

# BRANDON HURLEY

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October 8, 2018

Mr. Keith Ingram  
Director of Elections  
Texas Secretary of State  
Elections Division  
208 East 10th Street  
Austin, Texas 78711

Re: Inspection of the EVS 6000 System conducted on September 5 and 6, 2018

Dear Mr. Ingram:

Pursuant to my appointment by the Texas Secretary of State as a voting systems examiner under TEXAS ELECTION CODE § 122.035, please allow this letter to serve as my report concerning the above referenced examination. I, along with the other statutory examiners and staff from the Secretary of State's office, examined the Electronic Systems & Software EVS 6.0.0.0 voting system ("**EVS 6000 System**") on September 5 and 6, 2018, at the offices of Elections Division of the Texas Secretary of State in Austin, Texas.

I examined the above referenced software and equipment and accompanying written materials for compliance with the relevant provisions of the TEXAS ELECTION CODE and Texas Administrative Code related to the requirements for election machines and software.

The EVS 6000 System provides a new election reporting software replacing the old "ERM" system. The EVS 6000 System also adds a limited number of new physical components that include a Universal Voting machine and an Express Touch Electronic Universal Voting System. However, many of the components in the EVS 6000 System are carry-overs from previously certified ES&S systems, including the recently approved 5.2.4 System, such as the central ballot tabulators and DS200.

It is important to note that the e-poll books that are part of the EVS 6000 System were not reviewed for certification and ES&S voluntarily withdrew its request to certify the new Express Vote device as a DRE (i.e.- the tabulator function of the new Express Vote machine was not reviewed).

## **ACCESSIBILITY TESTING**

On the first day of the inspection, I and others tested the physical equipment of the EVS 6000 System for accessibility compliance with the applicable state laws and regulations. These tests confirmed that the new components in the EVS 6000 System complied with the accessibility requirements of Texas law.

## **TESTING OF HARDWARE AND SOFTWARE**

Also on the first day of the examination, ES&S completed the loading and installation of the EVS 6000 System. ES&S officials ran the Logic and Accuracy tests and calibrated the scanners to be used in the inspection before any testing or inspection of the equipment and software.

After these set-up procedures were completed, the examiners and Secretary of State staff completed the accessibility testing described above. ES&S officials also provided an overview of the new EVS 6000 System and explained new election management software and new hardware pieces included in the EVS 6000 system.

On both days of the examination, the examiners tested each piece of equipment and software for security, functionality and accuracy. The examiners and staff cast a script of ballots on each voting machine and paper ballots were fed into the optical scanners. The mock votes were tabulated and sorted with the new election software.

At the conclusion of the voting tests, the examiners and staff reviewed the audit logs and reports generated from the votes cast.

## **OBSERVATIONS**

1. Each of the separate pieces of hardware and software examined met the listed requirements of the TEXAS ELECTION CODE and TEXAS ADMINISTRATIVE CODE.
2. Although ES&S voluntarily withdrew its previous request to certify the new Express Vote machine as a DRE based on the new tabulator function of the machine, the recent Attorney General's opinion that concludes ballot marking machines may qualify as a DRE under Texas law means that devices such as the new Express Vote machine in the EVS 6000 System that generates a marked ballot that is then fed into an optical scanner could be construed as a DRE under Texas law. The new Express Vote device in the EVS 6000 system meets all of the requirements for a DRE in Chapter 129 of the TEXAS ELECTION CODE and applicable provisions of the TEXAS ADMINISTRATIVE CODE if a ballot is printed on this device and then fed into an optical scanner; however, this conclusion should not be construed as a statement about the use of the new Express Vote machine as a stand-alone DRE using its tabulator function since that aspect of the machine was not reviewed or tested.

3. The machines in the EVS 6000 System can be networked to upload results and reports; however, these devices cannot be connected to an internet or accessed wirelessly.
4. It should be noted that, as part of the EVS 6000 System's tabulation process, nothing prevents the scanning of the same ballot multiple times. However, the reporting and tabulation software should identify the double-scanned ballot and not count it twice.
5. The use of memory sticks on the DS200 device for the writing of election results on that machine presents a concern if the stick is removed in the middle of the election process before polls are closed because the memory stick will only have raw data at that point and cannot be used to report election results from that machine. However, the original ballots will still be present and can be counted on a central tabulator or by hand.
6. The new election reporting module is effective and more efficient in several aspects as compared to the old ERM software; however, things such adjudication of ballots by a user may present issues in Texas since Texas law limits who has the authority to adjudicate a provisional ballot.
7. As new systems and improvement continue to be presented by vendors, it is becoming more apparent that training and limiting opportunities for user error are critical. Because there are no dictated standards or regulations on training and minimization for opportunities for user error in Texas law, the analysis of a proposed system or particular hardware or software is subjective. Nevertheless, it appears the EVS 6000 System has made every attempt to minimize the opportunity for human error both at the voter stage and election official stage.

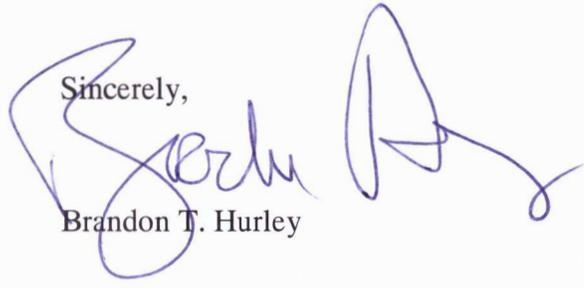
### **RECOMMENDATION**

Based on the foregoing observations and my examination of the EVS 6000 System, its accompanying literature and the representations made by ES&S officials both in its literature and at the examination, I recommend that the EVS 6000 System be certified as compliant with the requirements of the TEXAS ELECTION CODE and the TEXAS ADMINISTRATIVE CODE.

This report should not be construed as a tacit or implied comment on any of the technical aspects of the EVS 6000 System except as expressly stated herein. In the event any of the equipment, software or security devices examined are altered, changed or decertified by any accrediting agency (other than a "minor modification qualified for administrative certification process" as that term is defined in § 81.65 of the Texas Administrative Code), this report should be considered withdrawn.

Thank you for the opportunity to serve as an examiner and participate in this important process that protects the integrity of Texas' voting systems.

Sincerely,

A handwritten signature in blue ink, appearing to read "Brandon T. Hurley". The signature is stylized with large loops and a long tail on the final letter.

Brandon T. Hurley