

COVID-19 Tennessee County by County Hospital Bed Demand versus Supply

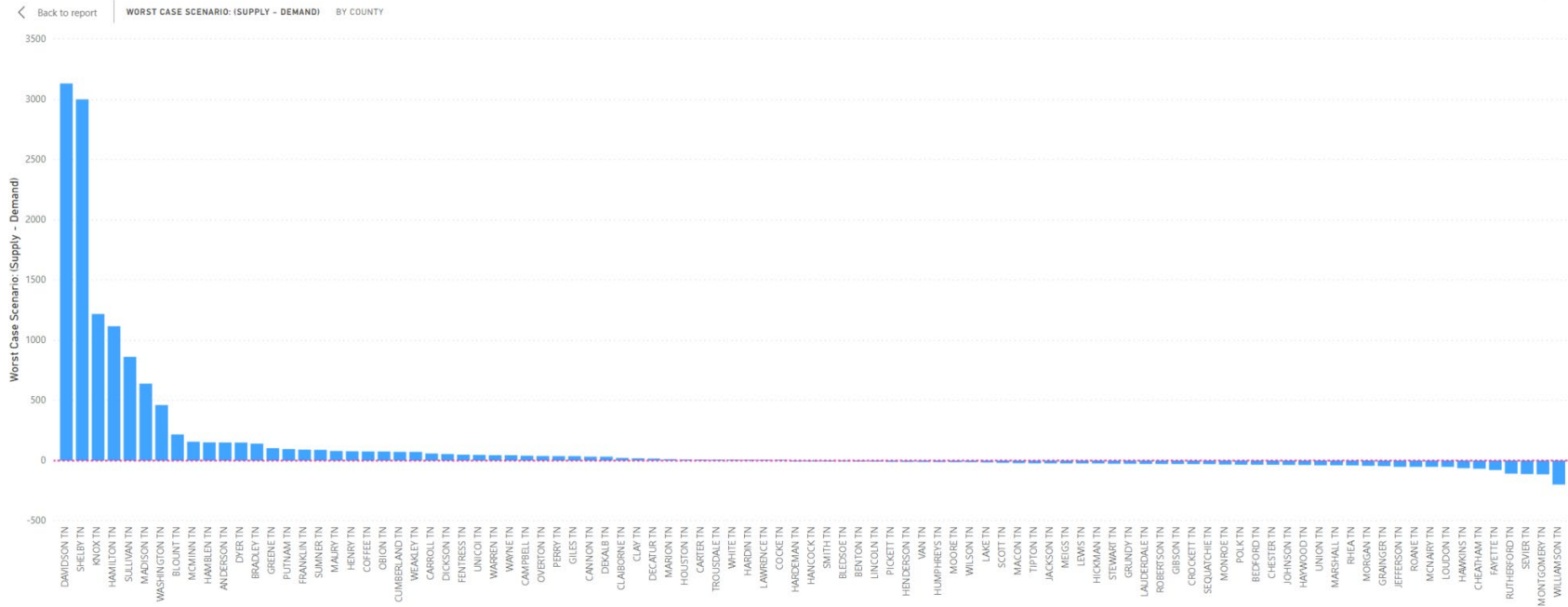


Fig 1: The above figure shows Supply minus Demand at peak using the Imperial-College-COVID19-NPI-modelling-16-03-2020 and the exponential regression model in the article published. All appearing above the red dashed line have capacity even at peak. All Counties that at or falling below the red line are will not be able to meet demand. In this scenario, peak will hit mid-May. Planning for servicing counties that either do not have hospitals or overburdened systems should be made. Some Counties will have capacity to redirect to needed areas.

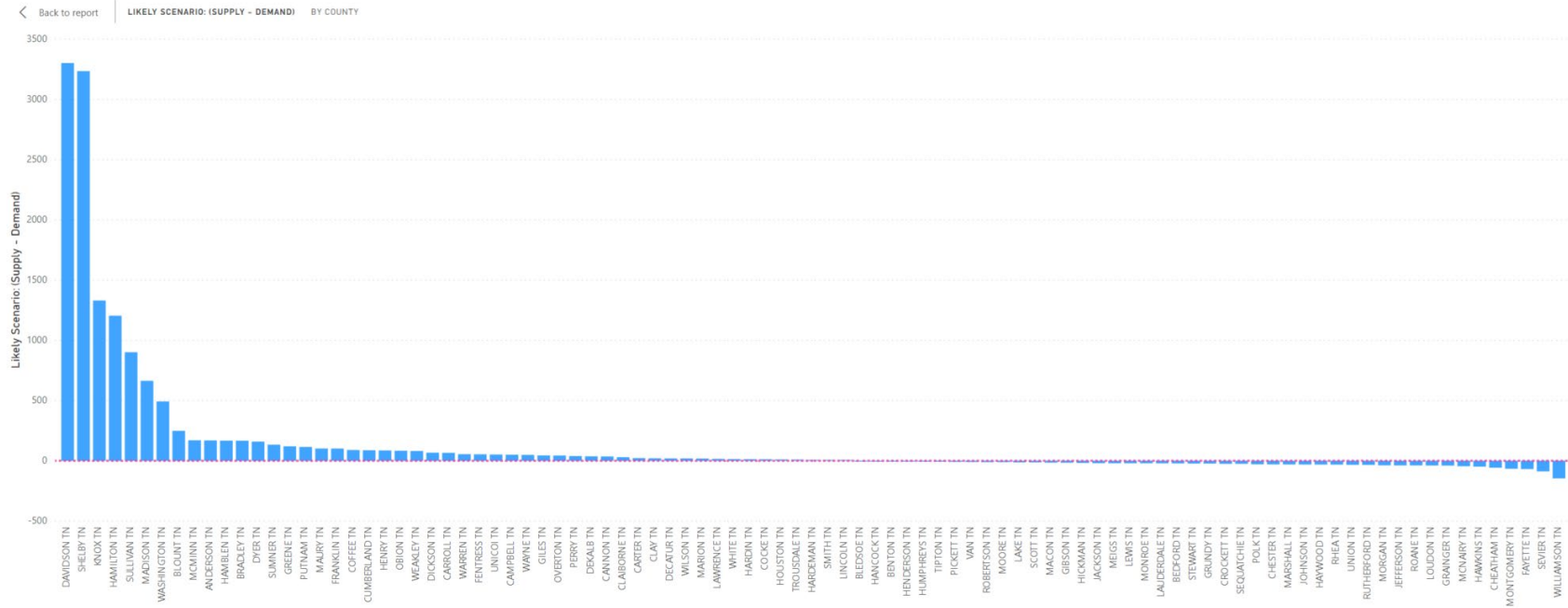


Fig 2: In the more likely scenario where some precautions are taken to flatten the curve, data suggests some Counties will still be unable to meet the needed demand. The peak will hit in early June. Planning for servicing counties that either do not have hospitals or overburdened systems should be made. Some Counties will have capacity to redirect to needed areas.

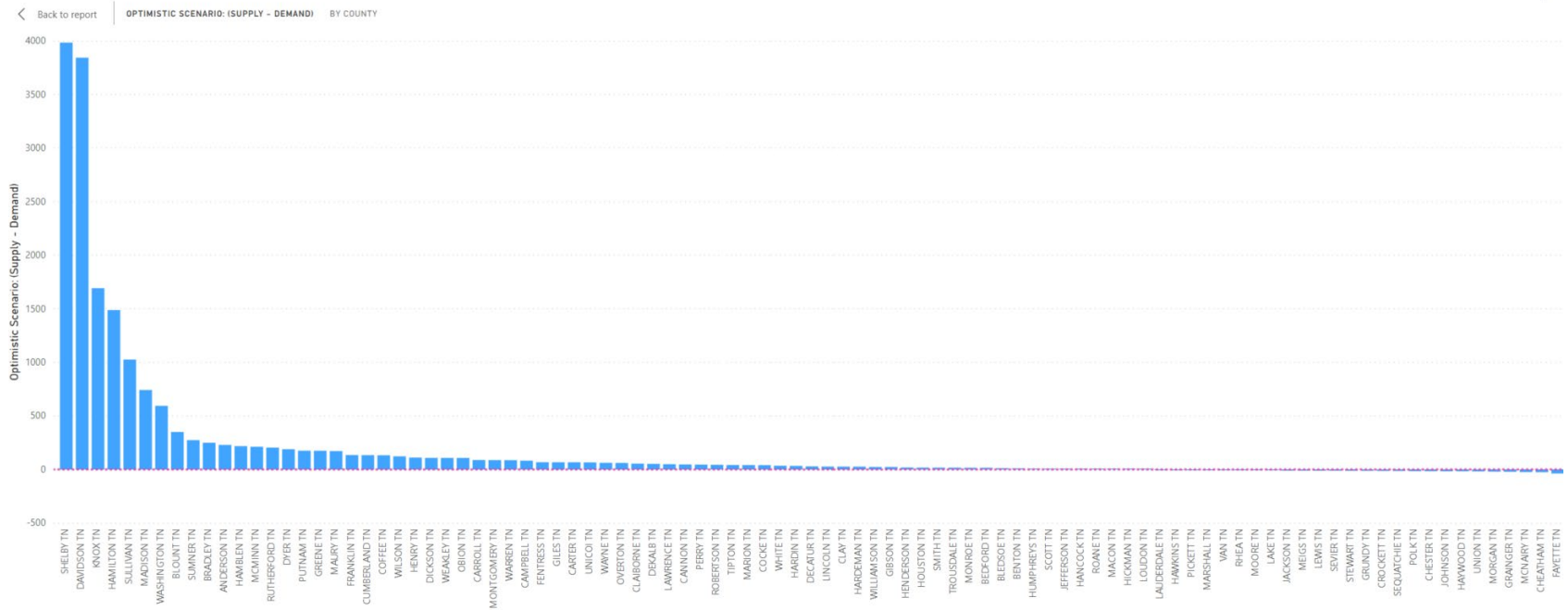


Fig 3: In the scenario where all precautions are taken to flatten the curve, data suggests almost all Counties will be able to meet the needed demand. The peak will hit in June. Planning for servicing counties that either do not have hospitals or overburdened systems should be made. Several Counties will have capacity to redirect to needed areas.

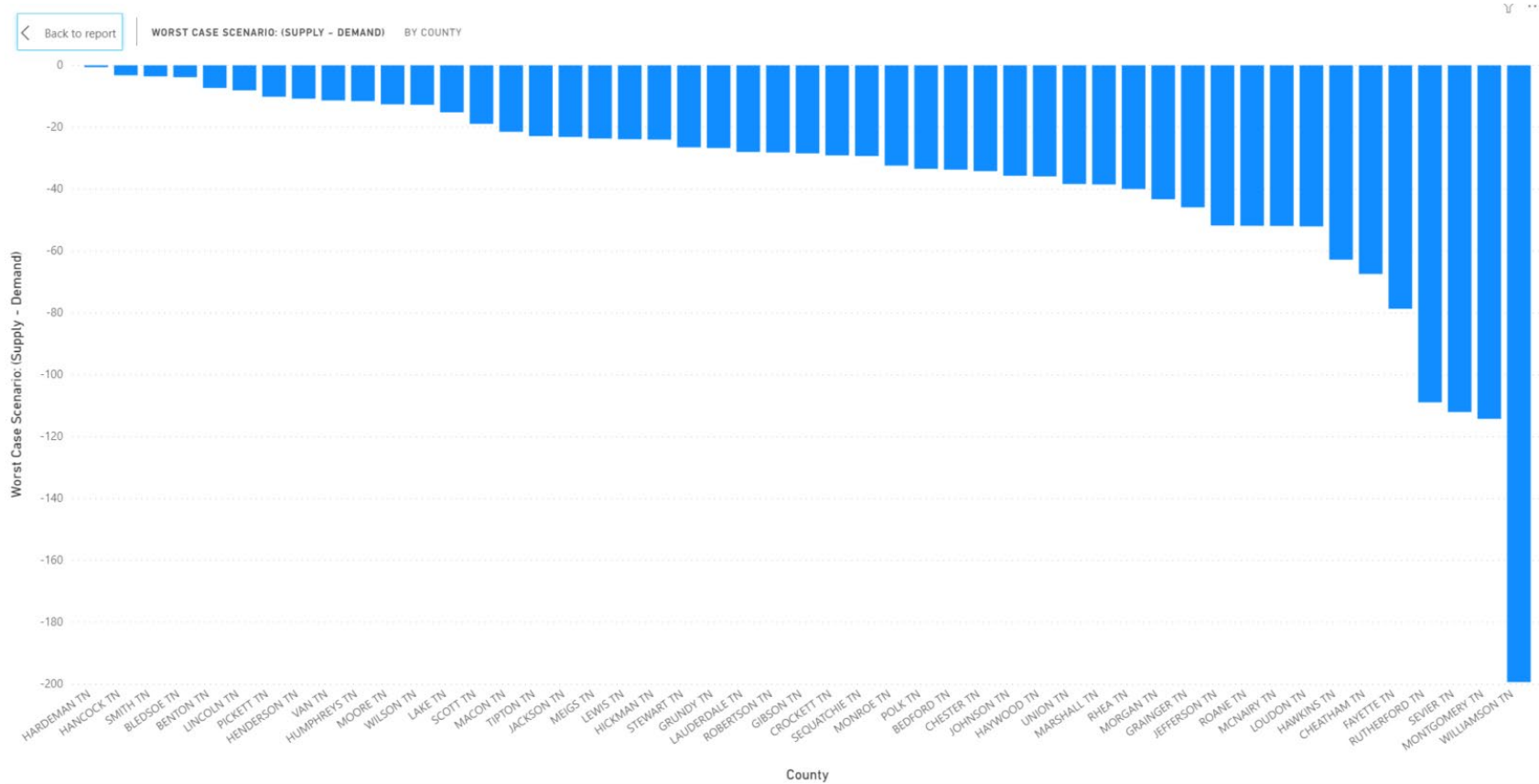


Fig 4: The figure above represents Counties that will run out of beds at peak for the Worst-Case scenario

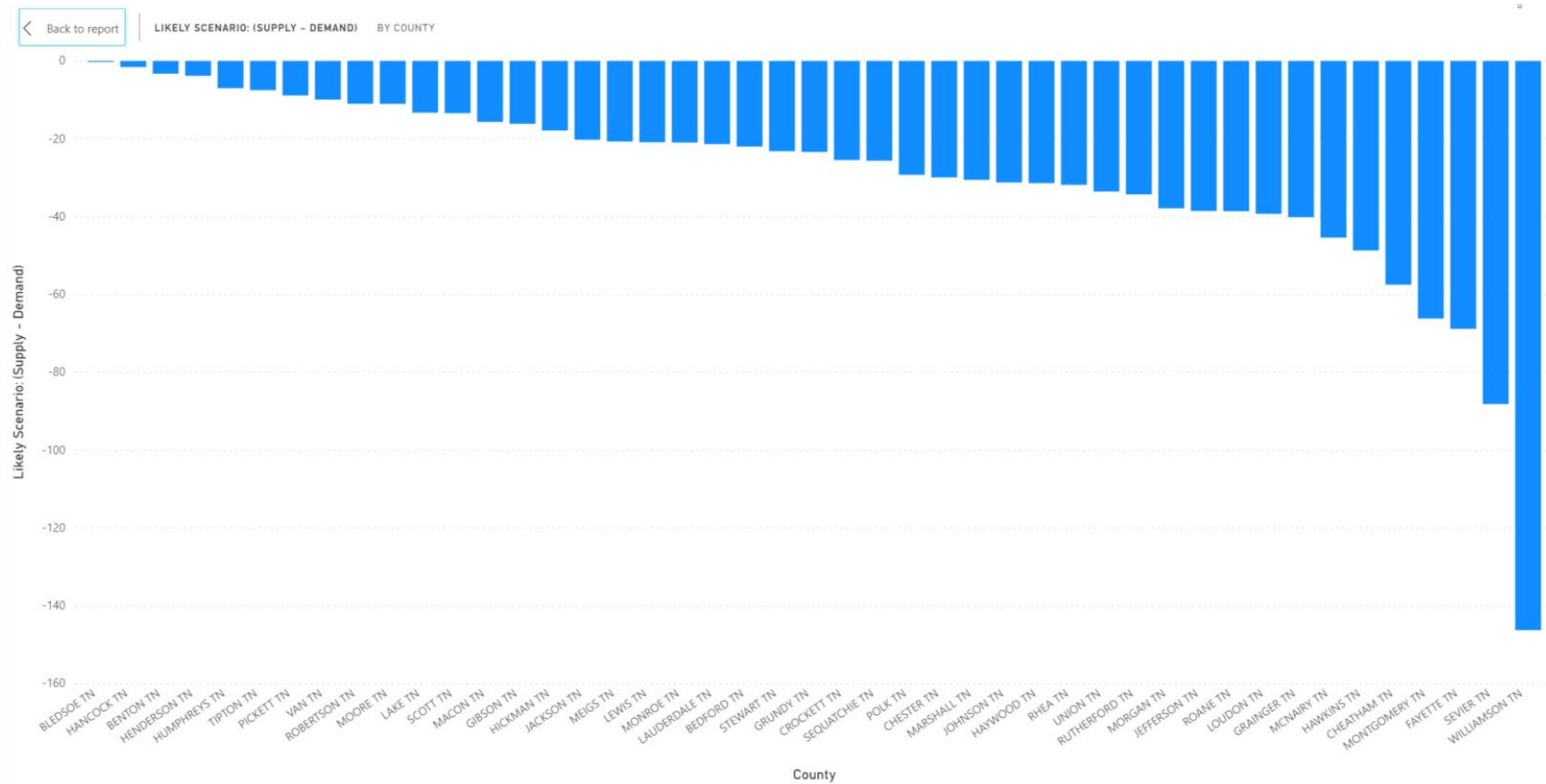


Fig 5: The figure above represents Counties that will run out of beds at peak for the Likely scenario

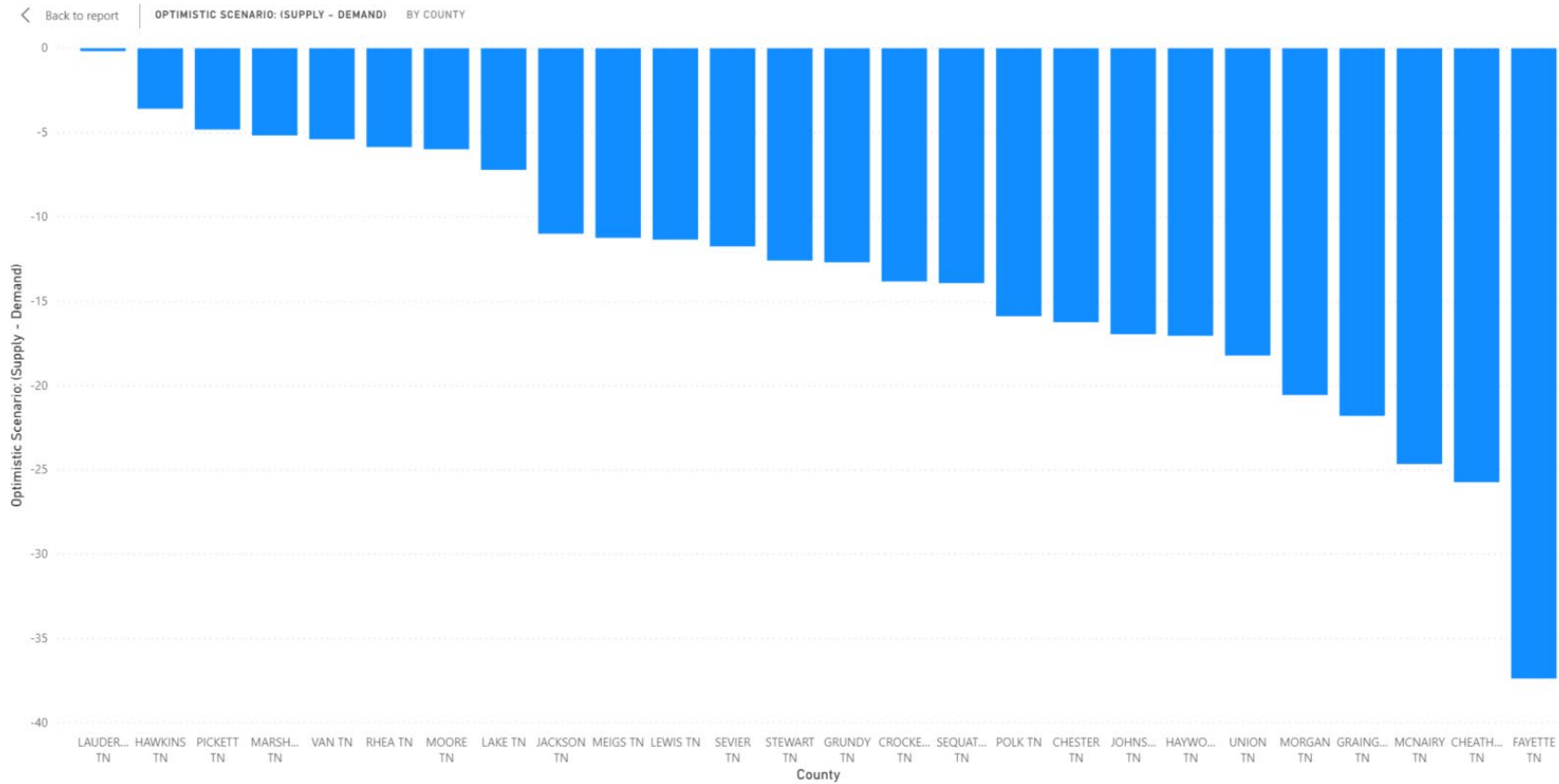


Fig 6: The figure above represents Counties that will run out of beds or do not have a hospital at peak for the Optimistic scenario

County	State	Total Population	65+ Population	Beds	With Full Precuations - Optimistic Scenario of needed Demand for Hospital Beds												With Some Precuations - Likely Scenario of needed Demand for Hospital Beds					With No Precuations - Worst Case Scenario of needed Demand for Hospital Beds					Counties to run out of beds (all precuations - Optimistic)	Counties to run out of beds (some precuations - likely)	Counties to run out of beds (no precuations - Worstcase)					
					O-April	O-May	O-June	O-Mid-June	O-July	O-August	L-Apr	L-May	L-June	L-July	L-August	W-April	W-May	Mid-May	W-June	W-July	W-August													
ANDERSON TN	TN	75538	17746	301	8	8	68	72	38	8	8	38	132	38	8	8	76	208	151	11	8													
WILSON TN	TN	128874	25490	245	13	13	116	122	84	13	13	64	226	64	13	13	129	354	258	19	13													

Table 1: Table with Data showing all three scenarios