



**TEXAS LOTTERY
COMMISSION**



An Internal Audit of Jackpot Estimation System Internal Controls

August 31, 2017

Report #17-011



McCONNELL & JONES LLP
CERTIFIED PUBLIC ACCOUNTANTS

This report provides management with information about the condition of risks and internal controls at a specific point in time. Future changes in environmental factors and actions by personnel will impact these risks and internal controls in ways that this report cannot anticipate.



Introduction

McConnell & Jones LLP (MJ) serving as the outsourced internal audit function (Internal Audit) for the Texas Lottery Commission (TLC) performed an internal audit of the jackpot estimation system processes and internal controls. We conducted this audit in accordance with generally accepted government auditing standards (GAGAS). Those standards require that we plan and perform the audit to obtain sufficient, appropriate evidence to provide a reasonable basis for our findings and conclusions based on our audit objectives. We believe that the evidence obtained provides a reasonable basis for our observations and conclusions based on our audit objectives.

Pertinent information has not been omitted. This report summarizes the audit scope, our assessment based on our audit objectives and the audit approach.

Objectives and Scope

TLC is responsible for preparing jackpot estimations for the Lotto Texas and Texas Two Step games. Jackpot estimations for Mega Millions and Powerball are prepared by the Multi-State Lottery Association (MUSL); however, TLC performs the state of Texas sales projections.

We completed the audit of the jackpot estimation system (JES) to ensure that the appropriate jackpot estimation internal controls were integrated into the agency's newly designed and implemented electronic jackpot estimation system.

It is important that the agency's internal controls for jackpot estimations are sound and working as intended due to the high potential impact on TLC's ability to meet the following business objectives:

- ✓ Calculate and publish accurate jackpot estimations.
- ✓ Ensure that jackpot estimations are reviewed and authorized prior to publication.
- ✓ Maintain public trust and integrity of lottery games.

We evaluated internal controls and business processes related to the jackpot estimation system for the period of August 29, 2016 through June 30, 2017. Some test procedures were performed as of fieldwork date. This work product was a point-in-time evaluation that cannot address the inherent dynamic nature of subsequent changes to the process/procedures reviewed.

Results and Conclusions

Internal Audit categorizes audit findings as Effective, Some Improvement Needed, Major Improvement Needed, Unsatisfactory and Best Practices. Based on the audit results, we determined that controls over the jackpot estimation system processes are effective and working as intended to achieve the business objectives. We also concluded that the internal control environment is enhanced with the implementation of the jackpot estimation system.



TLC’s processes for preparing, reviewing and authorizing jackpot estimations are best

practices that could be replicated by other state lotteries.

Rating	Description of Ratings
Best Practices	Observations indicate best practice opportunities identified during the course of the review that may add value to the function/department/organization. Best practices do not require management comments and do not require internal follow-up to validate implementation status.
Effective	Controls evaluated are adequate, appropriate, and effective to provide reasonable assurance that risks are being managed and objectives should be met.
Some Improvement Needed	A few specific control weaknesses were noted; generally, however, controls evaluated are adequate, appropriate, and effective to provide reasonable assurance that risks are being managed and objectives should be met.
Major Improvement Needed	Numerous specific control weaknesses were noted. Controls evaluated are unlikely to provide reasonable assurance that risks are being managed and objectives should be met.
Unsatisfactory	Controls evaluated are not adequate, appropriate, or effective to provide reasonable assurance that risks are being managed and objectives should be met.

Acknowledgement

We wish to thank all staff involved in this audit for their professionalism and positive outlook towards the assessment of their business processes. The timely completion of this audit

was due to their efforts, responsiveness to our requests and maintenance of documentation in electronic format.





Jackpot Estimation System

We reviewed business processes for jackpot estimations and jackpot advertisements related to the two draw games for which TLC prepares estimates; Lotto Texas and Texas Two Step.

Texas Administrative Codes (TAC) provides guidance on the state of Texas lottery game jackpots. The Lotto Texas game is governed by TAC Title 16, Part 9, Chapter 401, Subchapter D, Rule 401.305. This rule states “The jackpot prize for a drawing is the greater of 40.47 percent of the proceeds from *Lotto Texas* ticket sales for all drawings in the roll cycle and any earnings on an investment of all or part of the sales proceeds, paid in 30 annual installments; or the amount advertised in accordance with subsection (e) of the Lotto Texas On-Line Game Rule as the estimated jackpot for the drawing, paid in 30 annual installments.”

The “Texas Two Step” game rule is found in TAC Title 16, Part 9, Chapter 401, Subchapter D, Rule 401.312. The rule states, “The jackpot prize for a *Texas Two Step* drawing is the amount the commission establishes and authorizes vendors to publicize for the drawing”.

In May 2016, TLC’s executive director tasked agency staff with creating an electronic system that would facilitate the jackpot estimation processes. TLC staff internally developed the jackpot estimation system with the review and approval workflow being the short-term focus with the intent to make future enhancements. The Office of the Controller, Lottery

Operations Division and Information Resources Department staff all played intricate roles in developing and launching the jackpot estimation system ahead of its ninety day target.

Jackpot Estimation System Features:

Tracking the jackpot estimation workflow process is the primary benefit of the jackpot estimation system. Prior to JES, TLC’s jackpot estimation process was manual and dependent upon paper documents and physical authorization routed throughout the agency. JES has made the jackpot estimation process more efficient with the following features.

- ✓ Remote access for executive-level review and approval.
- ✓ Jackpot estimation entry, review, approval and posting workflow tracking.
- ✓ Automatic jackpot estimation advertisement email notifications to designated TLC staff.
- ✓ Historical retention of jackpot estimations and supporting data.
- ✓ Scratchpad spreadsheet feature to perform test estimations.
- ✓ Access is restricted to authorized system users.
- ✓ Internal programmers are available to monitor and support the system

The Office of the Controller (OC) and the Lottery Operations Division Products



Department are the primary TLC divisions/departments involved in preparing and reviewing jackpot estimations. The OC jackpot estimation team and the Lottery Operations jackpot estimation team independently create a jackpot estimations. Both team’s jackpot estimations are based upon their projections of anticipated sales. Each department’s estimators have over 25 years of experience in performing and reviewing jackpot estimations.

Once the preliminary jackpot estimations have been completed, the two jackpot estimation teams consult with each other to concur on the estimated sales projection prior to finalizing the jackpot estimation. The OC jackpot estimation team then enters the final jackpot estimation into JES. This process is a step included on the Jackpot Estimation Checklist within the JES. The agreed-upon estimated sales projection results in a recommended advertised jackpot amount to be used in the event of a jackpot roll.

The Office of Controller also uses a Jackpot Estimation Checklist to document the jackpot estimation process for each draw. The Jackpot Estimation Checklists includes:

- ✓ estimated sales for the current draw;

- ✓ estimated total sales for the current roll cycle;
- ✓ projected total sales for the next drawing; and
- ✓ estimated support for the jackpot prize for the next drawing.

Each of these steps are supported with detailed sales data. Additionally, each checklist step is reviewed at least once by an OC jackpot estimations team member and some of the checklist steps are also reviewed by the Lottery Operations jackpot team members.





Jackpot Estimation System Business Risks and Audit Results

This section of the report provides a summary of the jackpot estimation system’s primary business risks, TLC’s internal controls in place and the respective internal control ratings. TLC established internal

controls in the form of policies, procedures, management review and monitoring processes. These internal controls are effective and working as intended.

BUSINESS OBJECTIVE 1: Jackpot Estimation System Policies and Procedures

Business Objective	Ensure that TLC’s jackpot estimation system maintains the workflow status and results for the jackpot calculations, review, authorization and advertising in accordance with the agency’s policies and procedures.
Business Risk	Jackpot estimations are not prepared in accordance with policies and procedures. This could result in noncompliance with TAC rules.
Management Controls	<ul style="list-style-type: none"> ➤ Detailed written procedures exist and are reviewed on a regular basis. ➤ All departments serving a function within the jackpot estimation process are involved in updating policies and procedures. ➤ A Jackpot Estimation Checklist is used during the jackpot estimation process to verify that all prior information is correct and that all of the required steps are completed.
Control Tests	<ul style="list-style-type: none"> ➤ Conducted interviews. ➤ Performed audit testing. ➤ Analyzed applicable documentation.
Control Assessment	Written procedures include TAC requirements for jackpot estimations and also provide detailed step-by-step instructions for the jackpot estimation process. Jackpots estimations complied with written procedures.
Recommended Actions	None
Management Action Plan	N/A

BUSINESS OBJECTIVE 2: Preparing Jackpot Estimations

Business Objective	To independently estimate anticipated jackpots based on sales projections prior to review and approval.
Business Risk	<ul style="list-style-type: none"> ➤ Overestimated sales revenues do not meet sales projections which then results in inaccurate advertised jackpots and financial loss to the state of Texas. ➤ Underestimated sales projections could result in inaccurate advertised jackpots and loss of consumer confidence and willingness to play the lottery games.





BUSINESS OBJECTIVE 2: Preparing Jackpot Estimations

Management Controls	<ul style="list-style-type: none"> ➤ Jackpot estimations are independently prepared and reviewed by at least two estimators for the same period and then compared and discussed to reach consensus. ➤ Jackpot estimation process includes reviewing historical data and trends, including drawing dates, anticipated weather, holidays and current advertised jackpot.
Control Tests	<ul style="list-style-type: none"> ➤ Conducted interviews. ➤ Reviewed policy and procedures. ➤ Performed audit testing.
Control Assessment	The jackpot estimation process followed established processes which resulted in consensus and accurate preparation.
Recommended Actions	None
Management Action Plan	None Required

BUSINESS OBJECTIVE 3: Review of Jackpot Estimations

Business Objective	To ensure all jackpot estimations are reviewed according to established procedures.
Business Risk	<ul style="list-style-type: none"> ➤ Jackpot estimation is not reviewed. ➤ Incorrect jackpots could be advertised.
Management Controls	<ul style="list-style-type: none"> ➤ Written procedures and the Jackpot Estimation Checklist require at least one estimator to review checklist steps. ➤ JES allows all users to view workflow status to determine progress.
Control Tests	<ul style="list-style-type: none"> ➤ Conducted interviews. ➤ Performed audit testing. ➤ Analyzed applicable documentation.
Control Assessment	In some instances, workflow status is not available for the post-draw checklists. TLC’s Office of Controller is working with Information Resources staff to program JES to provide notifications when a checklist step requires action.
Recommended Actions	➤ Take interim measures to ensure that the post-draw checklist steps are completed and reviewed.
Management Action Plan	None required.

BUSINESS OBJECTIVE 4: Executive Approval of Jackpot Estimations

Business Objective	To ensure all jackpot estimates are reviewed and authorized by the agency’s Executive Director (or designee) prior to being published.
Business Risk	Incorrect or unauthorized jackpots could be advertised.



BUSINESS OBJECTIVE 4: Executive Approval of Jackpot Estimations

Management Controls	<ul style="list-style-type: none"> ➤ Written procedures and the Jackpot Estimation Checklist require TLC’s Executive Director to electronically sign off on each estimation prior to public advertisement. ➤ Executive level approval is restricted to specific user access. This access list can only be updated by requesting a change with TLC’s Information Resources Department.
Control Tests	<ul style="list-style-type: none"> ➤ Conducted interviews. ➤ Performed audit testing. ➤ Analyzed applicable documentation.
Control Assessment	All jackpot estimations are appropriately documented, reviewed and authorized prior to jackpot advertisement.
Recommended Actions	None
Management Action Plan	N/A

BUSINESS OBJECTIVE 5: Accuracy of Advertised Jackpots

Business Objective	To ensure that the advertised jackpots represent accurate estimates of potential winnings.
Business Risk	Loss of consumer confidence and willingness to play the games.
Management Controls	➤ Jackpot estimation worksheets include sales calculation support data.
Control Tests	<ul style="list-style-type: none"> ➤ Conducted interviews. ➤ Reviewed policy and procedures. ➤ Analyzed applicable documentation.
Control Assessment	All jackpot estimations agreed with advertised jackpots.
Recommended Actions	None
Management Action Plan	N/A

BUSINESS OBJECTIVE 6: User Access in JES

Business Objective	To ensure that access is limited to individuals that have a role in the jackpot estimation process.
Business Risks	Access is granted to individuals who are not knowledgeable of the estimation process.
Management Controls	<ul style="list-style-type: none"> ➤ Division directors must approve all user access requests. ➤ Clearly defined roles, responsibilities and users are defined in JES.



BUSINESS OBJECTIVE 6: User Access in JES	
Control Tests	<ul style="list-style-type: none"> ➤ Conducted interviews. ➤ Performed audit testing. ➤ Analyzed applicable documentation.
Control Assessment	User access is limited to individuals with a role in the jackpot estimation process.
Recommended Actions	None
Management Action Plan	None Required

The jackpot estimation system includes checklists to document that the jackpot estimation processes were completed. When a user checks the associated box in JES to indicate that they have performed the step, the system automatically updates the signature and the checklist step is complete.

Checklists applicable to Texas jackpot games are:

- ✓ Jackpot Estimation Checklist
- ✓ Post Approval Checklist
- ✓ Post Draw Checklist

Checklists applicable to Multi-State jackpot games are:

- ✓ Jackpot/Cash Value Checklist
- ✓ Post Approval Checklist
- ✓ Post Draw Checklist

We sampled twelve jackpot estimations and reviewed supporting documentation maintained in JES. Of the twelve estimations, four were incomplete and did not support the post draw checklist completion due to missing reviewer signatures. These incomplete post draw checklists were:

- ✓ Texas Two Step, Sept. 1, 2016
- ✓ Texas Lotto June 17, 2017
- ✓ Texas Lotto August 31, 2017
- ✓ Powerball June 10, 2017

Completing the Post Draw Checklist is an important component of the jackpot estimation process in that the steps identified ensures that the daily sales calculations are maintained, updates comments of any issues that may have been encountered and locks the estimation spreadsheet that was used to preserve the information. These steps combine to ensure data integrity for future jackpot estimations.

TLC’s Office of the Controller staff is working with the agency’s Information Resources staff to develop a notification within JES that will advise staff and JES approvers of incomplete checklist processes in JES. In the meantime, the Office of Controller should ensure that the Post Draw Checklist is completed and reviewed. This is an interim measure and does not require management response because the agency is in the process of implementing a long-term solution.