

# Population Data Vignette

## Population data

This vignette explains and gives examples for the population Data for Wisconsin's Wastewater treatment plants(WWTP).

The first column three columns contain location information; the region the site is in(as defined by the DHS), the county the site is in, and the WWTP site name. Next is the lab submitter, which is the lab that processed the results which can be either the State Lab of Hygiene (SLH) or University of Wisconsin Milwaukee (UMW). Finally is the population of the site.**Madison only data** has two entries for each site one with the total Madison population and the other with the specific population for that WWTP.

regions	county	site	lab_submitter	pop
Northeastern	Algoma	Algoma	SLH	3171
Northeastern	Appleton	Appleton	SLH	74832
Northern	Ashland	Ashland	SLH	8000
Southern	Baraboo	Baraboo	SLH	14000
Southern	Beloit	Beloit	SLH	35000
Northeastern	Berlin	Berlin	SLH	6000

Sometimes we split sites by population size into 3 groups:

- Small(below 10,000)
- Medium(between 10,000 and 100,000)
- Large(Over 100,000)

regions	county	site	lab_submitter	pop	popgroup
Northeastern	Algoma	Algoma	SLH	3171	Small
Northeastern	Appleton	Appleton	SLH	74832	Medium
Northern	Ashland	Ashland	SLH	8000	Small
Southern	Baraboo	Baraboo	SLH	14000	Medium
Southern	Beloit	Beloit	SLH	35000	Medium
Northeastern	Berlin	Berlin	SLH	6000	Small

To combine cities that have multiple WWTPs, you can use code similar to this:

regions	county	site	lab_submitter	pop
Southern	MMSD-P11	MMSD-P11	SLH	106791
Southern	MMSD-P18	MMSD-P18	SLH	89139
Southern	MMSD-P2	MMSD-P2	SLH	83127

regions	county	site	lab_submitter	pop
Southern	MMSD-P7	MMSD-P7	SLH	42734
Southern	MMSD-P8	MMSD-P8	SLH	70024
Southern	Madison	Madison	SLH	380000