September 1, 2020

The Honorable Dan Patrick  
Lieutenant Governor of Texas  
2E.13  
The Capitol

The Honorable Dennis Bonnen  
Speaker of the Texas House of Representatives  
2W.13  
The Capitol

Dear Governor Patrick and Speaker Bonnen:

House Bill 402, enacted by the 86th Legislature, establishes the Uniform Electronic Legal Material Act (UELMA) and designates the Texas Legislative Council as the official publisher of the Constitution of the State of Texas. H.B. 402 also designates the secretary of state as the official publisher of the general and special laws ("session laws") and the Texas Administrative Code. See Chapter 159 (H.B. 402), Acts of the 86th Legislature, Regular Session, 2019 (Subchapter E, Chapter 2051, Government Code).

This new law also requires each official publisher, including the council, to create an outcomes-based, technology-neutral framework for providing online the designated legal material with the same level of trustworthiness traditionally provided by publication in a law book. H.B. 402 requires the council, not later than September 1, 2020, to submit to your offices an implementation plan for the official publication of the Texas Constitution. Please find the council's plan attached to this letter.

I am, of course, available for additional discussions regarding this project.

Sincerely,

Jeff Archer  
Executive Director

Enclosure
Implementation Plan for Publishing the Constitution of the State of Texas in Compliance with the Uniform Electronic Legal Material Act
MEMORANDUM

TO: The Honorable Dan Patrick
Lieutenant Governor of Texas
The Honorable Dennis Bonnen
Speaker of the Texas House of Representatives

FROM: Jeff Archer
Executive Director

DATE: September 1, 2020

SUBJECT: Implementation Plan for the Publication of the Texas Constitution under the Texas Uniform Electronic Legal Material Act

I. INTRODUCTION

Chapter 159 (H.B. 402), Acts of the 86th Legislature, Regular Session, 2019 (Subchapter E, Chapter 2051, Government Code),1 establishes the Texas Legislative Council (the council) as the official publisher of the Constitution of the State of Texas and requires the council to meet certain authentication, preservation, and distribution requirements. Pursuant to SECTION 3 of H.B. 402, the council has prepared this implementation plan.

II. PUBLISHING OF THE CONSTITUTION OF THE STATE OF TEXAS 2

The current Texas Constitution was adopted at the state constitutional convention of 1875 and ratified by the people of Texas in 1876.3 In 1925, the Vernon Law Book Company published an official version of the Texas civil statutes, which included a copy of the state constitution whose content was verified by the publishing company.4,5 Referred to as "Vernon's," this and the

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2 The council expresses its appreciation to the Legislative Reference Library of Texas for its assistance in completing the historical portion of this memorandum.
subsequent versions of the 1925 compilation became the standard legal reference for most legal practitioners.6

The Texas Legislative Council was created by statute in 1949 and began operating in 1950.7 From the beginning, the council has assisted the Texas Legislature in drafting and adopting all manner of legislation, including proposed constitutional amendments. Like most other practitioners, the council used Vernon's as its source for statutory and constitutional language. Indeed, for decades, the council's process for drafting legislation often involved making a photocopy of the Vernon's version of an existing provision of law and making handwritten changes or inserts to the photocopy to ensure the accuracy of the law being amended. In addition, the council and Vernon's publishers acted as partners to revise and improve the published version of the state's constitution and statutes. After the council used Vernon's as the basis to draft legislation that would become adopted constitutional amendments or statutes, Vernon's publishers incorporated the council's amended text into the Vernon's publication; the council, in turn, used the updated Vernon's to draft new legislation.

With the advent of word processing and digital publishing tools, the council began to maintain its own digital copy of the constitution and statutes separate from Vernon's. This version was stripped of the publisher's annotations and formatted in a manner that the council's staff and legislative clients preferred. This copy remained, however, a reformatted version of the law as passed by the legislature and updated by the editors of Vernon's. In an effort to make this version more available to its legislative clients, the council began publishing its version of Texas laws on the Internet in the mid-1990s.8

In 2006, the council determined that it was capable of creating and updating its own constitutional and statutory database, and that doing so was desirable for purposes of efficiency and editorial control. So, beginning with laws enacted and constitutional amendments ratified in 2005, the council began independently updating and publishing the Texas statutes and constitution without involving Vernon's in the process.9 The publicly available website that resulted is called Texas Constitution and Statutes (TCAS).

Taking on this responsibility was no small task. The council had relied on Vernon's because updating the code and constitution is a complex process. Since the council does not have the authority to revise or change legislation after it has been finally passed by the legislature, the council's legal, document production, and information technology teams must work in close partnership to carefully update the council's constitutional and statutory databases. Conflicting

6 Gardner, p. 18.
9 TCAS can be found at [http://statutes.capitol.texas.gov/](http://statutes.capitol.texas.gov/).
additions and amendments must be harmonized where possible and set out separately when necessary. Each change must be carefully scrutinized to ensure it accurately reflects the law.

In order to support its work to publish the constitution and statutes, the council has developed a highly sophisticated information technology solution, Automated Statute Update (ASU), to ensure that the council's constitutional and statutory provisions are current. The ASU system is a custom software solution written by the council that manages the provisions in an SQL relational database maintained on secured council servers. The constitutional and statutory database that is managed by ASU flows into numerous council systems, including TCAS, and the council uses automated software tools to determine on a daily basis whether the database must be updated to accommodate any nonstandard effective dates of constitutional or statutory provisions.

The council is committed to protecting ASU information and consistently making it available to the legislature and the public. Only authorized council staff have the access necessary to change ASU data. All changes that are made to ASU data are reviewed by multiple council employees, including legal editors responsible for the statutes and constitutional text, and logs are maintained to track any changes to the data. The constitutional and statutory database is backed up nightly and stored off-site for disaster recovery purposes. Finally, the council commits substantial resources to the goal of ensuring that all of its applications, including TCAS, are available at all times to the legislature and the public with the exception of short maintenance interruptions.

III. THE UNIFORM ELECTRONIC LEGAL MATERIAL ACT

The national Uniform Law Commission adopted the Uniform Electronic Legal Material Act (UELMA) in 2011. Since then, 21 states, including Texas, have adopted some variation of UELMA. UELMA is intended to create "an outcomes-based, technology-neutral framework for providing online legal material with the same level of trustworthiness traditionally provided by publication in a law book." UELMA requires that official electronic legal material be authenticated by providing a method to determine that it is unaltered, preserved either in electronic or print form, and accessible for use by the public on a permanent basis. If one state adopts

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10 SQL stands for “Structured Query Language.” SQL is a programming language used for interacting with relational database management systems. A relational database is a collection of data arranged in a set of tables with columns and rows, supplemented by unique identifiers. This arrangement allows data to be accessed in many different ways without reorganizing the database tables.


12 Id.

13 Id.

14 Id.
UELMA, the legal material the state designates as official is presumed accurate in another state that has also adopted UELMA.15

Texas' version of UELMA was enacted by Chapter 159 (H.B. 402), Acts of the 86th Legislature, Regular Session, 2019 (Subchapter E, Chapter 2051, Government Code). UELMA establishes the Texas Legislative Council as the official publisher of the state constitution and requires the council to ensure the integrity of the electronic constitution, provide for backup and disaster recovery of the electronic constitution, ensure the constitution's continuing usability, and ensure that the electronic constitution is reasonably available for use by the public on a permanent basis.16 UELMA requires the council to consider the standards and practices of other jurisdictions; the most recent standards regarding authentication, preservation, and security of and public access to legal material in an electronic record and other electronic records as adopted by national standard-setting bodies; the needs of users of legal material in electronic records; the views of certain interested persons; and, to the extent practicable, the methods and technologies for the authentication, preservation, and security of and public access to legal material that are compatible with the methods and technologies used by official publishers in other states that have adopted a law that is substantially similar to the Texas version of UELMA.17

UELMA permits the council to designate either an electronic or nonelectronic copy of the state constitution as the official version of the legal material.18 The council does print a limited number of paper copies of the state constitution for internal reference purposes, but designating TCAS as official would make the official version of the Texas Constitution more readily available. UELMA applies to legal material first published after January 1, 2021, and expressly does not require the material to be authenticated until after it takes effect.19 This means that, in the likely event that a state constitutional referendum passes in November 2021 and the related constitutional amendment takes effect in 2022, the council must be prepared to electronically publish an authenticated version of the constitution not later than January 2022.

IV. IMPLEMENTATION

The implementation of UELMA will consist of three parts. In part one, the council will ensure the integrity of the council's current version of the constitution. The second part consists of implementing UELMA's authentication requirement. The final part of the council's implementation plan consists of providing for continual support, updating, and improvement of the constitution as technology changes and the constitution is amended.

16 SECTION 1, Chapter 159 (H.B. 402), Acts of the 86th Legislature, Regular Session, 2019.
17 Id.
18 Id.
19 Id.
A. Ensuring Integrity

Texas legal practitioners have relied on the Vernon's version of the constitution without significant incident for nearly a century, so it is exceedingly unlikely that there are any substantive differences between the council's version, which as described above is derived from Vernon's, and the originally adopted constitution and subsequent amendments. Regardless, UELMA requires the council to ensure the integrity of the version of the constitution published by the council. Consequently, the council has undertaken the task of proofreading its current version of the constitution by comparing it to images of the signed, enrolled version of the 1876 constitution and images of the signed, enrolled version of each amendment to the constitution maintained by the Texas State Library and Archives Commission, the Legislative Reference Library of Texas, and the council's own collection. The signed, enrolled versions of these documents will be used because they are considered to be "conclusive evidence as to the [legislative] act and of its passage." The council will also use its regularly updated compilation of all prior amendments to the constitution, Amendments to the Texas Constitution Since 1876, in analyzing the accuracy of the council's constitutional text. The verification process will be concluded before January 2021.

Another issue to consider regarding the integrity of the official constitution is that the public must be aware of and able to cite to the official version. The council will add information to TCAS to ensure that the public is aware of TCAS's official status and adopt a recommended citation style to help secondary users of the official version of the constitution know what is being referenced. These changes will be implemented when TCAS is updated in January 2022 in full compliance with UELMA.

Finally, UELMA requires the council to provide for backup and disaster recovery of the legal material covered by the act, and the act requires the council to ensure the continuing integrity, usability, preservation, and availability of the material. As described in Part II above, the council already has a robust quality control process for updating and making editorial changes to the databases where the authenticated constitution will reside. In addition, the council already has a compliant system for controlling access to and backing up these databases. As noted above, the council already commits a large number of resources to the goal of ensuring that all of its applications, including TCAS, are available at all times to the legislature and the public with the exception of short maintenance interruptions.

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20 Id.
21 Mason's Manual of Legislative Procedure 483 (National Conference of State Legislatures in cooperation with the American Society of Legislative Clerks and Secretaries, 2010). See also Association of Texas Professional Educators v. Kirby, 788 S.W.2d 827, 829 (Tex. 1990).
B. Authentication

An important feature of UELMA is that it is not enough to simply internally ensure the integrity of the official legal materials being published. UELMA also requires the publisher to provide a method by which a person viewing the materials is able to authenticate the legal material.22 This makes the material useful in situations in which having a certified copy of the legal material is required or preferred.

After conducting extensive research and considering all of the standards described in H.B. 402, the council has determined that an authentication system based on portable document format (PDF) documents is the solution most suited to users’ needs and most cost-effective for implementation. Originally developed by Adobe, Inc., in the 1990s, PDF is a royalty-free standard for electronic documents that has been adopted by the International Organization for Standardization, a large and well-respected developer of voluntary international software standards.23 PDF is one of the most popular document formats, the Adobe Acrobat PDF reader application is readily available for download for free, and all major supported Internet browsers feature integrated PDF readers. This popularity is likely the reason that a robust market exists for services that verify publicly available PDF documents as authentic. For these reasons, several official publishers in other states that have adopted UELMA have already adopted PDF-based UELMA solutions.24

Authenticating the official version of the Texas Constitution will consist of several steps. First, the council will create a PDF version of each constitutional provision that the council intends to authenticate. Then, the council will securely retrieve a digital signature from a digital signature provider selected by the council, apply the signature to the PDF, and embed into the PDF an encrypted hash digest that is unique to the signed PDF.25 After this process is completed, the council will send the hash digest to the digital signature provider in order to facilitate independent authentication of the signature. Finally, the council will publish the signed PDF in TCAS. This authentication system will be deployed at the same time that the Texas Constitution is updated in TCAS in January 2022.

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22 H.B. 402, supra.
25 A "hash digest" is a unique string of alphanumeric characters that describes a document, in some ways similar to a person's fingerprint, and allows the comparison of two documents to determine if they are identical. The signature is another method by which a provision of the constitution can be verified as coming from the authentic publisher.
The process for determining the authenticity of a constitutional provision is very simple from the perspective of a TCAS user: an authenticated provision of the council's published PDF will display a visible badge at the top indicating that the PDF has been verified. In addition, any downloaded copy of the PDF cannot be edited. Finally, many users will also encounter a band displayed near the top of the document; clicking on the band will reveal additional information describing the document's authenticity.

C. Commitment to UELMA's Success

After taking the steps described above, the council will incorporate the UELMA mission into its permanent information technology planning process. The council will budget the necessary resources to ensure that the council's official constitution continues to be updated, usable, verifiable, and available for use by the public on a permanent basis.

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Attachment

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An example of how the authenticated provision of the constitution will appear is attached as Appendix A.
APPENDIX A.

EXAMPLE OF AUTHENTICATED PROVISION OF THE STATE CONSTITUTION

THE TEXAS CONSTITUTION

ARTICLE 2. THE POWERS OF GOVERNMENT

Sec. 1. SEPARATION OF POWERS OF GOVERNMENT AMONG THREE DEPARTMENTS. The powers of the Government of the State of Texas shall be divided into three distinct departments, each of which shall be confided to a separate body of magistracy, to wit: Those which are Legislative to one; those which are Executive to another, and those which are Judicial to another; and no person, or collection of persons, being of one of these departments, shall exercise any power properly attached to either of the others, except in the instances herein expressly permitted.