The State of Texas

Elections Division P.O. Box 12060 Austin, Texas 78711-2060 www.sos.state.tx.us



Phone: 512-463-5650 Fax: 512-475-2811 Dial 7-1-1 For Relay Services (800) 252-VOTE (8683)

Ruth R. Hughs Secretary of State

MEMORANDUM

TO: Keith Ingram, Director of Elections, Texas Secretary of State

FROM: Chuck Pinney, Staff Attorney, Elections Division, Texas Secretary of State

DATE: February 8, 2021

RE: Hart Intercivic – Verity 2.5 Voting System Examination

In accordance with my appointment by the Texas Secretary of State as a voting system examiner under Tex. Elec. Code §122.067, I present my report on the voting system examination which took place on January 4-8, 2021, in the offices of the Texas Secretary of State at the James E. Rudder Building, 1019 Brazos, Austin, Texas 78701.

On January 4-8, 2021, the examiners appointed by the Texas Secretary of State and the Texas Attorney General examined Verity 2.5, a voting system that was presented by Hart Intercivic ("Hart") for certification in Texas. The following hardware and software components were examined at the Office of the Secretary of State:

Component	Version	Previous Texas Certification Date
Verity Data	2.5.0	6/26/2020
Verity Build	2.5.0	6/26/2020
Verity Count	2.5.0	6/26/2020
Verity Central	2.5.1	6/26/2020
Verity User Management	2.5.0	6/26/2020
Verity Election Management	2.5.0	6/26/2020
Verity Desktop	2.5.0	6/26/2020
Verity Scan	2.5.1	6/26/2020
Verity Touch Writer with Access	2.5.1	6/26/2020
Verity Controller	2.5.1	6/26/2020
Verity Touch with Access	2.5.1	6/26/2020

Verity Touch Writer Duo	2.5.1	6/26/2020
Verity Touch Writer Duo Standalone	2.5.1	None

For the reasons outlined below, I recommend that this system be certified by the Texas Secretary of State under Tex. Elec. Code §§122.031 and 122.039.

Background

Hart previously received certification in Texas for the HVS voting system and previous versions of Verity. The most recent version of their software, Verity 2.4, was presented by Hart in April 2020, and was certified in June 2020.

The voting system that was the subject of this examination, Verity 2.5, was certified by the U.S. Election Assistance Commission ("EAC") on September 9, 2020.

Summary of the Examination

The examination of Verity 2.5 took place on January 4-8, 2021.

Due to health concerns relating to COVID-19, a number of accommodations were required in order to comply with social distancing and protective gear recommendations from federal and state authorities. The examination was conducted at the Office of the Secretary of State over the course of five days with no more than two examiners on each day, rather than the normal two-day exam with all six examiners present at once. The other examiners who were not physically present in the room were able to participate remotely in the exam process via a live video conference that allowed them to watch the other examiners' interactions with the equipment and ask questions to the in-person examiners and the vendor.

I was present for the first and second day of the exam, which began with the decryption of the trusted build from the hard drive provided to our office by the testing labs. We then performed the installation of the software and firmware for Verity 2.5 off of the trusted build. After completing the installation, I performed a hash validation using the procedures provided by the vendor and compared them to the trusted hashes provided by the EAC. That hash validation was successful.

On the third day of the exam, the vendor provided a presentation of the software and the updates involved in the current version of Verity. The vendor also presented the Verity Touch Writer Duo Standalone, which is a standalone version of the existing Verity Touch Writer Duo device. The Duo Standalone is a ballot marking device that has not been previously certified in Texas.

After the vendor presentation, Brandon Hurley and I examined the equipment and conducted the test election by voting a series of test ballots and comparing the results of that election to the expected results. We then conducted the accessibility testing and tested the visually impaired functions, the sip-and-puff controller, and the paddle controller. The system performed well

during the accessibility testing and presented no significant issues, though there was one minor event that I will detail below.

On the fourth day of the exam, Brian Mechler and Tom Watson conducted their in-person examination of the equipment.

On the fifth and final day of the exam, Lesley French conducted her in-person examination of the equipment along with other employees from the Office of the Attorney General.

On each day of the exam, the in-person examiners conducted testing on various components of the system to determine if they could generate any issues or errors.

Analysis

The standards for a voting system in Texas are outlined in Texas Election Code Chapter 122. Specifically, the system may only be certified for use in Texas if it satisfies each of an enumerated list of requirements contained in Texas Election Code §122.001. Because the system satisfies each of those requirements, I would recommend that this system be certified.

The Verity Touch Writer Duo Standalone is the only piece of hardware that was presented in this examination that had not been previously certified in Texas. The Duo Standalone performed well during the examination and did not present any major concerns. The Duo Standalone is essentially an identical device to the Verity Touch Writer Duo, which has already been certified in Texas. The primary difference between the two devices is that the Duo Standalone does not require a separate Verity Controller device to function. This distinction does not negatively impact the functionality of the device. Ultimately, the standalone nature of that device may make it a more attractive option for jurisdictions who only use a small amount of voting equipment at each polling place.

Other examiners' reports have gone into greater detail about the various features of Verity 2.5, including its security features, ease of use, and reliability as a system. My conclusions about the positive aspects of the system are similar to those of the other examiners. I have no significant concerns about this system, but I will highlight a few relevant observations about the system.

General Observations

- During the accessibility testing, Brandon Hurley noted that in one of his testing sessions the audio instructions were not playing. That error was resolved by rebooting the system, at which point those audio instructions were available for the next session. This error did not occur on any of the other accessibility testing sessions for the other devices. Because the mechanism for resolving that issue was simple and relatively quick, this issue does not raise any major concerns relating to certification of this system.
- The vendor also presented the Verity Duo Go, which is an accessory for the Verity Duo and Verity Duo Standalone that allows the device to be used as a curbside solution. That accessory is not a voting device itself, and therefore is not listed as a separate component of

the system in the Form 100. The examiners examined the device and provided feedback to the vendor in the course of the exam, but did not observe any major issues with that accessory. While the Verity Duo Go is somewhat weighty and requires the voting device to be removed from its casing between voting sessions for ballot activation purposes, it is a useful device that allows for a paper-based electronic voting system to be used at the curbside.

• The hash validation process outlined by the vendor was simple and easy to use. The vendor provided instructions for that hash validation process that were generally pretty straightforward, but occasionally required clarification on certain steps in the procedures because the documentation was either somewhat ambiguous or out of date. In the course of the exam, the vendor indicated that they would update that documentation to reflect the suggestions made by the examiners. However, even without those updates, I found the hash validation process to be very user-friendly, and should be relatively easy for jurisdictions to perform during acceptance testing and at other phases of the election cycle.

Conclusion and Recommendation

Verity 2.5 meets the necessary standards for certification under Texas Election Code §122.001 and complies with all other legal requirements under the Texas Election Code. Therefore, I would recommend certification of the current version of Verity.