VEST WI 2020

State: Wisconsin
Organization: Voting and Election Science Team (VEST)
Summary of Races included: Presidential [General]
Date File Updated: 06/02/2021
Date Report Updated: 11/03/2021
RDH Validation Code (Github): https://github.com/nonpartisan-redistricting-datahub/pdv-wi

RDH Criteria	Explanation
Is all raw data available? Yes	**Accessible files:** ● VEST WI 20 data file ○ Accessed 10/18/21, Source: VEST ○ https://dataverse.harvard.edu/file.xhtml?fileId=4773528&version=21.0 ● VEST WI 20 documentation file ○ Accessed: 10/18/21, Source: VEST ○ https://dataverse.harvard.edu/file.xhtml?fileId=5206372&version=21.0 ● WI Precinct-Level Election Results ○ Accessed: 10/18/21, Source: Wisconsin State Legislature ○ https://data-ltsb.opendata.arcgis.com/datasets/2012-2020-election-data-with-2020-wards/explore?location=44.717495%2C-89.815220%2C7.91 ● WI Municipal Wards 2021 Shapefile ○ Accessed: 10/19/21, Source: University of Wisconsin ○ https://geodata.wisc.edu/catalog/WILTSB_e35f092f1ca543f7987cb62feb01f818_0
Processing steps available? Yes	● The full processing steps can be accessed at the link above and were accessed on 10/18/21. Part of the documentation is copied below: ○ Election results and precinct shapefile from Wisconsin State Legislature Open Data Portal (https://data-ltsb.opendata.arcgis.com/) ○ The following wards had been added due to annexations prior to the 2020 general election. They appear in the 2020 election results but not in the LTSB 2020 shapefile. They were added using the 2021

municipal wards shapefile. Any associated election results were redistributed based on the number of registered voters by ward as of 11/01/2020.

- ○ Chippewa: Chippewa Falls 5A
- ○ Dane: DeForest 23
- ○ Eau Claire: Eau Claire 80, 81
- ○ Kenosha: Kenosha 116
- ○ Manitowoc: Manitowoc 32
- ○ Sauk: Prairie du Sac 5
- ○ Wood: Marshfield 25, 26; Wisconsin Rapids 26, 27, 29

Information not in their processing steps:
- ● Vote allocation steps for added wards.

Able to replicate joining election data and shapefiles? **Yes**	The election results were already joined to shapefiles.
Able to replicate joining demographic data to block-level shapefiles? N/A	There is no demographic data on the file.
Able to replicate joining boundary data? N/A	There is no boundary data on the file.

Successfully ran validation?
 	
Yes
	<u>Election results:</u> **Yes**
	● We validated election results at three different levels:
	    ○ Statewide candidate vote totals
	    ○ Countywide candidate vote totals
	    ○ Precinct-level candidate votes
	● At the statewide total level, the election results matched VEST's. The totals also Wisconsin's Elections Commissions election summary report (https://elections.wi.gov/elections-voting/results/2020/fall-general)
	● At the countywide total level, the election results matched VEST's.
	● At the precinct-level of the 7090 precincts, 7080 matched exactly. In the 10 precincts where the election results did not match VEST's, it is most likely due to the allocation of votes that VEST did, which incorporated voter registration, which we did not replicate.
	
	<u>Geographies:</u> **Yes**
	● We were able to fully validate the geographies
	● There were 7090 total precincts in VEST's file. Of the 7090 precincts we compared:
	    ○ 0 precincts w/ a difference of 0 km^2
	    ○ 7090 precincts w/ a difference between 0 and 0.1 km^2
	    ○ 0 precincts w/ a difference between 0.1 and 0.5 km^2
	    ○ 0 precincts w/ a difference between 0.5 and 1 km^2
	    ○ 0 precincts w/ a difference between 1 and 2 km^2
	    ○ 0 precincts w/ a difference between 2 and 5 km^2
	    ○ 0 precincts w/ a difference greater than 5 km^2