



Wisconsin Elections Commission

212 East Washington Avenue | Third Floor | P.O. Box 7984 | Madison, WI 53707-7984

December 30, 2021

SENT VIA EMAIL

Dear Representative Brandtjen and members of the Assembly Committee on Campaigns and Elections,

Thank you for your recent inquiry regarding the origin, structure, and security of WisVote, the state's voter registration system and voter database. Wisconsin Elections Commission staff have provided answers, explanations and background for each of your questions submitted on December 22, 2021. Below, please find a specific response to each question. The text of your questions is also included with each response for easy reference. Your original request, along with this reply, has also been provided to the six-member Wisconsin Elections Commission.

While we are always happy to provide requested information to the Committee on a timely basis, some of the requests you make will need to be considered by the full Commission. The Chair of the Commission has added this discussion to the January 11, 2021, meeting. Further, in that some of your requests involve statutory issues regarding release of confidential voter information under Wis. Stat. §§ 6.36(1)(b)1.a., 6.47, and Wis. Admin. Code EL § 3.50(8), the Commission will need to consider the options available to fulfill your request. We explain in detail below the quandaries in those cases where they occur and what the options for further follow-up include.

We look forward to working with the Committee on these and any other questions about elections administration in Wisconsin.

Sincerely,

Meagan Wolfe
Administrator
Wisconsin Election Commission

cc: members of the Wisconsin Elections Commission

Wisconsin Elections Commissioners

Ann S. Jacobs, chair | Marge Bostelmann | Julie M. Glancey | Dean Knudson | Robert Spindell | Mark L. Thomsen

Administrator
Meagan Wolfe

Question 1: State Control of Data. *Please confirm that all of the voter identification data (Voter Identification Database) contained within, used or accessed by the Wisconsin statewide voter roll system administered by your agency (Statewide System) is hosted, stored or otherwise resides on a server or servers owned and operated by the Wisconsin Department of Administration (DOA). If the Voter Identification Database is hosted elsewhere, please provide the identity of the host and any and all written or oral agreements between WEC and such host.*

Answer 1: All voter data is hosted, stored, or otherwise resides on servers and systems owned by the State of Wisconsin. The Wisconsin Elections Commission uses the same state-owned data center and services as other state agencies through the Department of Administration's Division of Enterprise Technology. There are no other entities to identify or with whom the WEC holds agreements for data or server hosting.

Question 2: Database Specifications. *Please provide the type, specifications and version of the database software used to contain and manage the data in the Voter Identification Database (such as MySQL, Oracle, etc.) on said servers. Upon receipt of your response, we will expect the ability to: identify the software used to create the Voter Identification Database program, identify who wrote the database program, determine whether the database program was actually built by WEC staff as you declared publicly in the September 8, 2021 Senate hearing ("we actually built it ourselves here in the State of Wisconsin") or whether the database program is actually vendor-supplied database software or components, and that the database software containing over 7 million records of Wisconsin voter data is hosted or otherwise resides securely on DOA servers.*

Answer 2: The State of Wisconsin voter registration program and database, containing all voter registration records and voter history, resides at the state data centers and is securely hosted on DOA servers. The current state-wide voter registration system, known as WisVote, is a system designed, developed, maintained, and secured by the State of Wisconsin. All program development, testing, and security is done by State of Wisconsin employees and employees hired through the state's required IT development services contract, currently with Knowledge Services. It is our understanding that the Committee Chair has made a separate public records request to the Department of Administration for WEC employee and service contract information which will verify this fact. State of Wisconsin agencies use the state IT services contract to hire and maintain IT developers to accomplish their IT needs. The WEC built the WisVote system, and DET hosts the system using the following specifications:

- **Platforms:**
 - Dynamics CRM 365 On Premise (User Interface)
 - SQL Server 2019 Enterprise (Database)
 - Windows Server
 - Red Hat Enterprise Linux 7
 - ASP.NET (Badger Voters)
- **Environments:**
 - PROD
 - UAT
 - DEV
 - MIRROR
- **# of Servers:**
 - Currently 2 production database servers
 - Additional database servers in other environments for testing and redundancy

- More than 50 total servers all types – all housed and secured through the Department of Administration
- **Server Application Types:**
 - Azure DevOps
 - Badger Voters
 - Canvass
 - Email Routing
 - Linux Database Servers
 - MyVote
 - PS Management
 - SQL Software Reporting Services
 - User interface
 - Windows Database Servers
 - WisVote Asynchronous Servers
 - WisVote Batch jobs

As it relates to the history of the “Database,” development history is a matter of public record and is extensively detailed in public meeting minutes of the SEB, GAB, and WEC. Over the past 20 years Wisconsin’s registration system evolved from nothing to the AESM, then to SVRS, and most recently WisVote. The current system, used by the WEC since the creation of the agency, was built by the State of Wisconsin and is not a vendor-based system. The WisVote system is maintained, tested, built, repaired, and secured using state employees and employees hired through the state’s Knowledge Services mandatory contract.

Voter Database Timeline

Before the state-wide system

- **2002** - The Federal Help America Vote Act mandates creation of state-wide voter registration systems and allocates funding for states to create them.
- **2003** – The State Elections Board (SEB) begins planning for a state-wide voter registration system.
 - At the time, 13 of 72 counties had legacy voter registration databases – most using Access, Excel, and Word. Some were DOS based and one (Fond du Lac) was Cobalt based.
 - 235 municipalities maintained local databases using 61 different types of software ranging from Microsoft Word to off-the-shelf products.
- **2004** – SEB contracts with Accenture to create a state-wide voter registration system. Development starts.
- **2005** – SEB hires Project and Limited-Term staff to support development of the state-wide voter registration system. SEB contracts with National Business Systems for data entry to import voter data.
 - State law did not require voter registration in municipalities with a population under 5,000 until 2005. Thus, many smaller jurisdictions did not maintain a database until state law changed and until some statewide functions were mandated under HAVA. Therefore, many voter registration records converted from county and municipal legacy systems into the state-wide system did not have a “registration date” associated with them. See our FAQ on this topic (<https://elections.wi.gov/node/7516>) for more details.

AESM Pilot System

- **2006** – SEB launches AESM (Accenture Election System Manager). This system was version 1.0 of the State-wide Voter Registration System (SVRS). System performance is evaluated as poor by the SEB and Wisconsin clerks.

- 2007 – SEB and Accenture terminate their contract. Accenture repays the State of Wisconsin \$4.0 million and releases all data to the State.

SVRS

- 2008 – GAB hires transitional IS professionals to redevelop and manage the state-wide system, SVRS. It consists of 59 servers in 3 environments.
- 2009 – GAB hires LTE contract software developers to continue development of SVRS and transition SVRS to .NET Framework 3.5.
- 2010 – GAB launches SVRS 7.0. It consists of 55 servers in 4 environments.
- 2011 – GAB hires IS contractors to support SVRS under the direction of the DOA Bureau of Application Support Director and the GAB Elections Division Governance Team.
- 2012 – GAB IT development team updates SVRS to comply with the Photo ID law and incorporate elements using Dynamics CRM platform elements.
- 2012-2013 – GAB upgrades SQL server, Windows Server, and .NET framework versions.
- 2014 – GAB begins developing an all-new state-wide system after positive feedback on the usability and stability of Dynamics CRM elements of SVRS. Dynamics CRM is a development platform which we used to create a custom, proprietary, user interface that interacts with the other components of WisVote. This is not a vendor-based system and no vendor has access to the system or the code base. If a change is made, a feature added, or a fix implemented to the system it is done by state employees or employees hired through Knowledge Services.
- 2015 – GAB approves the purchase of Dynamics CRM platform licenses to complete development and fielding of the new system, called WisVote.

WisVote

- 2016 – GAB launches WisVote. WisVote adds absentee ballot request and tracking tools, election worker training and tracking tools, and support for the MyVote Wisconsin and Badger Voters portals.
- 2017 – WEC upgrades WisVote to support Online Voter Registration after state law is passed allowing voters that option and to also support the statutorily authorized Badger Book electronic poll book system.
- 2018 – WEC upgrades WisVote with Election Day Registration postcard reporting and election reconciliation functions. SQL server and Windows Server versions are also updated. Multifactor authentication is added for all users – this is in addition to regular username and password credentialing. Mandatory device endpoint testing software and cyber security training is also required before clerks receive access.
- 2019 – WEC upgrades the WisVote user interface to the Dynamics CRM 365 On Premise operating platform, which provides security updates and adds endpoint monitoring for all devices accessing WisVote using a separate software application.
- 2020 – WEC upgrades WisVote with absentee ballot mail tracking for outgoing ballots.
- Development background:
 - the Wisconsin Elections Commission built WisVote, and it is a custom, in-house developed application that is not used by any other entity and is not available for use or sale by any other entity. It was built utilizing secure platforms and customized in-house to comply with Wisconsin election laws and meet the needs of system users.
 - All WisVote development was performed by:
 - full-time state employees
 - federally funded-project state employees
 - or individuals hired through the State of Wisconsin’s IT services contract and supervised by state employees
 - No vendors were involved in the development or maintenance of WisVote.

Question 3: WisVote Structure. *Please identify the name and all technical specifications (including coding language, version and platform) of the application software used to code and run the Statewide System and whether any contractors were used to design, build or operate any portion or component of the software. It is our understanding that the Statewide System consists of a main application or platform, and coordinates WisVote, MyVote, Badger Voters, and possibly other applications, which may not be public. Please identify ALL applications that have any connectivity to the Statewide System through any application programming interface (API) or other path of connectivity giving any and all parties real time access to any function of the Statewide System or the Voter Identification Database, including contractors, vendors, non-profit or political entities and any other parties.*

Answer 3: The current state-wide voter registration database, WisVote, was built using the following specification:

- **Platforms**
 - Dynamics CRM 365 On Premise (User Interface)
 - SQL Server 2019 Enterprise (Database)
 - Windows Server
 - Red Hat Enterprise Linux 7
 - ASP.NET (Badger Voters)

- **Language**
 - C#

- WEC and DOA/DET employ individuals for software development under the mandatory state Knowledge Services contract, and previously under the Tapfin contract, who are under the direct supervision of state employees.
- Other State of Wisconsin systems with connectivity to WisVote (direct or indirect).
 - MyVote.wi.gov (Public access website, built and maintained by WEC, hosted by DOA)
 - Badger Voters (Data request system, built and maintained by WEC, hosted by DOA)
 - Badger Book (indirect, no live connection. System built and maintained by WEC, hosted by DOA)
 - Canvass Reporting System (indirect connection. Official election results collection from counties and unofficial report generation for counties).
 - Access Elections (WEC database for ADA-compliance site review data)
 - Campaign Finance Information System (CFIS) (limited access to Ethics Commission for required statutory functions)
- External Services accessed by WisVote (one-way queries only)
 - WisDOT DMV Service
 - ArcGIS
 - Smarty Streets addressing service
 - Google Maps
- Internal Only APIs
 - Wisconsin DOT, statutorily required to support Online Voter Registration
 - Above mentioned statutorily required indirect access to Ethics CFIS
 - Elections Data Management
 - Department of Corrections, statutorily required felon notices
 - Address verification/validation USPS Service and ZP4 Service
- There are no APIs offering external contractors, vendors, non-profits, political entities, or other parties access to the system. Local election authorities do not have system development access and are therefore unable to offer APIs to any entity.

Question 4: Physical Location of Data. *Please reveal where the Statewide System is hosted. Is the Statewide System hosted at DOA with or separate from the Voter Identification Database or is it hosted elsewhere on another server system such as Amazon© Web Services (AWS) or hosted physically at WEC itself? If the Statewide System is hosted at any place or vendor other than DOA, please provide all written and oral agreements between WEC and said host. If the Statewide System is physically hosted at WEC, please disclose which room or office number it is located in and provide security logs of who has authorized physical access to that room or rooms.*

Answer 4: All voter data is hosted, stored, or otherwise resides on servers and systems owned by the State of Wisconsin under the supervision and management of the Department of Administration's Division of Enterprise Technology. DOA/DET primarily uses two major data centers: Femrite Data Center (Madison, WI) and Milwaukee Data Center (Milwaukee, WI).

Question 5: Procurements & Contracts. *Please provide a copy of any and all procurement agreements, requests for proposals, bid requests, bid invitations and all technology agreements, technology employment agreements and other agreements related to coding, designing, structuring, envisioning, updating, editing, writing or otherwise manipulating in any way, the Voter Identification Database or the Statewide System that WEC, or any of its predecessors, is or has been a party to over the past 20 years. This request requires you to produce copies of all procurement or other agreements entered into by WEC, or its predecessors, with any other parties under Wisconsin procurement procedures relying upon the technique known as "piggybacking" on other existing state procurement contracts.*

Answer 5: Regarding current personnel records, all information related to the WEC's employment of IT development staff is now being processed as part of a public records request through the Department of Administration. It is our understanding that the Committee has also asked for and received documents regarding any IT procurements related to the current state-wide system. Those requests are currently being processed in coordination between the WEC, DOA, and DET.

Regarding historical records of previous systems under predecessor agencies, WEC is not in physical possession of these records, but if requested can work to analyze and process this request as a public records request including working with the state archives and DOA to locate responsive historical records. This request asks for records that span 20 years, three separate state agencies, and involve technical applications no longer in use by the State of Wisconsin. Commission approval is needed before expending the vast volume of hours and resources required to comply with a request of this nature. If the Committee is not seeking records related to systems that no longer exist and are no longer in use, it is our belief that the current public records request filed with the Department of Administration will yield all responsive records related to the current WisVote system and related applications.

Question 6: All Logs & Registries. *Please provide all logs and registries (as commonly understood in database and application and internet usage), of ALL types, whether defined herein or not, including, but not limited to, registry logs, access logs, data change logs, login logs and all other logs recording all digital activities occurring within the Statewide System and the Voter Identification Database.*

Answer 6: The state-wide system is housed through the Department of Administration's Division of Enterprise Technology, all related technical logging information must also be requested through DOA, who would determine if there are responsive records. WEC would cooperate with DOA regarding any such request.

Question 7. All Audit History. *Please provide all logs, registries or records of any kind recording all changes to the status of every voter, active and inactive, contained in the 7 million record Voter Identification Database or the Statewide System. Such logs, registries and other records must specifically*

show the time and date a voter is registered in the Voter Identification Database and Statewide System, who registered the person to vote and each and every status change of every voter when turned inactive, reactivated and or turned back inactive.

Answer 7: This request also needs to be elevated to the full Commission for review and consideration. Our reading of this request is that the Legislature seeks data to understand the status of every voter record in the statewide system (both active and inactive) and to understand how/who established or changed voter records and statuses throughout history. This kind of data can be accessed and is provided routinely to parties who request it through Badger Voters. State law and the Commission's administrative code requires the agency to charge for such custom data (Wis. Stat. § 6.36(6), Wis. Admin. Code EL § 3.50). There are no exceptions to this requirement for legislative committees under state law or administrative code.

The request as described would include hundreds of millions of data points and would require coordination and congruent technical applications between the state and the Legislature to facilitate a meaningful and secure transfer. Also, the Wisconsin State Statutes and Administrative Code provisions, including but not limited to Wis. Stat. §§ 6.36(1)(b)1.a., 6.47, Wis. Admin. Code EL § 3.50(8), prohibit the release of personally identifiable information. Both state and federal law protect information such as dates of birth, social security numbers, and driver license and ID card numbers contained in voter records. There are no exceptions to this requirement for legislative committees under state law or administrative code.

Upon approval from the Commission, WEC staff would work with the Committee to provide data that is useful, timely, and compliant under state statutes.

Question 8: External APIs. *Please provide an exact copy of the API code or software that allowed any and all private, for-profit, non-governmental, non-profit, political party or any type of lobbying or advocacy group to directly access WisVote, MyVote or any other part of the Statewide System or the Voter Identification Database at any time during the years of 2020 and 2021. Please also provide logs, registries and any other records of the times and dates any or all of these parties accessed the Statewide System or the Voter Identification Database, or any other data system operated or controlled by the State of Wisconsin in 2020 and 2021.*

Answer 8: There are no private, for-profit, non-governmental, non-profit, political party, or any type of lobbying or advocacy group with direct access to WisVote, MyVote or any database or application related to the statewide database. Only the official government entities and systems described in our answer to question 3 above have any sort of direct or indirect access to the statewide voter registration system or related applications.

Question 9. ERIC Data. *Please provide a list of all voters referred by the Electronic Registration Information Center to WEC or to Wisconsin clerks in 2020 and 2021, including the specific communication, the name of each voter and their address, driver's license number, date of birth and the date referred to WEC or any Wisconsin Clerk.*

Answer 9: ERIC does not make "referrals" to the WEC or clerks. ERIC provides data in various categories as outlined in the ERIC membership agreement. Production of ERIC data reports about voters is expressly prohibited by the ERIC Membership Agreement, paragraph 4. Wisconsin law requires the chief election official to enter into a membership agreement with ERIC. Wis. Stat. §6.36(1)(ae). To maintain its membership with ERIC, the WEC may not violate the terms of the agreement. Additionally, as described above, state law and administrative code provisions do not allow the release of a voter's personally identifiable information, with limited exceptions.

There is some data that WEC can provide in compliance with the ERIC agreement and state statute. At this link (<https://elections.wi.gov/node/7461>) you can find the mailer design that was sent to voters who were flagged as having a different address in their voter record than DMV/USPS in 2021. In 2020 the Commission sent a mailer to voters who are not registered to vote but are eligible according to DMV records, which is also required by the ERIC membership agreement. Information about the most recent mailing is available at this link: <https://elections.wi.gov/node/6940>. The Commission will review and approve any changes to the mailers for 2022 at an upcoming meeting.