HDSI Harvard Data Science Initiative — Affiliate Project | **DirectRelief**

Hurricane Ian Situation Report for Oct 1, 2022 at 16:00

Data last updated on Oct 2, 2022 at 19:00

01 Disaster

02 Movement

03 Vulnerability

Summary

This report summarizes population movements and vulnerability indicators for coastal southwest Florida in the aftermath of the landfall of Hurricane Ian.

Whereas sharp decreases in population could be detected from the Facebook data on   Sept.   28th and 29th, steady rates of return could also be detected in most counties through October 1st.
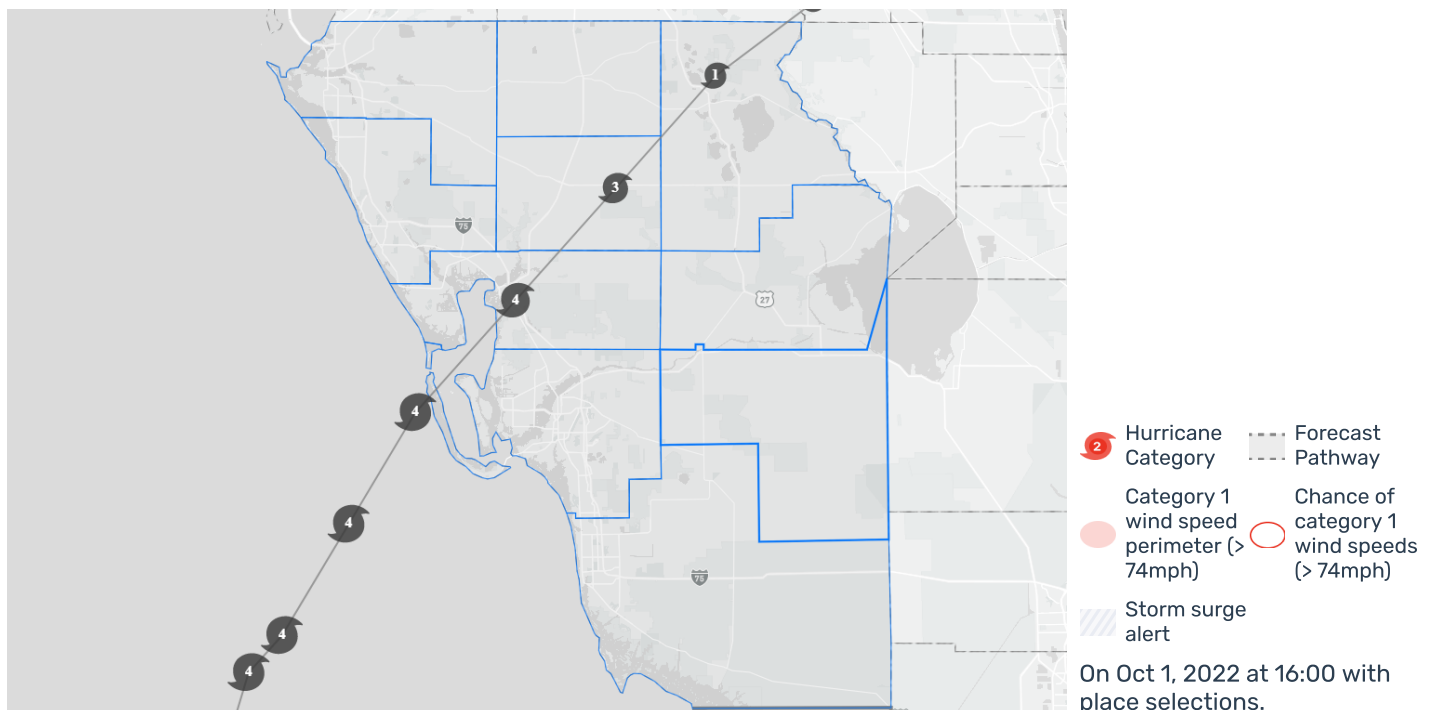
Sarasota, Hardee, DeSoto, Lee, and Charlotte counties remain at 10% or below baseline, with Charlotte seeing the most severe ongoing decline at -40%. However, those rates are in comparison to peak declines of roughly 65% in the most affected areas.

The more northern or inland counties of Manatee, Hendry, Glades, Collier, and Highland are all seeing population increases relative to baseline as of October 1st, ranging from 2% to 14%.
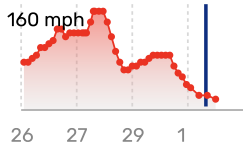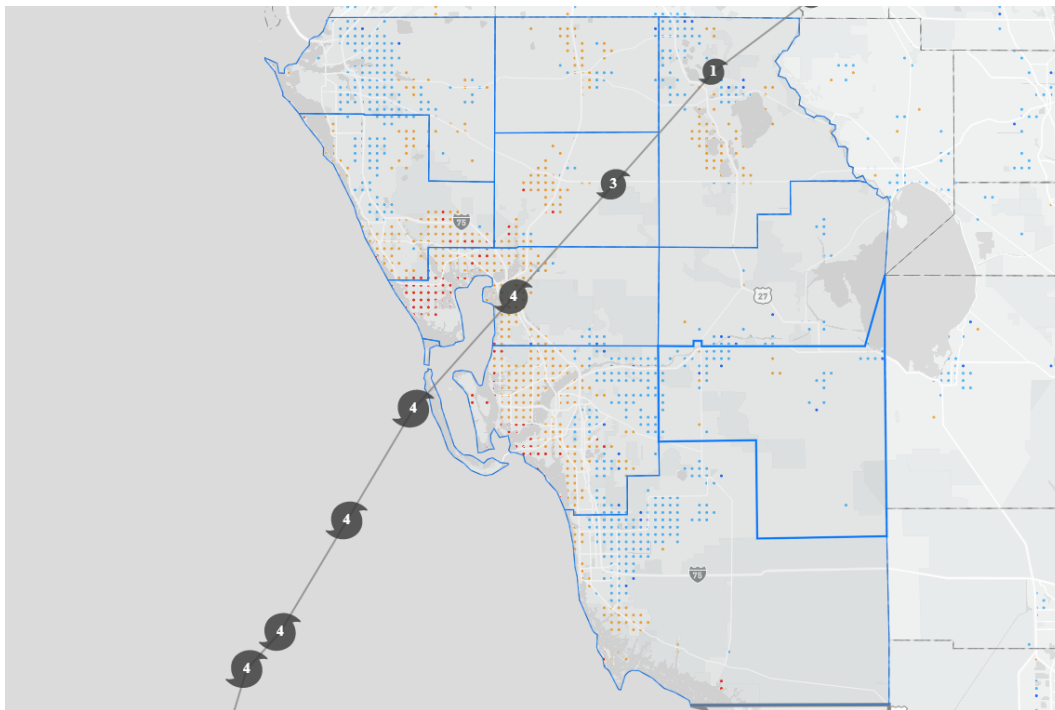
DISASTER

Hurricane Path on Oct 1, 2022 at 16:00

Legend:
- ② Hurricane Category
- ┄┄ Forecast Pathway
- Category 1 wind speed perimeter (> 74mph)
- Chance of category 1 wind speeds (> 74mph)
- Storm surge alert

On Oct 1, 2022 at 16:00 with place selections.

Wind Speed Over Time

Hurricane Ian

160 mph

26   27   29   1

MOVEMENT

% Pop. Density Change on Oct 1, 2022 at 16:00

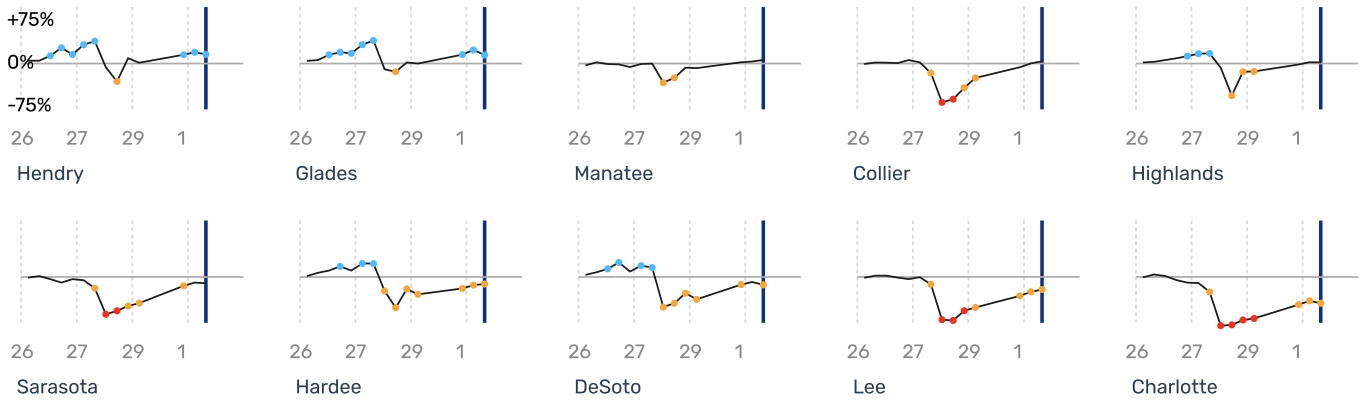**Facebook Mobility Data**

🟥	-50%+
🟧	-50 to -10%
🟦	10 to 50%
🟦	50%+

% Pop. Density Change on Oct 1, 2022 at 16:00 with place selections.

Population Density on Oct 1, 2022 at 16:00

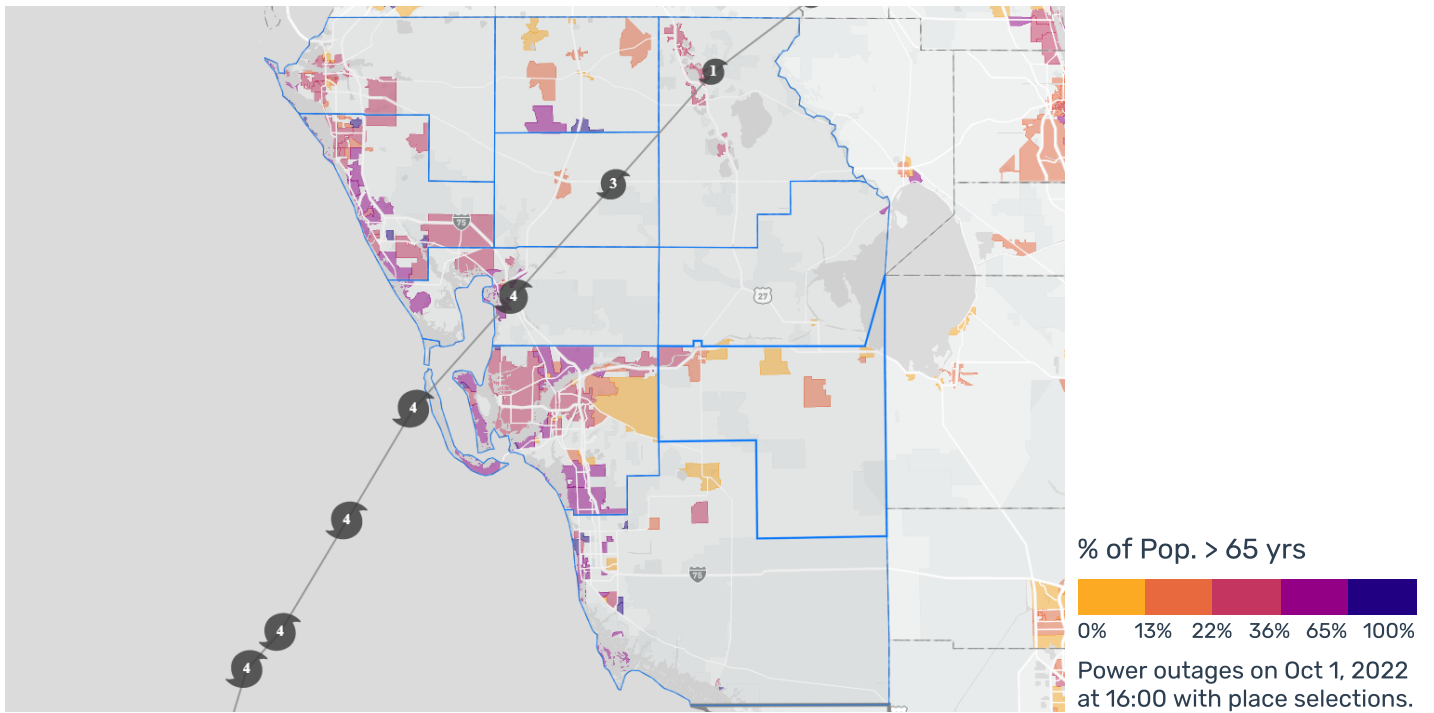| Location	Baseline Pop.	Current Crisis Pop.	Pop. Density vs. Baseline ▼	Confidence Level
Hendry County	6972	7938	14%	N/A
Glades County	2202	2488	13%	N/A
Manatee County	80327	84641	5%	N/A
Collier County	63828	65992	3%	N/A
Highlands County	18053	18358	2%	N/A
Sarasota County	79887	72290	−10%	N/A
Hardee County	3751	3349	−11%	N/A
DeSoto County	5981	5265	−12%	N/A
Lee County	154907	125351	−19%	N/A
Charlotte County	37877	22738	−40%	N/A

% Pop. Density Change Over Time

Hendry   Glades   Manatee   Collier   Highlands

Sarasota   Hardee   DeSoto   Lee   Charlotte

VULNERABILITY

Pop. > 65 yrs on Oct 1, 2022 at 16:00

% of Pop. > 65 yrs

0%   13%   22%   36%   65%   100%

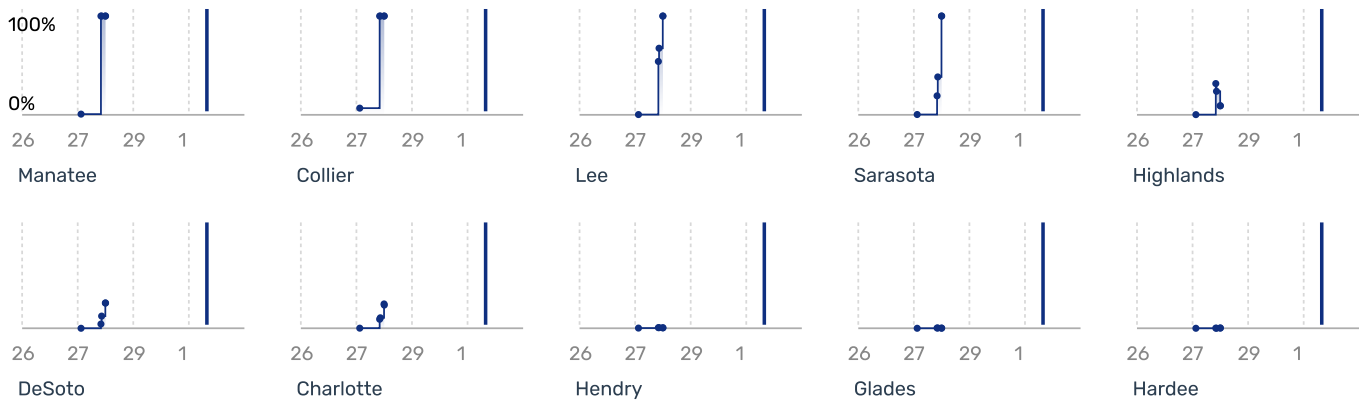Power outages on Oct 1, 2022 at 16:00 with place selections.

Demographics

Location	Total Pop.	Pop. > 65 yrs	% of Pop. > 65 yrs ▼	% of Pop. Below Poverty Level	Num. Customers Without Power	DME Users	DME Users / 100K Pop.
Charlotte County	185,926	74,548	40%	10%	0	2632	0.0263
Sarasota County	427,766	156,983	37%	9%	0	4475	0.0447
Highlands County	104,574	37,320	36%	16%	0	2261	0.0226
Collier County	379,345	122,024	32%	11%	0	2579	0.0258
Lee County	756,570	215,942	29%	12%	0	6559	0.0656
Glades County	13,777	3,885	28%	15%	0	84	0.0008
Manatee County	393,847	108,468	28%	11%	0	3363	0.0336
DeSoto County	37,371	8,317	22%	25%	0	403	0.0040
Hardee County	27,027	4,371	16%	23%	0	304	0.0030
Hendry County	41,472	5,601	14%	26%	0	278	0.0028

Power Outages

Places