

**Marine Recreational Information Program
Fishing Effort Survey Transition
Progress Report**

October 28, 2016

The MRIP Fishing Effort Survey (FES) was implemented in January, 2015 to estimate shore and private boat fishing effort for states in the Atlantic and Gulf of Mexico regions. The FES design, which was tested in MA, NY, NC and FL in 2013, has been identified as a more efficient and accurate approach for monitoring recreational fishing effort than the Coastal Household Telephone Survey ([Andrews et al., 2014](#)). Testing of the FES suggested that the design is less susceptible to survey errors than the CHTS and demonstrated that FES estimates were considerably larger than CHTS estimates.

Given the magnitude of differences between FES and CHTS effort estimates, NOAA Fisheries developed and executed a [Transition Plan](#) to facilitate the transition from the CHTS to the FES. The Transition Plan includes a three-year benchmarking period during which the FES and CHTS will be conducted concurrently in all Atlantic and Gulf coast states. This document describes results from the first full year (wave 1, 2015 – wave 6, 2015) of the benchmarking period.

Response Rates

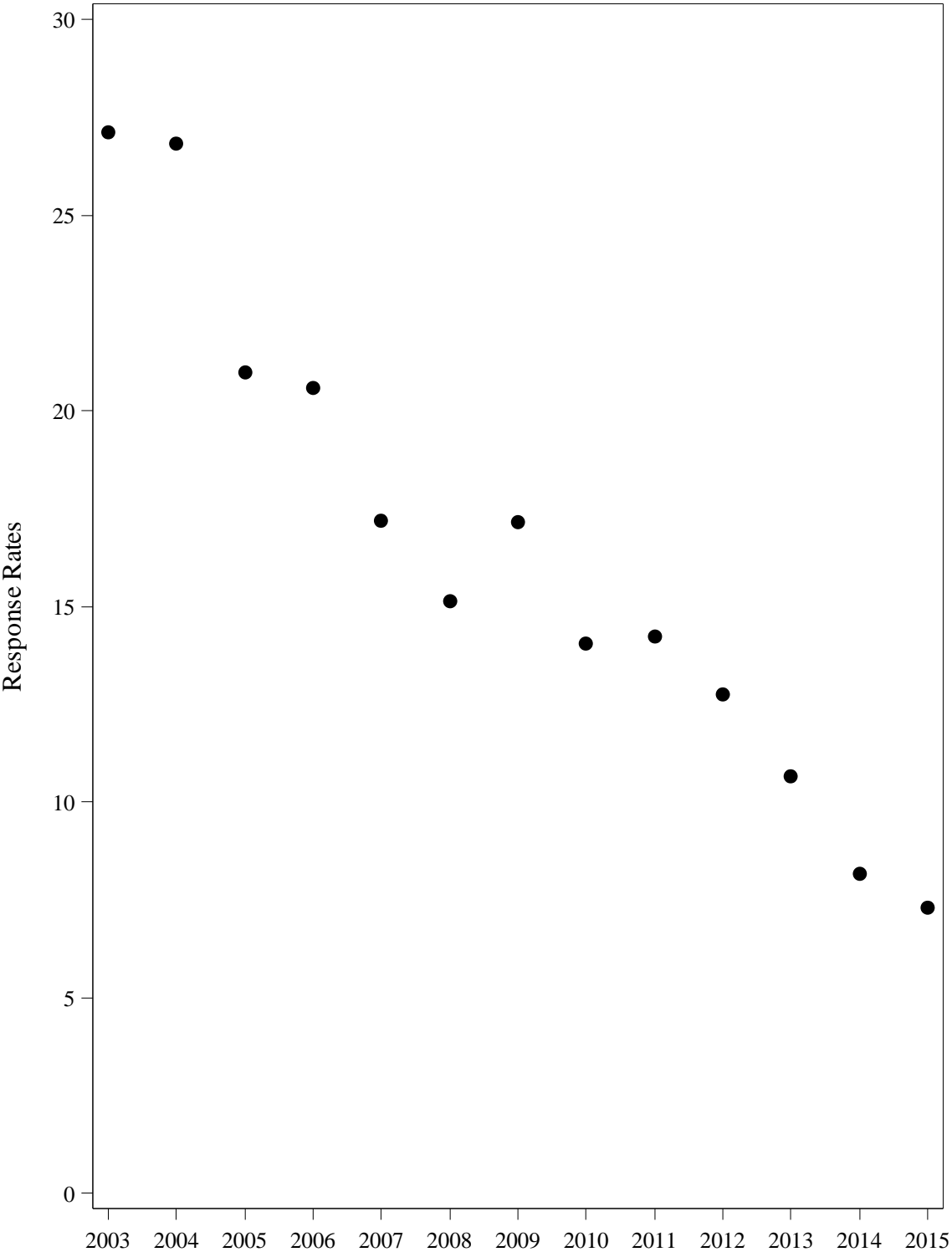
Table 1 provides final response rates for the 2015 CHTS and FES. During 2015, the 2015 FES achieved an overall response rate of 35.1%. Among states, response rates ranged from 32.3% in NJ to 44.7% in ME. In contrast, the CHTS achieved an overall response rate of 7.3%, and response rates ranged from 4.6% in RI to 11.2% in ME. The overall CHTS response rate for 2015 is consistent with the steady decline in response rates that has been observed over the past 10+ years (Figure 1).

Table 1. Weighted response rates overall and by state for the 2015 FES and FES Pilot Study.

State	2015 CHTS	2015 FES
AL	11.0	35.2
CT	8.2	35.0
DE	8.0	37.1
FL	7.5	34.3
GA	9.1	32.6
LA	8.0	32.5
ME	11.2	44.7
MD	4.8	36.6
MA	5.7	37.6
MS	9.1	34.9
NH	8.8	39.1
NJ	7.1	32.3
NY	6.6	33.6
NC	9.2	37.2
RI	4.6	38.1
SC	9.9	38.3
VA	7.6	38.3
Overall	7.3	35.1

Note: American Association for Public Opinion Research Response Rate 2 (AAPOR RR2). Response rate formula excludes ineligible addresses.

Figure 1. Annual CHTS response rates (AAPOR RR2) from the period 2003-2015.



FES/CHTS Estimate Comparisons

Overall, the FES estimate of total shore and private boat fishing effort across all states and waves (waves 1-4, 2015) is 4.7 times larger than the corresponding CHTS estimate (245,000,000 angler trips vs. 52,000,000 angler trips). This result is similar to pilot study results, where the overall FES estimate was 4.1 times larger than the CHTS estimate. We believe that the larger difference between FES and CHTS estimates in 2015 is the result of the expanded coverage of the FES to all Atlantic and Gulf of Mexico states in 2015, as well as the continued deterioration of the CHTS between 2013 and 2015 (i.e. declining response rates and coverage of landline telephone service).

As in the pilot study, overall differences between FES and CHTS estimates are larger for shore fishing (6.2X) than for private boat fishing (3.3X) (Figure 2). Differences between FES and CHTS estimates are larger for shore fishing (Figures 3a-6a) than private boat fishing (Figures 3b-6b) in all states. Differences between FES and CHTS estimates range from a factor of 2.2 for private boat fishing in Louisiana and Alabama to a factor of 11.1 for shore fishing in Georgia.

Figure 2. 2015 FES and CHTS effort estimates and the ratio of FES to CHTS estimates by fishing mode across all states and waves (wave 1-6, 2015).

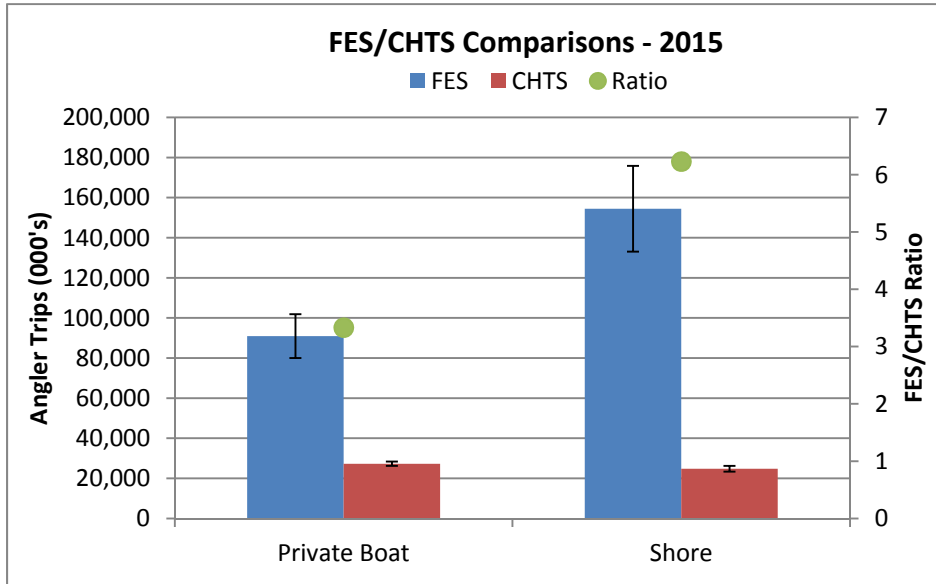


Figure 3a. 2015 FES and CHTS shore fishing effort estimates by state, North Atlantic subregion

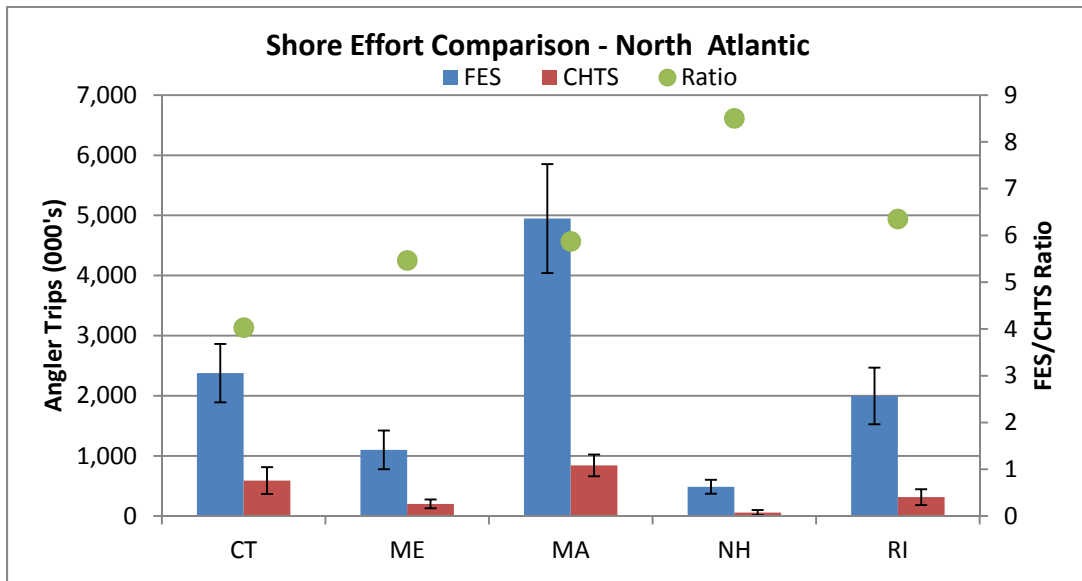


Figure 3a. 2015 FES and private boat fishing effort estimates by state, North Atlantic subregion

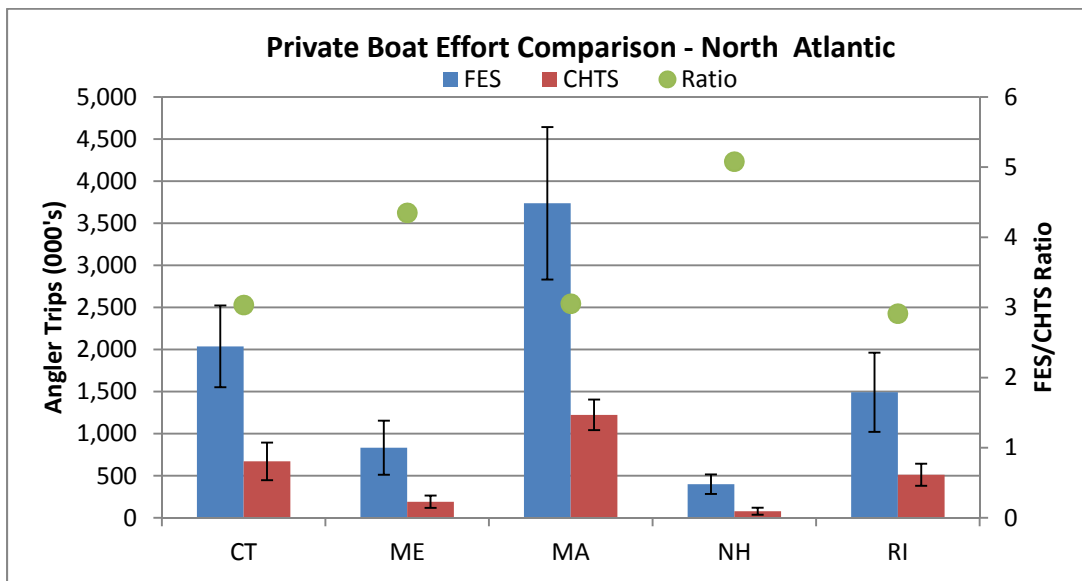


Figure 4a. 2015 FES and CHTS shore fishing effort estimates by state, Mid Atlantic subregion

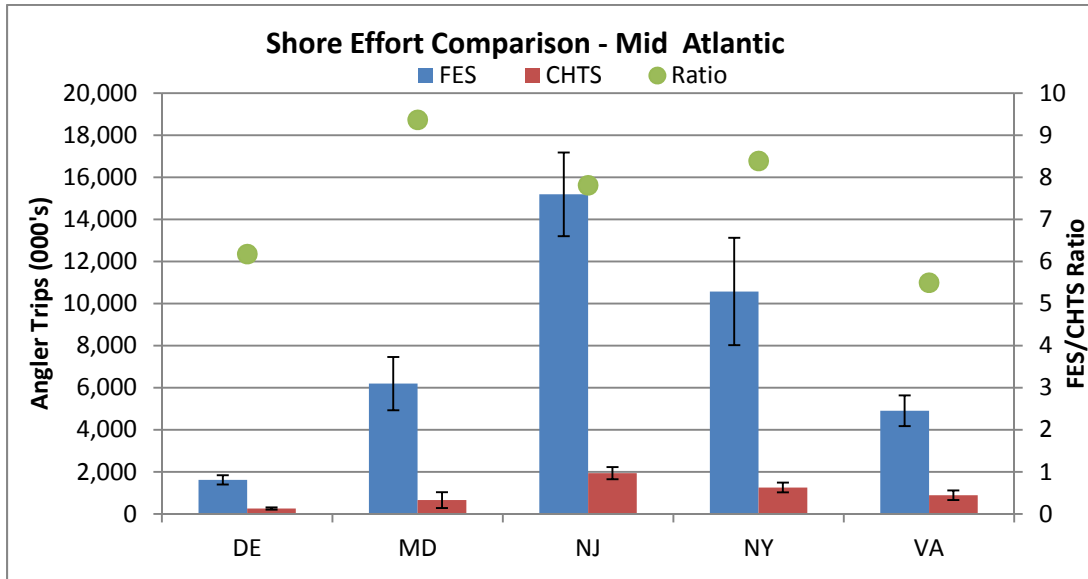


Figure 4b. 2015 FES and private boat fishing effort estimates by state, Mid Atlantic subregion

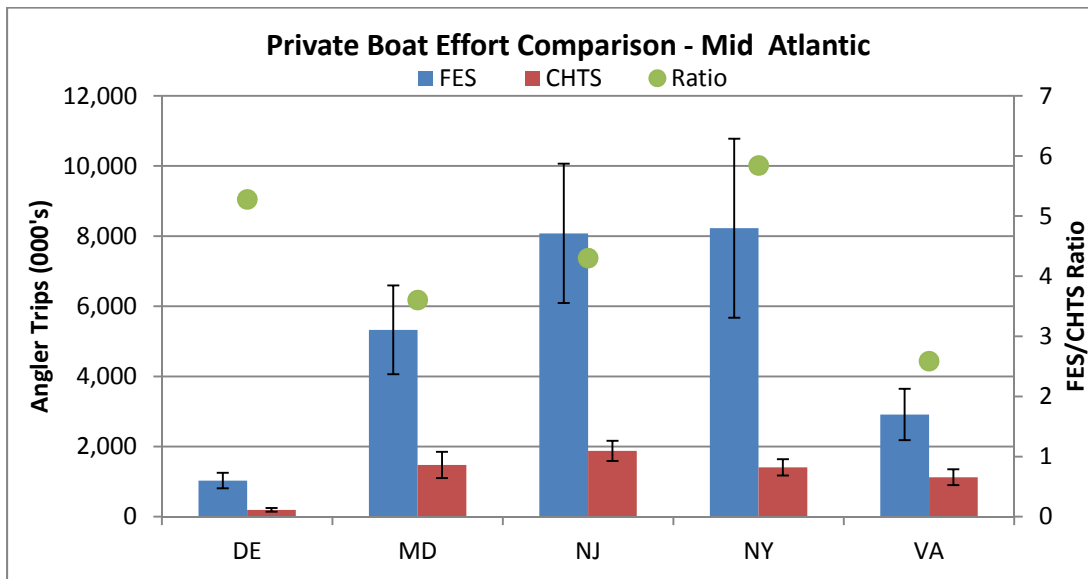


Figure 5a. 2015 FES and CHTS shore fishing effort estimates by state, South Atlantic subregion

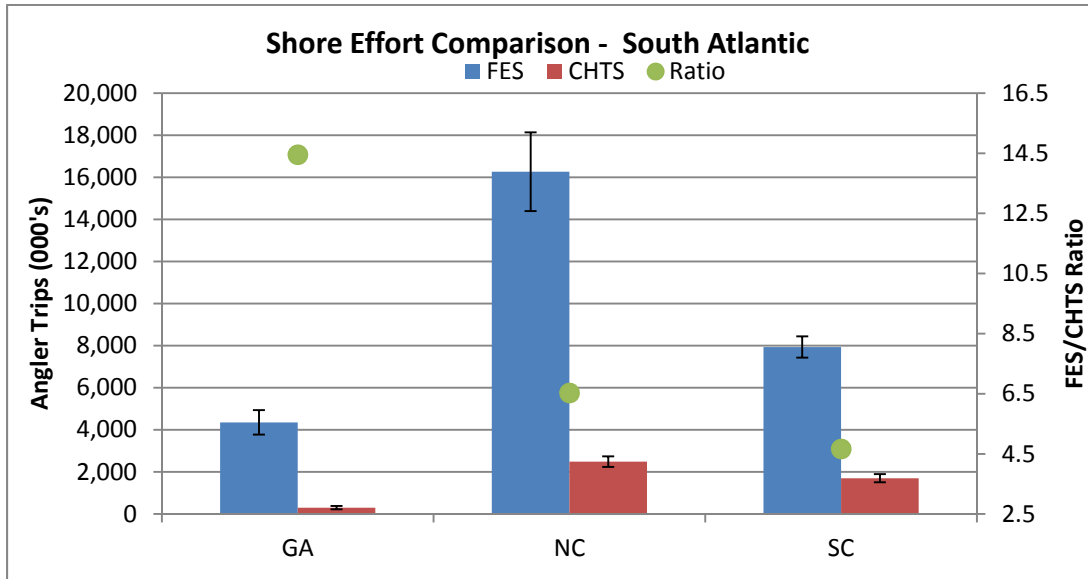


Figure 5b. 2015 FES and private boat fishing effort estimates by state, South Atlantic subregion

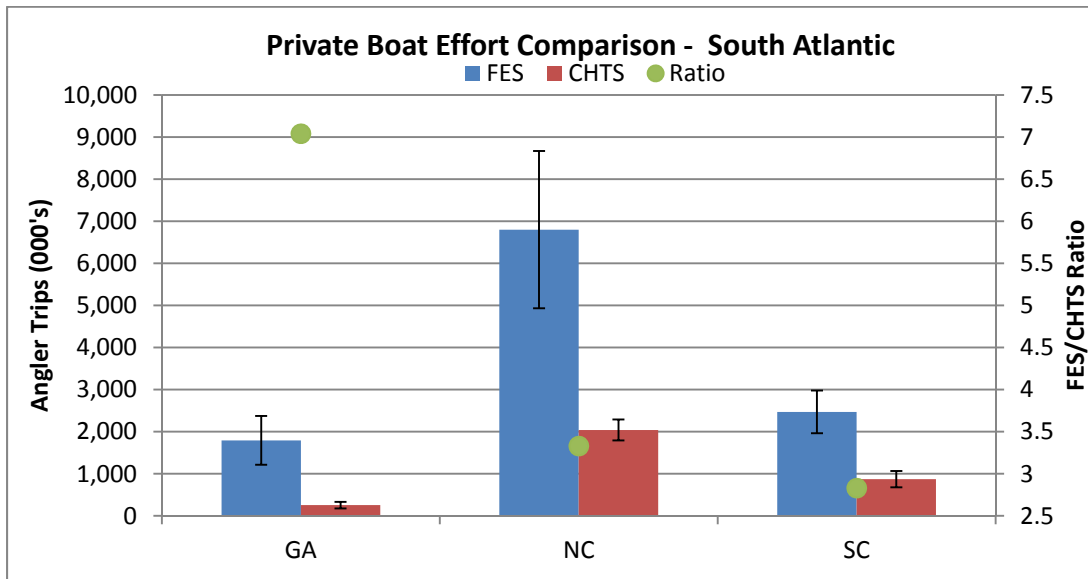


Figure 6a. 2015 FES and CHTS shore fishing effort estimates by state, Gulf of Mexico subregion

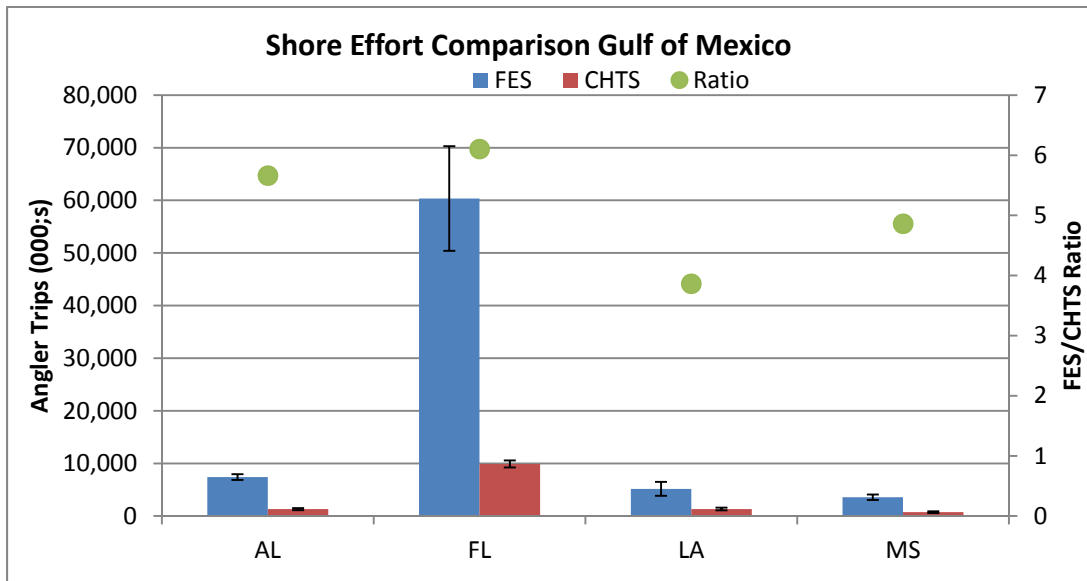
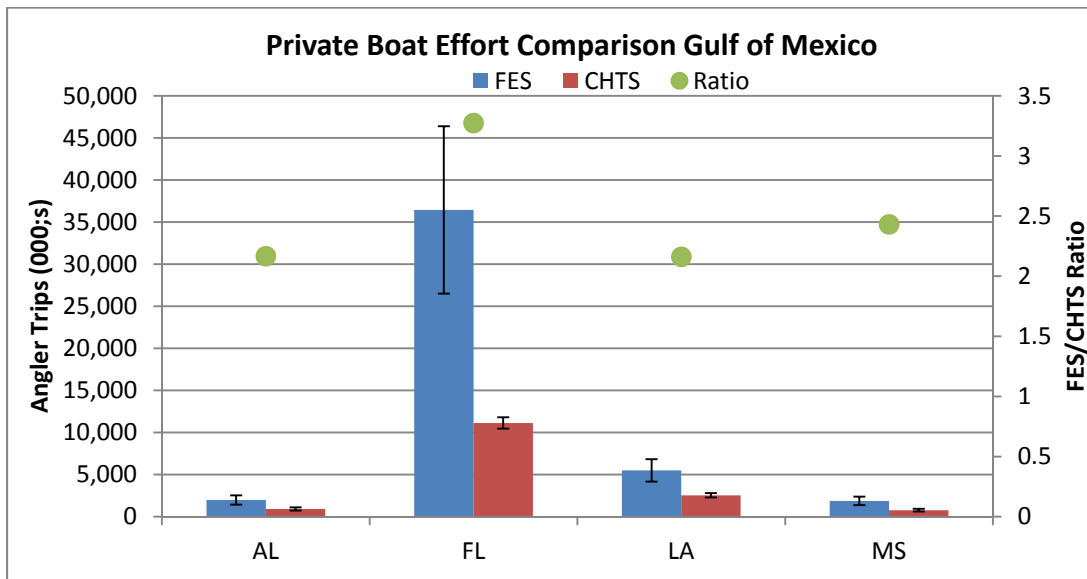


Figure 6b. 2015 FES and private boat fishing effort estimates by state, Gulf of Mexico subregion



References

Andrews, R., J.M. Brick, and N.M. Mathiowetz. 2014. Development and testing of recreational fishing effort surveys, testing a mail survey design. Available: http://www.st.nmfs.noaa.gov/Assets/recreational/pdf/2012-FES_w_review_and_comments_FINAL.pdf.