



2016 Highlights of Ferry Operations in the United States

October 2017

By Janine McFadden, Andrew Barrows, and Clara Reschovsky

Based on those ferry operations that responded to the 2016 National Census of Ferry Operators (NCFO), a reported total of 118.9 million passengers and 25.0 million vehicles were transported by ferry in 2015. New York and Washington, the top 2 states for total passenger boardings, together reported transporting almost 70 million passengers in 2015 (43.6 and 26.1 million passengers, respectively). Washington and Texas, the top two states for total vehicle boardings, transported a reported 11.1 and 2.3 million vehicles, respectively, in 2015 (figure 1).

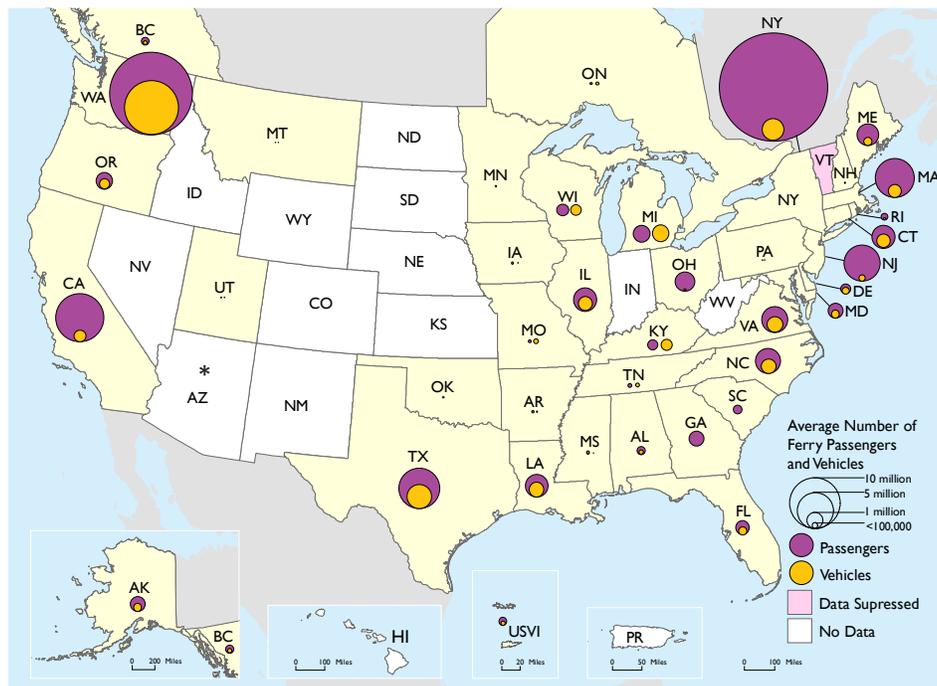
Ferries are used for a variety of reasons: to cross water in rural areas where there is not a bridge, to commute to work in coastal cities, to receive services in island regions, and for recreation or tourism in parks, amongst other reasons. In urban regions, namely New York City and San

Francisco, there has been a recent resurgence in ferry use. Between 2017 and 2018, New York City plans to add 10 new ferry terminals and 19 new vessels that will facilitate 4.6 million annual trips across 6 routes and cover over 60 miles of waterway.^{1,2} From 2013 to 2015, the NCFO data showed that San Francisco's ferry ridership increased 25 percent. This resurgence in the bay area has prompted the construction of new ferry vessels, terminals, and route segments to create additional transportation options in an area where roadways and other public transportation options are overcrowded, or where there previously was no other accessible public transportation.

¹ <http://untappedcities.com/2017/01/09/the-evolution-and-new-revolution-of-nycs-ferry-service-citywide-ferry-to-launch-summer-2017/>

² <http://untappedcities.com/2016/11/23/a-look-at-the-new-ferry-vessels-for-nycs-first-citywide-ferry-system/>

Figure 1: Passenger and Vehicle Boarding Totals by State (2015)



NOTES: Interstate segment boardings are assigned to the state of origin. BC and ON are included on the map as there was reported ferry traffic destined to a U.S. terminal from these Canadian provinces. A state's data is suppressed when all reporting operators in the state chose for their data to not be disclosed to the public. States with no data have no ferry operations.

(*) Arizona has 1 ferry operation, which submitted their 2016 NCFO, but did not report boarding counts.

SOURCE: U.S. Department of Transportation, Bureau of Transportation Statistics, National Census of Ferry Operators 2016, Appendix A, Table 1, available at www.bts.gov as of October 2017.

This publication highlights data collected by the 2016 NCFO. The Bureau of Transportation Statistics (BTS) conducted the NCFO from April through November 2016, collecting the operational characteristics of the 2015 calendar year ferry operations.

The 2016 NCFO collected responses from 163 ferry operators or 74.1 percent of all the known 220 eligible ferry operators. The data presented in this report represent only the responses provided by the ferry operators who responded to the NCFO. Unlike in previous years, the analysis provided in this report only includes reported numbers. Missing information or responses designated as business sensitive³ were not imputed or used in estimating totals.

In 2015 the Fixing America's Surface Transportation Act (FAST Act) (Public Law 114-94, section 1112)⁴ set aside \$80 million for each fiscal year from 2016 to 2020 for the

³ Respondents in the 2016 NCFO could designate any reported information as business sensitive. Of the total respondents 18 (11.0%) indicated one or more of their responses as business-sensitive.

⁴ <https://www.congress.gov/114/bills/hr22/BILLS-114hr22enr.pdf>

maintenance and improvement of the Nation's public ferry system. These funds are authorized to the Federal Highway Administration (FHWA) for their Ferry Boat Program (FBP) for the construction of ferry boat and ferry terminal facilities. The FBP funds are made available for eligible projects through the state or territory by use of the most recent NCFO data; the FBP funding formula is used to calculate the funding distributions.

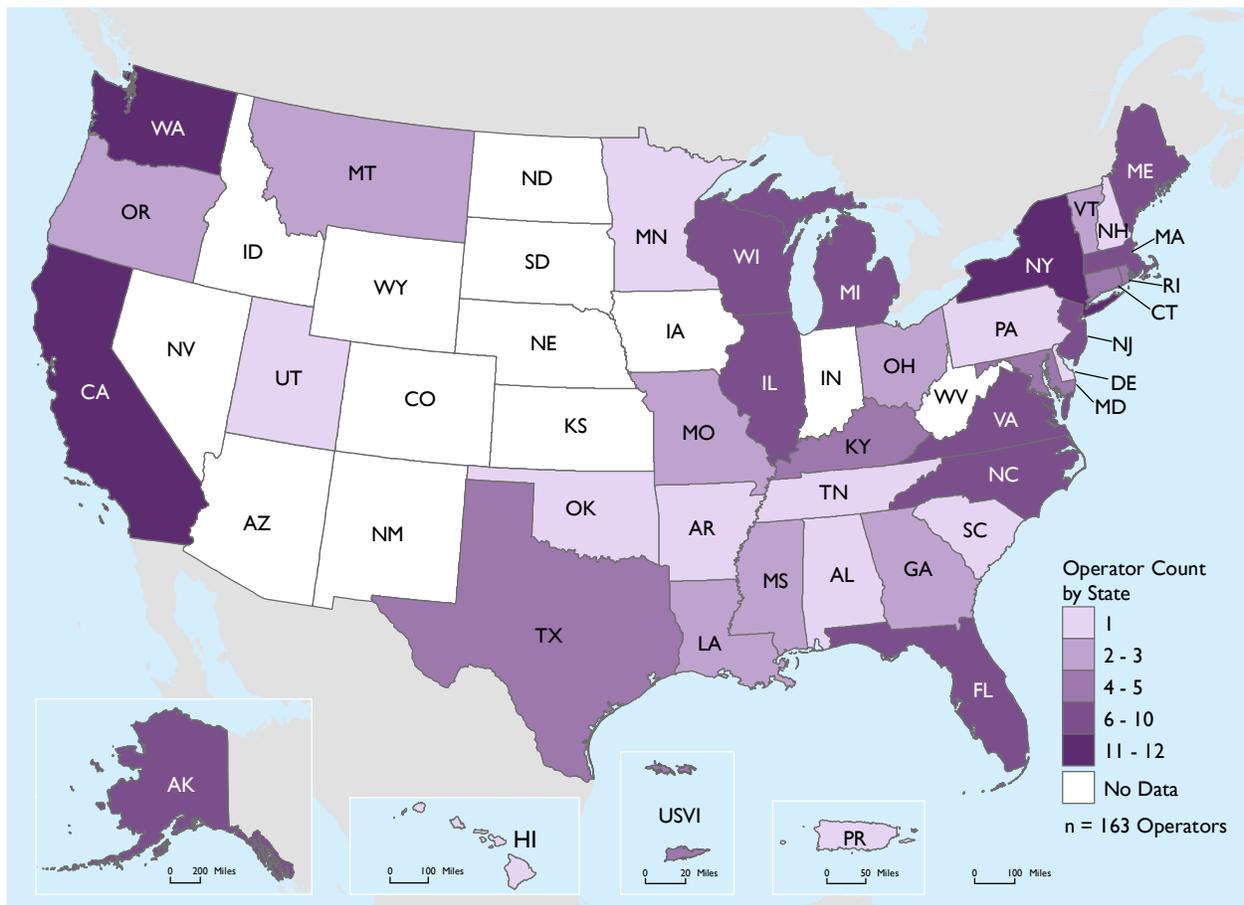
U.S. Ferry Operations

A total of 163 (out of 220 eligible) ferry operators responded to the 2016 NCFO, including 157 operators across 37 states (of which 2 operated between U.S. and non-U.S. locations⁵) and 6 operators across 2 U.S. territories (figure 2). California, New York, and Washington had the largest numbers of total operators, each with 12.

Of the 163 responding ferry operators, 75 reported as a public operation (reporting on behalf of a federal, state, or local government agency) and 88 reported as a private operation. Of the 57 operators that did not respond to the

⁵ Non-U.S. ferry operations that served U.S. ferry terminals are included in the NCFO.

Figure 2: Operators Reporting by State (2015)



NOTE: Operators are assigned to their state of their reported business address.

SOURCE: U.S. Department of Transportation, Bureau of Transportation Statistics, National Census of Ferry Operators 2016, Appendix A, Table 2, available at www.bts.gov as of October 2017.

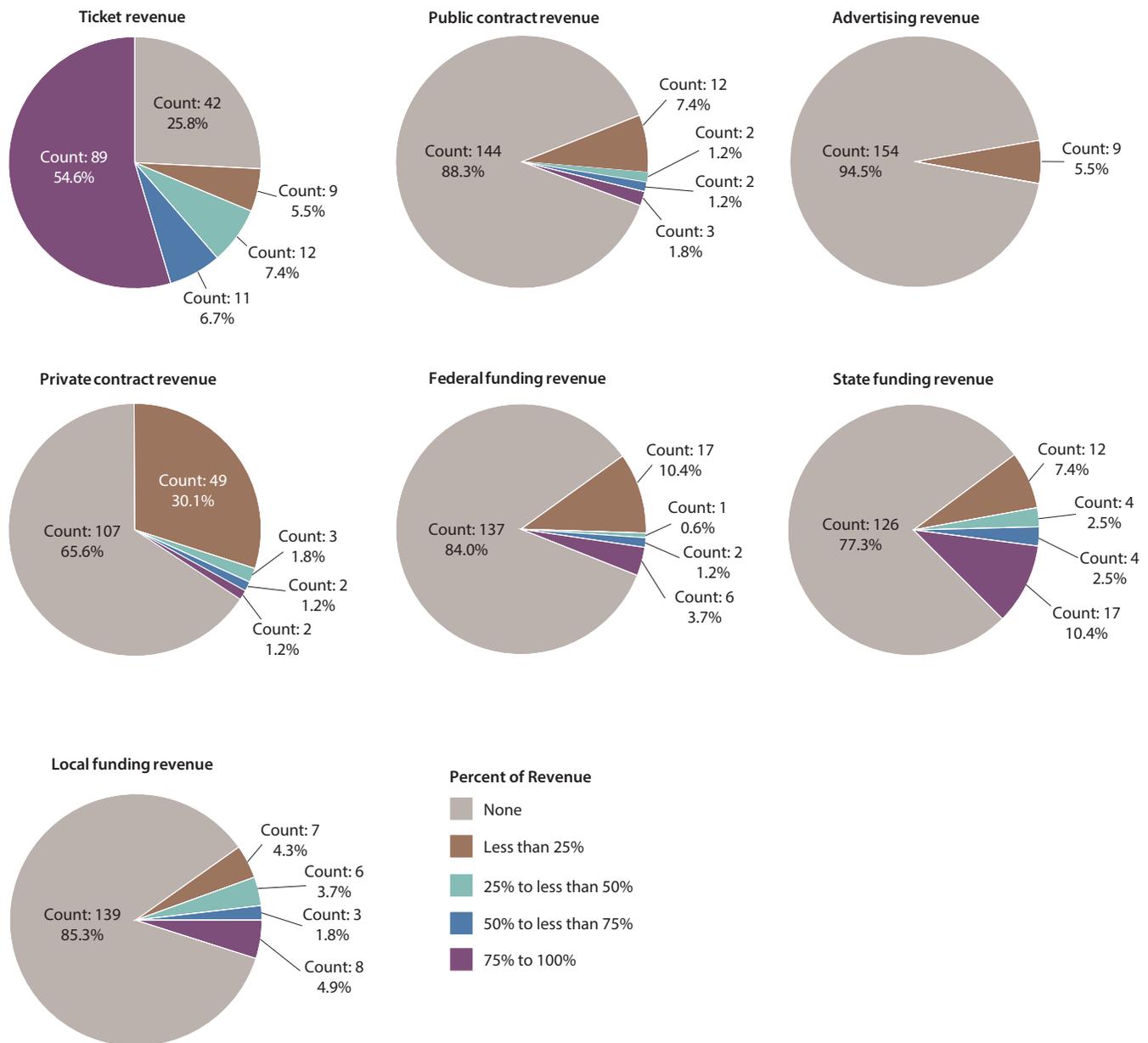
2016 NCFO, 3 were identified as public operators, while the remaining 54 were identified as private operators.

Operator Funding

Of the 163 operators that responded to the 2016 NCFO, the majority (74.2 percent) reported that part of their revenue came from ticket sales, and 54.6 percent of all ferries reported those ticket sales to be between 75 and 100 percent of their total revenue (figure 3). The vast

majority of responding operators (88.3 percent) reported having no public contract revenue. A large majority of responding operators also reported no federal funding revenue (84.0 percent). A relatively small number of operators (22.7 percent) received state funding, and of those that did, the majority reported it to be between 75 and 100 percent of their total revenue. Local funding revenue was also a revenue source for a relatively small number of the responding operators (14.7 percent).

Figure 3: Number of Operators by Revenue Source (2015)



SOURCE: U.S. Department of Transportation, Bureau of Transportation Statistics, National Census of Ferry Operators 2016, Appendix A, Table 3, available at www.bts.gov as of October 2017.

U.S. Ferry Vessels

A total of 652 vessels were reported by those operators responding to the 2016 NCFO. Of these vessels, 609 (93.3 percent) were reported to be in-service in 2015. New York and California had the largest reported fleets in 2015 with 56 and 55 vessels, respectively (figure 4).

Vessel Ownership and Operation

Of the 652 reported vessels, 46.8 percent were privately owned and operated, while 37.3 percent were publicly owned and operated (figure 5). Some of the vessels were reported as either publicly or privately owned, but did not report how they were operated (1.7 and 6.3 percent,

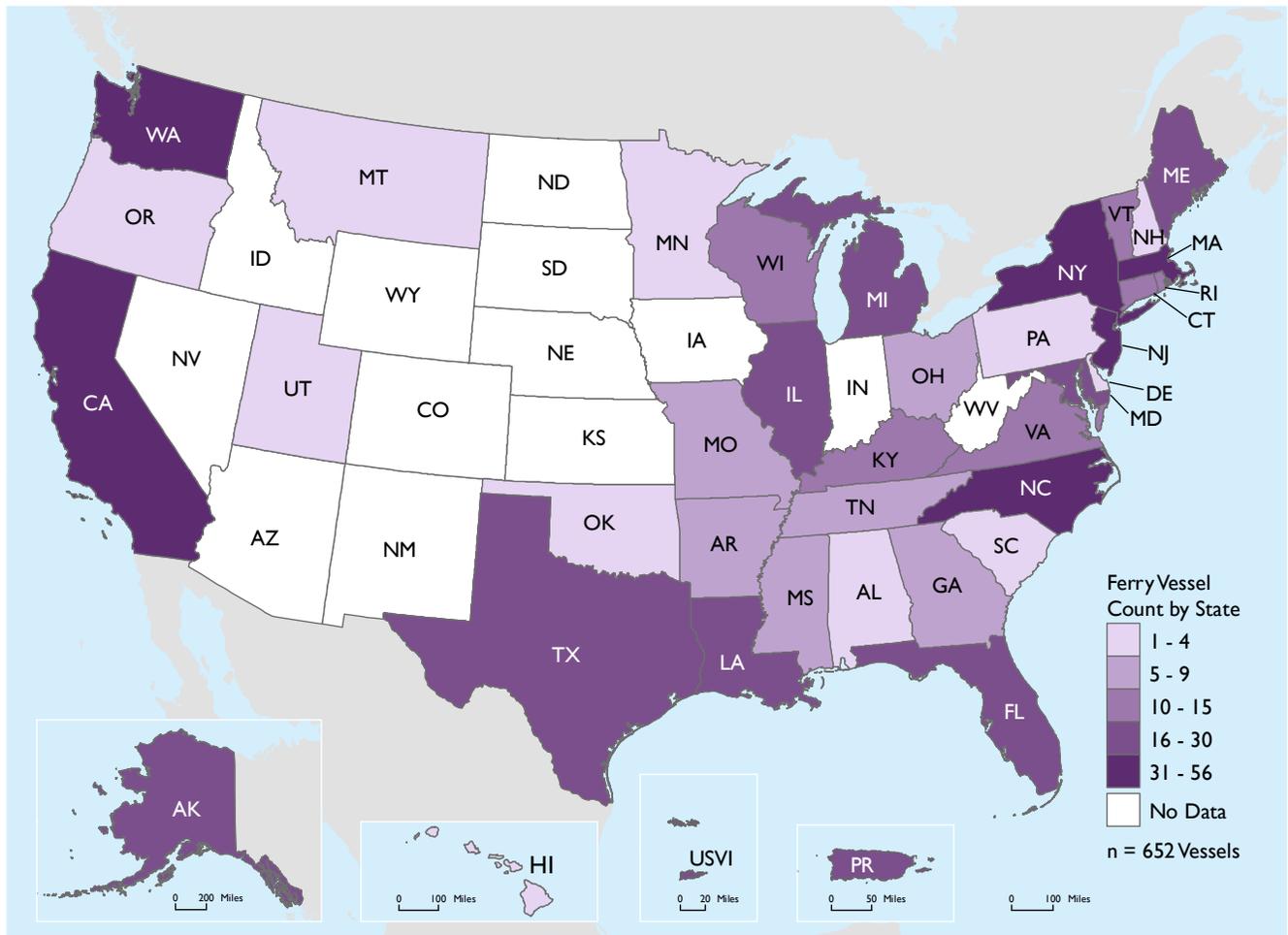
respectively). A relatively small number were publicly owned and privately operated (6.1 percent), while even fewer were privately owned and publicly operated (0.9 percent).

Vessel Characteristics

Of the 652 reported vessels, nearly all carried passengers (93.3 percent), while under half (42.8 percent) carried vehicles, and less than a quarter carried freight (19.9) (figure 6).

In addition, of the reported vessels, 313 were passenger-only vessels, 7 were vehicle-only vessels and 5 were

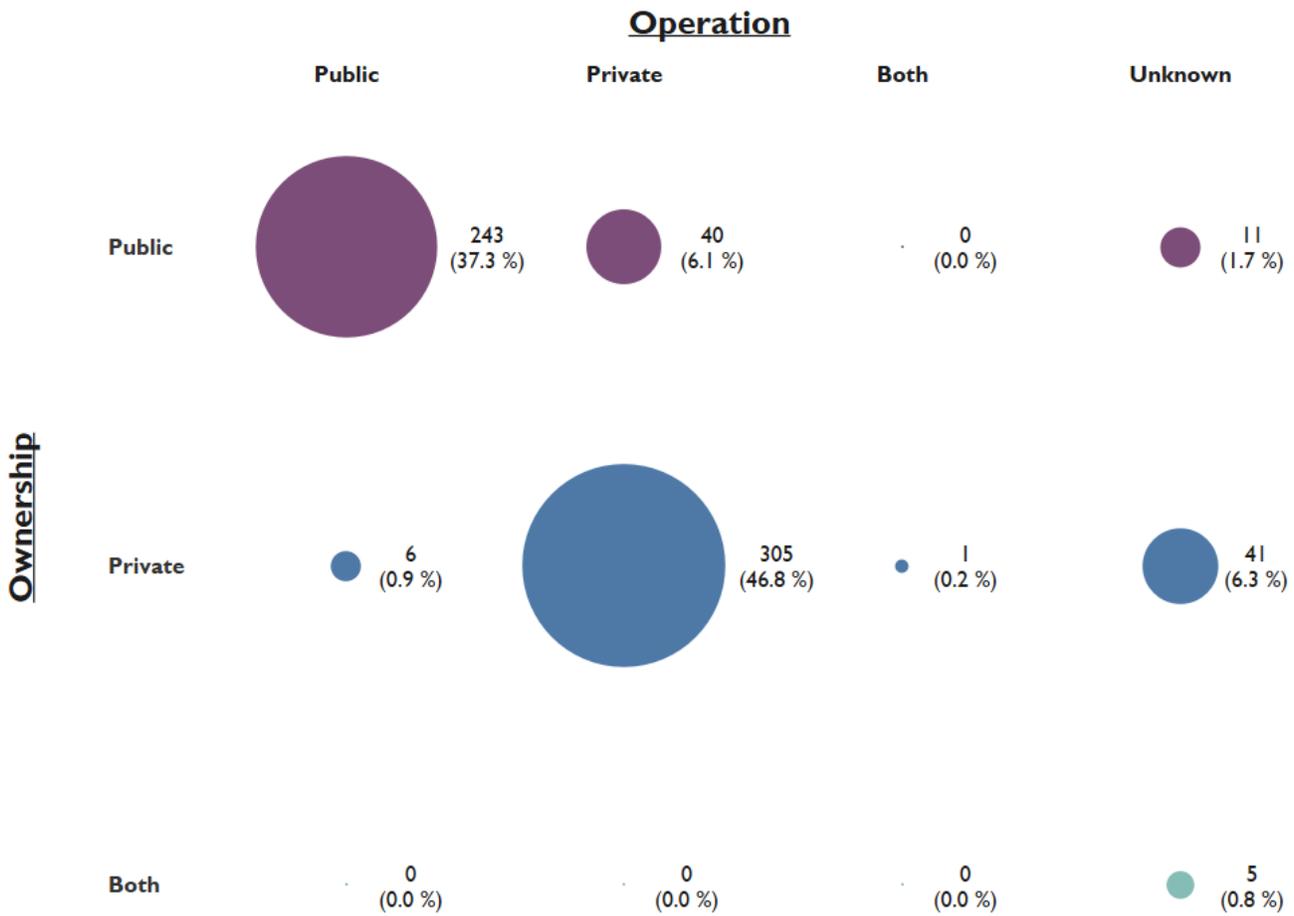
Figure 4: Vessels by State (2015)



NOTE: Vessels are assigned to their operator state of origin.

SOURCE: U.S. Department of Transportation, Bureau of Transportation Statistics, National Census of Ferry Operators 2016, Appendix A, Table 4, available at www.bts.gov as of October 2017.

Figure 5: Number of Vessels by Ownership and Operation (2015)



SOURCE: U.S. Department of Transportation, Bureau of Transportation Statistics, National Census of Ferry Operators 2016, Appendix A, Table 5, available at www.bts.gov as of October 2017.

freight-only vessels (figure 7). While 170 (26.1%) carried both passengers and vehicles, 23 (3.5%) carried both passengers and freight, and 102 (15.6%) carried passengers, vehicles and freight. There were no reported vessels that carried only vehicles and freight.

The average passenger capacity of the reported passenger-carrying vessels was 323 passengers, with a median passenger capacity of 149 and a maximum capacity of 5,200 (figure 8). The average vehicle capacity of the reported vehicle-carrying vessels was 23, with a median vehicle capacity of 9 and a maximum capacity of 202. The average operating speed of the reported vessels was 14 knots, with a median speed of 12 knots and a maximum of 43. The average age of the reported vessels was 27 years, the median age was 25 years, and the oldest vessel was 102.

Of the 652 reported vessels, additional vessel characteristics were identified using data collected by the U.S. Coast Guard.⁶ Vessel propulsion data was identified

⁶ United States Coast Guard Merchant Vessels of the United States (Feb. 8, 2017).

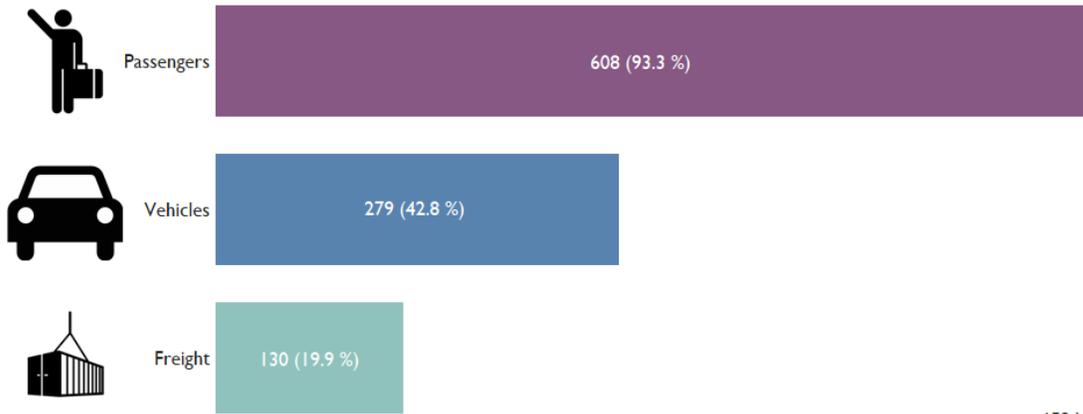
using this source for 596 of the reported vessels in 2015. Of these vessels, almost all were self-propelled (95.1 percent), while 29 vessels (4.9 percent) used some other form of propulsion (figure 9).

The majority of vessels were fueled by diesel engines (91.7 percent), followed by gasoline engines (3.4 percent) (figure 10). In addition, 4 reported vessels were powered by electricity and 27 by some other fuel source, of which the majority were barges powered by an adjoining tug boat. Non-powered barge and powered tug boat combinations are commonly used in river crossing operations, mainly to move one vehicle and passenger across at a time.

U.S. Ferry Terminals

Operators that participated in the 2016 NCFOP reported a combined total of 560 terminals in calendar year 2015 (figure 11). The regions with the highest density of reported terminals were in the northeast and in the Upper Peninsula of Michigan, as well as on the west coast and in Alaska. New York had the highest number of reported terminals in 2015 (60), while California (47), Alaska (41), Washington

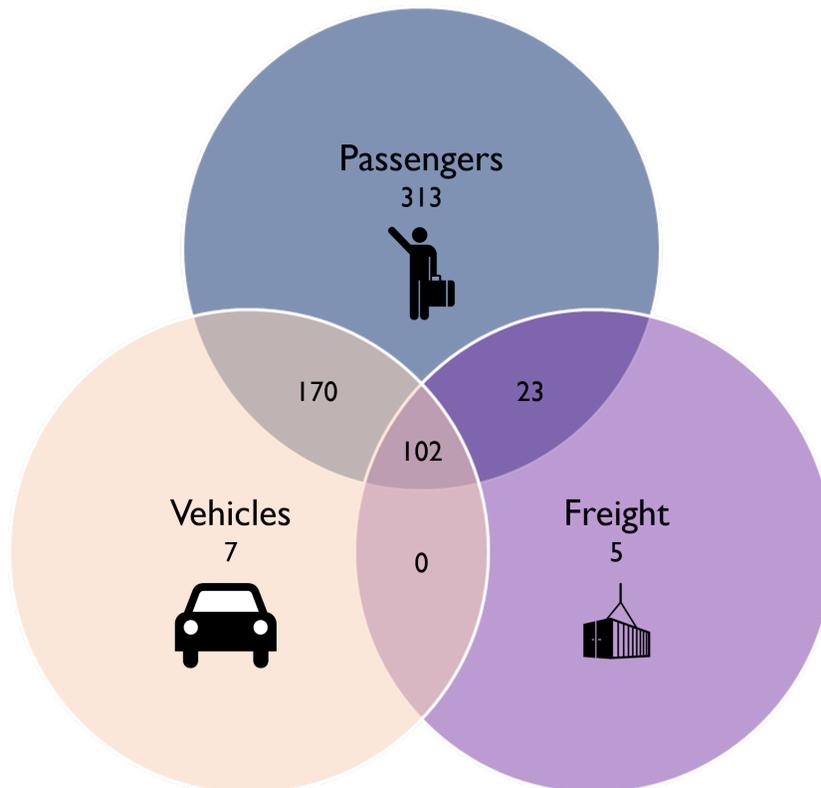
Figure 6: What Vessels Transport (2015)



n = 652 Vessels

SOURCE: U.S. Department of Transportation, Bureau of Transportation Statistics, National Census of Ferry Operators 2016, Appendix A, Table 6, available at www.bts.gov as of October 2017.

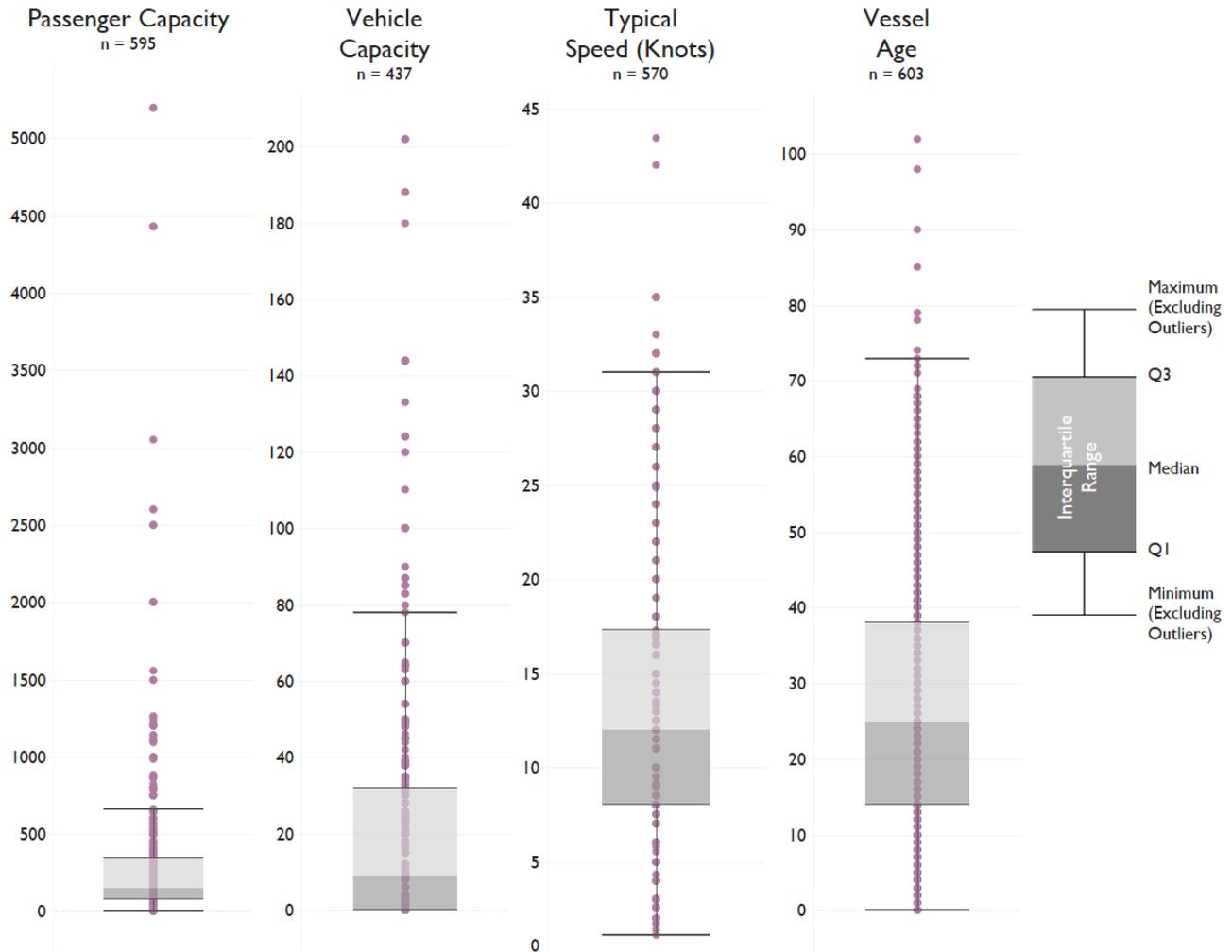
Figure 7: Overlap of What Vessels Transport (2015)



SOURCE: U.S. Department of Transportation, Bureau of Transportation Statistics, National Census of Ferry Operators 2016, Appendix A, Table 6, available at www.bts.gov as of October 2017.

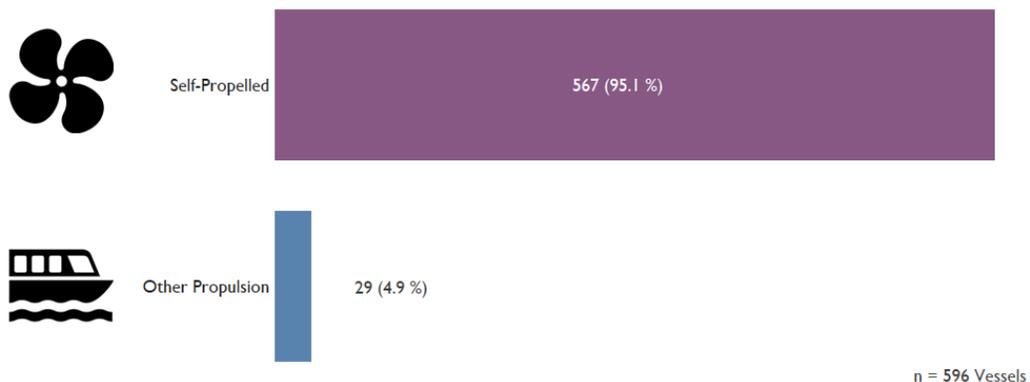
Figure 8: Vessel Characteristics (2015)

Vessel Characteristics



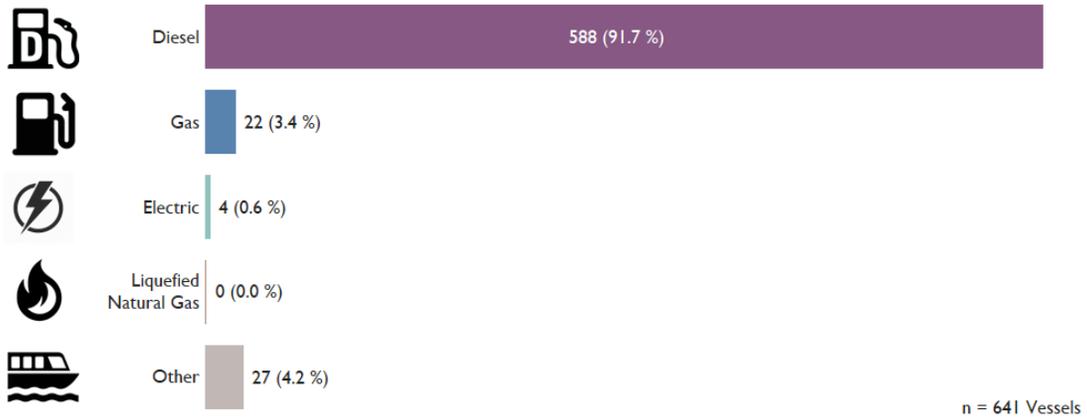
NOTE: Q1-Median of the lower half. Q3-Median of the upper half. An outlier is an observation that lies outside of the normal distribution.
SOURCE: U.S. Department of Transportation, Bureau of Transportation Statistics, National Census of Ferry Operators 2016, Appendix A, Table 7, available at www.bts.gov as of October 2017.

Figure 9: Vessel Propulsion Characteristics (2015)



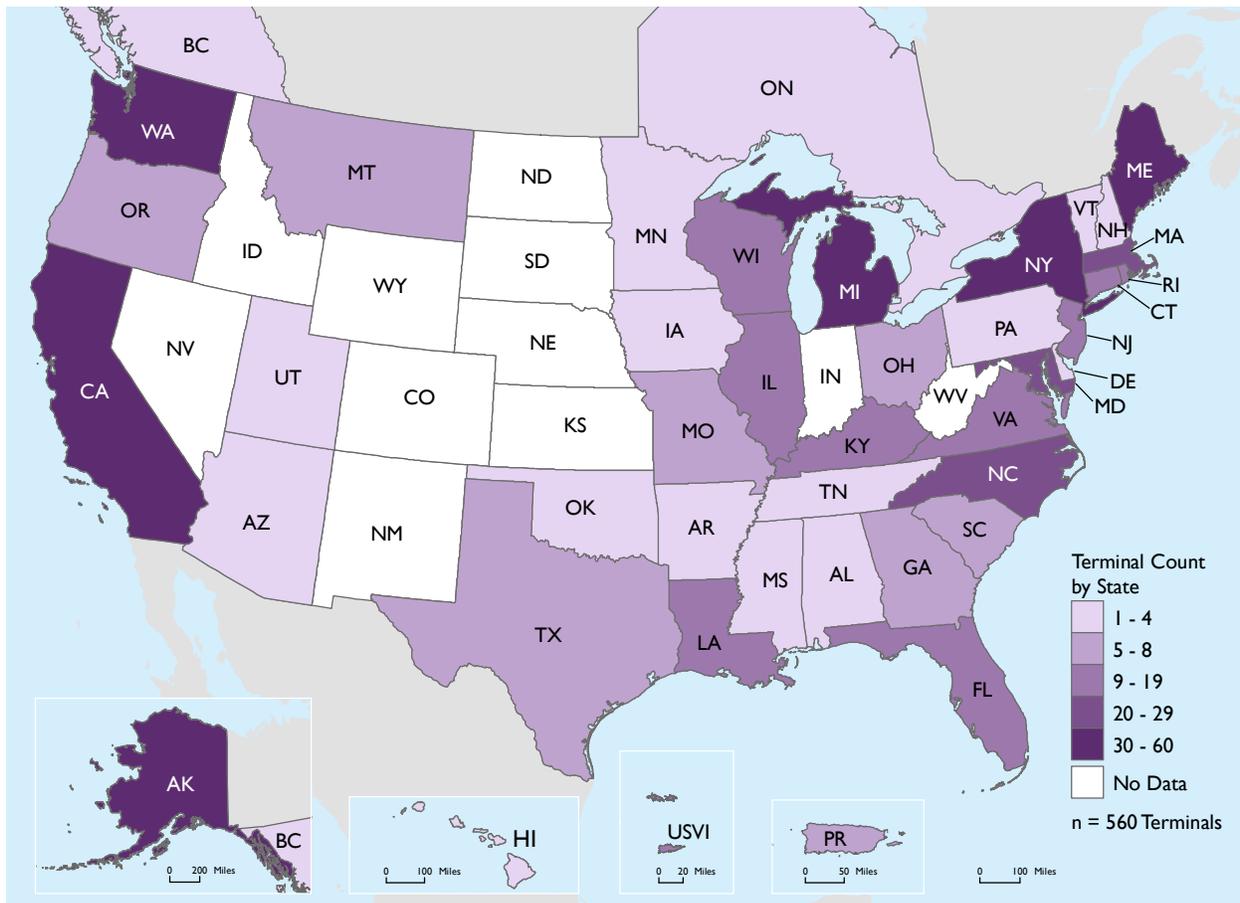
SOURCE: U.S. Coast Guard, Merchant Vessels of the United States (February 8, 2017). U.S. Department of Transportation, Bureau of Transportation Statistics, National Census of Ferry Operators 2016, Appendix A, Table 6, available at www.bts.gov as of October 2017.

Figure 10: Vessel Fuel Source (2015)



SOURCE: U.S. Coast Guard, Merchant Vessels of the United States (February 8, 2017). U.S. Department of Transportation, Bureau of Transportation Statistics, National Census of Ferry Operators 2016, Appendix A, Table 6, available at www.bts.gov as of October 2017.

Figure 11: Terminals by State (2015)



SOURCE: U.S. Department of Transportation, Bureau of Transportation Statistics, National Census of Ferry Operators 2016, Appendix A, Table 8, available at www.bts.gov as of October 2017.

(40), Maine (32) and Michigan (31) also had a relatively high numbers of reported terminals.

Terminal Access

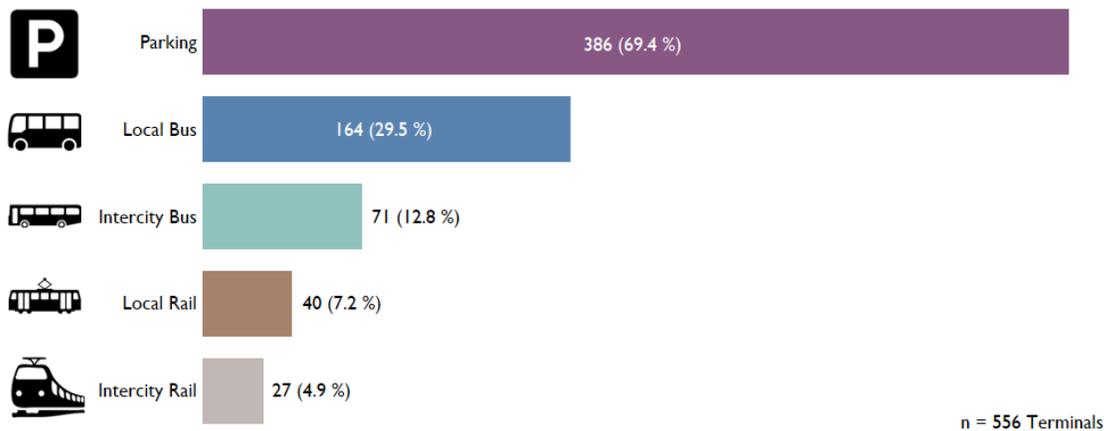
Of those terminals that reported terminal intermodal connectors (556), over two-thirds had parking onsite or nearby (69.4 percent), whereas nearly one-third (29.5 percent) had local bus service (figure 12). Additionally, 12.8 percent of terminals reported having intercity bus service, 7.2 percent of terminals reported having local rail service, and 4.9 percent of terminals reported having intercity rail service,

while a smaller percentage had rail service nearby (local rail = 7.2 percent, intercity rail = 4.9 percent).

Terminal Ownership and Operation

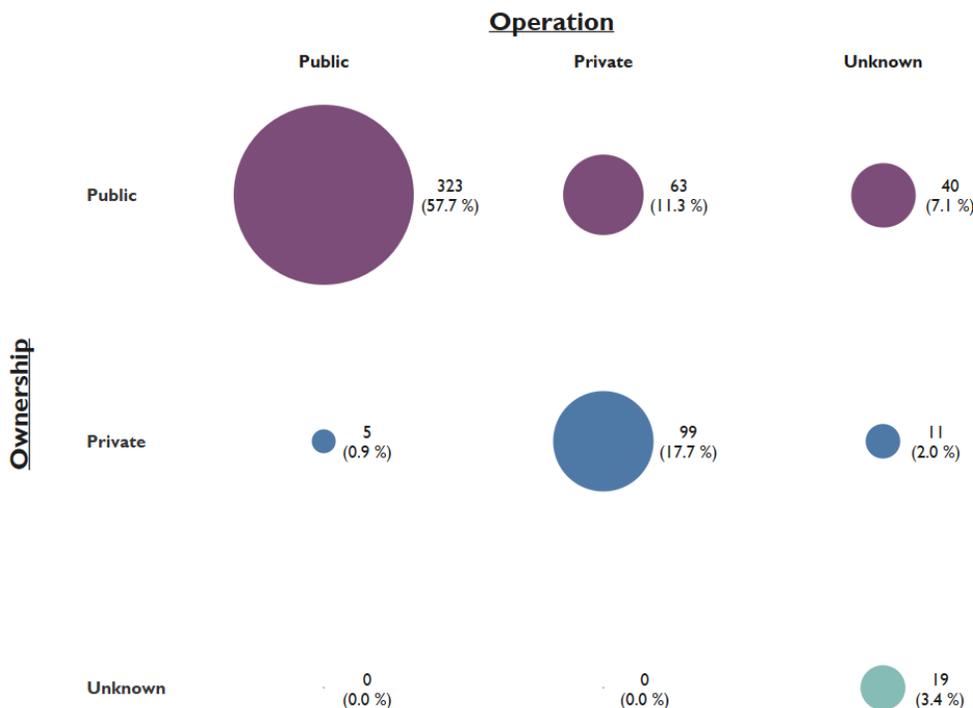
Out of the 560 reported terminals, over half were reported to be publicly owned and operated (57.7 percent), while 17.7 percent were privately owned and operated, and 11.3 percent were publicly owned and privately operated (figure 13).

Figure 12: Terminal Intermodal Connectors (2015)



SOURCE: U.S. Department of Transportation, Bureau of Transportation Statistics, National Census of Ferry Operators 2016, Appendix A, Table 6, available at www.bts.gov as of October 2017.

Figure 13: Number of Terminals by Ownership and Operation (2015)



SOURCE: U.S. Department of Transportation, Bureau of Transportation Statistics, National Census of Ferry Operators 2016, Appendix A, Table 9, available at www.bts.gov as of October 2017.

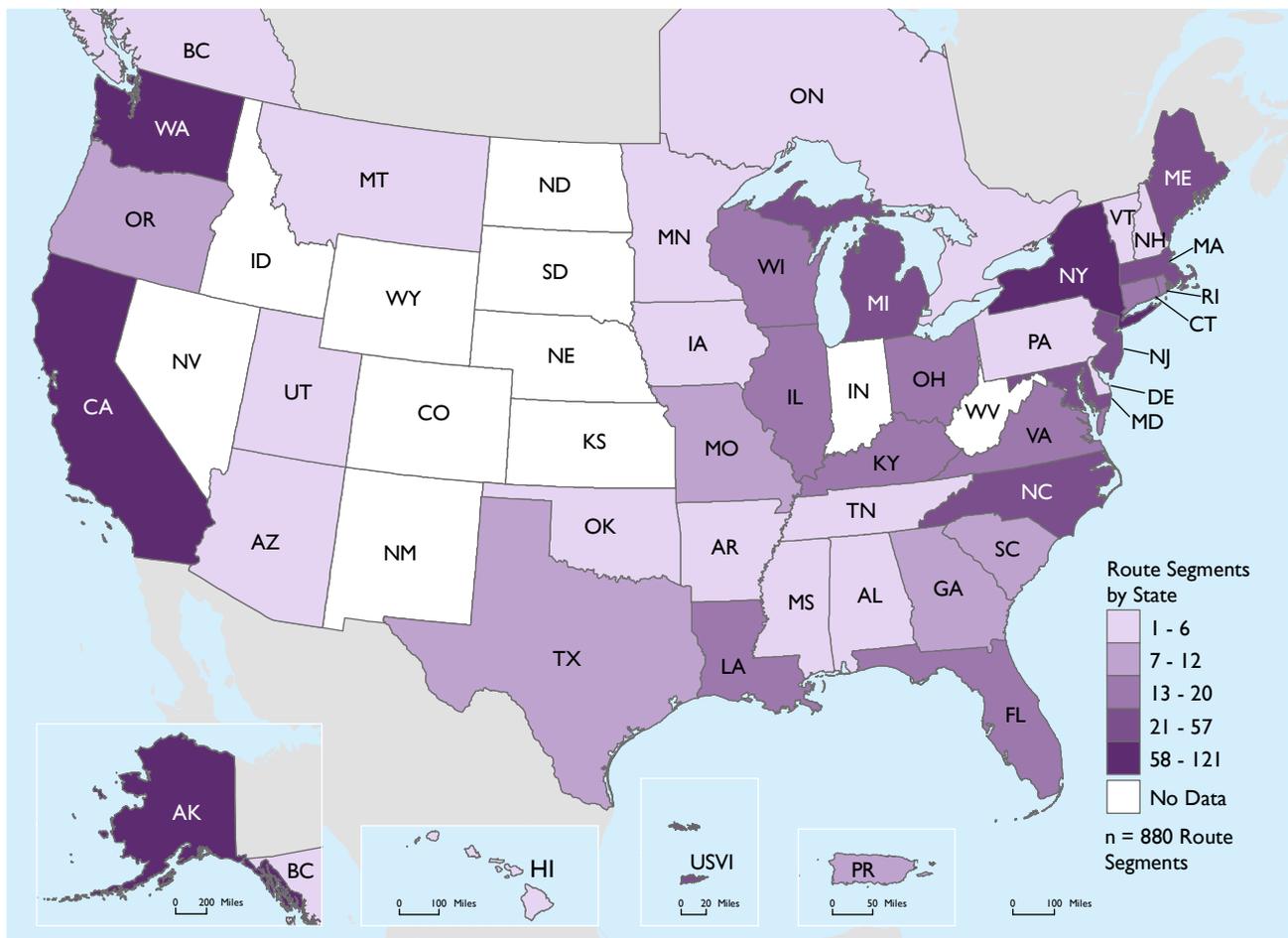
U.S. Ferry Route Segments

Route segments are defined as the direct travel between two terminals with no intermediate stops, where the associated state of the route segment is the state of the origin terminal. The highest number of reported route segments were concentrated in the northeast, the west coast, and in Alaska (figure 14). The top five states with the largest number of reported terminals accounted for half of the total reported segments. Those top five states are: Alaska (13.8 percent), California (11.1 percent), New York (10.8 percent), Washington (8.9 percent), and Michigan segments (6.0 percent).

The 880 total reported route segments served a combined total of 20,042.4 nautical miles,⁷ with an average distance of 11.9 nautical miles per route segment (table 11). By far the highest total number of reported state route miles was in Alaska, where 12,492.5 nautical miles were served in calendar year 2015, totaling over 62.3 percent of the reported U.S. route miles. Ferry routes in the United States ranged from 0.1 miles to 595.0 miles, while the majority of routes were less than 1 mile (26.02%) (figure 15). These ferry routes ranged from riverbank crossings to the longest reported route segment, which extends from Ketchikan, AK, to Bellingham, WA.

⁷ 1 nautical mile = 1.15078 highway miles.

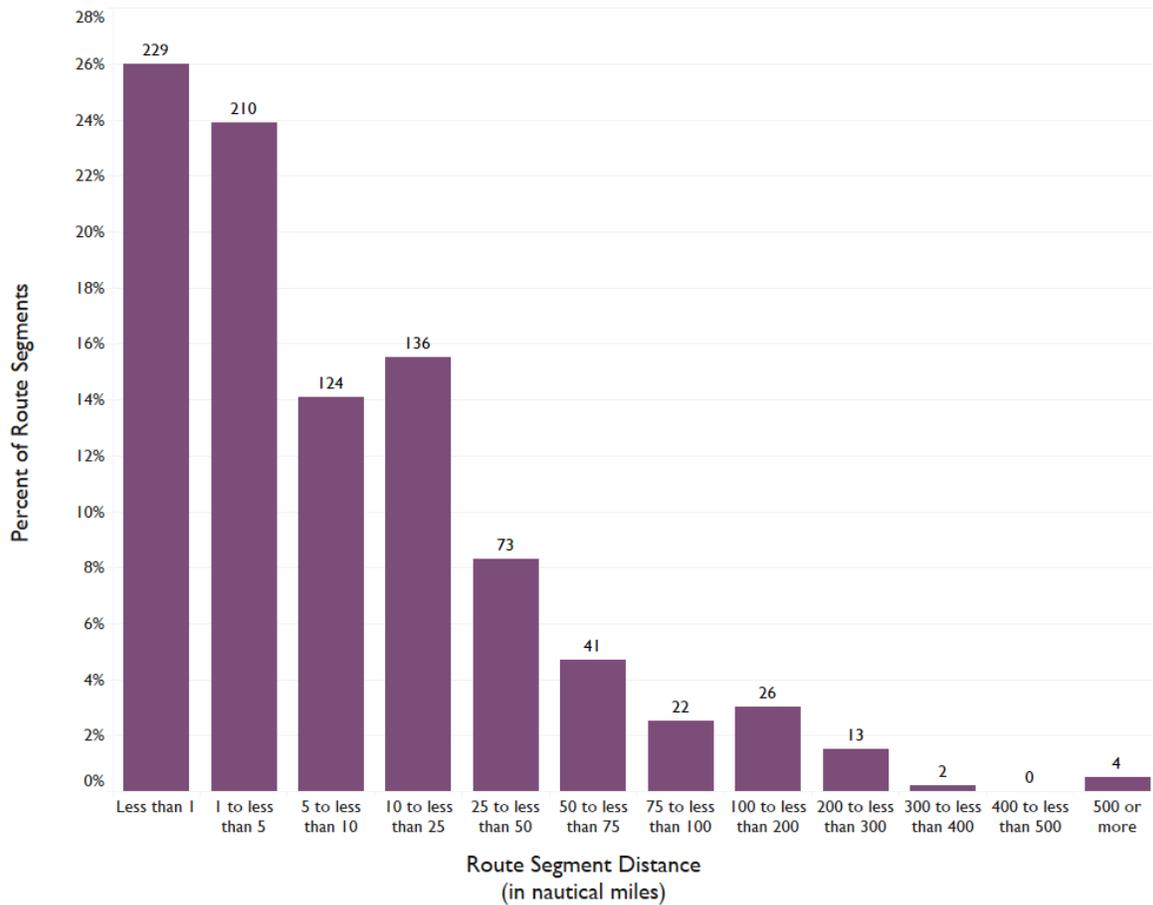
Figure 14: Route Segments by State (2015)



NOTE: Interstate route segments are assigned to their state of origin.

SOURCE: U.S. Department of Transportation, Bureau of Transportation Statistics, National Census of Ferry Operators 2016, Appendix A, Table 8, available at www.bts.gov as of October 2017.

Figure 15: Route Segment Distance (2015)



SOURCE: U.S. Department of Transportation, Bureau of Transportation Statistics, National Census of Ferry Operators 2016, Appendix A, Table 10, available at www.bts.gov as of October 2017.

The majority of all reported route segments were intrastate (87.7 percent), meaning that the segment did not cross state lines. The largest percentage of interstate segments, that is, segments that crossed state lines, were reported in the northeast (figure 16). Of those northeastern states, New York and New Jersey had a relatively large proportion of these interstate segments, 25 and 19, respectively. There were also 10 international segments, that is, segments that either started or ended at a terminal in a non-U.S. state or territory.

Over 10 percent of the reported U.S. ferry system segments in 2015 were identified as being operated for the U.S. National Park Service (NPS). Of the 92 reported NPS ferry segments, the highest numbers were reported in Michigan (32), California (18), and New York (9) (figure 17).

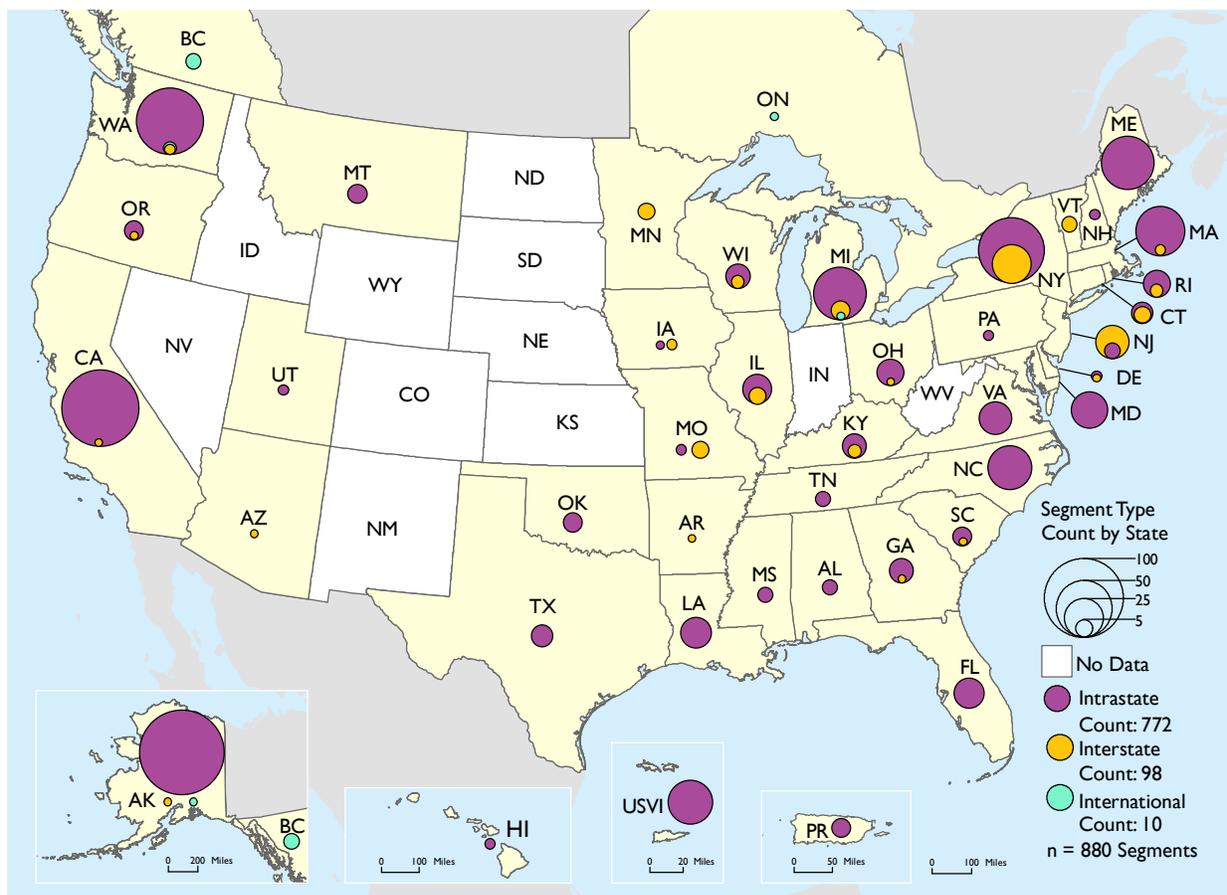
Methodology

The 2016 NCFO was a census of all known ferry boat operations within the United States and its territories,

encompassing the 50 states, Puerto Rico, and the U.S. Virgin Islands. In addition to the ferry operations providing domestic service within the United States and its territories, operations providing international services to or from at least one U.S. terminal were also included. Ferry operations included within the scope of the NCFO were those providing itinerant, fixed route, and common carrier passenger and/or vehicle ferry service. Railroad car float operations were also included within the scope of the NCFO.

Not included within the scope of the ferry census were operations that were exclusively nonitinerant, such as excursion services (e.g. whale watches, casino boats, day cruises, dinner cruises, etc.). Also not included are passenger-only water taxi services not operating on a fixed route and LoLo (Lift-on/Lift-off) freight/auto carrier series. Efforts to enumerate ferry operations within the United States for the 2016 NCFO resulted in a frame of 259 active ferry operations for calendar year 2015.

Figure 16: Segment Type by State (2015)



NOTE: Interstate segments are assigned to the state of the origin terminal.

SOURCE: U.S. Department of Transportation, Bureau of Transportation Statistics, National Census of Ferry Operators 2016, Appendix A, Table 12, available at www.bts.gov as of October 2017.

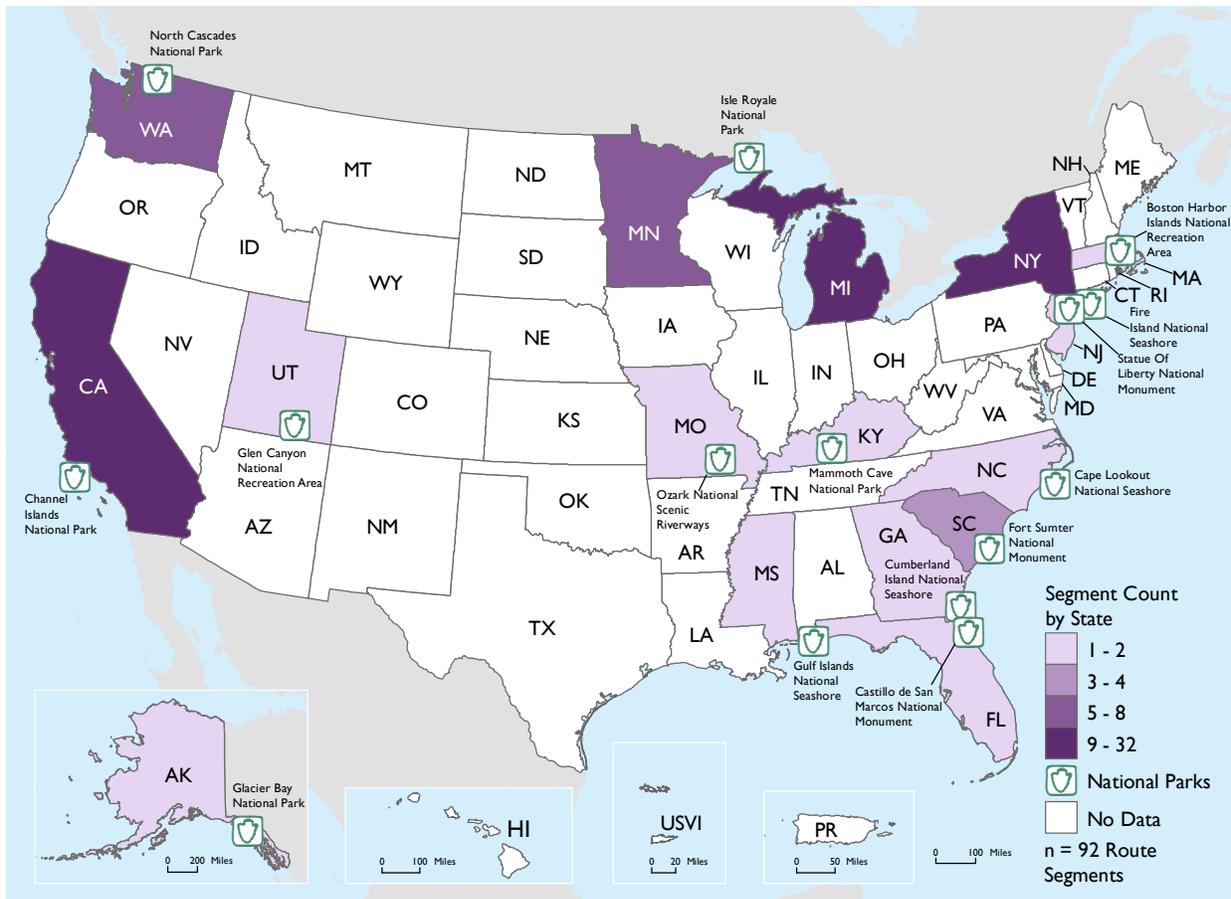
All 259 known ferry operations were encouraged to participate in the 2016 NCFO by an advance letter sent out in March 2016. The Bureau of Transportation Statistics then sent the questionnaire in April 2016 to each operator. Non-respondents were then contacted by phone from May through July 2016 to ensure that they received their questionnaire and to determine if they needed any assistance in completing the form. Non-respondents were also sent two emails over this same time-period. Data collection was completed in November 2016.

Additional clarification of data entries and data cleaning was conducted based on information collected from ferry operator websites and from the U.S. Coast Guard (USCG) vessel database including vessel, terminal, segment, and other operational information. Furthermore, the USCG vessel database was used to collect additional vessel characteristics on the reported vessels. Of the 259 ferry operators who were sent a questionnaire, 32 were determined to be out of scope (i.e., they were either determined to be ineligible or they were no longer in operation), while 7 other operations were determined

to already have had their data included in their state transportation agency's report or in their parent company's report (e.g., some ferry companies operate more than one ferry service and report all their operations on a single NCFO form). To avoid double counting, those 7 operations were removed from the frame of individual operations. A total of 163 ferry operators from the remaining list of 220 completed the NCFO questionnaire for a response rate of 74.1 percent.

There were 18 (11.0%) operators that either did not provide passenger and/or vehicle boarding data or asked that the data they provided not be made public. Unlike in past years, missing passenger and vehicle boarding estimates were not imputed in the 2016 NCFO due to high variability in the estimates. Due to eligible operators who did not respond, as well as those choosing not to provide or make information public for select data items, the numbers in this report likely underestimate the true values. These underestimates included the counts of vessels, terminals, segments, and route miles—and especially—total passenger and vehicle boardings in 2015.

Figure 17: National Park Service (NPS) Segments by State (2015)



NOTE: Interstate NPS segments are assigned to the state of the origin terminal.

SOURCE: U.S. Department of Transportation, Bureau of Transportation Statistics, National Census of Ferry Operators 2016, Appendix A, Table 11, available at www.bts.gov as of October 2017.

Finally, it is not encouraged to compare NCFO statistics from census-to-census year due to differences in the responding population as well as differences in imputing missing data.

Appendix A

Table 1: Passenger and Vehicle Boarding Counts by State (2015)

States	Boarding counts	
	Passengers	Vehicles
AK	906,851	268,862
AL	248,166	80,782
AR	34,502	17,250
AZ	0	0
CA	8,923,100	566,073
CT	2,034,954	776,343
DE	400,000	189,160
FL	798,570	248,276
GA	899,972	0
HI	0	0
IA	32,844	2,831
IL	2,136,032	801,717
KY	428,053	463,752
LA	1,978,521	905,425
MA	5,681,996	638,158
MD	898,914	250,000
ME	1,730,675	278,884
MI	1,065,364	1,147,176
MN	5,639	0
MO	60,508	103,777
MS	61,304	910
MT	3,473	4,022
NC	2,500,990	821,244
NH	10,000	0
NJ	5,035,614	140,000
NY	43,557,550	1,733,475
OH	1,467,807	28,983
OK	10,338	0
OR	1,065,475	412,522
PA	2,319	600
RI	201,634	26,024
SC	358,785	0
TN	93,440	73,000
TX	6,393,436	2,259,084
UT	7,022	2,546
VA	2,649,150	955,233
VT	*	*
WA	26,081,154	11,145,634
WI	546,913	454,858
U.S. Total	118,311,065	24,796,601
PR	0	0
VI	287,046	79,755
U.S. Territories total	287,046	79,755
BC	236,638	74,671
ON	33,762	49,007
Non-U.S. total	270,400	123,678
Grand total	118,868,511	25,000,034

NOTES: States that could not be shown individually due to potential disclosure issues for passenger and vehicle data are designated as business confidential and are denoted by (*). Interstate segment boardings are assigned to the state of the origin terminal. BC and ON are included as there was reported ferry traffic destined to a U.S. terminal from these Canadian providences.

SOURCE: U.S. Department of Transportation, Bureau of Transportation Statistics, 2016 National Census of Ferry Operators, available at www.bts.gov as of October 2017.

Table 2: Operators by State (2015)

States	Operators	
	Count	Percent
AK	6	3.7
AL	1	0.6
AR	1	0.6
CA	12	7.4
CT	4	2.5
DE	1	0.6
FL	6	3.7
GA	3	1.8
HI	1	0.6
IL	6	3.7
KY	5	3.1
LA	3	1.8
MA	9	5.5
MD	4	2.5
ME	7	4.3
MI	10	6.1
MN	1	0.6
MO	3	1.8
MS	2	1.2
MT	2	1.2
NC	6	3.7
NH	1	0.6
NJ	6	3.7
NY	12	7.4
OH	2	1.2
OK	1	0.6
OR	2	1.2
PA	1	0.6
RI	5	3.1
SC	1	0.6
TN	1	0.6
TX	4	2.5
UT	1	0.6
VA	6	3.7
VT	2	1.2
WA	12	7.4
WI	7	4.3
U.S. Total	157	96.3
PR	1	0.6
VI	5	3.1
U.S. Territories total	6	3.7
Grand total	163	100.0

NOTE: Operators are assigned to the state of their reported business address.

SOURCE: U.S. Department of Transportation, Bureau of Transportation Statistics, 2016 National Census of Ferry Operators, available at www.bts.gov as of October 2017.

Table 3: Number and Percent of Operators by Revenue Source (2015)

Number and percent of total operators by revenue source

Percent of operator revenue	Ticket revenue	Private contract revenue	Advertising revenue	Public contract revenue	Federal funding revenue	State funding revenue	Local funding revenue
None	42 25.8%	107 65.6%	154 94.5%	144 88.3%	137 84.0%	126 77.3%	139 85.3%
Less than 25%	9 5.5%	49 30.1%	9 5.5%	12 7.4%	17 10.4%	12 7.4%	7 4.3%
25% to less than 50%	12 7.4%	3 1.8%	0 0.0%	2 1.2%	1 0.6%	4 2.5%	6 3.7%
50% to less than 75%	11 6.7%	2 1.2%	0 0.0%	2 1.2%	2 1.2%	4 2.5%	3 1.8%
75% to 100%	89 54.6%	2 1.2%	0 0.0%	3 1.8%	6 3.7%	17 10.4%	8 4.9%
Total	163 100.0%						

SOURCE: U.S. Department of Transportation, Bureau of Transportation Statistics, 2016 National Census of Ferry Operators, available at www.bts.gov as of October 2017.

Table 4: Vessels by State (2015)

States	Vessels		Vessels in-service	
	Count	Percent	Count	Percent
AK	19	2.9	18	2.8
AL	3	0.5	3	0.5
AR	5	0.8	5	0.8
CA	55	8.4	54	8.3
CT	15	2.3	15	2.3
DE	1	0.2	1	0.2
FL	19	2.9	19	2.9
GA	9	1.4	9	1.4
HI	4	0.6	4	0.6
IL	30	4.6	29	4.4
KY	12	1.8	11	1.7
LA	19	2.9	15	2.3
MA	47	7.2	45	6.9
MD	22	3.4	22	3.4
ME	27	4.1	23	3.5
MI	24	3.7	22	3.4
MN	2	0.3	2	0.3
MO	6	0.9	5	0.8
MS	5	0.8	5	0.8
MT	3	0.5	3	0.5
NC	39	6.0	37	5.7
NH	1	0.2	1	0.2
NJ	50	7.7	48	7.4
NY	56	8.6	53	8.1
OH	8	1.2	8	1.2
OK	3	0.5	3	0.5
OR	3	0.5	3	0.5
PA	2	0.3	2	0.3
RI	12	1.8	10	1.5
SC	2	0.3	2	0.3
TN	7	1.1	6	0.9
TX	17	2.6	17	2.6
UT	1	0.2	1	0.2
VA	13	2.0	12	1.8
VT	13	2.0	13	2.0
WA	46	7.1	44	6.7
WI	15	2.3	15	2.3
U.S. Total	615	94.3	585	89.6
VI	16	2.5	15	2.3
PR	21	3.2	9	1.4
U.S. Territories total	37	5.7	24	3.7
Grand total	652	100.0	609	93.3

NOTE: Vessels are assigned to the state of which their operator is assigned.

SOURCE: U.S. Department of Transportation, Bureau of Transportation Statistics, 2016 National Census of Ferry Operators, available at www.bts.gov as of October 2017.

Table 5: Number of Vessels by Ownership and Operation (2015)

Vessel ownership	Vessel operation by number and percent of total				
	Public	Private	Both	Unknown	Total
Public	243 37.3%	40 6.1%	0 0.0%	11 1.7%	294 45.1%
Private	6 0.9%	305 46.8%	1 0.2%	41 6.3%	353 54.1%
Both	0 0.0%	0 0.0%	0 0.0%	5 0.8%	5 0.8%
Unknown	0 0.0%	0 0.0%	0 0.0%	0 0.0%	0 0.0%
Total	249 38.2%	345 52.9%	1 0.2%	57 8.7%	652 100.0%

SOURCE: U.S. Department of Transportation, Bureau of Transportation Statistics, 2016 National Census of Ferry Operators, available at www.bts.gov as of October 2017.

Table 6: Route, Vessel, and Terminal Characteristics (2015)

Route (sample size)	Count	Percent
Fares regulated (861)	584	67.8

Vessel		
Operational characteristics (sample size)	Count	Percent
Carries passengers (652)	608	93.3
Carries vehicles (652)	279	42.8
Carries freight (652)	130	19.9
Carries passengers and vehicles (652)	170	26.1
Carries passengers and freight (652)	23	3.5
Carries vehicles and freight (652)	0	0.0
Carries passengers, vehicles, and freight (652)	102	15.6
Self-propelled (596)	567	95.1
Other propulsion (596)	29	4.9
Diesel (641)	588	91.7
Gas (641)	22	3.4
Liquified natural gas (641)	0	0.0
Electric (641)	4	0.6
Other (641)	27	4.2

Terminal		
Intermodal connectors (sample size)	Count	Percent
Parking (556)	386	69.4
Local bus (556)	164	29.5
Intercity bus (556)	71	12.8
Local rail (556)	40	7.2
Intercity rail (556)	27	4.9

SOURCES: U.S. Department of Transportation, Bureau of Transportation Statistics, 2016 National Census of Ferry Operators, available at www.bts.gov as of October 2017. U.S. Coast Guard, Merchant Vessels of the United States, Feb. 8, 2017.

Table 7: Vessel Characteristics (2015)

Vessel characteristics (sample size)	Mean^a	Median^a	Minimum^c	Maximum
Passenger capacity (595) ^b	323	149	0	5200
Vehicle capacity (437) ^b	23	9	0	202
Typical speed (570)	14	12	1	43
Vessel age (603)	27	25	0	102

^a The mean is the average value. The median represents the middle most value when all numbers are listed in order. The median is a more accurate measure of the central tendency when a distribution of numbers is slightly skewed.

^b Does not include vessels that do not carry passengers and or vehicles. Car ferries often do not track or report passenger boarding counts.

^c The minimum value of zero for vehicle capacity is due to the reporting a Tug/Barge combination or reporting error.

SOURCE: U.S. Department of Transportation, Bureau of Transportation Statistics, 2016 National Census of Ferry Operators, available at www.bts.gov as of October 2017.

Table 8: Terminals and Route Segments by State (2015)

State	Terminals		Segments	
	Count	Percent	Count	Percent
AK	41	7.3	121	13.8
AL	4	0.7	4	0.5
AR	1	0.2	1	0.1
AZ	1	0.2	1	0.1
CA	47	8.4	98	11.1
CT	9	1.6	13	1.5
DE	3	0.5	3	0.3
FL	18	3.2	16	1.8
GA	8	1.4	11	1.3
HI	3	0.5	2	0.2
IA	3	0.5	3	0.3
IL	16	2.9	20	2.3
KY	15	2.7	13	1.5
LA	16	2.9	16	1.8
MA	23	4.1	42	4.8
MD	21	3.8	23	2.6
ME	32	5.7	46	5.2
MI	31	5.5	53	6.0
MN	1	0.2	5	0.6
MO	6	1.1	7	0.8
MS	4	0.7	4	0.5
MT	6	1.1	6	0.7
NC	29	5.2	32	3.6
NH	2	0.4	2	0.2
NJ	14	2.5	23	2.6
NY	60	10.7	95	10.8
OH	7	1.3	13	1.5
OK	4	0.7	6	0.7
OR	7	1.3	7	0.8
PA	2	0.4	2	0.2
RI	11	2.0	15	1.7
SC	5	0.9	7	0.8
TN	4	0.7	4	0.5
TX	8	1.4	8	0.9
UT	2	0.4	2	0.2
VA	17	3.0	18	2.0
VT	4	0.7	4	0.5
WA	40	7.1	78	8.9
WI	12	2.1	13	1.5
U.S. Total	537	95.9	837	95.1
PR	5	0.9	6	0.7
VI	14	2.5	32	3.6
U.S. Territories total	19	3.4	38	4.3
BC	3	0.5	4	0.5
ON	1	0.2	1	0.1
Non-U.S. total	4	0.7	5	0.6
Grand total	560	100.0	880	100.0

NOTE: Interstate segments are assigned to the state of the origin terminal.

SOURCE: U.S. Department of Transportation, Bureau of Transportation Statistics, 2016 National Census of Ferry Operators, available at www.bts.gov as of October 2017.

Table 9: Number of Terminals by Ownership and Operation (2015)

Terminal ownership	Terminal operation by number and percent of total				
	Public	Private	Both	Unknown	Total
Public	323 57.7%	63 11.3%	0 0.0%	40 7.1%	426 76.1%
Private	5 0.9%	99 17.7%	0 0.0%	11 2.0%	115 20.5%
Both	0 0.0%	0 0.0%	0 0.0%	0 0.0%	0 0.0%
Unknown	0 0.0%	0 0.0%	0 0.0%	19 3.4%	19 3.4%
Total	328 58.6%	162 28.9%	0 0.0%	70 12.5%	560 100.0%

SOURCE: U.S. Department of Transportation, Bureau of Transportation Statistics, 2016 National Census of Ferry Operators, available at www.bts.gov as of October 2017.

Table 10: Route Segment Distance (2015)

Route segment distance (in nautical miles)	Count	Percent
Less than 1	229	26.0
1 to less than 5	210	23.9
5 to less than 10	124	14.1
10 to less than 25	136	15.5
25 to less than 50	73	8.3
50 to less than 75	41	4.7
75 to less than 100	22	2.5
100 to less than 200	26	3.0
200 to less than 300	13	1.5
300 to less than 400	2	0.2
400 to less than 500	0	0.0
500 or more	4	0.5
Total	880	100.0

SOURCE: U.S. Department of Transportation, Bureau of Transportation Statistics, 2016 National Census of Ferry Operators, available at www.bts.gov as of October 2017.

Table 11: Route Segment Distance by State (2015)

States	Route segment distance ^a					
	Segment count	Mean	Median	Minimum	Maximum	Total
AK	121	103.2	74.0	0.3	595.0	12,492.5
AL	4	2.9	2.9	2.0	3.7	11.4
AR	1	0.7	0.7	0.7	0.7	0.7
AZ	1	3.1	3.1	3.1	3.1	3.1
CA	98	11.4	7.1	0.1	47.0	1,048.6
CT	13	7.0	2.0	0.2	35.0	83.9
DE	3	4.7	0.1	0.1	14.0	14.2
FL	16	1.7	0.5	0.2	7.0	23.4
GA	11	5.0	0.4	0.3	25.0	55.3
HI	2	16.0	16.0	16.0	16.0	32.0
IA	3	2.2	2.8	0.8	3.0	6.5
IL	20	1.1	0.5	0.3	2.9	19.3
KY	13	0.5	0.3	0.1	2.0	5.9
LA	16	0.4	0.4	0.1	0.7	6.0
MA	42	16.9	18.0	4.0	54.0	439.0
MD	23	4.0	0.3	0.1	24.0	91.2
ME	46	7.7	6.0	0.5	23.0	324.9
MI	53	27.6	22.0	0.1	75.0	1,461.7
MN	5	54.0	55.0	20.0	77.0	270.0
MO	7	50.5	1.3	0.4	125.0	252.3
MS	4	5.6	5.6	0.2	11.0	22.4
MT	6	0.1	0.1	0.1	0.1	0.5
NC	32	7.9	3.9	0.1	39.3	252.1
NH	2	6.5	6.5	6.5	6.5	13.0
NJ	23	3.8	2.7	0.7	17.9	87.0
NY	95	3.6	3.5	0.1	18.0	335.7
OH	13	9.6	10.0	0.4	18.0	125.4
OK	6	2.7	2.9	0.1	3.6	16.1
OR	7	0.3	0.1	0.1	1.4	2.2
PA	2	-	-	-	-	-
RI	15	14.6	13.0	0.3	54.0	189.3
SC	7	7.6	3.5	3.5	25.0	53.0
TN	4	0.4	0.4	0.2	0.7	1.7
TX	8	1.2	0.9	0.2	2.7	9.3
UT	2	3.8	3.8	3.8	3.8	7.7
VA	18	4.8	0.5	0.1	18.0	76.2
VT	4	3.4	2.2	0.5	8.7	13.5
WA	78	17.7	4.5	0.6	595.0	1,345.3
WI	13	12.8	2.2	0.4	75.0	165.9
U.S. Total	837	11.2	2.9	0.1	595.0	19,358.2
PR	6	13.7	18.0	1.0	22.0	82.0
VI	32	14.5	10.5	3.0	35.0	434.0
U.S. Territories total	38	14.1	14.3	1.0	35.0	516.0
BC	4	41.8	28.6	18.9	91.0	167.2
ON	1	1.0	1.0	1.0	1.0	1.0
Non-U.S. total	5	21.4	14.8	1.0	91.0	168.2
Grand total	880	11.9	2.9	0.1	595.0	20,042.4

^a Length is in nautical miles.

NOTES: Missing values denoted by (-). Interstate segment route miles are assigned to the state of the origin terminal.

SOURCE: U.S. Department of Transportation, Bureau of Transportation Statistics, 2016 National Census of Ferry Operators, available at www.bts.gov as of October 2017.

Table 12: Route Segment Type and National Park Ferry Service by State (2015)

States	Intrastate		Interstate ^a		International		National Park Service	
	Count	Percent	Count	Percent	Count	Percent	Count	Percent
AK	119	13.5	1	0.1	1	0.1	1	1.1
AL	4	0.5	0	0.0	0	0.0	0	0.0
AR	0	0.0	1	0.1	0	0.0	0	0.0
AZ	0	0.0	1	0.1	0	0.0	0	0.0
CA	97	11.0	1	0.1	0	0.0	18	2.0
CT	8	0.9	5	0.6	0	0.0	0	0.0
DE	2	0.2	1	0.1	0	0.0	0	0.0
FL	16	1.8	0	0.0	0	0.0	2	0.2
GA	10	1.1	1	0.1	0	0.0	2	0.2
HI	2	0.2	0	0.0	0	0.0	0	0.0
IA	1	0.1	2	0.2	0	0.0	0	0.0
IL	15	1.7	5	0.6	0	0.0	0	0.0
KY	10	1.1	3	0.3	0	0.0	2	0.2
LA	16	1.8	0	0.0	0	0.0	0	0.0
MA	40	4.5	2	0.2	0	0.0	2	0.2
MD	23	2.6	0	0.0	0	0.0	0	0.0
ME	46	5.2	0	0.0	0	0.0	0	0.0
MI	46	5.2	6	0.7	1	0.1	32	3.6
MN	0	0.0	5	0.6	0	0.0	5	0.6
MO	2	0.2	5	0.6	0	0.0	2	0.2
MS	4	0.5	0	0.0	0	0.0	2	0.2
MT	6	0.7	0	0.0	0	0.0	0	0.0
NC	32	3.6	0	0.0	0	0.0	2	0.2
NH	2	0.2	0	0.0	0	0.0	0	0.0
NJ	4	0.5	19	2.2	0	0.0	1	0.1
NY	70	8.0	25	2.8	0	0.0	9	1.0
OH	12	1.4	1	0.1	0	0.0	0	0.0
OK	6	0.7	0	0.0	0	0.0	0	0.0
OR	6	0.7	1	0.1	0	0.0	0	0.0
PA	2	0.2	0	0.0	0	0.0	0	0.0
RI	12	1.4	3	0.3	0	0.0	0	0.0
SC	6	0.7	1	0.1	0	0.0	4	0.5
TN	4	0.5	0	0.0	0	0.0	0	0.0
TX	8	0.9	0	0.0	0	0.0	0	0.0
UT	2	0.2	0	0.0	0	0.0	2	0.2
VA	18	2.0	0	0.0	0	0.0	0	0.0
VT	0	0.0	4	0.5	0	0.0	0	0.0
WA	73	8.3	2	0.2	3	0.3	6	0.7
WI	10	1.1	3	0.3	0	0.0	0	0.0
U.S. Total	734	83.4	98	11.1	5	0.6	92	10.5
PR	6	0.7	0	0.0	0	0.0	0	0.0
VI	32	3.6	0	0.0	0	0.0	0	0.0
U.S. Territories total	38	4.3	0	0.0	0	0.0	0	0.0
BC	0	0.0	0	0.0	4	0.5	0	0.0
ON	0	0.0	0	0.0	1	0.1	0	0.0
Non-U.S. States total	0	0.0	0	0.0	5	0.6	0	0.0
Grand total	772	87.7	98	11.1	10	1.1	92	10.5

^a Interstate segments are assigned to the state of the origin terminal.

NOTE: The National Park Service segments are accounted for within the total of intrastate, interstate and international segments counts.

SOURCE: U.S. Department of Transportation, Bureau of Transportation Statistics, 2016 National Census of Ferry Operators, available at www.bts.gov as of October 2017.