



Central Iowa COVID19 Update

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Aperio

Statistical Consulting

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Quick Stats¹

	Polk County	Iowa
Percent of population with 1 dose*	5%	3.3%
Percent of population with 2 doses*	51%	45.2%
7d Lab Test Positivity	1.6%	2%
14d Lab Test Positivity	1.5%	2.2%
Total cases per 100,000 the last 7d	11	18
Total cases per 100,000 the last 14d	28	35
Average daily cases the last 7d	8	79
Average 7-day new cases per 100,000	2	3

*Percent of entire population vaccinated to represent progress to herd immunity.

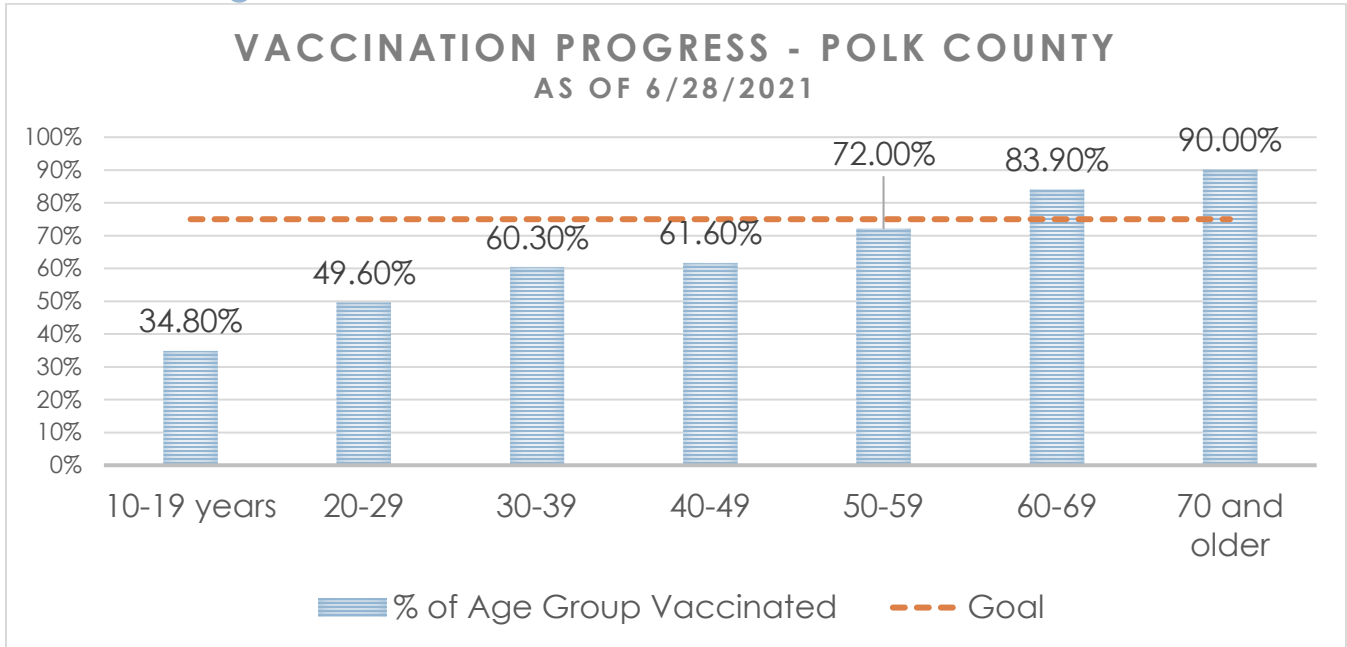
All data are sourced from <https://coronavirus.iowa.gov/pages/case-counts> with previous days refreshed daily. When recent data are unavailable, data from <https://github.com/nytimes/covid-19-data> may be used. Population of Polk County used is 490,161. Population of Iowa used is 3.155 million. Averages and percent positivity are subject to change with retrospectively refreshed data.

Critical Points, Media, and Research

- Polk County cases remain low, but the predictive model for the state shows an increase the next few weeks. An increase in activity is expected due to the Delta variant. Early studies show the Delta variant is susceptible to widely available vaccines.
- Hospitalizations are very low. The state is administering about 2000 doses per day. This rate is too low to reach herd immunity before the end of the year; however, Polk County is outpacing the state.
- [Study finds Pfizer and Moderna vaccines may offer COVID protection for years](#) A study in Nature showed immunity may last for years with the strongest protection among those who had COVID-19 and vaccination, followed by those completely vaccinated, followed by those with one dose.
- [Delta variant could become dominant strain in U.S., CDC director says](#)
- Myocarditis
 - [Today's ACIP meeting: myocarditis and booster shots - BNT162b2-elicited neutralization of B.1.617 and other SARS-CoV-2 variants | Nature](#)
- [Public health workers report being threatened and harassed during the pandemic - CBS News](#)
- [To fully vaccinate children against Covid-19 by the time school starts, many parents must act now](#)
- [Antibody Responses to SARS-CoV-2 after Infection or Vaccination in Children and Young Adults with Inflammatory Bowel Disease](#)
- [Pediatric Vaccination During the COVID-19 Pandemic | American Academy of Pediatrics](#)
- [Community-level evidence for SARS-CoV-2 vaccine protection of unvaccinated individuals | Nature Medicine](#)
- [Revealing public opinion towards COVID-19 vaccines with Twitter Data in the United States: a spatiotemporal perspective](#)
- [Molecular evidence of SARS-CoV-2 in New York before the first pandemic wave | Nature Communications](#)



Vaccine Progress

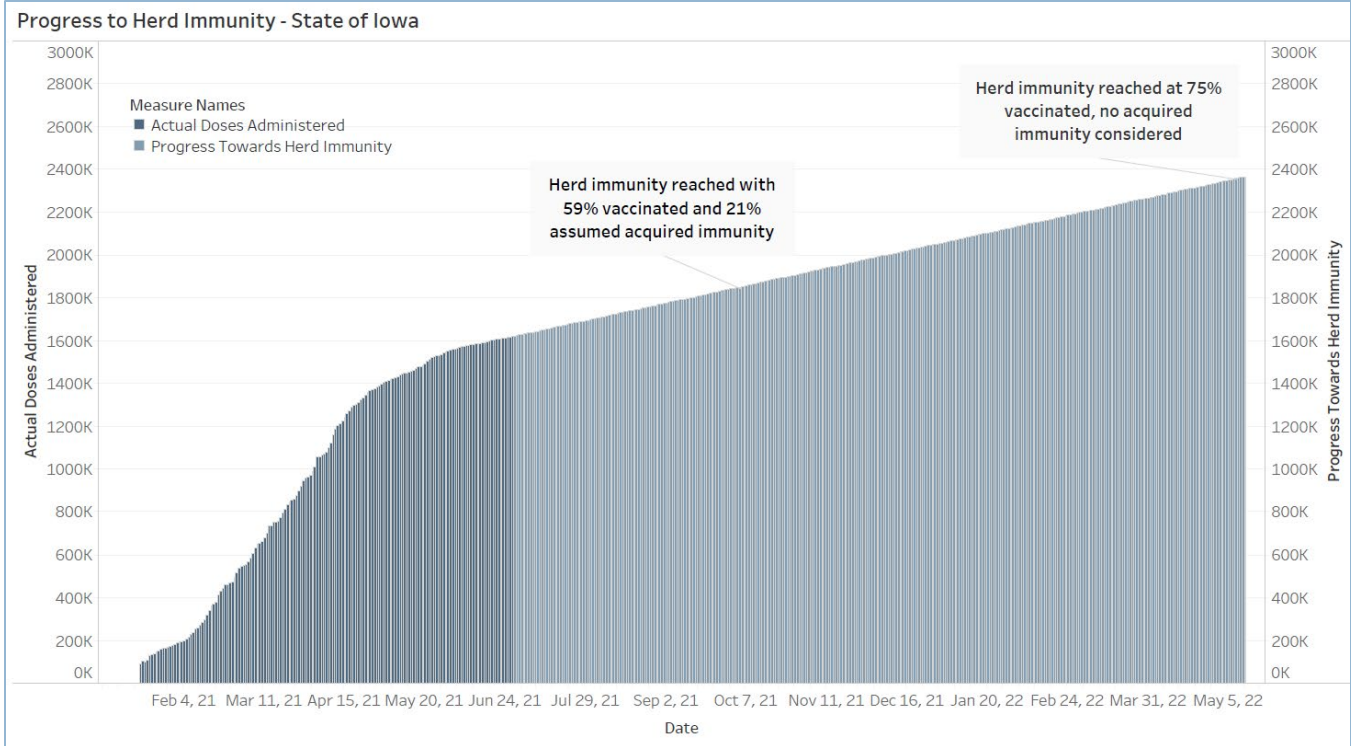


Number of Doses Administered (by date of report)	Initiated Vaccination (1st dose/No Janssen)	Completed Vaccination (2nd dose/Janssen)	Total Polk Co Residents Partially/Fully Vaccinated	Total Population of Polk County (all ages)
492,214	19,397 (5%)	242,672 (50%)	262,069 (54%)	490,121

Age Group	Vaccinated	% Age Group Vaccinated	Estimated Census Population*
10-19 years	21,667	8.30%	34.80%
20-29	34,262	13.10%	49.60%
30-39	42,216	16.10%	60.30%
40-49	40,232	15.40%	61.60%
50-59	42,985	16.40%	72.00%
60-69	41,357	15.80%	83.90%
70 and older	39,350	15.00%	90.00%
Total	262,069		62.50%

*U.S Census Bureau Polk County (2019 1yr estimate). Census predetermined age data includes non-eligible ages 10 and 11 years old.

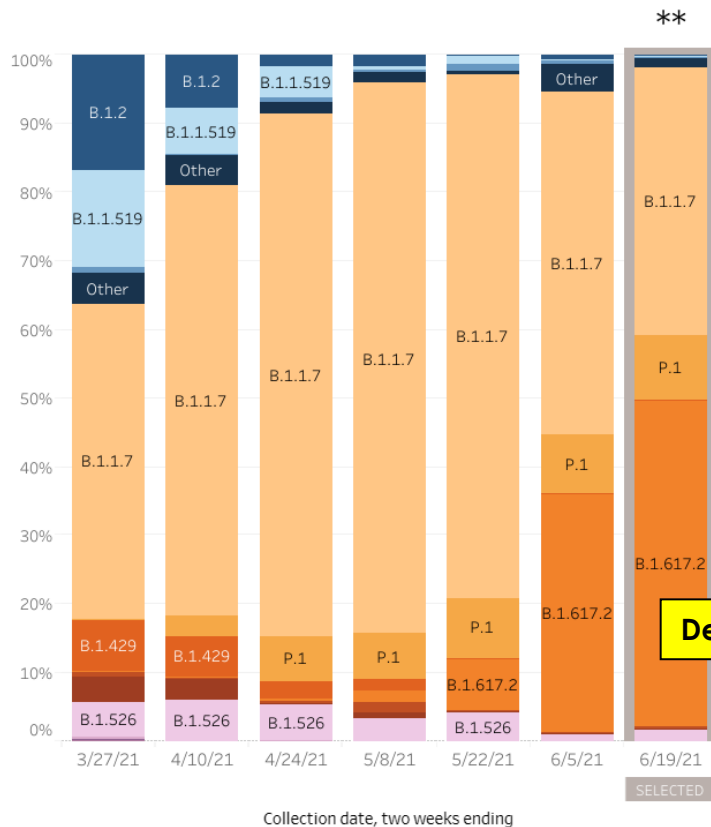
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Variant Prevalence

HHS Region 7: 3/14/2021 – 6/19/2021

HHS Region 7: 6/6/2021 – 6/19/2021 NOWCAST



Region 7 - Iowa, Kansas, Missouri, and Nebraska

	Lineage	Type	%Total	95%PI	
Most common lineages #	B.1.617.2	VOC	47.5%	28.0-68.0%	
	B.1.1.7	VOC	39.0%	20.0-60.0%	
	P.1	VOC	9.6%	0.0-24.0%	
	B.1.526	VOI	1.9%	0.0-8.0%	
	B.1.1.519		0.2%	0.0-4.0%	
Additional VOI/VOC lineages #	B.1		0.1%	0.0-4.0%	
	B.1.2		0.0%	0.0-4.0%	
	B.1.351	VOC	0.2%	0.0-4.0%	
	B.1.429	VOC	0.0%	0.0-4.0%	
	B.1.427	VOC	0.0%	0.0-4.0%	
	B.1.617.1	VOI	0.0%	0.0-4.0%	
	B.1.525	VOI	0.0%	0.0-4.0%	
P.2	VOI	0.0%	0.0-4.0%		
Other*	Other		1.4%	0.0-8.0%	

Delta Variant

* Other represents >200 additional lineages, which are each circulating at <1% of viruses

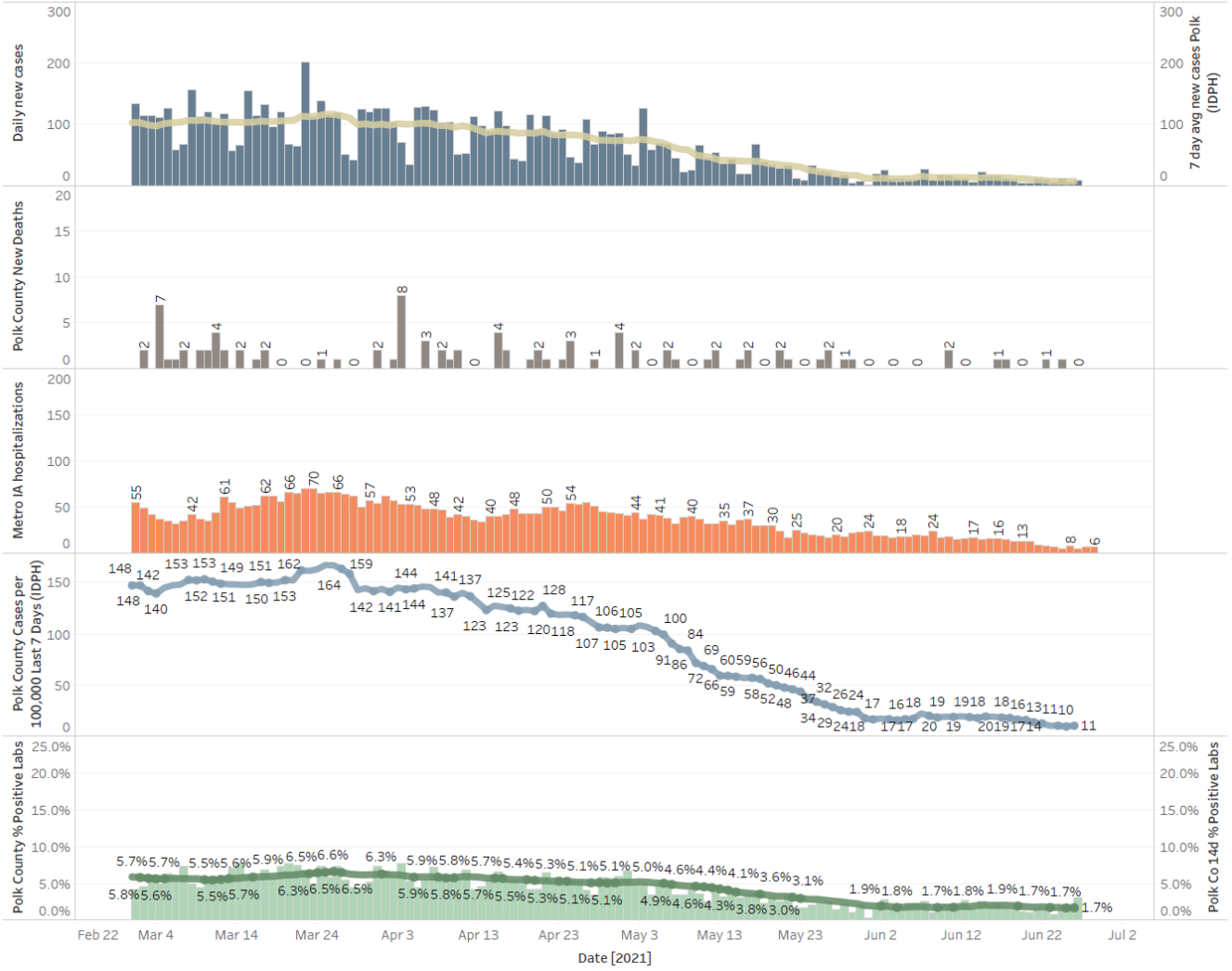
** These data include Nowcast estimates, which are modeled projections that may differ from weighted estimates generated at later dates

Sublineages of P.1 and B.1.351 (P.1.1, P.1.2, B.1.351.2, B.1.351.3) are aggregated with the parent lineage and included in parent lineage's proportion.

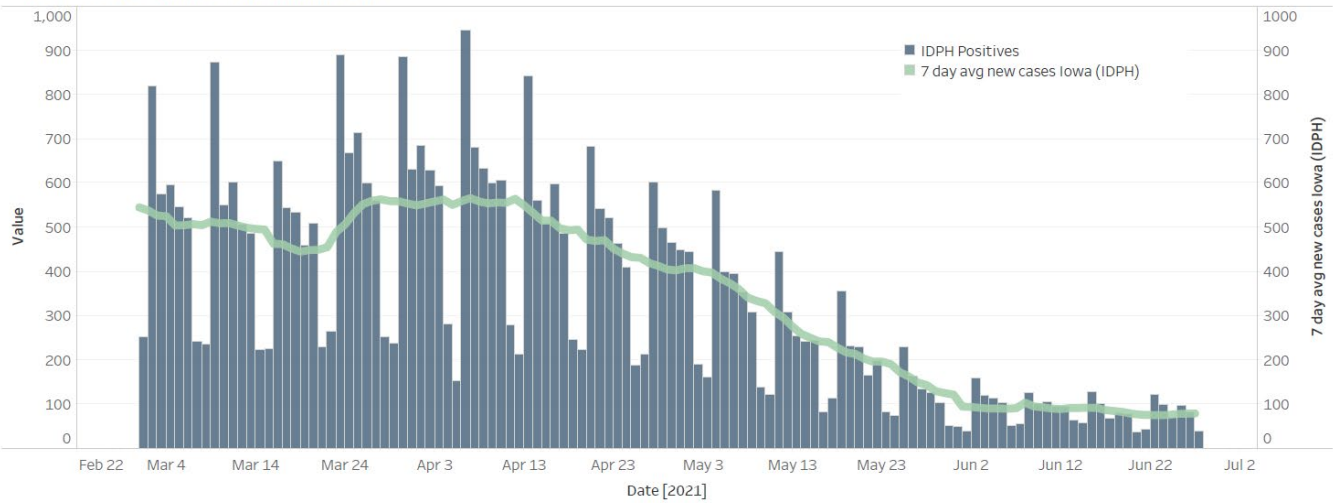
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Polk County Activity View - Since Jan 1 2021 through Predictive



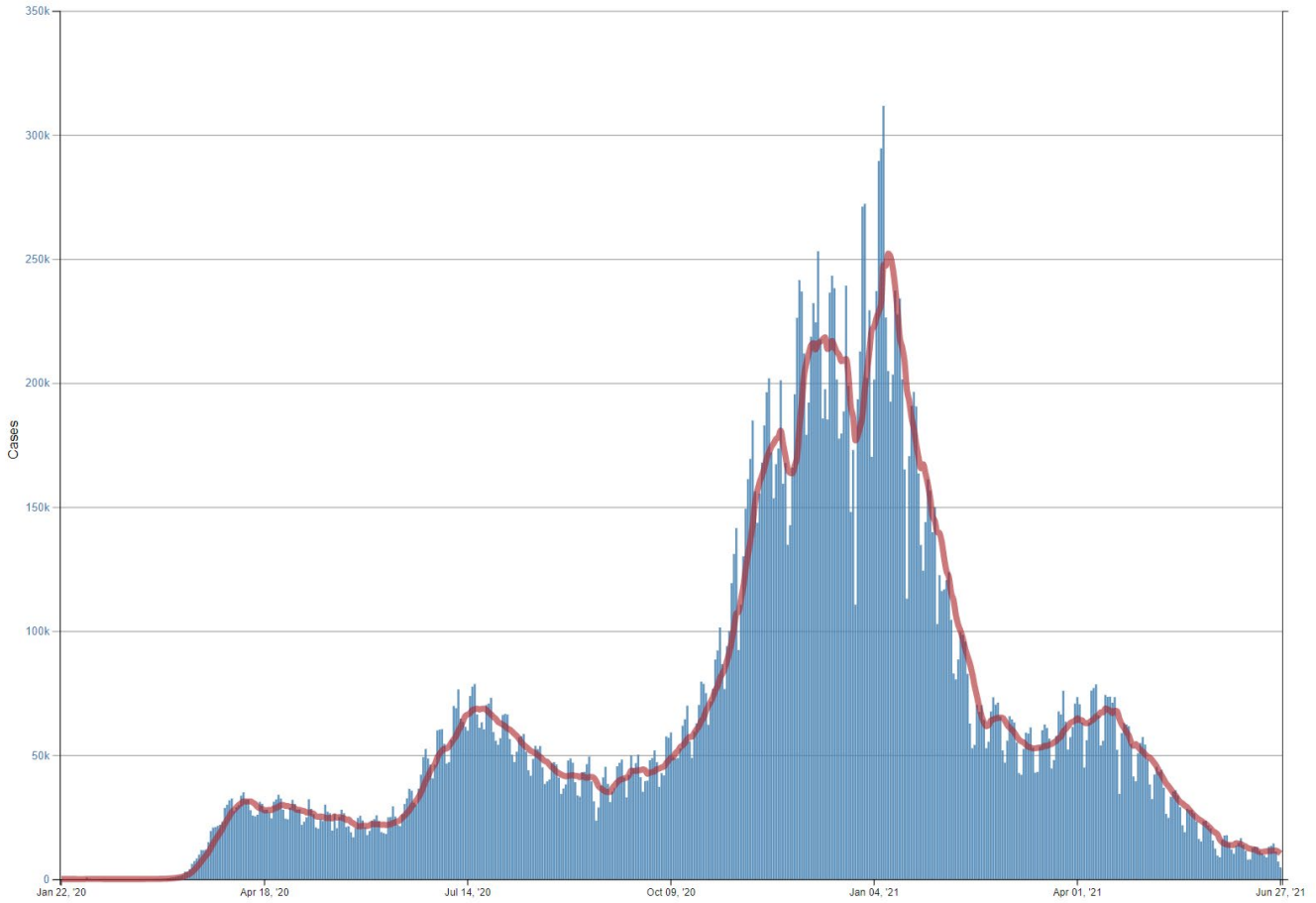
Iowa Cases by Day and 7d Moving Average



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Daily Trends in Number of COVID-19 Cases in the United States Reported to CDC



	CASES DAILY AVG.	PER 100,000	14-DAY CHANGE	HOSPITALIZED DAILY AVG.	PER 100,000	14-DAY CHANGE	DEATHS DAILY AVG.	PER 100,000	FULLY VACCINATED
United States	11,881	4	-18%	16,851	5	-15%	307.6	0.09	46%
Missouri >	787	13	+42%	851	14	+21%	6.0	0.10	38%
Nevada >	391	13	+57%	317	10	+31%	3.5	0.11	41%
Wyoming >	66	11	-6%	39	7	-15%	0.9	0.15	34%
U.S. Virgin Islands	12	11	-53%	4	4	-49%	0	—	33%
Utah >	334	10	+22%	172	5	+15%	4.7	0.15	37%
Arkansas >	236	8	+8%	284	9	+31%	2.7	0.09	34%
Florida >	1,578	7	-17%	1,874	9	-2%	31.0	0.14	45%
Colorado >	401	7	-33%	356	6	-17%	7.0	0.12	51%
Arizona >	489	7	+17%	511	7	-1%	11.8	0.16	39%
Louisiana >	295	6	-13%	261	6	-7%	5.0	0.11	34%