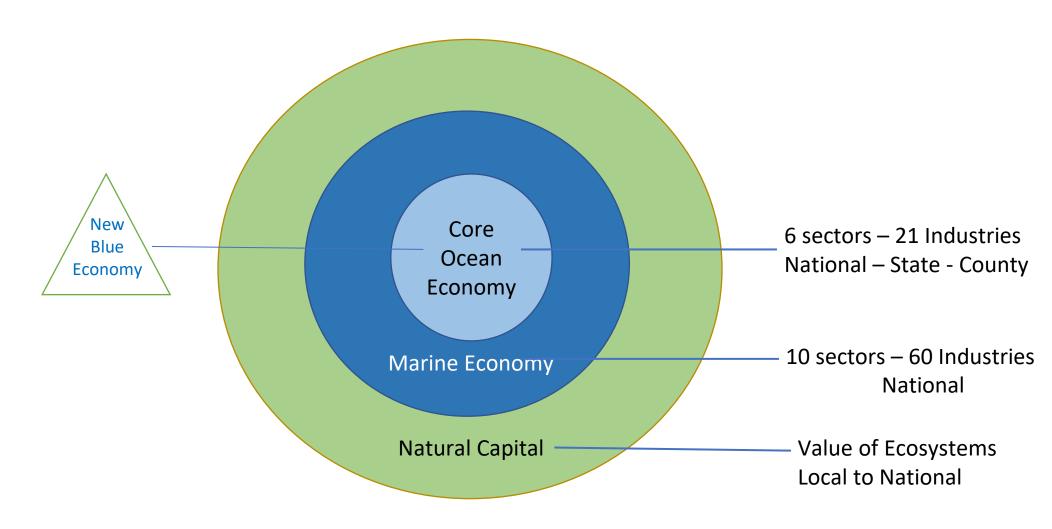




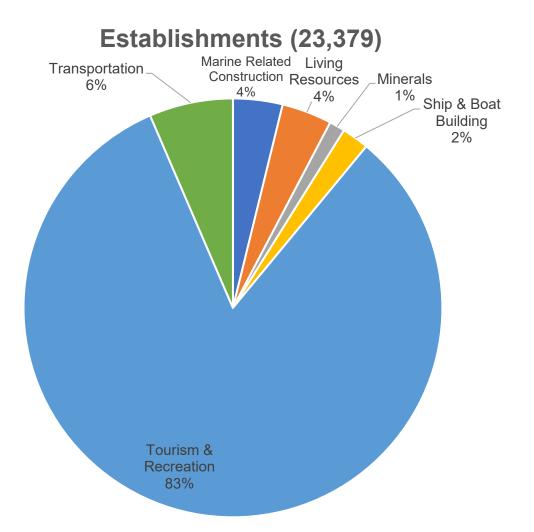
Charles S. Colgan PhD
Center for the Blue Economy
Middlebury Institute of International
Studies at Monterey

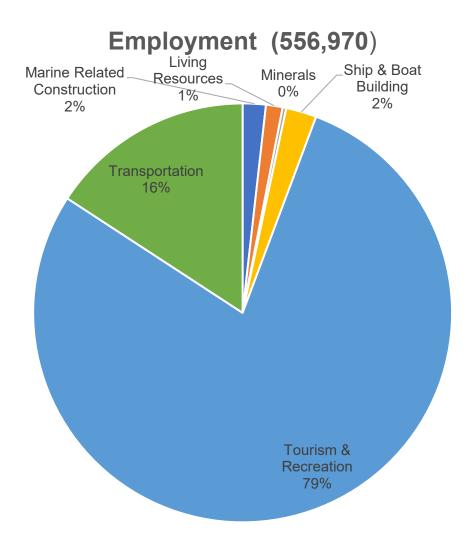
Florida: From Ocean Economy to Blue Economy

Expanding Views of the Ocean Economy

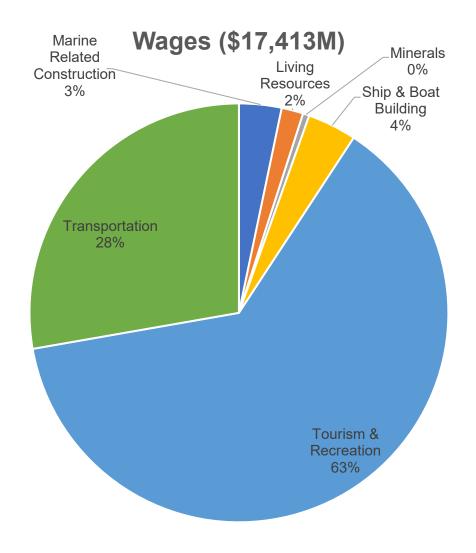


Florida Ocean Economy 2019

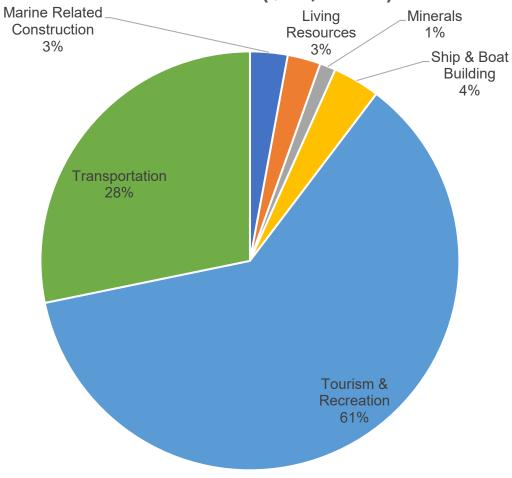


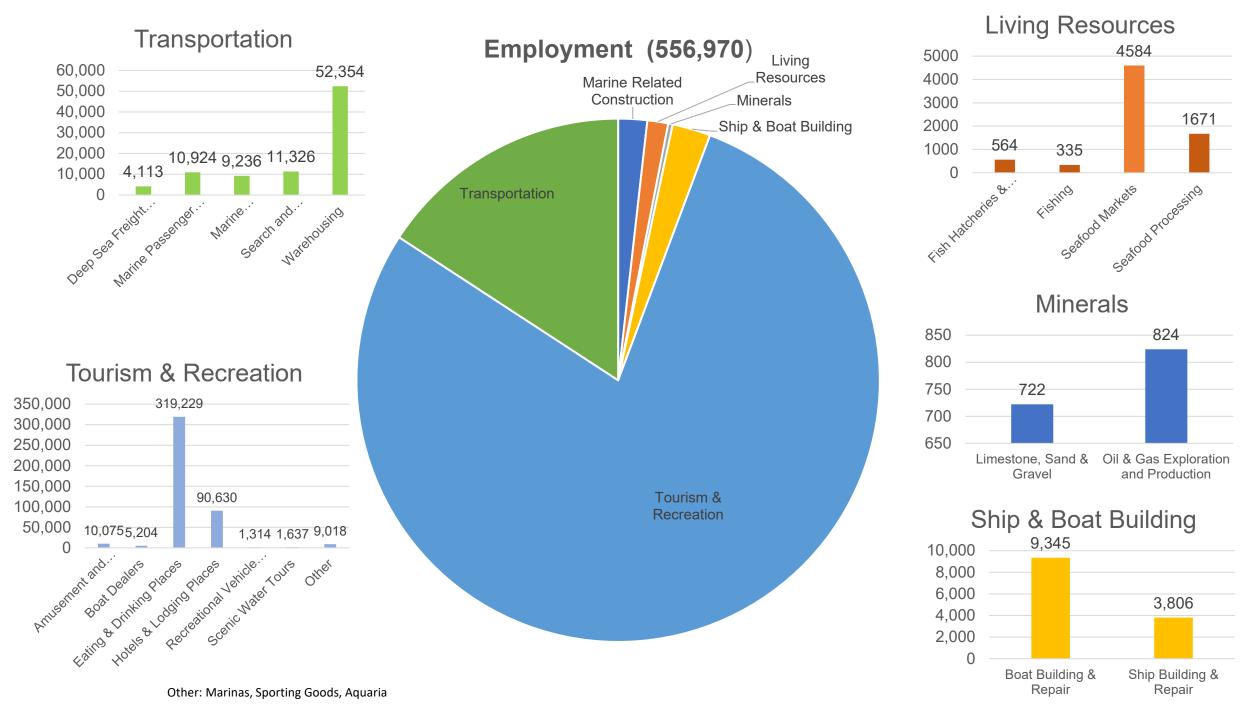


Florida Ocean Economy 2019



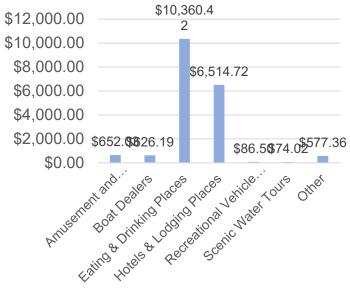


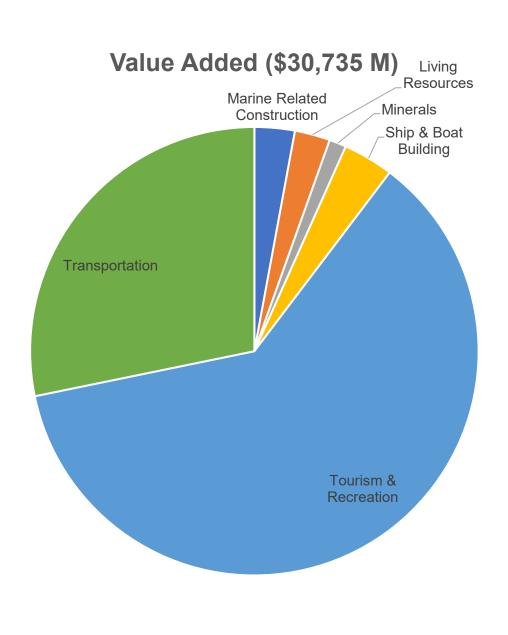












Living Resources



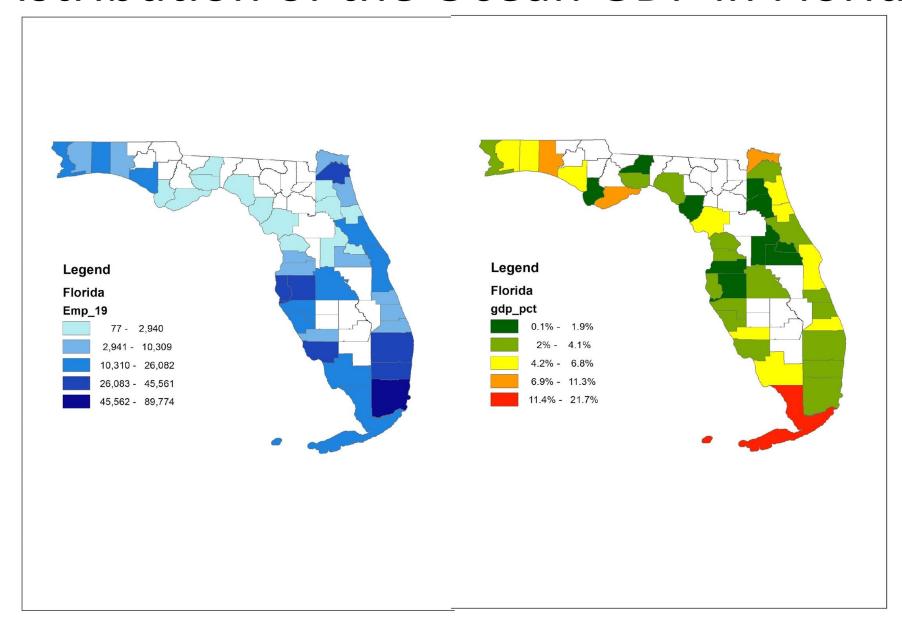




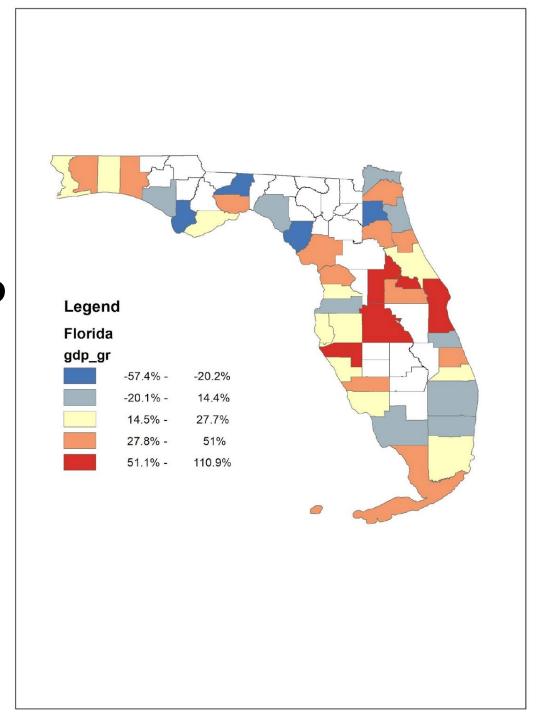
Production



Distribution of the Ocean GDP in Florida

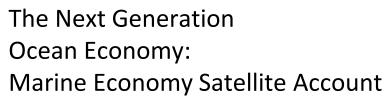


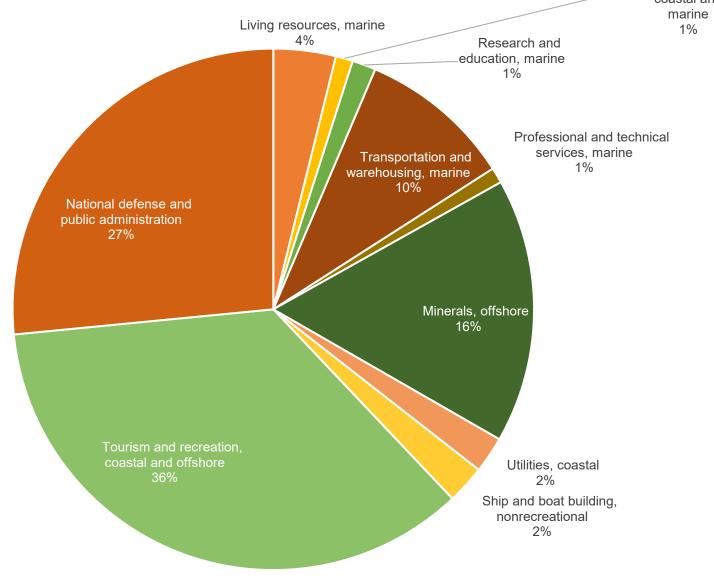
Growth in Ocean Real GDP 2010-2019

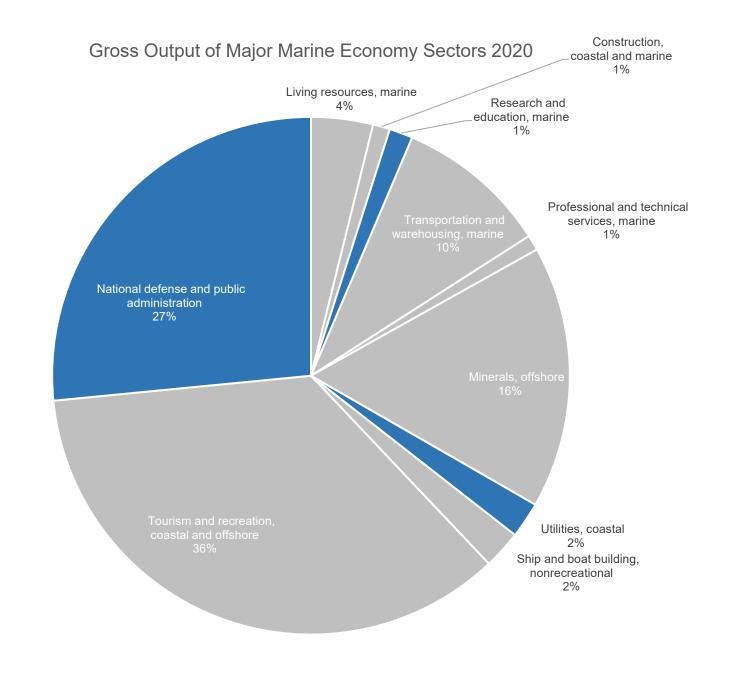


Gross Output of Major Marine Economy Sectors 2020

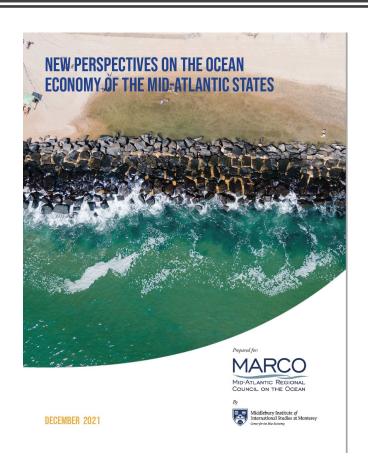
Construction, coastal and marine 1%





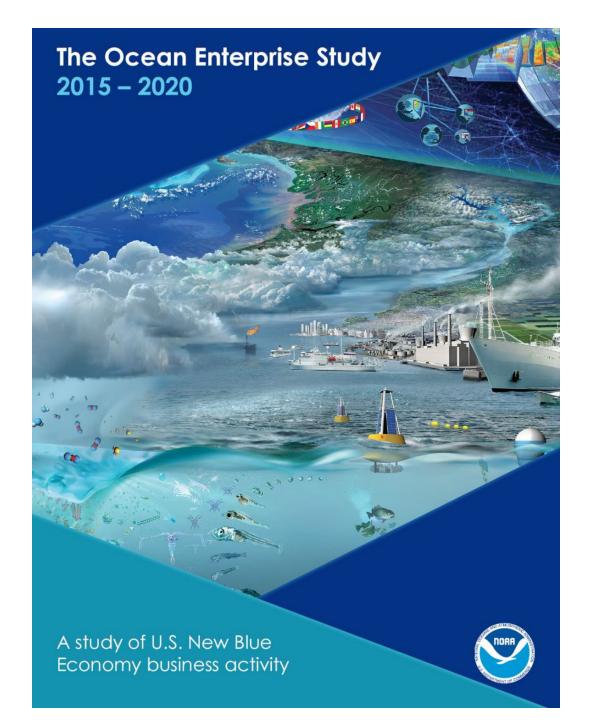


Adding MESA data to Ocean Economy





Ocean Sector	Establishments	Employment	Wages (\$M)	GDP (\$M)
Marine Construction	595	8,977	\$769.09	\$1,422.41
Living Resources	1,668	14,026	\$619.88	\$1,923.38
Offshore Mineral Extraction	289	1,527	\$107.04	\$292.01
Ship and Boat Building	154	40,837	\$3,024.82	\$4,278.06
Tourism and Recreation	39,597	628,927	\$18,616.81	\$41,596.83
Marine Transportation	2,326	153,373	\$10,203.62	\$17,384.25
ENOW Ocean Sectors	44,612	847,667	\$33,341.25	\$66,896.93
Marine Research and Education	37	7,231	\$235.35	\$316.87
State Government*	31	6,360	\$397.64	\$654.66
Tourism & Recreation Revised	21,852	417,411	\$2,615.40	\$5,810.70
Electric Power Generation	328	24,522	\$3,182.37	\$22,408.61
ENOW +	21,920	431,003	\$3,248.39	\$6,782.22
TOTAL REVISED OCEAN ECONOMY	26,935	649,743	\$17,972.83	\$32,082.32
Tourism & Recreation Peak	37,534	696,447	\$4,531.02	\$10,093.85



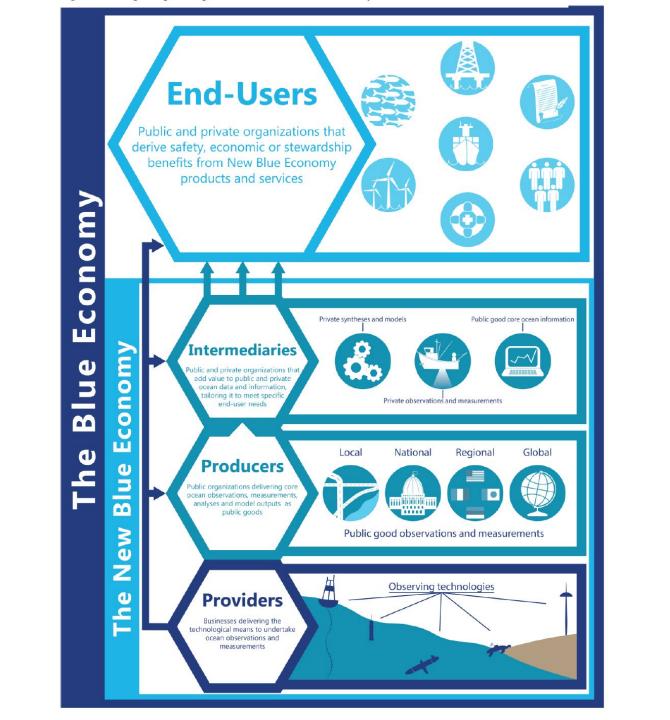
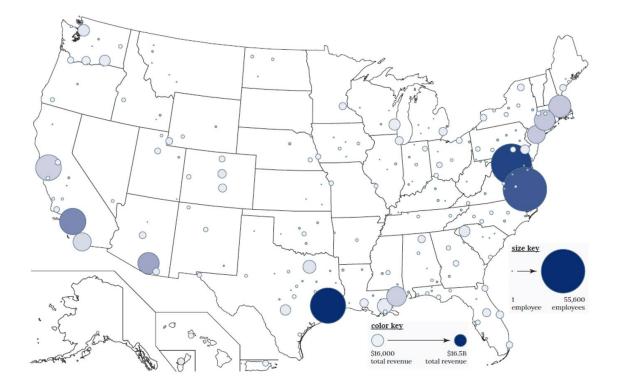


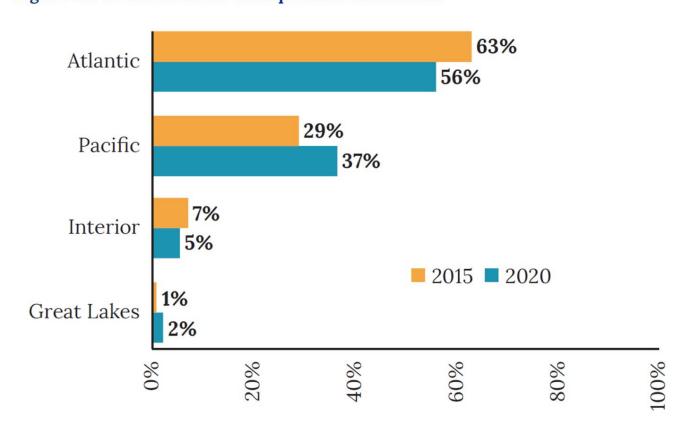
Figure 3.13. Geographic distribution of total employment and revenue of Ocean Enterprise businesses.





The New Blue Economy (Blue Tech)

Figure 3.7. Ocean of access of respondent businesses.





Natural Capital: The Value of Ecosystem Services

Natural Infrastructure: Wetlands Attenuating Flood Damages:

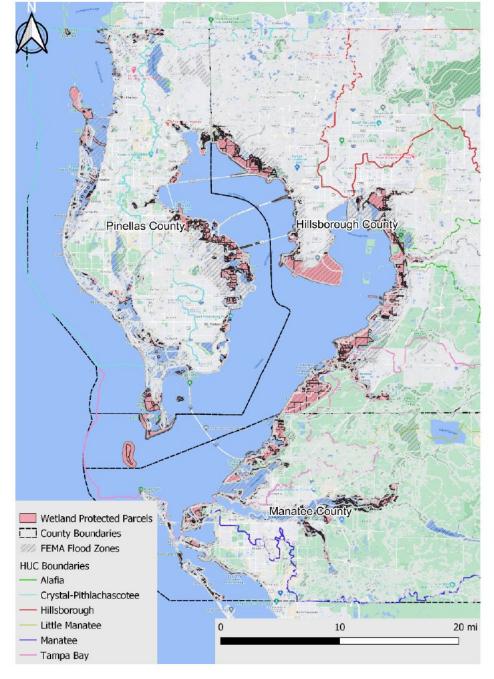


Figure VIII-3. Tampa Bay Wetlands and Parcels

Blue Carbon: Keeping Wetlands Intact and Carbon out of the Atmosphere





Tampa Bay	Total hectares in analysis	Estimated benefits per hectare of wetlands (\$Thousands)		Total Estimated Benefits (\$Millions)	
		Low estimate	High estimate	Low estimate	High Estimate
Natural Infrastructure	34,377	\$26.2	\$78.7	\$902.0	\$2,705.1
Coastal Blue Carbon ⁷³	24,439	\$1.2	\$6.6	\$7.7	\$44.2
Total				\$909.7	\$2,749.3

The Value of the Ocean and Coasts for Florida

- In 2019
 - 24,000 establishments
 - 557,000 employees
 - \$17.4 billion in wages
 - \$30.7 billion in GDP
- To Be Added:
 - National Defense
 - Research and Education
 - State Government
 - Services
 - Real Estate
 - Natural Capital

