

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

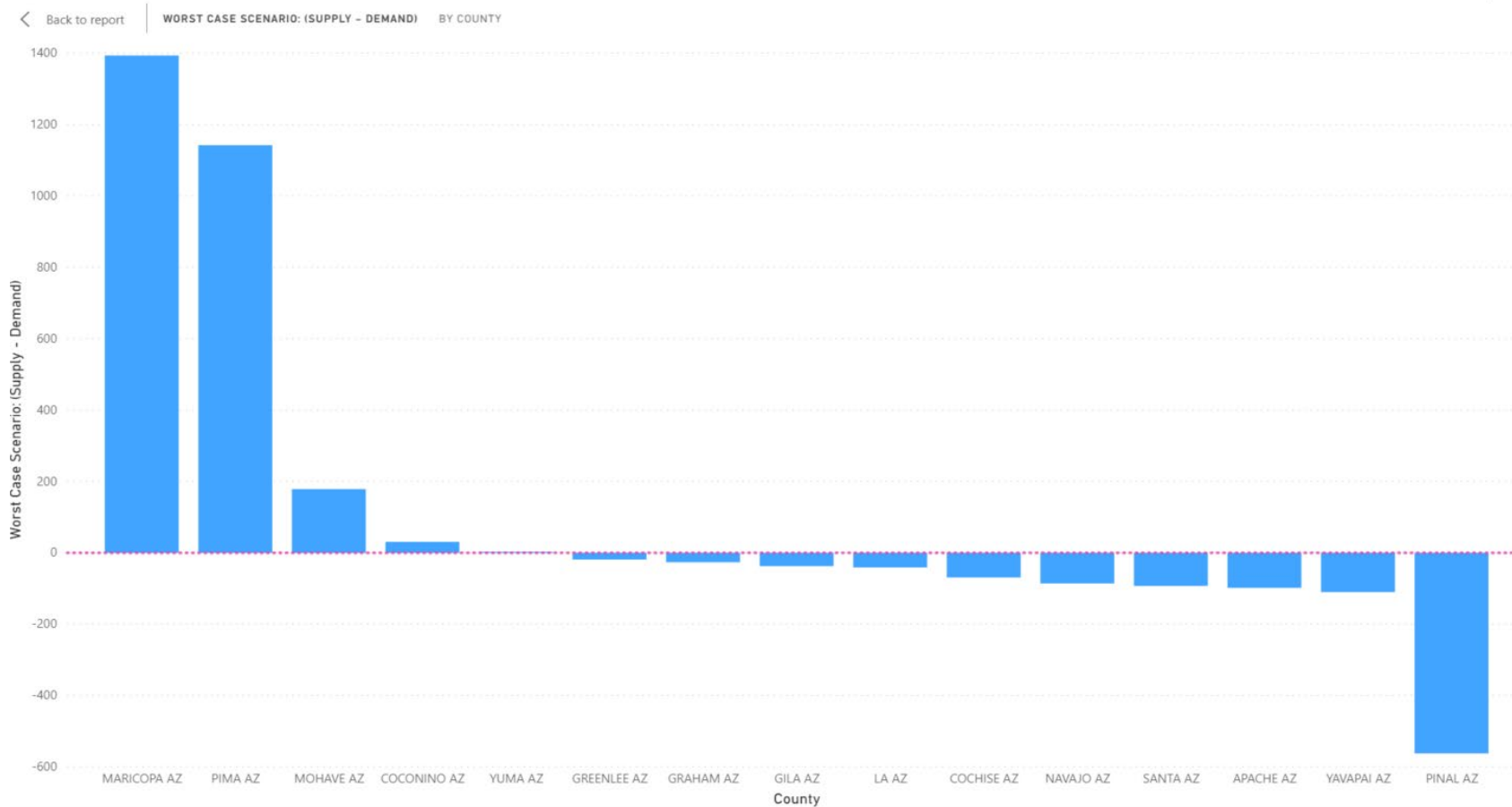


Fig 1: The above figure shows Supply minus Demand at peak using the Imperial-College-COVID19-NPI-modelling-16-03-2020 and the exponential regression model in the article published. All appearing above the red dashed line have capacity even at peak. All Counties that at or falling below the red line are 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.

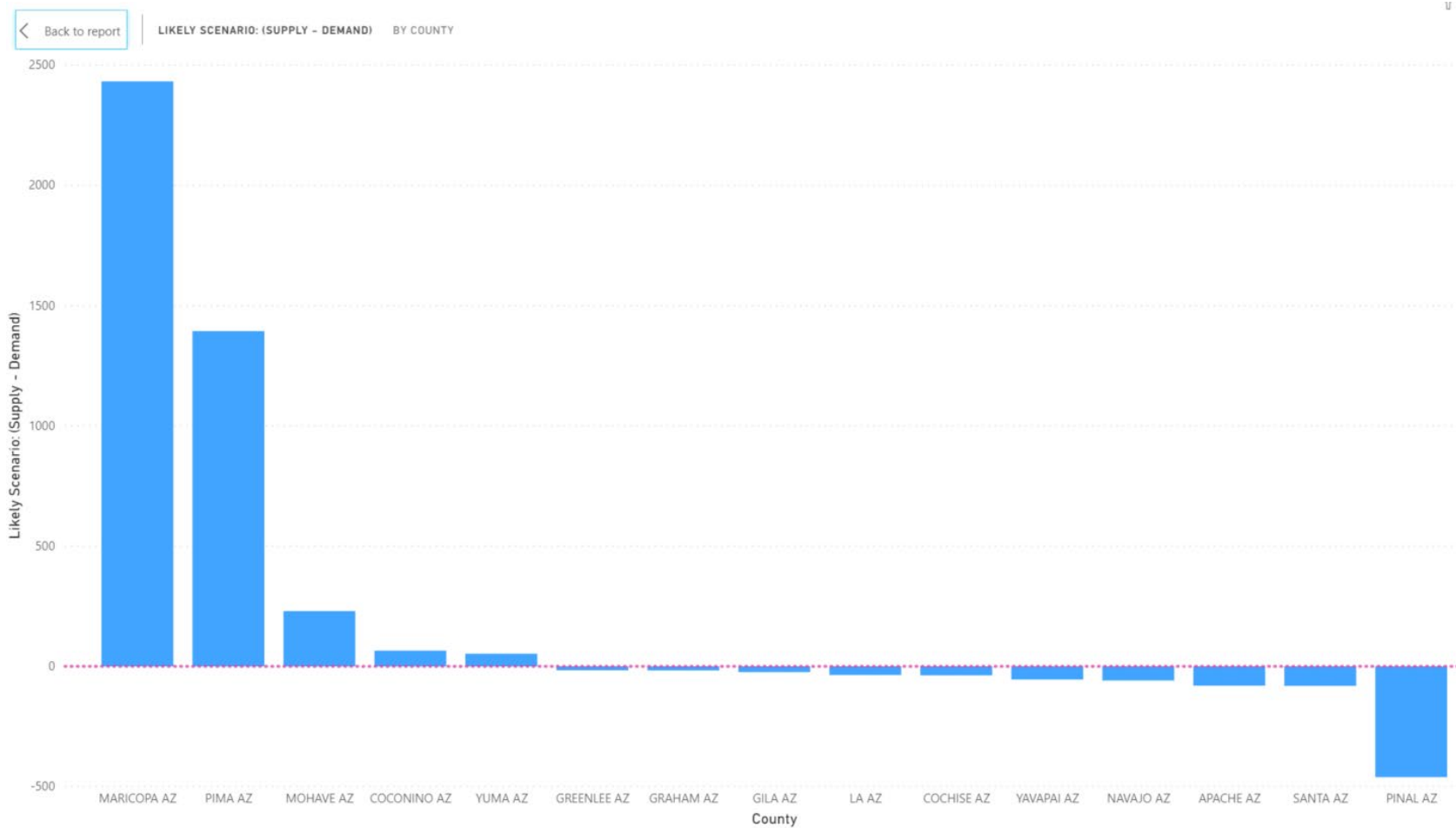


Fig 2: In the more likely scenario where some precautions are taken to flatten the curve, data suggests some Counties will still be unable to meet the needed demand. The peak will hit in early June. Planning for servicing counties that either do not have hospitals or overburdened systems should be made.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

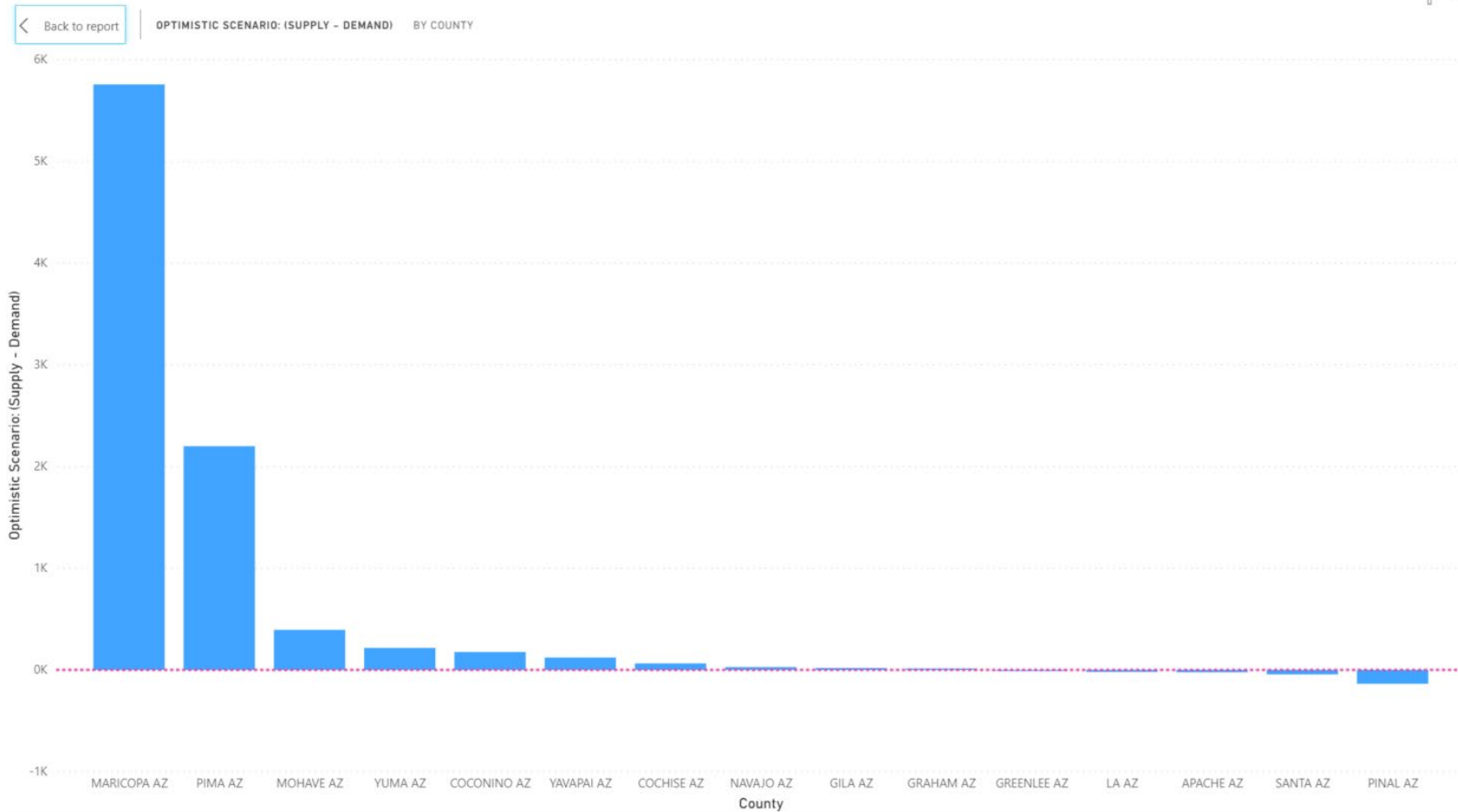


Fig 3: In the scenario where all precautions are taken to flatten the curve, data suggests almost all Counties will be able to meet the needed demand. The peak will hit in June. Planning for servicing counties that either do not have hospitals or overburdened systems should be made. Several Counties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

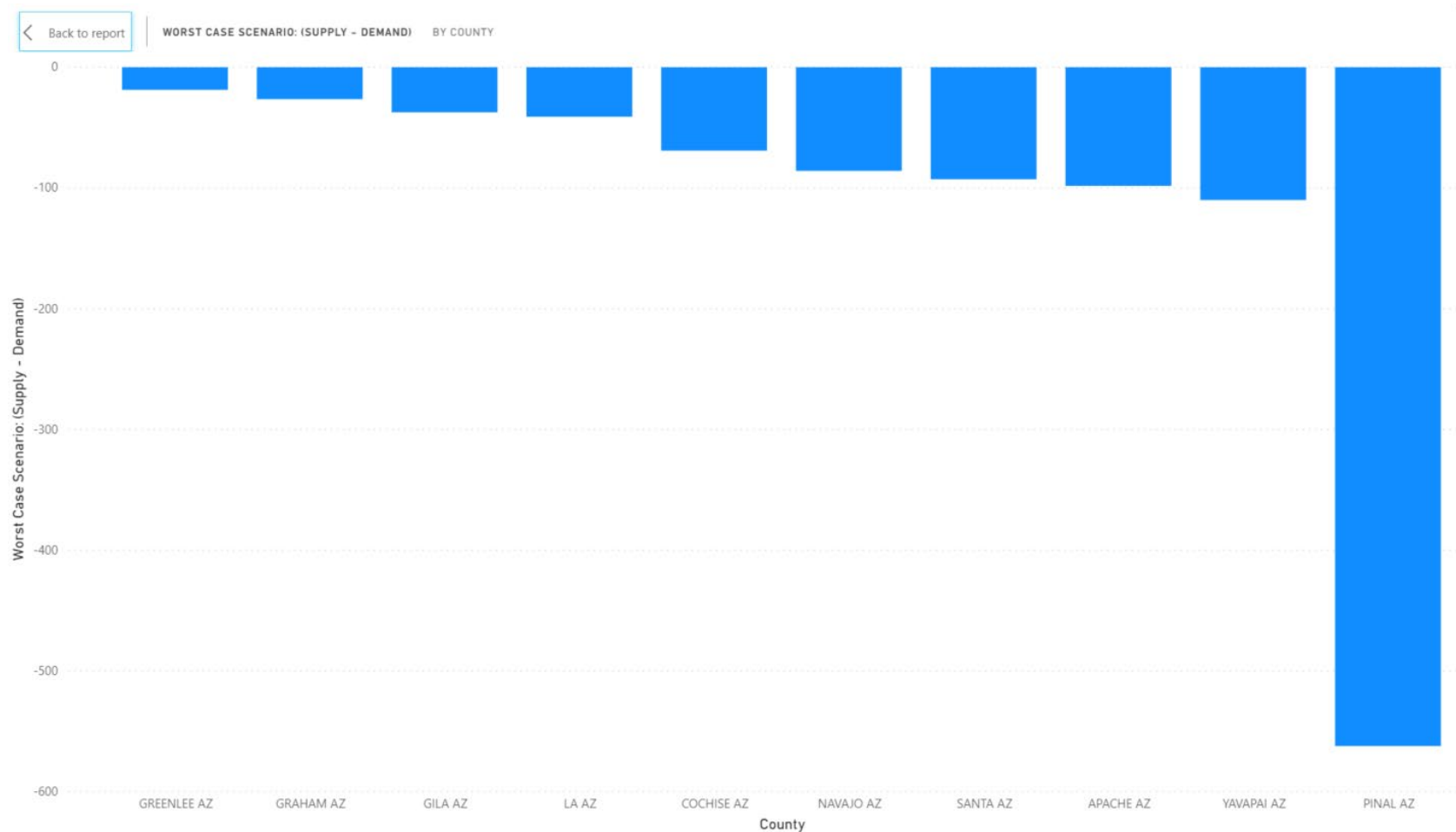


Fig 4: The figure above represents Counties that will run out of beds at peak for the Worst-Case scenario

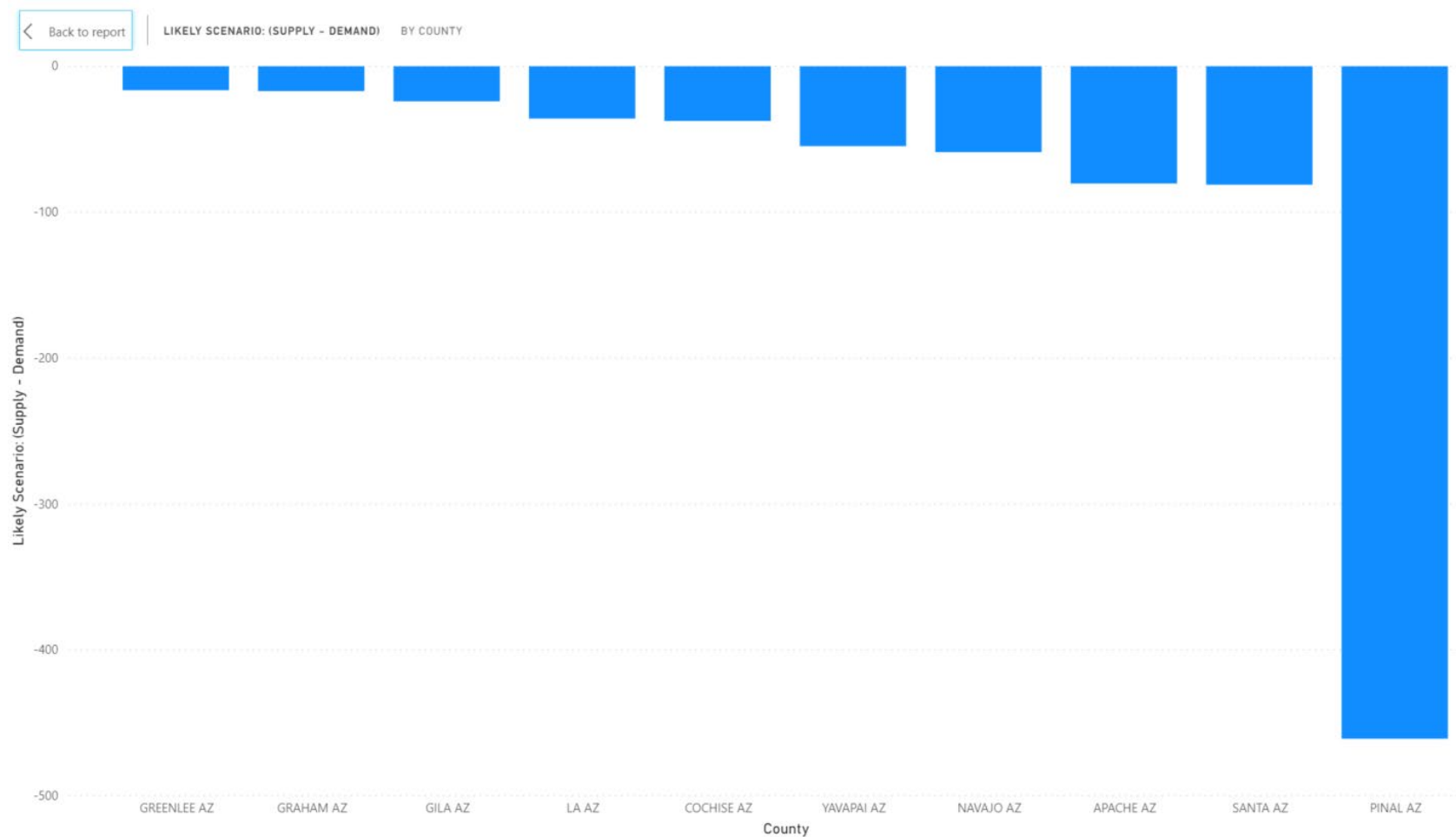


Fig 5: The figure above represents Counties that will run out of beds at peak for the Likely scenario

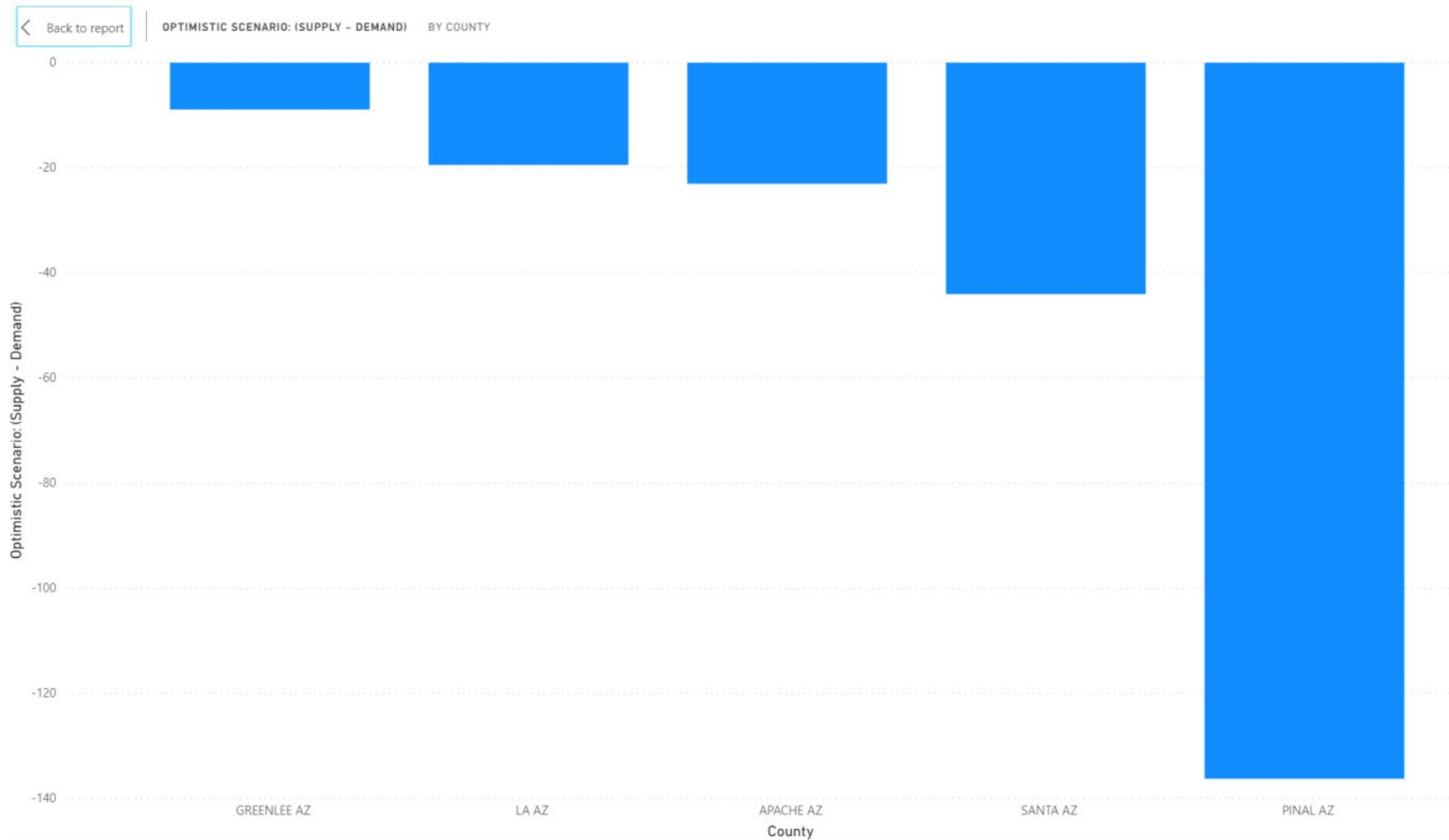


Fig 6: The figure above represents Counties that will run out of beds at peak for the Optimistic scenario

County	State	Total Population	65+ Population	Beds	With Full Precautions - Optimistic Scenario of needed Demand for Hospital Beds					With Some Precautions - Likely Scenario of needed Demand for Hospital Beds					With No Precautions - Worst Case Scenario of needed Demand for Hospital Beds					Counties to run out of beds (all precautions - Optimistic)	Counties to run out of beds (some precautions - Likely)	Counties to run out of beds (no precautions - 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		
APACHE AZ	AZ	71602	13063	45	7	7	64	68	36	7	7	36	125	36	7	7	72	197	143	11	7	x	x	x		
COCHISE AZ	AZ	126516	32745	184	13	13	114	120	63	13	13	63	221	63	13	13	127	348	253	19	13		x	x		
COCONINO AZ	AZ	138639	21834	308	14	14	125	132	69	14	14	69	243	69	14	14	139	381	277	21	14			x		
GILA AZ	AZ	53145	17427	69	5	5	48	50	27	5	5	27	93	27	5	5	53	146	106	8	5		x	x		
GRAHAM AZ	AZ	37700	6390	49	4	4	34	36	19	4	4	19	66	19	4	4	38	104	75	6	4		x	x		
GREENLEE AZ	AZ	9368	1526	0	1	1	8	9	5	1	1	5	16	5	1	1	9	26	19	1	1	x	x	x		
LA AZ	AZ	20477	8535	0	2	2	18	19	10	2	2	10	36	10	2	2	20	56	41	3	2	x	x	x		
MARICOPA AZ	AZ	4155501	737360	9705	416	416	3740	3948	2078	416	416	2078	7272	2078	416	416	4156	11428	8311	623	416				x	
MOHAVE AZ	AZ	204691	68317	588	20	20	184	194	102	20	20	102	358	102	20	20	205	563	409	31	20					
NAVAJO AZ	AZ	107902	22631	130	11	11	97	103	54	11	11	54	189	54	11	11	108	297	216	16	11		x		x	
PIMA AZ	AZ	1007257	223723	3157	101	101	907	957	504	101	101	504	1763	504	101	101	1007	2770	2015	151	101					
PINAL AZ	AZ	405537	94399	249	41	41	365	385	203	41	41	203	710	203	41	41	406	1115	811	61	41	x	x		x	
SANTA AZ	AZ	46358	9779	0	5	5	42	44	23	5	5	23	81	23	5	5	46	127	93	7	5	x	x		x	
YAVAPAI AZ	AZ	220972	78012	332	22	22	199	210	110	22	22	110	387	110	22	22	221	608	442	33	22		x		x	
YUMA AZ	AZ	204281	42326	410	20	20	184	194	102	20	20	102	357	102	20	20	204	562	409	31	20					x

Table 1: Table with Data showing all three scenarios