling 2,065 thefts, the Top 10 boat type and propulsion type combinations represent 46% of all 2018 watercraft thefts. Of the Top 10 boat type/propulsion type combinations, “PWC – Inboard” had the highest number of thefts with 704. The Top 10 combination with the highest recovery rate of 52% was “Runabout – Outboard”, while the combination with the lowest recovery rate was “Other–Manual” at 24%.

2018 Watercraft Thefts and Recoveries (through 04/04/19) for the Top 10 Boat Type & Propulsion Type Combinations

Boat Type	Propulsion Type	Thefts	Recoveries	Recovery Rate %
1. PWC	Inboard	704	195	28%
2. Other	Outboard	361	167	46%
3. Runabout	Outboard	292	151	52%
4. Other	Manual	211	51	24%
5. Utility	Outboard	181	80	44%
6. Runabout	Inboard	96	44	46%
7. Cruiser	Inboard	76	38	50%
8. Other	Inboard	61	19	31%
9. Cruiser	Outboard	55	25	45%
10. PWC	Outboard	28	10	36%

SECTION 2: Geographic Analysis

The Geographic Analysis Section analyzes the 2018 watercraft thefts and corresponding recoveries in 4 parts: [1] the 2018 watercraft thefts and corresponding recoveries by theft state; [2] the 2018 watercraft thefts per state by boat type; [3] the 2018 watercraft thefts and corresponding recoveries for the Top 10 theft counties; [4] the 2018 watercraft theft and corresponding recoveries for the Top 10 theft cities.

2018 Watercraft Theft and Corresponding Recoveries (through 04/04/19) by Theft State

All of the 4,499 watercraft thefts in 2018 identified the state where the theft occurred and almost every state reported at least one theft, with the exception of Hawaii, who had no reported thefts or recoveries during the time frame of this report. The following table lists the thefts and corresponding recoveries⁵ for each state in descending order by number of thefts. The Top 10* theft states are identified in the table below. Totalling 2,922 thefts, the Top 10 theft states comprised 65% of all 2018 watercraft thefts. Consistent with 2017 the state with the highest number of thefts was Florida with 1,114, representing 25% of all watercraft thefts in 2018. This is more than twice as many thefts as the next highest theft state, making Florida a watercraft theft hotspot. Of the Top 10 theft states, California had the highest recovery rate of 58%. The state with the lowest recovery rate of the top 10 was Tennessee, with 31% of stolen watercrafts being recovered. An asterisk (*) represents that there was a tie in the top 10 Theft States.

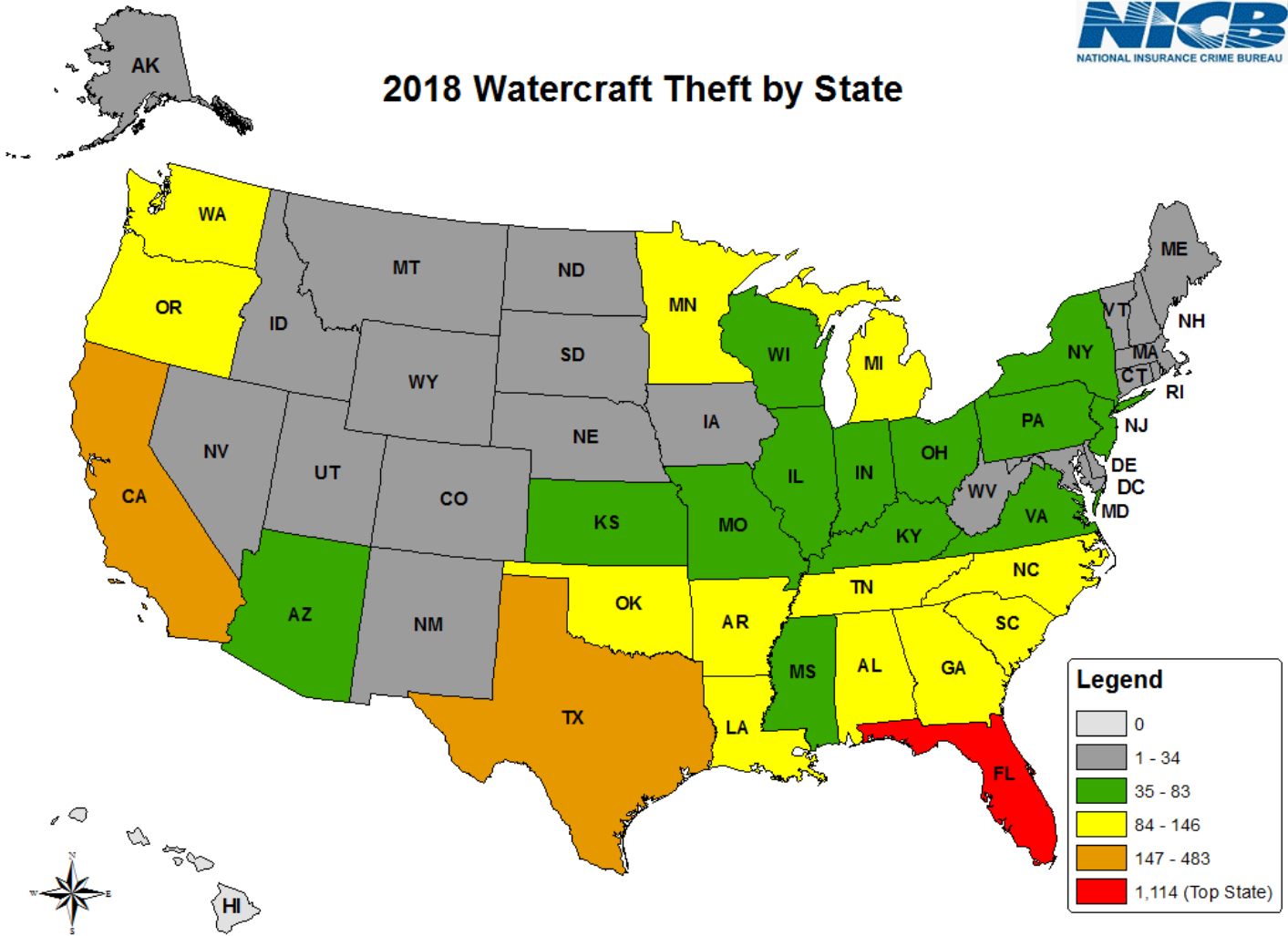
2018 Watercraft Theft and Corresponding Recoveries (through 04/04/19) by Theft State

State	Thefts	Recoveries	Recovery Rate %
FL	1,114	392	35%
CA	483	279	58%
TX	378	126	33%
LA	146	55	38%
NC	143	48	34%
WA	141	65	46%
SC	132	58	44%
AL	131	43	33%
*TN	127	39	31%
*AR	127	44	35%

The map shown below is a geographic representation of the volume of Watercraft thefts by state in 2018.

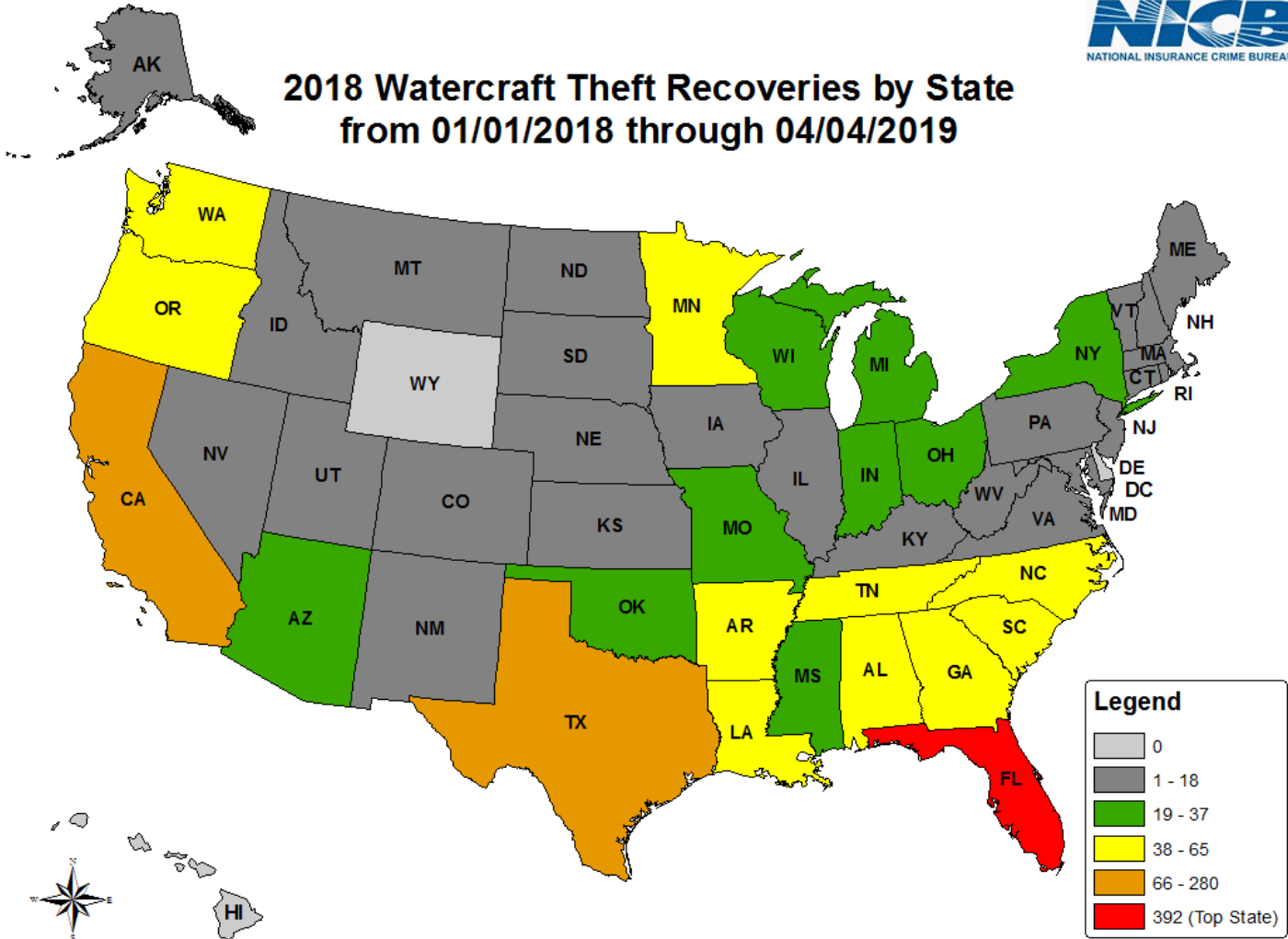
⁵ The recovery information for this section corresponds to the thefts per state in order to provide an accurate recovery rate. If a watercraft was recovered in a different state than where it was stolen, it was counted in the recovery information for the theft state, as opposed to the recovery information for the recovery state. Also, records from outside of the U.S. were not included in the counts.

2018 Watercraft Theft by State



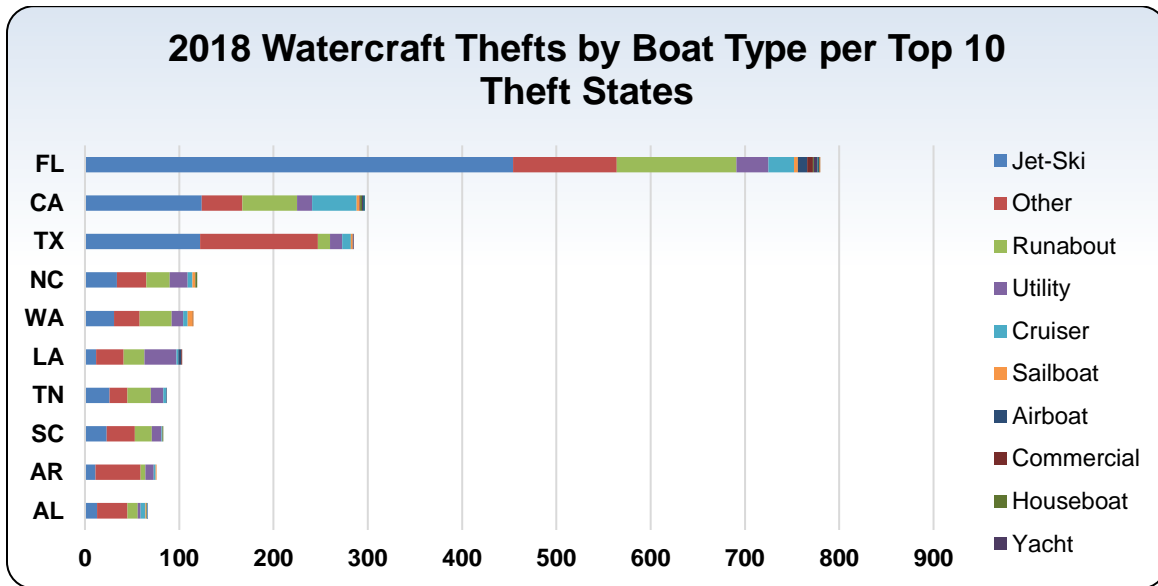
The map shown below is a geographic representation of the volume of Watercraft theft recoveries by state from 01/01/2018 through 04/04/2019.

2018 Watercraft Theft Recoveries by State from 01/01/2018 through 04/04/2019



2018 Watercraft Thefts by Boat Type per Top 10 Theft States

The following chart shows the number of reported watercraft thefts by boat type thefts per top 10 theft states. Florida had the highest number of reported thefts for PWC (454), Runabouts (127), Utility (34), Airboats (10), Commercial boats (6), and Sailboats (4); California reported the highest number of thefts of Cruisers (47).



2018 Watercraft Thefts and Corresponding Recoveries (through 04/04/19) by Theft County

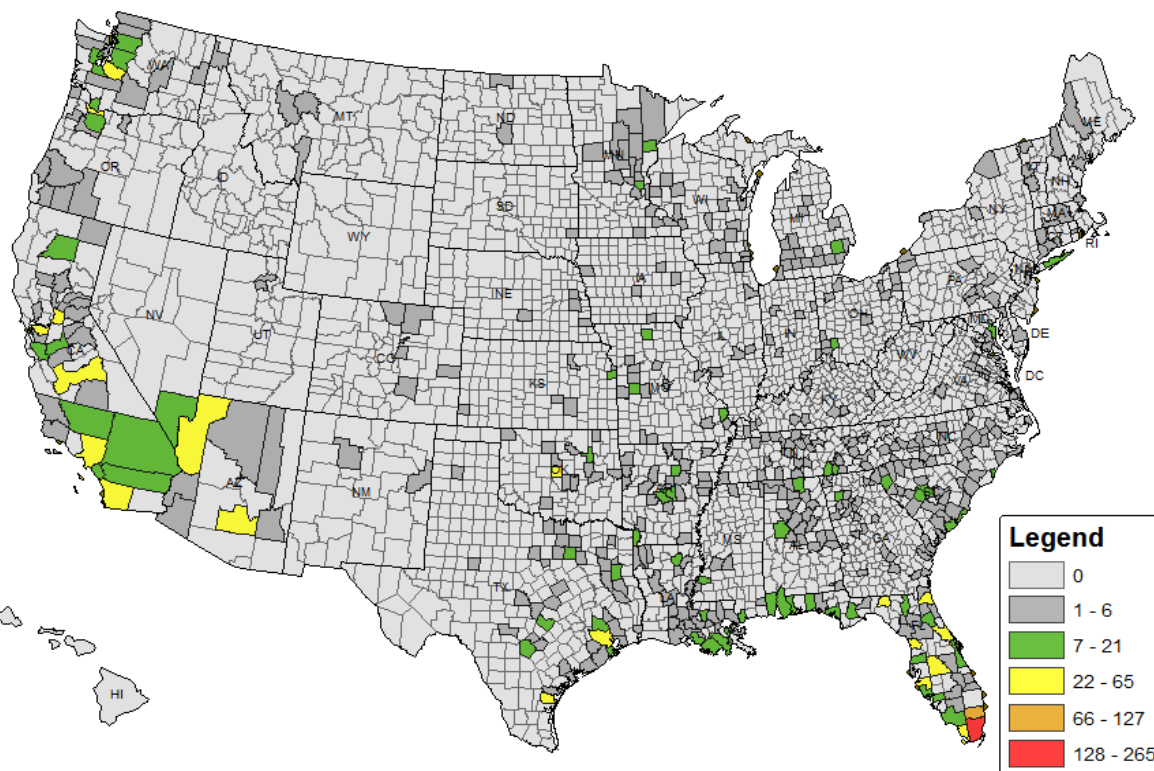
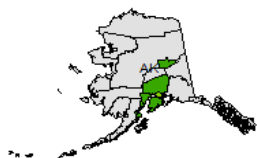
Of the 4,499 theft records, there were 1,100 counties identified in the 2018 watercraft theft and recovery data. Thirteen (13) counties with recoveries were not identified with a watercraft theft. The county with the highest number of stolen watercrafts was Miami-Dade County, Florida; with 282 thefts. Of the Top 10 theft counties, Sacramento County, California had the highest recovery rate of 76%, while Harris County, Texas had the lowest at 19% recovered. Of note, 6 of the top 10 theft counties were located in Florida, with the remaining counties located in California (2), Texas (1), and Oregon (1).

2018 Watercraft Thefts and Corresponding Recoveries (through 04/04/19) by top 10 Counties

County	State	Thefts	Recoveries	Recovery Rate %
1. Miami-Dade	FL	282	92	33%
2. Broward	FL	134	31	23%
3. Sacramento	CA	67	51	76%
4. Hillsborough	FL	66	18	27%
5. Los Angeles	CA	59	28	47%
6. Pinellas	FL	58	18	31%
7. Palm Beach	FL	55	21	38%
8. Harris	TX	52	10	19%
9. Multnomah	OR	37	21	57%
10. Polk	FL	36	19	53%

The map shown below is a geographic representation of the volume of Watercraft thefts by county in 2018.

2018 Watercraft Theft by County



2018 Watercraft Thefts and Corresponding Recoveries (through 04/04/19) by Theft City

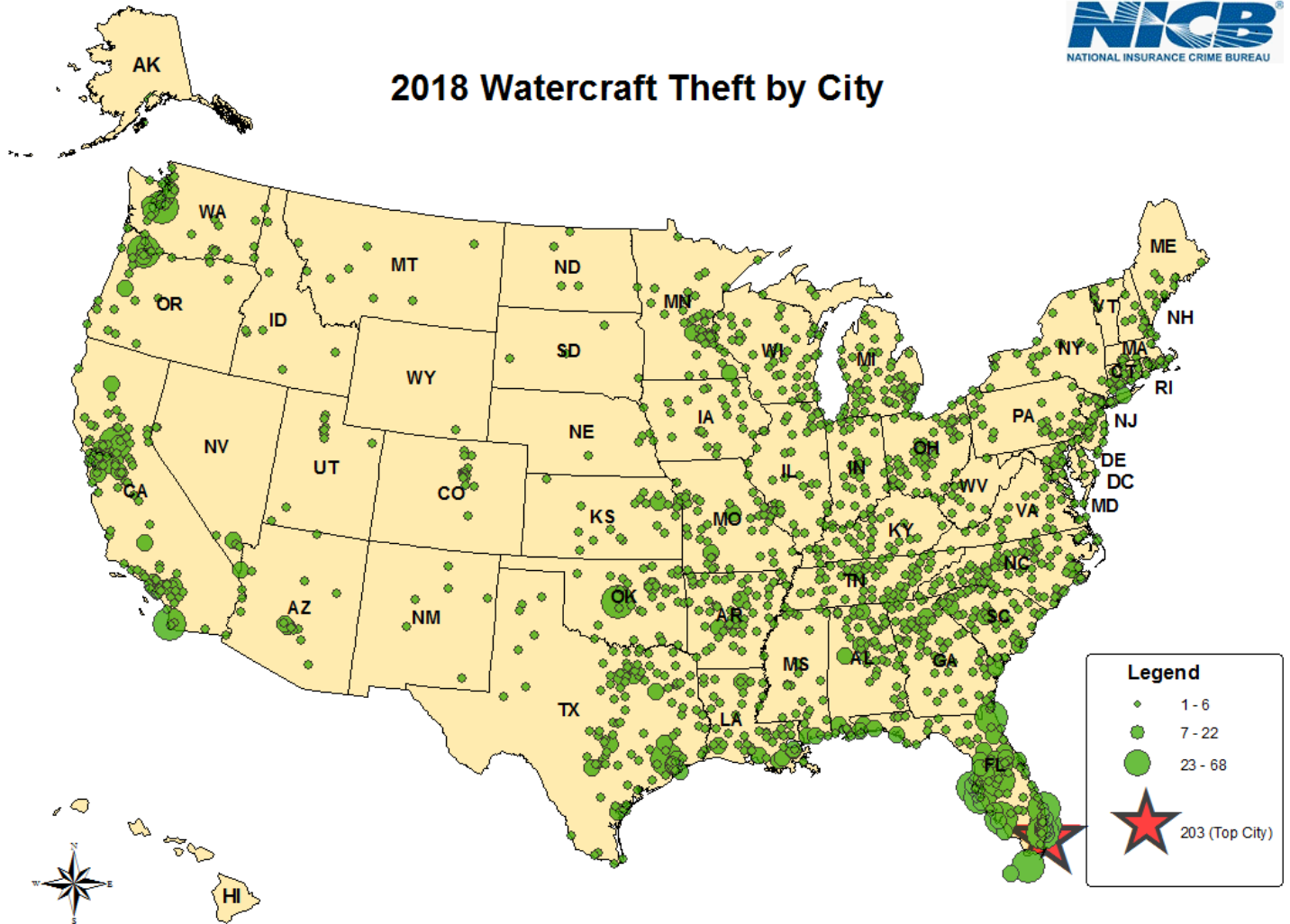
All of the 4,499 theft records identified the city in which the theft occurred, while 1,389 of the 1,733 recovery records reported the city where the watercraft was recovered. Of the 4,499 watercraft stolen in 2018, 1,733, or 39% were recovered through 04/04/2019. There were 1,389 unique cities identified in the 2018 watercraft theft and recovery data. Totalling 582 thefts, the Top 10 theft cities account for 13% of all watercraft thefts in 2018. The theft city with the highest number of stolen watercrafts was Miami, Florida with 203 thefts. Of the Top 10 theft cities, Portland, Oregon had the highest recovery rate of 65%, while Fort Lauderdale, Florida and had the lowest at 25% recovered. The below table depicts the total thefts by city, along with the total number of those thefts recovered (through 04/04/2019).

2018 Thefts and Corresponding Recoveries (through 04/04/19) by Theft City

City	State	Thefts	Recoveries	Recovery Rate %
1. Miami	FL	203	68	33%
2. Fort Lauderdale	FL	68	17	25%
3. Tampa	FL	64	18	28%
4. Sacramento	CA	55	41	75%
5. Portland	OR	34	22	65%
6. West Palm Beach	FL	36	15	42%
7. Largo	FL	35	10	29%
8. Tacoma	WA	30	16	53%
9. Hialeah	FL	29	14	48%
10. Jacksonville	FL	28	10	36%

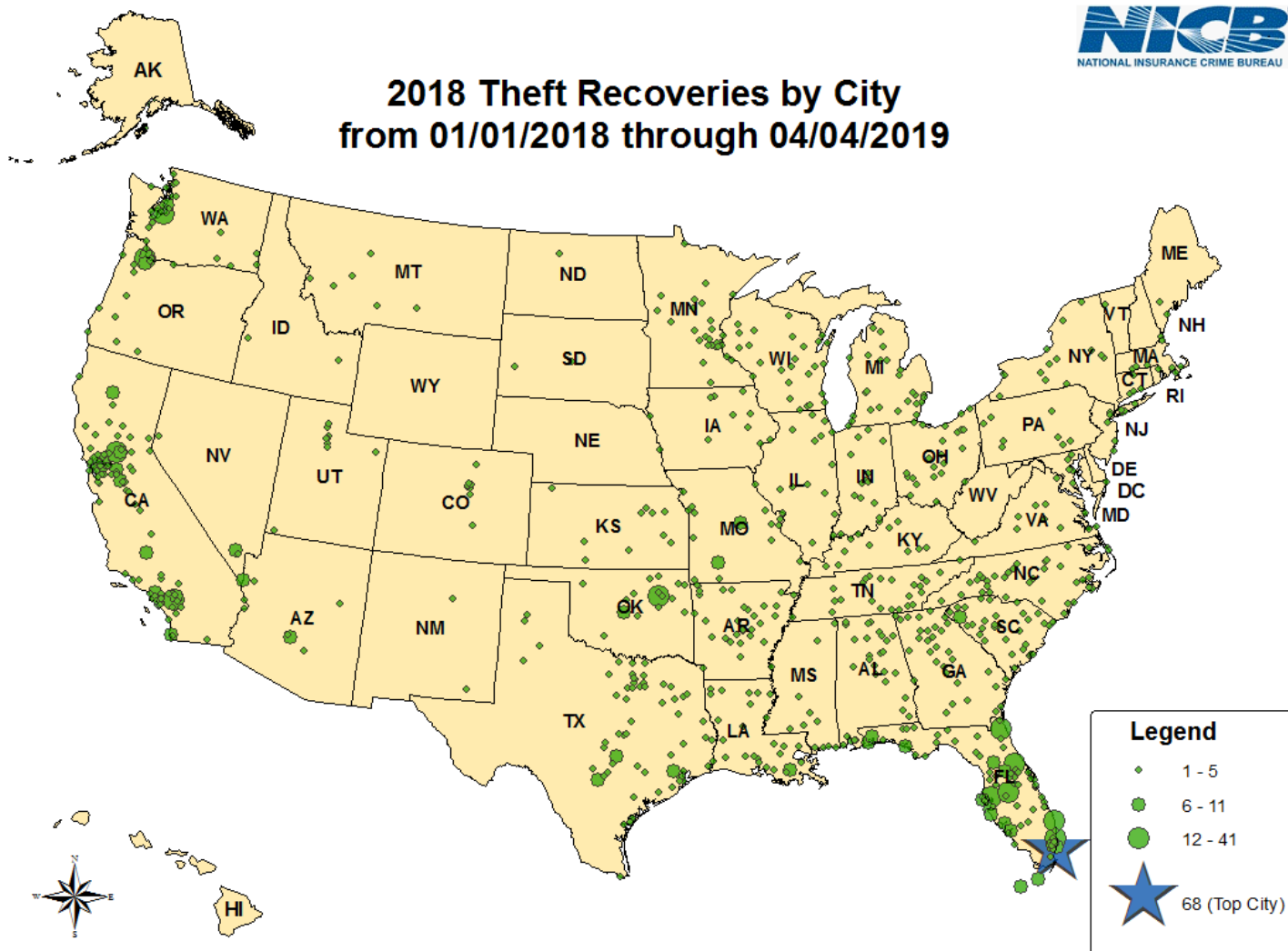
The map shown below is a geographic representation of the volume of Watercraft thefts by city in 2018.

2018 Watercraft Theft by City



The map shown below is a geographic representation of the volume of watercraft theft recoveries by city from 01/01/2018 through 04/04/2019.

2018 Theft Recoveries by City from 01/01/2018 through 04/04/2019

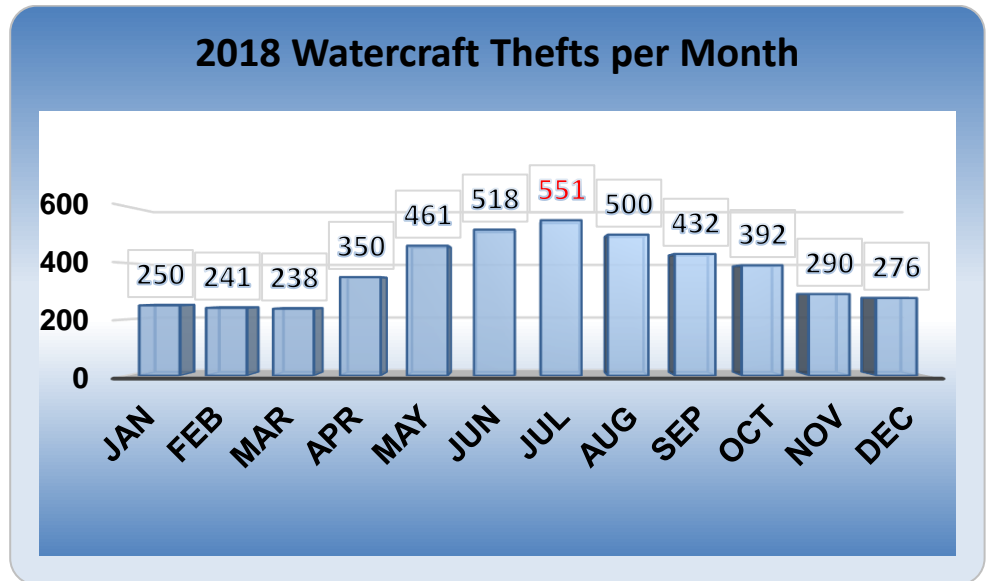


Section 3: Temporal Analysis

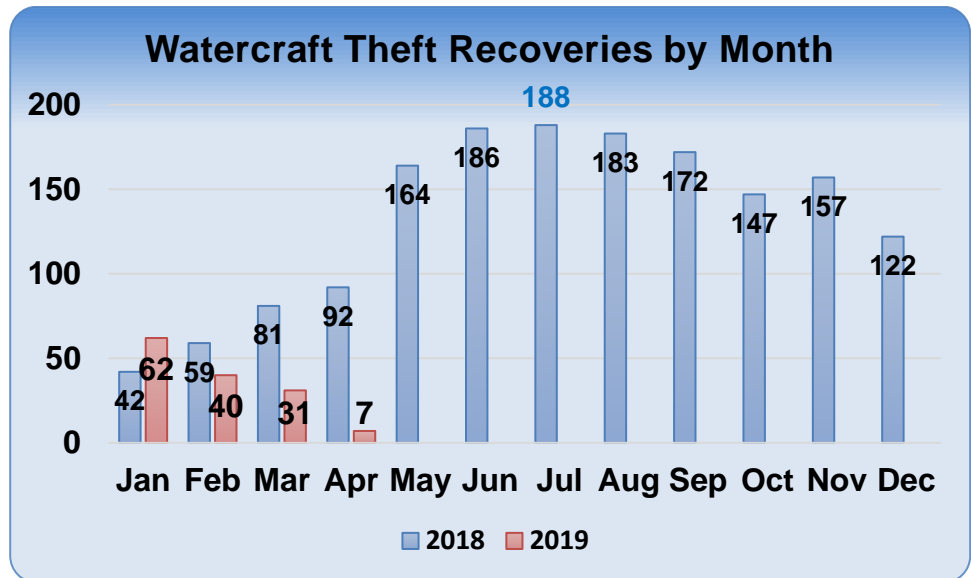
On average, there were approximately 12 watercraft thefts per day, 87 per week, or 375 per month in 2018. However, watercraft thefts are not distributed evenly over time and the following Temporal Analyses will aim to show when to be the most prepared for potential thefts by analyzing the 2018 watercraft thefts and recoveries in 3 ways: [1] by theft month and recovery month; [2] by holiday [3] by the average number of days between the theft date and recovery date for each boat type recognized by the NCIC.

2018 Watercraft Thefts and Corresponding Recoveries (through 04/04/19) by Theft Month

The graph to the right displays the 2018 watercraft thefts per theft month. As previously mentioned, watercraft thefts are not evenly distributed over the year and this graph clearly highlights that. Watercraft theft is a seasonal crime with more thefts occurring in spring and summer, as the months of May through September all exceeded the monthly average of 375. July had the highest number of thefts with 551, while March had the fewest thefts with 238.



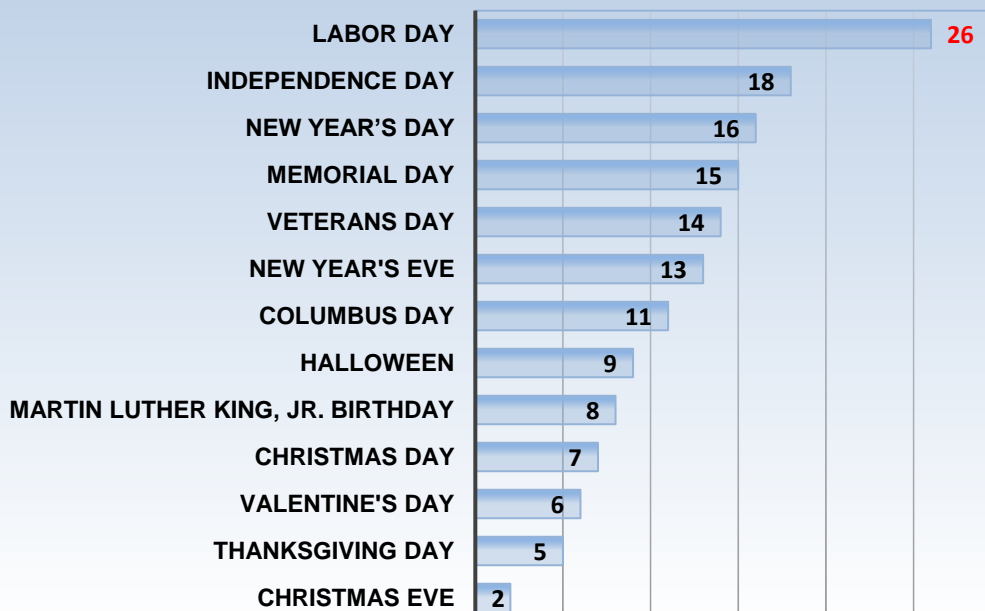
The graph to the right displays watercraft theft recoveries per month for the period of 01/01/2018 through 04/04/2019. Of the watercraft thefts in 2018, there was an average of 133 recoveries per month. As with the thefts, recoveries appear to be seasonal with May through November having a higher than average number of recoveries. July had the highest number of recoveries at 188, and January had the fewest number of recoveries at 42 in 2018.



2018 Watercraft Thefts and Corresponding Recoveries (through 04/04/19) by Holiday

The graph on the following page displays the number of watercraft thefts by holiday in 2018. The holiday with the most watercraft thefts in 2018 was Labor Day, with 26 thefts, and the holiday with the least number of thefts was Christmas Eve with two (2) thefts.

2018 Watercraft Thefts by Holidays



2018 Watercraft Thefts and Corresponding Recoveries (through 04/04/19): Analysis of the Number of Days between Theft Date and Recovery Date

The following table displays the top 10 number of days between a watercraft's theft and recovery date in descending order by number of recovered thefts (shown below in **bold blue** font). All 1,733 recoveries from 1/01/2018 through 4/04/2019 were included in this analysis. Of the 1,733 recovered thefts, 214 were recovered on the same day as the theft, representing 12% of all recoveries. 206 were recovered by the end of the following day, representing an additional 12% of all recoveries.

Top 10 Number of Days Between Theft Date and Recovery Date

Days to Recovery	Recovered Thefts	% of All Thefts	% of All Recoveries
0 (Same Day)	214	5%	12%
1	206	5%	12%
2	110	2%	6%
3	76	2%	4%
4	53	1%	3%
6	71	2%	4%
7	42	1%	2%
5	49	1%	3%
8	48	1%	3%
9	39	1%	2%
Totals	908	20%	52%

Methodology

Data parameters were defined as all watercraft stolen in the US between January 1, 2018 and December 31, 2018 that were reported to the NCIC. Corresponding recovery information was collected from the NCIC and included only watercraft that were stolen in 2018, but were recovered between January 1, 2018 and April 4, 2019. Watercraft stolen from the US, but, recovered outside of the US are not included. Steps taken to clean the data included:

1. Removing records not classified as watercraft by the NCIC (the NCIC classifies watercraft by assigning a file number beginning with the letter 'B')
2. Removing all records that did not identify a HIN
3. Removing duplicate records
4. Removing records with a theft location outside of the US
5. Removing all records used for testing and training purposes.

NCIC can be considered one of the most reliable and comprehensive sources of watercraft theft and recovery data, as it is a centralized database where local, state, and federal law enforcement agencies throughout the US can report crime information. Despite its reliability, many validity issues still arise through inaccurate or incomplete information within each individual record, which may result in limitations in the data. Of all 4,499 thefts in 2018, 29% did not supply or gave incomplete information on the boat type, and 39% did not provide or gave incomplete information on propulsion type. To offer all watercraft theft stakeholders with the most valuable information, any records with miscellaneous, misidentified, or unidentified information were not included in any Top 10, within this report; however, all relevant calculations were evaluated based on the premise of 4,499 total thefts.

Appendix 1

States	Thefts	Recoveries	Recovery Rate %
1.FL	1,114	392	35%
2.CA	483	279	58%
3.TX	378	126	33%
4.LA	146	55	38%
5.NC	143	48	34%
6.WA	141	65	46%
7.SC	132	58	44%
8.AL	131	43	33%
9.*TN	127	39	31%
9.*AR	127	44	35%
10.GA	121	44	36%
OK	108	37	34%
MN	108	42	39%
MI	102	33	32%
OR	96	49	51%
MO	83	29	35%
OH	76	24	32%

AZ	71	26	37%
WI	66	36	55%
IL	59	18	31%
MS	59	21	36%
IN	57	21	37%
KY	52	17	33%
NY	47	23	49%
NJ	43	11	26%
VA	42	14	33%
KS	41	15	37%
PA	37	11	30%
IA	34	13	38%
MD	30	9	30%
NV	25	12	48%
AK	22	13	59%
CO	21	11	52%
MA	21	9	43%
CT	19	5	26%
WV	17	1	6%
UT	16	10	63%
ME	14	3	21%
NH	13	2	15%
MT	12	9	75%
ID	12	2	17%
RI	10	2	20%
NE	10	3	30%
NM	10	2	20%
ND	6	1	17%
SD	6	4	67%
VT	6	2	33%
DE	4	0	0%
WY	1	0	0%
HI	0	0	-

Appendix 2

Airboat	Undefined
Commercial	Ferry, oyster boat, motor barge, towboat, tug, clam dredge, coaster, riverboat, smack boat, etc.
Cruiser	A boat with an inboard motor that is at least 25 feet long but no longer than 50 feet
Houseboat	Undefined
Hovercraft	Undefined
Hydrofoil	Undefined
Hydroplane	Undefined
Jet Ski (PWC)	Aqua Bike
Runabout	Launch, motorboat, outrider, speedboat, etc.
Sailboat	Cat, catamaran, cutter, bark, ketch, lateen, lugger, pinnace, schooner, sloop, yawl, etc.
Utility	Fisherman, sedan, etc.
Yacht	A boat with an inboard motor that is more than 50 feet in length and is used mainly for pleasure or recreation
All Other	Canoe, dinghy, dory, johnboat, kayak, lifeboat, paddleboat, rowboat, scull, skiff, etc.