MARCH REPORT 2024

Guatemalan Elections

Digital Witness

Verify every vote

www.DigitalWintess.io

EXECUTIVE SUMMARY

In 2023, a "citizen army" of hundreds of thousands of Guatemalan volunteers from the Vote Reception Boards (Juntas Receptoras de Votos - JRV), Municipal Electoral Boards (JEM), and District Electoral Boards (JED) once again came to polling stations to protect, with their bare hands, the Democratic Republic of Guatemala. Yet, once again, the Supreme Electoral Tribunal (TSE) fell short, casting uncertainty over whether these essential volunteers will be willing to participate in future elections.

Beyond injustices in candidate participation and other issues that fall within the scope of the Electoral and Political Parties Law (LEPP), Guatemalans' trust in the election results, as reflected in the Electoral Records, is the sole responsibility of the TSE and the very reason for its existence (we'll refer to them as "Actas Electorales", "actas" or "tally sheets" in this report). The legislative, executive, and judicial branches play no role in the design, safeguard, or transmission of these records. They are the conduit through which a minimal national consensus is achieved: simple addition, the most basic arithmetic. Once that trust is lost, the foundation for the peaceful transfer of power collapses.

DigitalWitness.io exists because political organizations no longer fulfill their oversight role over the Actas Electorales, leaving the TSE weakened in its primary duty due to the absence of an effective counterweight. For the most part, party-appointed observers ("fiscales" in Spanish) are little more than electoral ghosts—showing up occasionally to argue, rarely to contribute, and almost always without a grasp of their duty. In practice, they have delivered little to the public beyond confusion.

In contrast, DigitalWitness.io seeks to empower JRVs, JEMs, and JEDs by strengthening the entire system under a simple principle: we verify every vote. We place no trust in the TSE, political organizations, media outlets, or influencers—we verify the numbers on the Actas Electorales signed by citizen volunteers at polling stations and compare our totals to the published results..

This year, we became the first and only elections audit initiative to verify all 145,976 tally sheets published through the Preliminary Results Transmission System (TREP). We are proud to note that this was accomplished in under two weeks for the June General Elections and in under 24 hours for the August Presidential Runoff.

We succeeded thanks to the support of numerous anonymous contributors who performed more than 10.4 million machine-based readings, alongside 1,763 volunteer users who contributed over 3.1 million human-based readings. This intensive review revealed that 98.48% of valid vote data matched between the TREP and our audit, confirming the presidential election while exposing concerning discrepancies in municipal and legislative races.

Once again, we underscore the urgency of updating the voting system and present concrete recommendations that the TSE can implement on its own without legislative or executive order.

Since the results of the TREP 'have no legal effect,' we submitted multiple requests for access to the official results through the TSE's Office of Public Information Access (FOIA equivalent). After our request to review the original Acta#4 tally sheets from the June General Elections was denied, even though the results had already been made official based on Acta#8, we filed a constitutional appeal (amparo) before the Supreme Court of Justice (CSJ), which was likewise rejected.

We are deeply concerned by the institutional practice, now upheld by the CSJ, that makes it impossible to access all the tally sheets produced through the hard work and dedication of countless citizen volunteers. We call on all veteran members of JRVs, JEMs, and JEDs to demand access to their original documents and to see for themselves whether their contributions still exist or have been erased.

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We acknowledge that in 2023, the Public Prosecutor's Office overstepped its bounds by seizing the Actas—an act that infringed upon the TSE's fundamental responsibility. However, we regard this as an unacceptable excuse and a failure to fulfill institutional duties. The TSE had both the obligation and ample opportunity, from July to October 2023, to digitally safeguard the original Actas using SimpleProof.com's Immutable Proof Service (Respaldo Inalterable) at the moment of handover by the District Electoral Boards (JED). Why wasn't this done in that 4-month window?

As a result, the majority of the work carried out by hundreds of thousands of Guatemalans in 2023 has been lost. We demand that the TSE establish a standard practice of digitally backing up and publishing all Electoral Records without exception, as early as possible. We also urge JRVs, JEMs, and JEDs to do the same by capturing and publishing photographs online through any system that ensures public access and allows cross-verification with the TSE's official versions.

We developed this bullet-point framework, known as Key Performance Indicators (KPIs), to assess the historical performance of the TSE. We vow to apply this lens in every future national voting event to measure whether the electoral system is improving or deteriorating.

Our KPIs make clear that, despite significant shortcomings under the current TSE magistrates, their performance has been considerably better than that of the 2015–2020 magistrates.

We take this opportunity to remind Julio Solórzano and other former magistrates that their administration was the worst in the TSE's history, that many of today's systemic problems were inherited from their tenure, and that we will not forget this is their legacy.

KPI SCORE	2015	2019	2023
Release	● 11%	● 11%	● 11%
Production-Release Time	Not Available	● 50%	● 90%
Metadata	● 4%	● 4%	● 10%
Matching Tally Sheets	● 24%	● 70%	● 77%
Matching Data Points	● 74%	● 95%	● 98%
Preliminary vs. Official Discrepancies	● 87%	● 94%	● 95%
Image Scans Quality	● 26%	● 67%	● 73%
OCR Readability Score	Not Available		● 70%
Database Release Time	Not Available	● 90%	● 95%
Electoral System Score	● 25%	● 53%	69%

In summary, with the resources currently available to the TSE, it is possible to achieve much more with much less—ensuring that the temporary work of JRVs, JEMs, and JEDs endures permanently and remains accessible to all. Continuing with the status quo, where most Electoral Records disappear and public distrust deepens, amounts to a betrayal of the true heroes of democracy: the citizen volunteers.

Trust can be restored, and doing so requires no additional funding; in fact, it produces savings.

DigitalWitness demands that the TSE stop repeating the same actions while expecting different results. We want to verify every vote!

Carlos Toriello
Project Leader

EXECUTIVE SUMMARY

Release Score:
Measures the total volume of Electoral Records (tally sheets) released and available for download online, compared to the total number of documents generated by the Vote Reception Boards (JRVs) and Electoral Boards (JEMs and JEDs).

Release Score		
2015	**2019**	**2023**
● 11%	● 11%	● 11%

Production-Release Time:
Ninety percent of the score is awarded for publishing at least 99% of the tally sheets within 24 hours after the close of voting, with the score decreasing exponentially as time passes. The remaining ten percent is based on the delay between the date and time of the last signature (which, to date, has never been recorded) and the actual time of publication.

Production-Release Time		
2015	**2019**	**2023**
Not Available	● 50%	● 90%

Metadata:
Digital files contain crucial analytical information within their metadata, such as SHA-256 hashes and EXIF data. This information is often lost during file compression and should instead be backed up in a tamper-proof manner.

Metadata		
2015	**2019**	**2023**
● 4%	● 4%	● 10%

Matching Tally Sheets:
Results from the audit of Acta#4 tally sheets conducted by Digital Witness over the last three electoral cycles. This indicator reflects the proportion of tally sheets that match exactly with the official published data.

Matching Tally Sheets		
2015	**2019**	**2023**
● 24%	● 70%	● 77%

Matching Data Points:
Based on the audit results of Actas#4 conducted by Digital Witness over the last three electoral cycles, this indicator reflects the proportion of individual cells (vote entries within an Acta#4) that match exactly.

Matching Data Points		
2015	**2019**	**2023**
● 74%	● 95%	● 98%

Preliminary vs. Official Discrepancies:
Results from the audit comparing Official Results (Actas#8) against Preliminary Results (SITREP and TREP) over the last three electoral cycles. This indicator measures the magnitude of differences in vote counts, contested positions, and elections between the two sources.

Preliminary vs. Official Discrepancies		
2015	**2019**	**2023**
● 87%	● 94%	● 95%

EXECUTIVE SUMMARY

Image Quality:

Measures the quality of scanned images of Acta#4 against the minimum acceptable standard (3.5MP, 96 DPI, RGB), taking into account resolution (pixel count), DPI (dots per inch), and color storage.

Image Scans Quality		
2015	**2019**	**2023**
● 4%	● 4%	● 10%

OCR Readability Score:

Metric reflecting the percentage of Actas successfully read using two distinct OCR engines with 99% confidence. Results for 2019 and 2015 are still pending due to the poor image quality in comparison to 2023.

OCR Readability Score		
2015	**2019**	**2023**
Not Available		● 70%

Database Release Time:

Ninety percent of this metric is based on the real-time publication of the preliminary results transmission system databases. The remaining ten percent is divided between the Immutable Proof Service of the initial system reset (puesta en cero) and the final database.

Database Release Time		
2015	**2019**	**2023**
Not Available	● 90%	● 95%

Electoral System Score:

The absolute average score (including unavailable values) of all previous indicators. This serves as a general metric for the electoral year, assessing the performance of the TSE as the sole authority responsible for upholding Guatemalans' trust in the election results.

Electoral System Score		
2015	**2019**	**2023**
● 25%	● 53%	69%

EXECUTIVE SUMMARY

Recommendations for All Actas (#1 to #8)

- Ensure access to and digital backup of all voting documents and their copies.
- Facilitate OCR readability and standardize file formats for consistent data extraction.
- Include relevant QR codes linking each document to its Immutable Proof Service digital backup.
- Adopt a standardized Acta code format that contains information about the Electoral Board, election type, and page number.
- Standardize data-entry layout using a gray "digital figure 8" background to guide handwriting and improve readability.
- Record the date, hour, and minute of the final signature on every Acta.
- Eliminate manual completion of Actas#6 and Actas#8, replacing them with digitally filled and printed versions.
- Preserve manual completion of Acta#4 and Acta#7 as part of the citizen-authenticated voting process.
- Limit each page of Actas#6 and Actas#8 to one election type only, to avoid confusion and errors.
- Use OCR-B and MICR typefaces where appropriate to improve machine readability and verification.
- Correct the labeling of the tally column in Acta#8 to ensure clarity and consistency.

Specific Recommendations for Acta#4

- Standardize the observations section to ensure consistent space and structure across all Actas#4.
- Standardize the initial opening section, including an opening sheet with instructions.
- Separate the opening sheet to provide sufficient space for documenting the Acta#4 opening process without reducing space on the presidential vote page. This improvement should include:
  - Clear written instructions.
  - Examples of how to fill out vote entry cells.
  - QR codes linking to training content.
- Include relevant QR codes that link to the Immutable Proof Service (Respaldo Inalterable) of the document.
- Replace political party acronyms with standardized party codes in the section for polling station representatives, to reduce space usage and avoid ambiguity.
- Include a digit entry guide to improve handwriting clarity and OCR processing.
- Add a dedicated box for strikethroughs and corrections to standardize error handling.
- Introduce code references for vote types (e.g., valid, null, blank, challenged).
- Replace the title of the second column and correct any major design errors to prevent confusion during completion and data capture.

Specific Recommendations for Acta#5

- Eliminate Acta#5 and replace it with multiple digital versions of Acta#4, captured independently by all JRV members and party representatives at the polling station.
- Publish all digital copies online through a mobile application that records additional metadata from each user, device, timestamp, and geolocation at the moment of capture.
- Ensure that digital Acta#4 copies are accessible during Scrutiny Review Hearings (Audiencias de Revisión de Escrutinio) conducted by JEDs with district-level party overseers.

Recommendations for the Backup and Public Access of Electoral Records

- Preserve and expand the Immutable Proof Service (Respaldo Inalterable) for all Electoral Records (Actas).
- Implement digitization and backup of all Actas immediately upon creation.
- Safeguard the Historical Archive by digitizing and publishing all physical Actas from past electoral events currently held by the TSE.
- Establish Tamper-Proof Databases, covering both the initial reset state (puesta en cero) and the final dataset.
- Replace CD-based delivery of information with an interactive, cloud-based consultation system managed by the Office of Public Information Access (FOIA equivalent).

Tamper-Proof Evidence:
What the Timestamps Really Show

In these charts, we present the capture times of Actas#4 using both the digital EXIF metadata and the reception timestamps from the Immutable Proof Service (Respaldo Inalterable).
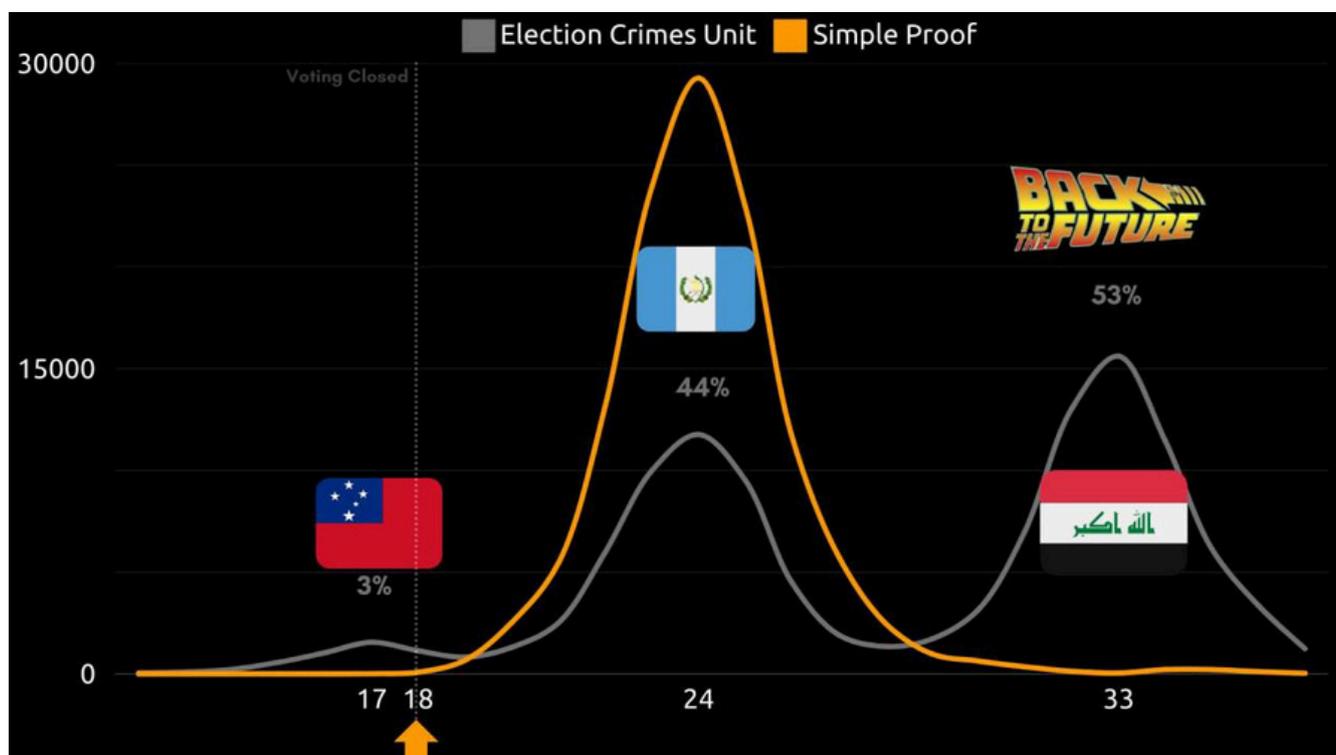
The EXIF data from TREP reveals two patterns. While Simple Proof's Immutable Proof Service (Respaldo Inaterable) shows a single consistent pattern, with no files timestamped before the official close of polls at 6:00 PM (18:00 hours), the Guatemalan Election's Crimes Unit argues three separate bell curves, the smallest of which occurs prior to 6:00 PM on voting day. Because the Immutable Proof Service is recorded on Bitcoin, its verification is both possible and indisputable. To date, no technology has succeeded in manipulating the Bitcoin blockchain. Doing so would require quantum computers or time travel. If the Public Prosecutor's Office (MP) has evidence of quantum computing or time travelers, we respectfully request that such information be shared with the world. The fact that 53% of the data they purport as real exists after evidence of creation exists on Bitcoin means these are two conflicting explanations of reality that cannot be true at the same time.

The vast majority of documents were registered within a 12-hour window following the close of voting. The digital fingerprint of each Acta has been verified by DigitalWitness, and anyone in the world can independently confirm this using the SHA-256 algorithm on any internet-connected smartphone, at no cost. For example, see here.

Regarding the FECI's claims that the Actas#4 were created before the polls closed, presenting photographs of the original Actas#4, taken by volunteers or party overseers at polling stations, could easily clarify the issue. If massive data manipulation had occurred, why not simply show the original citizen-signed Acta#4 side by side with the allegedly altered version? The absence of such evidence from the thousands of Actas supposedly created before closing time makes the claim indefensible.

The far more likely explanation is a time-zone misconfiguration on the devices used to capture the images—an operational error attributable to TREP contractors. About 3% of devices believed themselves to be in American Samoa (GMT-11), 53% in Baghdad (GMT+3) and only 44% in Guatemala (GMT-6). Bitcoin acts as a clock that cannot be wrong since it is beyond anyone's control. If data contradicts the Bitcoin blockchain it is much more likely that an error has occurred.

What is DigitalWitness

Origins, Achievements, and How DigitalWitness Works

Digital Witness

Verify **every** vote

What is DigitalWitness.io?

DigitalWitness.io is a real-time digital audit of voting documents. It was created in Guatemala by FundacionHCG.com, in partnership with Stakwork.com, and is built on the Immutable Proof Service (Respaldo Inalterable) of the Preliminary Results Transmission System (TREP). The project is powered by civic participation under a simple principle: we verify every vote.

Votes are verified using smartphones through open collaboration (crowdsourcing), employing OCR, artificial intelligence, and other technologies.

It is the only electoral audit initiative to have verified 100% of the images published by the TSE, beginning with the 2023 general elections in Guatemala. This process generated a database containing millions of vote-entry cells, enabling full comparison of all valid votes published in TREP.

We are also the only electoral audit initiative to have compared 100% of the Official Results (Actas#8) against the Preliminary Results (TREP and SITREP) from the 2023, 2019, and 2015 elections. This cross-cycle comparison makes it possible to identify significant patterns for analysis and has led to the creation of Key Performance Indicators (KPIs) that allow the public to assess whether the integrity of elections in Guatemala has improved or deteriorated over time.

Origins: 2019 Guatemalan Elections

DigitalWitness.io was founded by veteran members of Vote Reception Boards (JRVs) in direct response to the collapse of the SITREP system during the 2019 elections. In 2019, our initiative achieved the following:

- Released functional open-source code within 3 weeks, thanks to the collaborative effort of several anonymous technologists.
- Mobilized over 1,500 volunteers to verify the 101,716 SITREP documents submitted in June 2019.

However, the effort was successful at the time due to two main reasons:
1. The project was carried out in reaction to the events of that year, rather than in preparation for them.
2. Volunteers reviewed full tally sheets (actas) on computers, instead of reviewing individual data entries from tally sheet on smartphones.

Additionally, three formal recommendations were submitted to the 2019 Commission for the Updating and Modernization of the Elections (CAME-2019) between November 2019 and March 2020.

Only one was adopted:
The use of Blockchain Certifications, now known as the Immutable Proof Service (Respaldo Inalterable).

DigitalWitness 2019 Audit

● SITREP Documents   ● Verified Tally Sheets   ● Pending
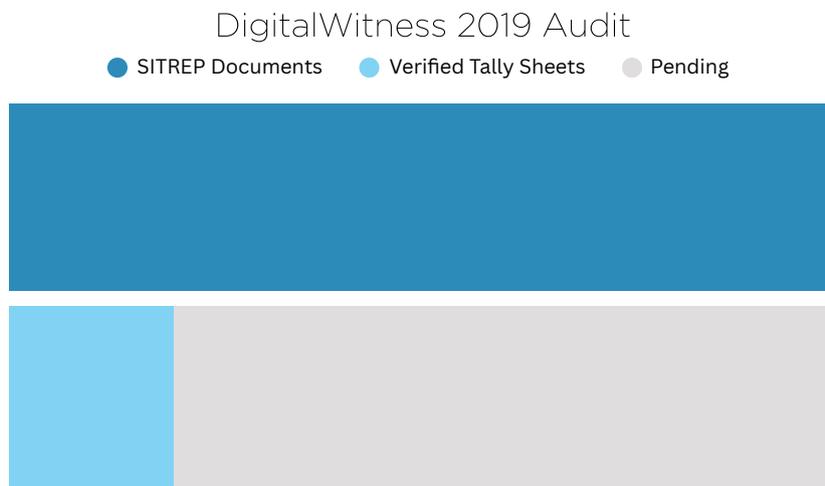
Digital Witness in 2023

FOR ACTAS#4 AND TREP FROM 2023

- We launched a week before the general election, not three weeks after, as in 2019.
- On July 6, we completed auditing 100% of the June 25, 2023 election results (less than two weeks after election day). By August 22, we had audited 100% of the August 20 presidential runoff (less than 24 hours after the runoff).
    - The software is no longer open-source, but rather a donated service by a private company, available for contracting by anyone who wishes to independently verify our work.
    - We mobilized 1,763 volunteer users, this time through mobile devices with gamified points system.
    - After a quality control process, 1,074 users qualified to work with real data, generating 66,158,542 satoshis in rewards.
- The 2023 database includes 2,756,175 individual data points, compared against TREP.gt.
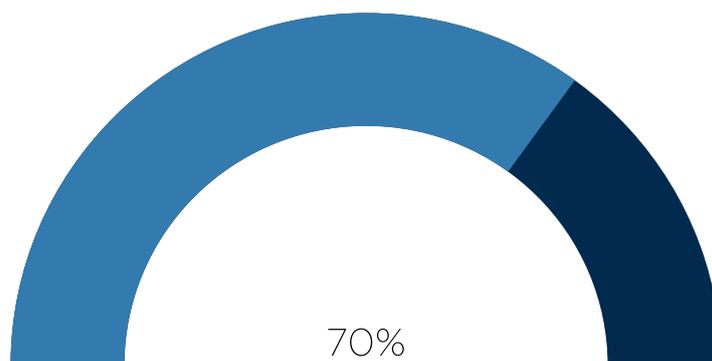   a. We ran 7.7 million OCR processes, resulting in 1,896,051 successfully read data points (70% OCR success rate).
    b. Our qualified volunteers performed 3,102,030 manual readings to identify the remaining 860,124 data points (30%) that OCR engines could not extract.

70%

1,896,051 datapoints were **OCR-sourced (70%)**
y 810,616 datapoints were **Crowd-Sourced (30%)**

Comparison Between Official Results (Actas#8) and Preliminary Results (TREP) from the 2015, 2019, and 2023 Elections

- Through public information access requests (FOIA equivalent), we obtained 100% of the Actas#8 signed by District Electoral Boards (JEDs) for the years 2015, 2019, and 2023.
- We created a database containing 381,794 data points, manually reviewed by qualified users, based on Actas#8 (Official Results).
- These official data points were then compared against the datasets published by the Preliminary Results Transmission Systems (TREP) for the same three electoral cycles.

Regarding Actas#4 from TREP 2015 and 2019

- Due to the poor quality of the triplicated images of Actas#4 from 2015 and 2019, the development of an independent database for those years is still in progress.
- The goal is to achieve quality metrics comparable to the 2023 audit.

How Did Digital Witness Work in 2023?

This QR code links to our explainer

video on YouTube:

A Download and Verification

Download of Acta#4 Photographs

We downloaded the official photographs from the Preliminary Results Transmission System (TREP.gt). We only work with official images.

Download of Official Database

We downloaded the official databases published by the TSE on TREP.gt, in CSV format.

SHA-256 Hash Verification

We processed all images downloaded in the first step to obtain their respective SHA-256 hash, which we then compared to the "integrity code" included in the TREP databases and the Immutable Proof Service (Respaldo Inalterable). This ensures that we are working with authentic, unaltered official images.

B Image and Database Preparation

Fragmentation of Actas#4

Once the legitimacy of each Acta#4 is confirmed, it is fragmented to isolate the sections containing data to be compared with the official databases from TREP.gt.

Creation of Comparison Database

The original dataset contained 2,756,175 valid vote entries that required verification. We proceeded to generate a parallel comparison database, allowing us to compare each field individually, identifying discrepancies, matches, and missing data. This database was populated using manual data entry conducted by Digital Witness.

C Consensus Through OCR

At this stage, each Acta#4 image is fragmented into 12 to 40 parts, depending on the number of fields it contains. Then:

Standard OCR Reading

A standard OCR engine is given a photo of a handwritten number and returns a digit as output.

AI-Based OCR Reading

An artificial intelligence OCR engine is provided with a fragment of the Acta#4 containing the party code, name, and acronym, along with the handwritten vote count field. It is then asked a question:

"How many votes does this party have?"

The AI used in this process was trained using data from the work done by Digital Witness in 2019, which means it has learned to recognize handwriting from Guatemalan JRV volunteers.

OCR Reading Comparison

This process yields two independent readings of the same data point, generated by two completely different algorithms. These results are displayed in two columns. If both results match, the value is considered valid and is entered into the parallel database, to later be compared against the official TSE database.

This step eliminates the need for human verification in those cases, enabling fast, effective, efficient, and low-cost data processing. This occurred for 69% of the data, meaning two-thirds of the information was successfully read by both OCR engines. If no consensus is reached, the data is escalated for manual verification by Digital Witness volunteers.

D Manual Data Entry and Volunteer Consensus

First Consensus by Digital Witness Users

The same fragments shown to the AI-based OCR engine are displayed to two different users, who must manually enter the handwritten numbers they see, using a CAPTCHA-style interface. The two entries are then compared. If they match exactly, the data point is considered valid and entered into the comparison database to be later checked against TREP data.

Tiebreaker and Final Consensus

If the first two entries do not match, the fragment is shown to a third user, who also enters the data they observe. This third entry is used to seek consensus with at least one of the previous entries.

If no agreement is reached after three attempts, the data point is recorded as illegible.

E Match Analysis and Data Comparison

The parallel database is compared with the TSE's official database

The previous steps allowed us to generate a parallel database containing 2,756,175 data points from the 2023 elections.

An exact match was found in 2,712,684 entries, resulting in a 98.42% validation rate against TREP data. This confirmed that the methodology described above is effective and that Digital Witness produces reliable data for comparison and analysis. The 1.58% of unmatched data disproportionately affected the District Deputy and Municipal Corporation elections, due to their smaller voting universes and narrower margins, compared to national-level elections.

Without access to the original Actas#4, it is not possible to independently verify the results of many of these elections or to eliminate all reasonable doubt.

What Does a Digital Witness Contributor Do?

1 **Registration**
On the Digital Witness website, users would click the "Participate!" button and enter their personal information, including a valid phone number.

2 **Validation**
The user receives an SMS code, which must be entered on the website to receive a unique user ID.

3 **Login**
Users then visit jobs.takwork.com/workers, where they can log into the data entry system using their assigned ID.

4 **Data Entry**
All users must complete the training tutorial before accessing real data. Only those who achieve a sufficiently high score are invited to begin actual data verification tasks.

5 **Data Entry**
Users complete verification tasks through a series of OCR readings, in which they are shown images with handwritten data and must type the numbers they see.

6 **Control Questions**
Randomly, control tasks are presented among normal jobs. These appear identical to regular tasks but are used to assess trust scores. If a user makes mistakes on control questions, their trust score decreases. If the score drops below 80%, the user is no longer allowed to participate. However, all users have the right to challenge a control answer if they disagree with the system's evaluation. If the challenge is valid, their trust score will remain unaffected. This feedback loop allows the system to continuously learn from its users.

7 **Gamified Points**
As users complete data entry tasks, they earn points, allowing them to compete with friends and family to see who contributes the most to verifying Guatemala's election system.

**User entries in 2023
earned a total of 66,158,542 satoshis (gamified points)!**

Voting System

How our voting system works

ARTURO HERBRUGER ASTURIAS' VISION

Pentagon Model with Electoral Records as the Central Axis

VOTING ROLLS

SUPREME ELECTORAL
TRIBUNAL (TSE)

VOTING SYSTEM

ACTA#4:
CLOSING AND
TALLYING BY
JRVs

VOTE RECEPTION
BOARD (JRV)

POLITICAL PARTY
OVERSEERS (Fiscales)
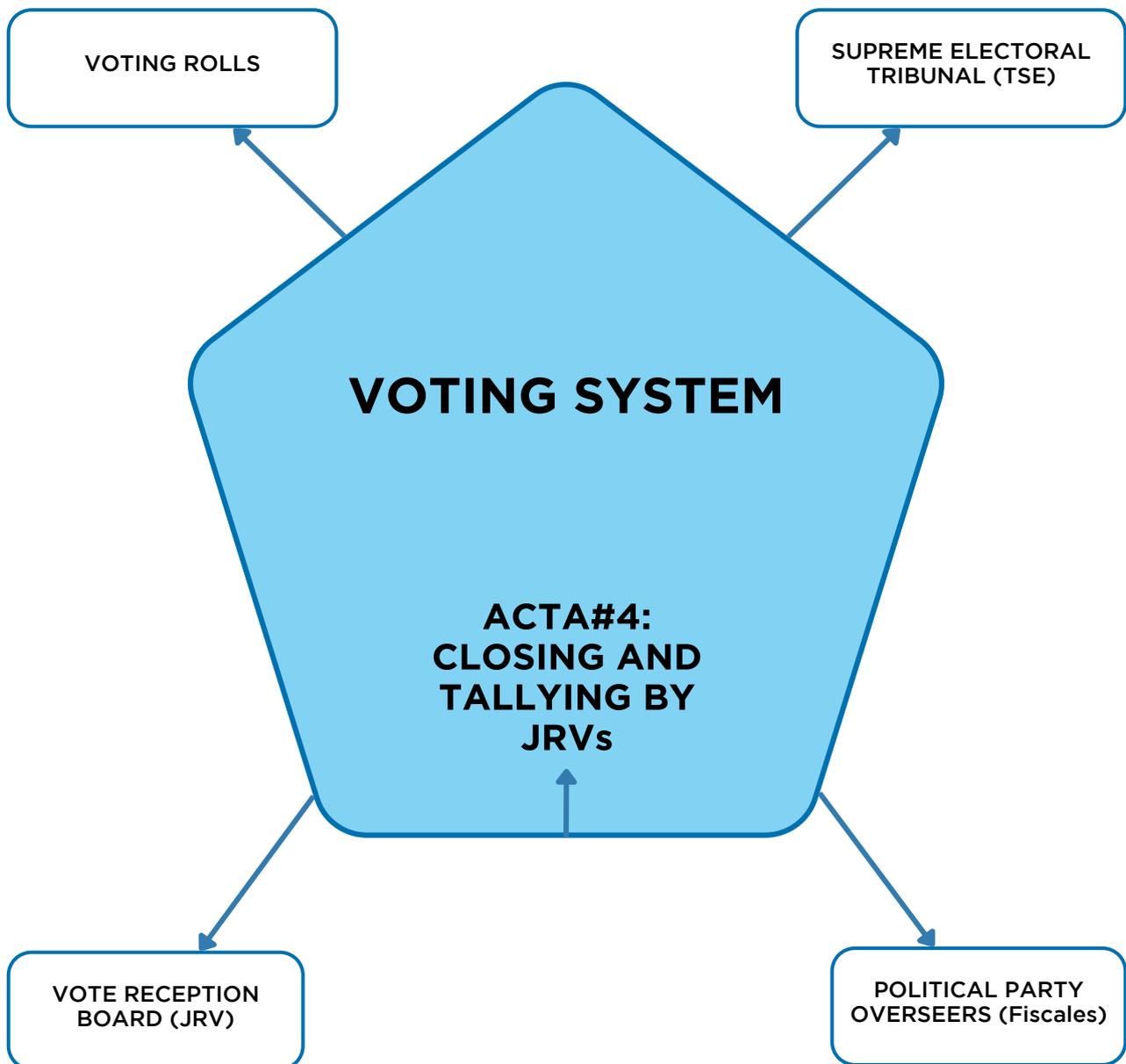
Acta#4 is the central document of the voting process and represents the culmination of collaboration among the system's key components: political party overseers, the Supreme Electoral Tribunal (TSE), the votings rolls, and the JRV volunteers. In essence, Acta#4 consolidates the efforts and intentions of all stakeholders, ensuring that the election results accurately reflect the voters' intent.

This is made possible by leveraging inherent distrust among antagonistic actors as a consensus mechanism: don't trust, verify!

Unfortunately, party overseers no longer fulfill their oversight role in accurately monitoring electoral records. They have become electoral ghosts, signing off on results merely to collect payment. As a result, the TSE is not subject to robust oversight, leading to a significant deterioration in its performance.

WHAT IS ACTA#4?

The term Actas#4, also referred to in Guatemala as polling station tally sheets, denotes the official document #4: the Final Closing and Tally Report of the Vote Reception Board (JRV). Polling station overseers, representing political organizations, sign their agreement with the numbers handwritten by the citizen volunteers in charge of each JRV.

This consensus between political party representatives and citizen volunteers ensures that the vote count reflects the true intention of each voter. As such, Acta#4 is the final line of defense held in the hands of the Guatemalan people to guarantee a peaceful transfer of power. It is the documentary proof of whether Guatemala is a legitimate democracy—or not. The very legitimacy of the Guatemalan State flows from it.

Acta#4 is a document born public, and it must remain accessible to all. Citizens should have the ability to verify its contents and validate election results independently. The more citizens who verify all Actas#4 for themselves, the greater the public trust in the process.

Background

In both 2019 and 2023, the Supreme Electoral Tribunal (TSE) caused severe complications in the officialization of election results. As a result, the peaceful transfer of power was placed at risk—threatening to return the country to instability or violence. The electoral process is in urgent need of technological modernization.

DigitalWitness is the only civilian elections audit initiative to have verified all 145,976 documents published by the TSE through the TREP system. We know that trust in election results is achievable, and it doesn't cost a single quetzal—in fact, it saves millions. Here, we present how to achieve this by:
- Redesigning Acta#4 based on OCR principles, and
- Ensuring public access to original (white) Actas#4 through the TREP system.

The Legacy Design of Acta#4
The background design of Acta#4 dates back to the 1980s, when fax technology represented the cutting edge of telecommunications. At that time, under the leadership of Dr. Arturo Herbruger Asturias, the TSE stood at the technological forefront. Since then, however, while many advances have taken place, the design and processes related to Acta#4 have remained unchanged. The initial technological success of the TSE established a tradition among future magistrates to leave the system untouched. As a result, institutional resistance tied to Dr. Herbruger's legacy has hindered modernization. DigitalWitness considers it URGENT to update the background design of Acta#4 by incorporating modern OCR-compatible design principles. This recommendation was formally communicated to the Commission for Electoral Updating and Modernization (CAME) of the TSE in November 2019 and again in February 2020.

Additionally, the processes related to all Electoral Records must be reviewed—particularly:
- Acta#5 (Certification of Acta#4 Results),
- Acta#6 (Municipal Tally Summary), and
- Acta#8 (District Tally Summary).

We reaffirm our 2019 recommendations to CAME and provide specific implementation details that can be adopted ahead of the next national election.

How Does the Acta#4 Protect the Vote?

On average, 400 voters are assigned to each Vote Reception Board (JRV). All individual votes are consolidated into the corresponding Acta#4, which serves as the official summary of results. This process guarantees the secrecy of the vote and ensures that opening ballot boxes containing individual ballots is required only in extreme or exceptional cases.

There is a common misunderstanding about the content of Acta#4. Many believe that it summarizes the votes from an entire polling station, but in reality, each page of an Acta#4 summarizes the votes of a single election conducted at that polling station. This means that each JRV produces multiple images of Actas#4—one for each type of election (e.g., presidential, congressional, municipal).

Each Acta#4 exists in three physical copies:
- The original (white),
- The duplicate (yellow), and
- The triplicate (blue).
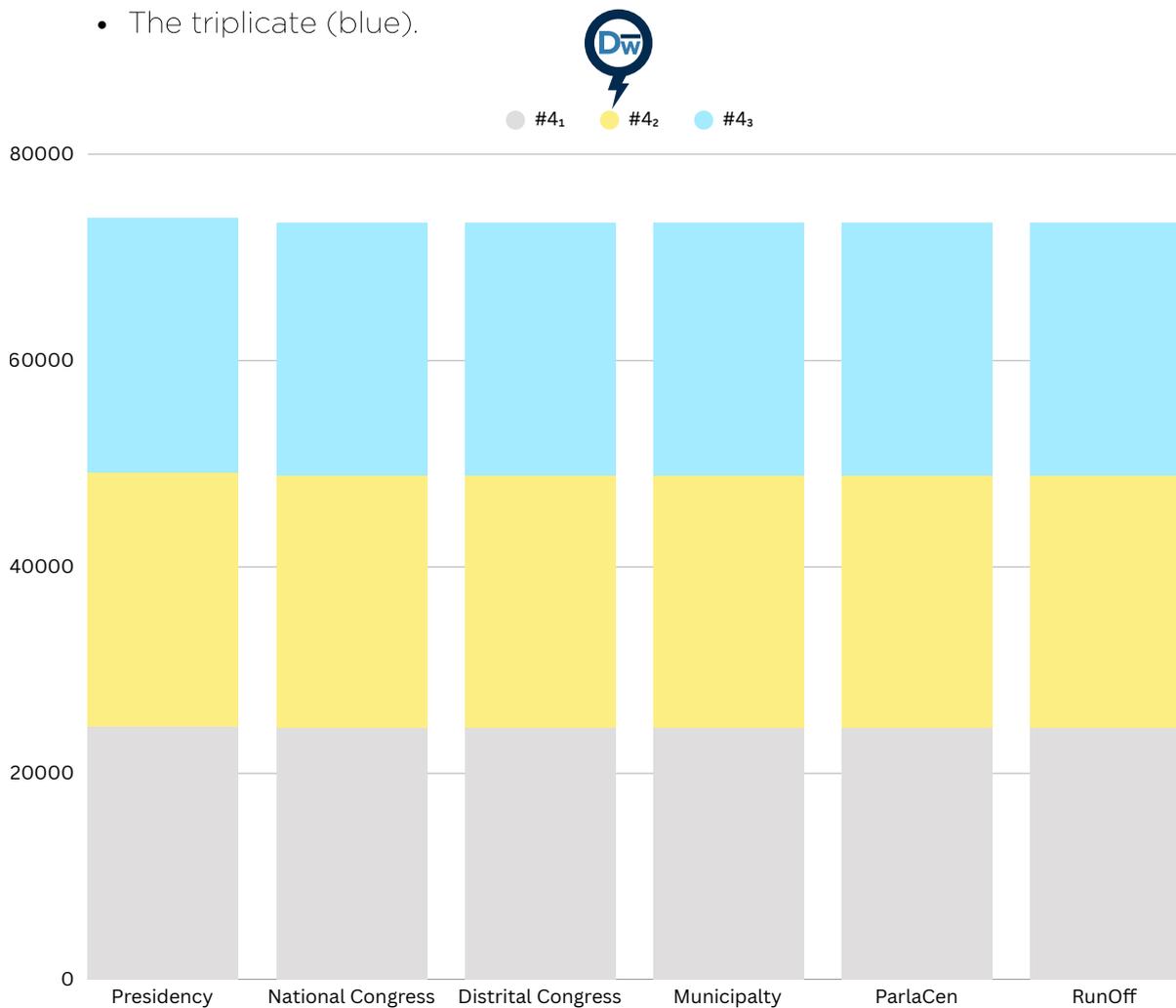
**IN TOTAL, 442,530 ACTAS#4 WERE GENERATED,
BUT ONLY 145,976 WERE PUBLISHED.**

Anatomy of an Acta#4

Electoral Year Emblem

ELECCIONES GENERALES 2023

Header Identifying the Vote Reception Board (JRV) and Election Type

ACTA FINAL DE CIERRE Y ESCRUTINIOS
JUNTA RECEPTORA DE VOTOS

Mesa Número	11	
Departamento	01	Guatemala
Municipio	01	Distrito Central
Tipo de Elección	Presidente y Vicepresidente	

QR Code reiterating ID: 100011172

100011172

Acta and Page Identifier

DOCUMENTO No.
4
PÁGINA 1

Opening Section for the Closing and Tallying of the Vote Reception Board

El(la) Presidente José Cecilio Antonio Paz Mendoza , DPI 2228 98704 0101
EL(la) Secretario(a) Hugo Gerardo De León Hernández , DPI 3607 48023 0701
y el(la) Vocal Wilfredo Alberto Reyes Gabriel , DPI 2151 05729 0101
de la Junta Receptora de Votos, hacen constar que siendo las Veinte horas y catorce minutos del día veinticinco de junio de dos mil veintitrés, el(la) Presidente de la junta declaró cerrada la votación; que se formaron los diferentes legajos guardándose en su bolsa, que se presentaron a votar **2 7 0** ciudadanos registrados en el padrón; y que el resultado final del escrutinio de votos es el siguiente:

Vote Tally Record Section

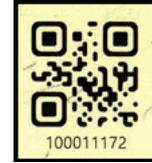| Código	Nombre y Siglas	Votos Válidos		
15	UNIDAD NACIONAL DE LA ESPERANZA (UNE)	0	1	2
32	PARTIDO AZUL (AZUL)	0	0	5
41	VALOR UNIONISTA (VALOR UNIONISTA)	0	3	5
33	CABAL (CABAL)	0	2	2
23	TODOS (TODOS)	0	0	0
36	VAMOS POR UNA GUATEMALA DIFERENTE (VAMOS)	0	0	6
28	PARTIDO HUMANISTA DE GUATEMALA (PHG)	0	0	1
30	PARTIDO REPUBLICANO (PR)	0	0	3
34	PARTIDO DE INTEGRACIÓN NACIONAL (PIN)	0	0	0
11	COMUNIDAD ELEFANTE (ELEFANTE)	0	0	2
18	VICTORIA (VICTORIA)	0	0	4
38	MOVIMIENTO SEMILLA (SEMILLA)	0	8	1
16	FRENTE DE CONVERGENCIA NACIONAL (FCN-NACION)	0	0	0
13	PARTIDO POLITICO NOSOTROS (PPN)	0	0	0
37	UNION REPUBLICANA (UR)	0	0	6
57	URNG-MAIZ WINAQ (URNG-MAIZ WINAQ)	0	0	4
20	COMPROMISO, RENOVACION Y ORDEN (CREO)	0	0	9
26	BIENESTAR NACIONAL (BIEN)	0	0	9
17	VISION CON VALORES (VIVA)	0	0	4
12	MI FAMILIA (MI FAMILIA)	0	0	9
31	CAMBIO (CAMBIO)	0	0	1
35	VOLUNTAD, OPORTUNIDAD Y SOLIDARIDAD (VOS)	0	3	9

Inconsistent Header

Total Votes Section

Total Votos Válidos (Es la suma de los votos obtenidos por las organizaciones políticas)	2	5	2
Votos Nulos	0	1	8
Votos en Blanco	0	0	0
Total Votos Válidamente Emitidos (Es la suma de los votos válidos, votos nulos y votos en blanco)	2	7	0
Votos Inválidos	0	0	0
Total Votos (Es la suma de los votos válidamente emitidos y votos inválidos)	2	7	0

Observations and Disputes Section

Observaciones
☐ Si se presentaron impugnaciones en la cantidad de _____ que se colocan en la bolsa de votos impugnados
☒ No se presentaron impugnaciones.

Ballot Receipt and Usage Section

Cantidad de papeletas recibidas **401**
Cantidad de papeletas no usadas **131**

Signature Area for Vote Reception Board Members

FIRMAS INTEGRANTES JUNTA RECEPTORA DE VOTOS
Presidente:
Secretario:
Vocal:

Signature Area for Party Overseers (Fiscales de Mesa)
This confirms their acceptance of the results on behalf of their political organization.

DPI Y FIRMAS DE FISCALES ORGANIZACIONES POLÍTICAS

DPI 3881 71456 0101	Siglas CV
DPI 2548945770106	Siglas CREO
DPI 2227 94283 4601	Siglas Valor Unionista
DPI 2324 71657 0101	Siglas Une

Identifier of Positions Being Elected

Presidente y Vicepresidente
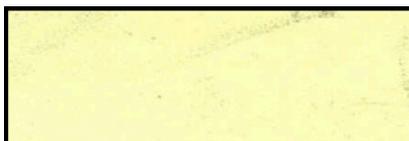
Blank Area Customarily Used for Strikethroughs (testados), Year After Year

Blank Area Again Used for Strikethroughs (testados), Customarily

Priority Instruction

Se instruye a las Juntas Receptoras de Votos, que de manera prioritaria, el acta de PRESIDENTE Y VICEPRESIDENTE sea entregada en el sobre No. 1 al operador de informática ubicado en su centro de votación.

Clarification on Use of Color-Coded Copies (Triplicates)

Original (Blanca): Junta Electoral Municipal
Duplicado (Amarilla): Dirección General de Informática
Triplicado (Celeste): Correo Propio (Auditoría)

JRVs Protect the Vote Through Acta#4

The Vote Reception Board (JRV) are a fundamental entity in the voting process, forming the base of the voting hierarchy. Each JRV is composed of three to five volunteers, who must be over 18 years of age and unaffiliated with any political party. In 2023, both nationally and abroad, there were 24,585 JRVs, each made up of five volunteers—totaling approximately 122,925 individuals, not including party overseers.

Party overseers (fiscales) have the right to challenge any irregularities they witness during voting. At the end of the count, their signatures confirm acceptance of the results recorded in the official documents.

The large number of individuals involved, combined with the diversity of volunteers and party overseers, makes it highly improbable to corrupt them all simultaneously. This structure adds a high level of reliability to the system. JRVs are the ideal setting for vote counting, and any process conducted outside of them is inherently less trustworthy.

For this reason, JRVs, together with party overseers, are considered high-security elements in the protection of the vote. This is also why Actas#4 are more valuable than individual ballots: the acta prevails over the ballot (acta mata papeleta).

In network terminology, this structure is known as "decentralization," and it is the key element that safeguards the integrity of the system. This is how 9.3 million possible votes in each election are condensed into tens of thousands of documents.

JRV

Voting Table
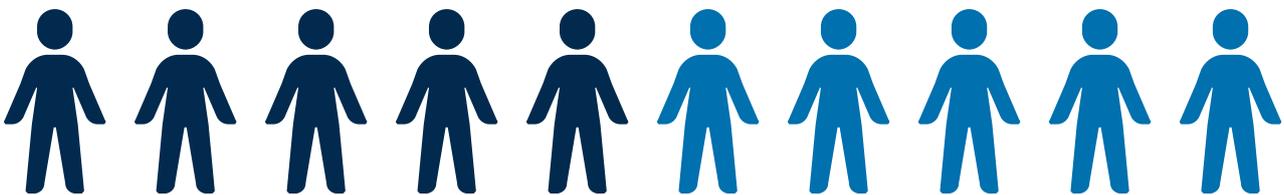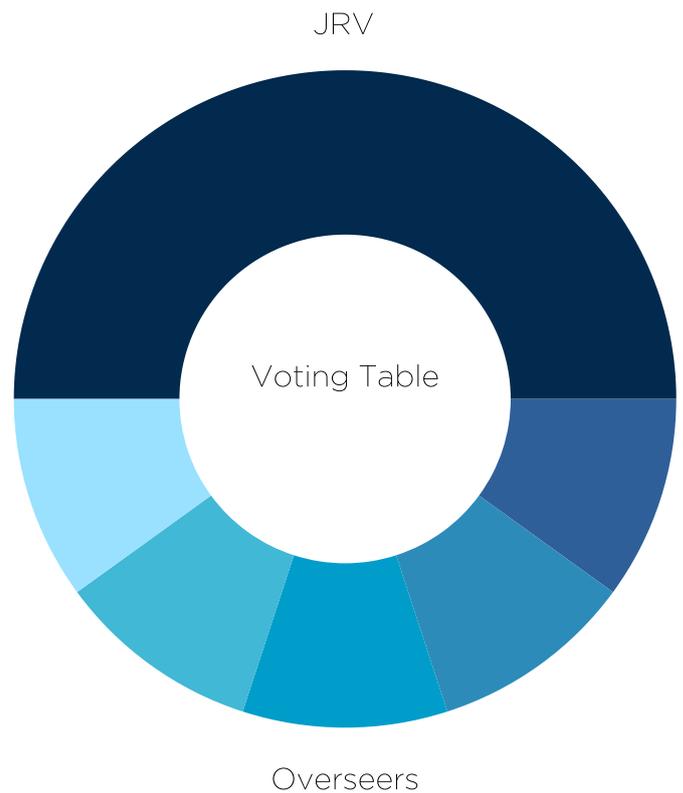
Overseers

JRV Members
President, Secretary, Vocal (Member), Alguacil (Usher), Alternate. Together, they provide five neutral decision-making points at each polling station.

Table Overseers
Approximately 5 table overseers from political parties are present, on average, throughout voting day and during tallying. They provide antagonistic viewpoints that must reach consensus, ensuring the result is honest.

What Does "#4" Mean?

The number "#4" refers simply to its position in the official documentation sequence, following a protocol established to track and validate each stage of the voting process.

THE ONLY ONE PUBLISHED BY THE TSE.
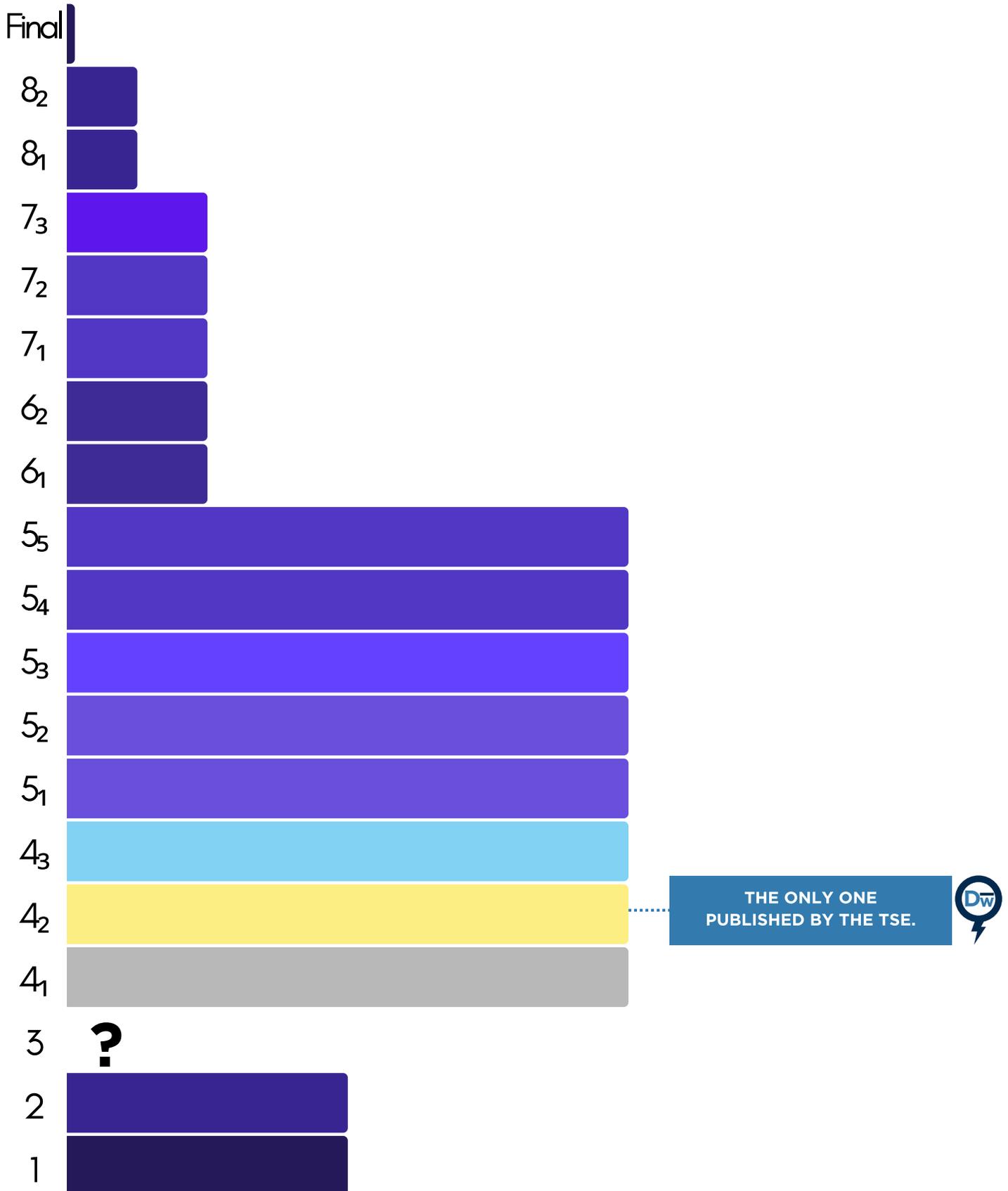
System Structure: A Pyramid

The JRVs (Vote Reception Boards) form the base of the pyramid in Guatemala's voting system. They are activated by the 339 Municipal Electoral Boards (JEMs) through 3,852 Voting Center Coordinators. All JEMs are appointed by the 24 District Electoral Boards (JEDs). These districts correspond to Guatemala's 22 departments, the Municipality of Guatemala (the only JED that is also a municipality and thus functions as both a JED and a JEM), and the Electoral Board for Votes from Abroad, the only one not tied to a municipality.

The members of the JEDs are appointed by the Supreme Electoral Tribunal (TSE) and granted both autonomy and temporary authority. This autonomy and temporality then flow downward: from JEDs to JEMs, and from JEMs to JRVs. This structure makes the Electoral and Vote Reception Boards as a kind of "citizen army," independent from the government.

Each board has at least three members, typically five on average, meaning the total number of citizen volunteers exceeds 100,000. This implies that at least one in every 100 registered voters directly protects the polling stations. When considering only valid votes for political parties, this ratio rises to one in every 50.

This system is perhaps the most important democratic achievement of the Guatemalan people since the 1982 revolution. It forms the foundation of the Republic's legitimacy under the 1985 Constitution and sustains the validity of all democratically elected governments since then.

As a result, the TSE functions as a referee: it sets the rules and announces the results. However, the main players in the process are the citizens and political organizations. The result of the game is found in the actas (tally sheets).

- **Supreme Electoral Tribunal (TSE)**

- **24 Departmental Electoral Boards (JEDs)**

- **339 Municipal Electoral Boards (JEMs)**

- **3,852 Voting Center Coordinators**

- **24,585 Vote Reception Boards (JRVs)**
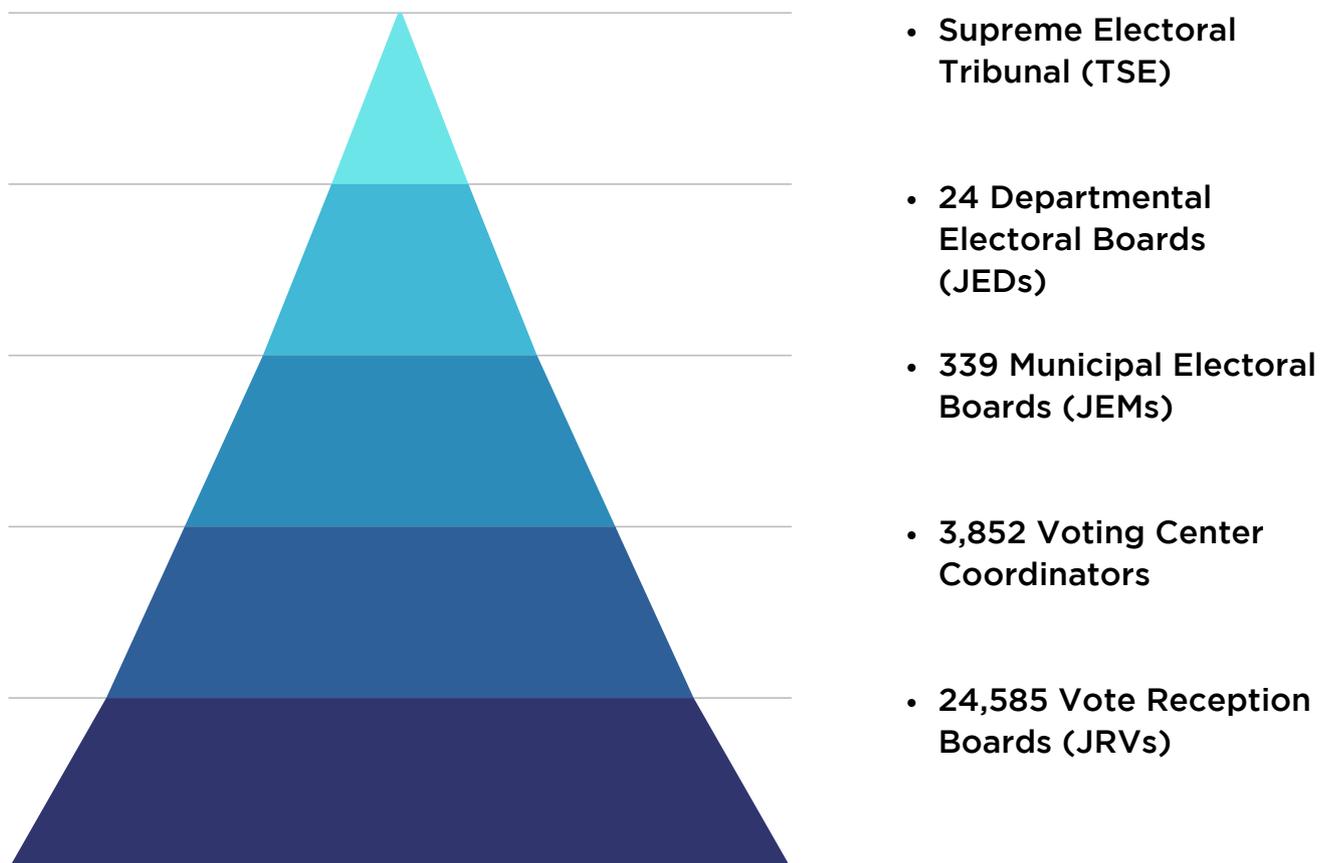
Report on Guatemalan Elections 2023

Held in June and August 2023

How Many Electoral Records Exist?

	Name	OFFICIAL RESULTS							PRELIMINARY RESULTS	
		Actas	Versions	Copies	Docs. per Process	Duplicates	Total Actas	%	Trep.gt	%
Final Agreement	TSE Final Agreement of Magistrates	27	1	1	27	0	27	0.002%	0	0.0%
Acta#8	District Tally Summary JED	23	2	2	46	46	92	0.007%	0	0.0%
Acta#7	Municipal Tally Certification JEM	340	6	3	2,040	4,080	6,120	0.475%	0	0.0%
Acta#6	Municipal Tally Summary JEM	340	6	2	2,040	2,040	4,080	0.317%	0	0.0%
Acta#5	JRV Tally Certification	24,585	6	5	147,510	590,040	737,550	57.230%	0	0.0%
Acta#4	Final Tally and Closing Record JRV	24,585	6	3	147,510	295,920	442,530	34.338%	145,976	11.3%
Acta#3	Challenge Form (Form for Filing Disputes)	0	2	2	0	0	0	0.0%	0	0.0%
Acta#2	Voter Control Sheet	24,585	2	1	49,170	0	49,170	3.815	0	0.0%
Acta#1	Initial Opening Record	24,585	2	1	49,170	0	49,170	3.815%	0	0.0%
	TOTAL	99,070			391,513	892,226	1,228,739	100%	145,976	11.3%

The Actas#4 published online for public access via TREP represent only 11% of all Electoral Records generated by the volunteer members of the Vote Reception and Electoral Boards. A complete electoral audit requires access to 100% of the Actas in order to be carried out successfully. These records are the product of the autonomous work of citizens serving on JRVs and Electoral Boards; therefore, the public has the right to full online access to these documents.

The only reason this is not happening lies in the institutional tradition of the original TSE, led by Arturo Herbruger Asturias, who at the time had only fax technology at his disposal. Continuing this institutional obstinacy and avoiding real modernization will lead to the collapse of the system.

Arturo Herbruger Asturias used every technological tool within his reach, that is the tradition that must be upheld, rather than repeating the same practices and expecting different results.

DO WE NEED ALL THE DETAILS TO AUDIT?

HOW MANY RECORDS DO WE HAVE A RIGHT TO ACCESS?

How Many Actas Were Published on TREP.gt in 2023?

- ● Accessed and Released
- ● Accessed and Not released
- ● Not Available
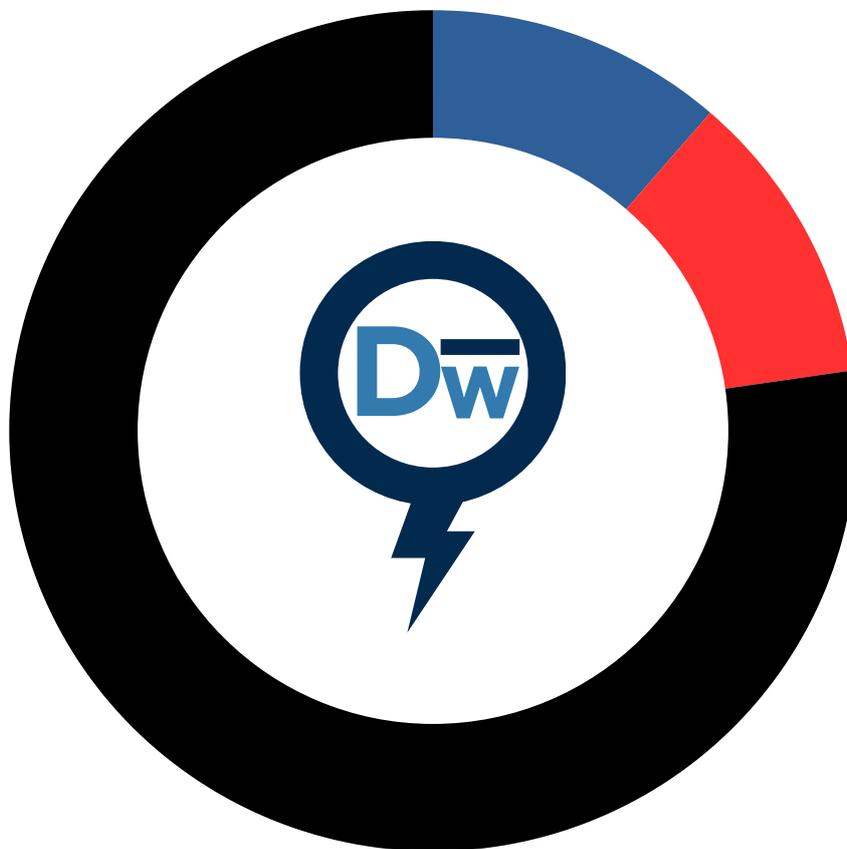
MATCHING WITH TREP.GT?

During the June and August 2023 elections, the TREP data entry personnel had access to the original Actas#4, received the triplicate copies, and were also able to consult directly with JRV presidents.

However, only the duplicate carbon-copy Actas#4 were published.

How can full reconciliation be achieved if only half of the information they have access to is made public?

How Many Actas Do We Have the Right to Access?

THIS IS THE ROOT OF PUBLIC DISTRUST

Chart axis values: 1400000, 1200000, 1000000, 800000, 600000, 400000, 200000, 0

Categories: Total Documents | Trep.gt | Public Access
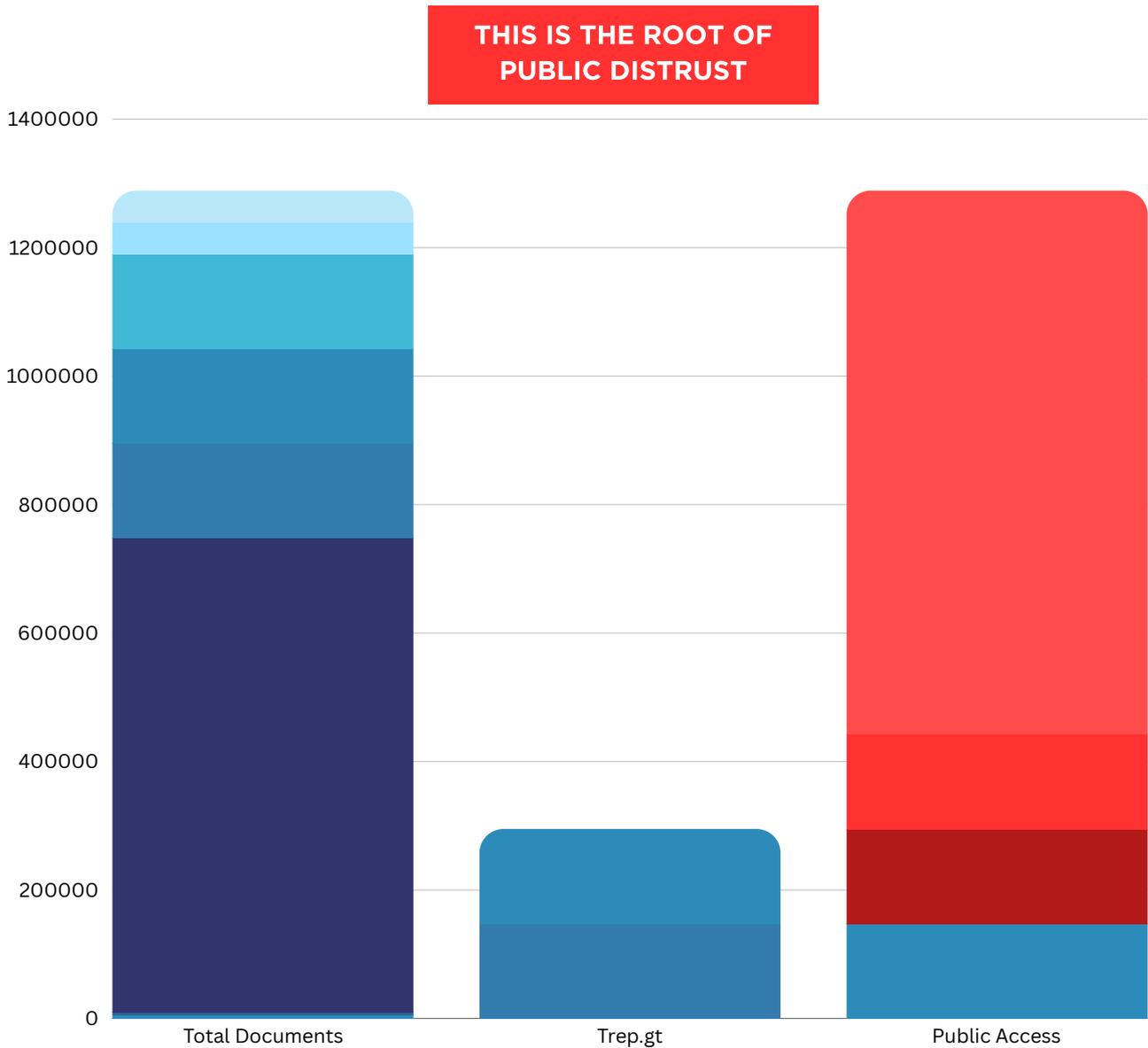
TREP.GT COST Q148M, EXCLUDING DATA ENTRY COSTS

Each Acta#4 made available to the public
—a triplicate copy on carbon paper—
costs more than Q1,000.

Yet only 11.3% of all Electoral Records
are published.

How much detail do we need?
Information on 9.36m voters

	President and Vicepresident	National Congress	Distrital Congress	Municipal Corporation	PARLACEN	August Runoff	2023 Elections	%
Valid Votes	4,202,442	4,171,353	4,486,445	5,167,749	3,696,089	4,009,133	25,733,211	45.82%
Blank Votes	388,442	544,815	390,840	295,352	645,696	52,687	2,317,832	4.13%
Void Votes	966,389	827,755	663,339	302,722	1,206,773	147,165	4,114,143	7.32%
Total Votes	5,557,273	5,543,923	5,540,624	5,765,823	5,548,558	4,208,985	32,165,186	57.27%
Absentees	3,803,795	3,817,145	3,820,444	3,595,245	3,812,510	5,152,083	24,001,222	42.73%
Electoral Roll	9,361,068	9,361,068	9,361,068	9,361,068	9,361,068	9,361,068	56,166,408	

IN THE 2023 ELECTIONS
1.52% of total votes did not match,
resulting in 168 contested positions,
of which 119 remained unreconciled.

Void Votes
7.32

Blank votes
4.13

Valid Votes
44.30

Absentees
42.73

Mismatches
1.52
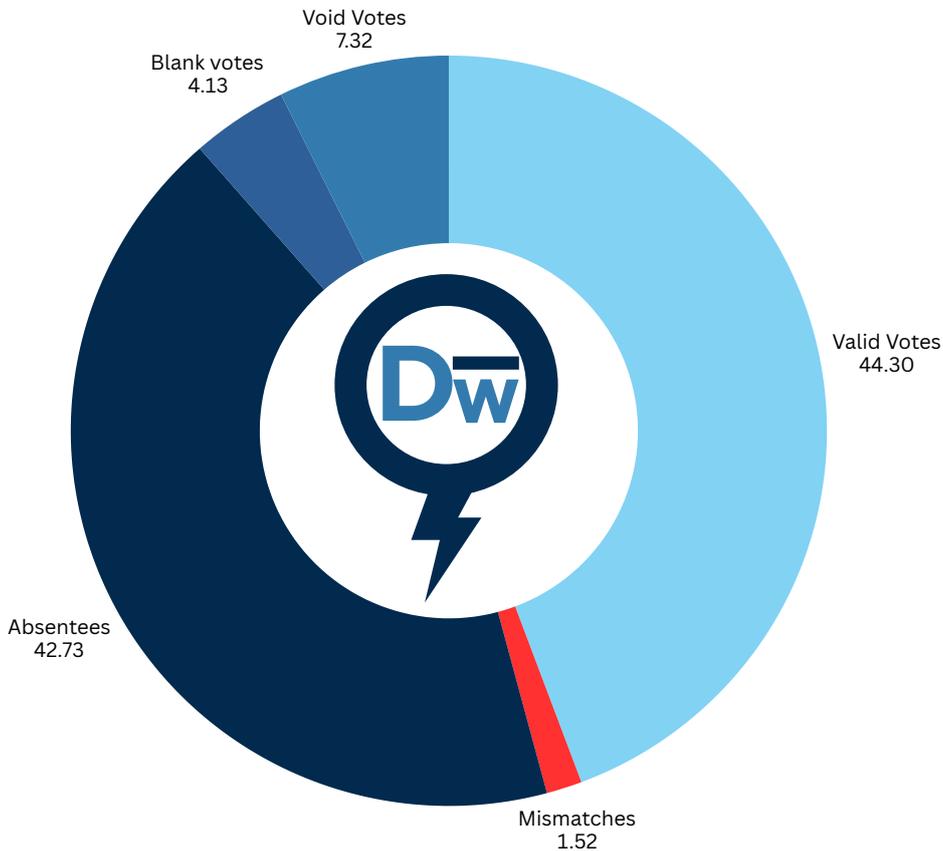
The TSE continues publishing the same content through TREP, expecting different results

There is no legal or technical justification for publishing only the yellow duplicate copies of Actas#4 while withholding the rest of the Electoral Records. It is urgent that TREP publish all Electoral Records. Until this happens, public distrust will continue to grow, ultimately threatening the collapse of the system.

	SITREP 2015	SITREP 2019	TREP 2023
Acta#1	0	0	0
Acta#2	0	0	0
Acta#3	0	0	0
Acta#4	75,509	125,171	145,976
Acta#5	0	0	0
Acta#6	0	0	0
Acta#7	0	0	0
Acta#8	0	0	0
Total Electoral Documents	664,703	1,095,107	1,275,417
Availabilty in preliminary results	75,509	125,171	145,976
Release Score	11%	11%	11%

The current practice of publishing only 11% of Electoral Records, specifically the triplicate copies of Actas#4, is not only unacceptable but also underscores a critical lack of transparency and accountability on the part of the Supreme Electoral Tribunal (TSE), particularly following a public investment exceeding Q148 million. This limitation in publication directly erodes public trust in the integrity of the voting process. It is imperative that the TSE urgently rectify this situation by ensuring the complete, unrestricted publication and tamper-proof backup of all voting documents generated during the General Elections and the Presidential Runoff.

Backup and Publication Timing:

The Success of TREP 2023 vs. SITREP 2019

The online publication of Electoral Records is a fundamental right of all Guatemalans, particularly for the volunteers of the Vote Reception and Electoral Boards. In addition, the legal principle of promptness (celeridad) applies, requiring that all procedures be dynamically integrated into a single act, proceeding simultaneously and without unnecessary delays.

We therefore propose measuring the time between document creation and online publication using a rapidly decreasing curve. The reason is simple: each day of delay exponentially reduces public trust in any digital file. The ideal time between creation and publication should be as close to zero as possible.

Actas
Publicadas

TREP 2023 contra SITREP 2019

Horas

←---→ MINIMO ESPERADO   —— TREP 2023   —— SITREP 2019
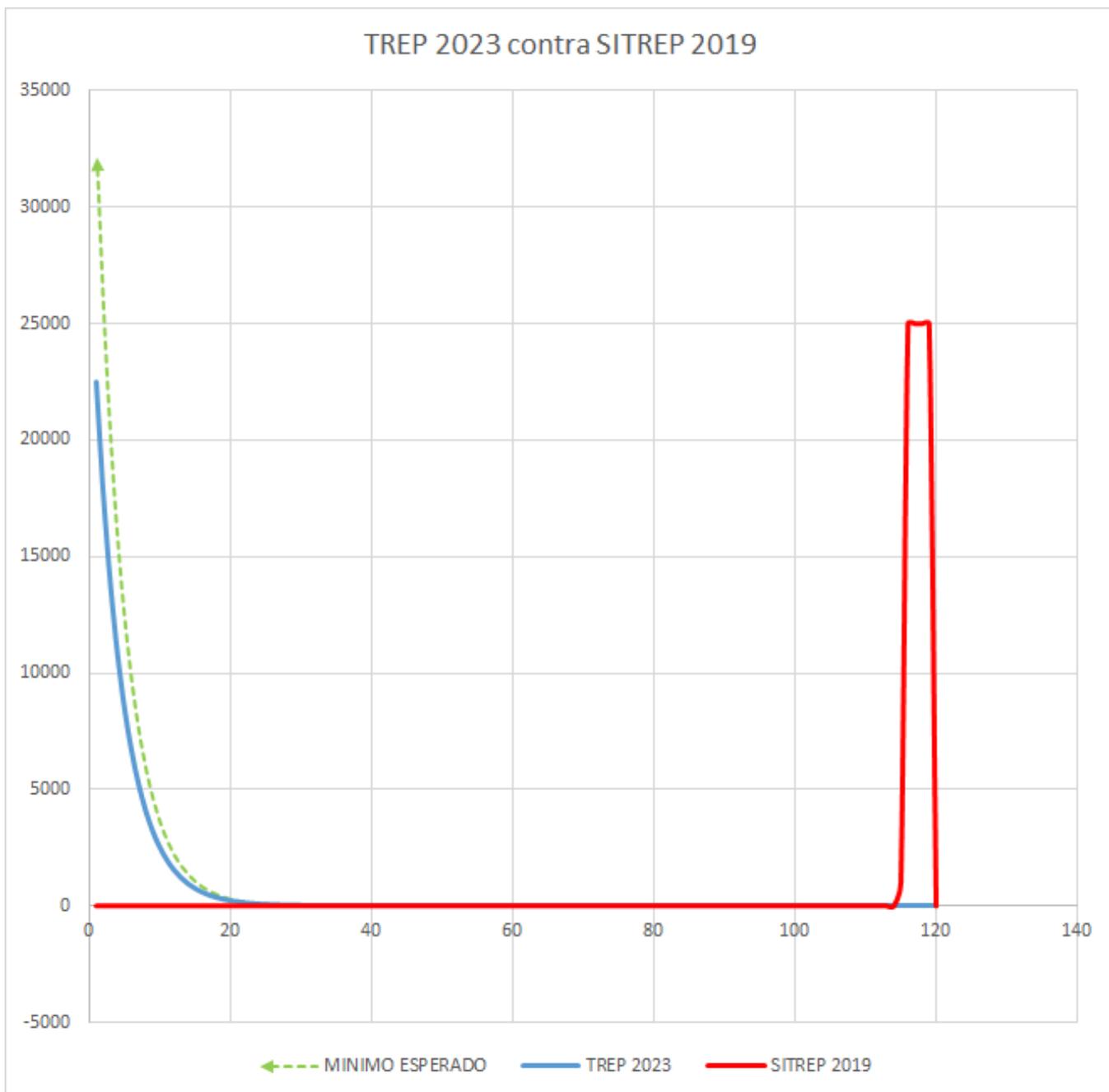
Since DigitalWitness was founded in 2019, we cannot analyze the 2015 SITREP (N/A). However, in 2019, the TSE published only 97% of the promised documents, and only did so five days post-election. In contrast, in 2023, TREP successfully published 99% of the documents on election night within hours of creation, marking a significant improvement over the 2019 fiasco. It is also worth noting that in 2019, the TSE eventually published the duplicated Actas#4, but only after succumbing to the public's demand for them.

We don't exist in a vacuum and a regional comparison is helpful. Costa Rica, following the municipal elections of February 4, 2024, the electoral authority has yet to publish the equivalent of Actas#4, years after the election. In El Salvador, during the February 2024 Legislative Assembly elections, it took their TSE more than three weeks to generate and publish the actas. For this reason, Guatemala's TSE continues to hold a leadership position in electoral transparency in the region and earns a score of 50% for the year 2019.

We strongly urge the TSE to eliminate the gap between the creation and online publication of Electoral Records generated by JRVs, JEMs, and JEDs. To achieve this, we recommend empowering citizens through:

- Implementing a mobile application that allows volunteers to upload their own photographs of Electoral Records directly into TREP.
- Including the timestamp of the final signature in every Electoral Record.

	SITRTEP 2015	SITREP 2019	TREP 2023
Release Time Span	NOT AVAILABLE	120 hours	24 hours
Document signature timestamps	NOT AVAILABLE		
Times between last signature and document release	NOT AVAILABLE		
Production to Release Score	NOT AVAILABLE	● 50%	● 90%

If all Electoral Records (actas) included the date and time of the final signature by JRV and Electoral Board volunteers, it would be possible to cross-check that timestamp against the time of online publication. Measuring this time difference would help the TSE identify ways to empower citizen volunteers to minimize delays. Achieving near-instant publication of Electoral Records, immediately after physical completion, would dramatically increase trust in the election results by eliminating the window for digital tampering by malicious actors.

What Are Metadata, EXIF, HASH, and TIMESTAMP?

In the context of post-electoral audits and the management of documents related to voting processes, the accuracy, integrity, and reliability of metadata associated with each document play a critical role. Metadata, including creation date, SHA-256 hash, timestamp, and EXIF data, not only provides essential information about the origin and authenticity of documents but also ensures traceability and security within the vote information chain. Proper device configuration, particularly with regard to time zones, is fundamental to maintaining the consistency and accuracy of this metadata. This avoids discrepancies that could compromise the integrity of the voting process.

Metadata

Information that describes the fundamental characteristics of a document, such as its author, creation date, and modifications. Metadata helps contextualize the content by providing a history of how, when, and by whom the document was handled.

Creation Date

Part of the metadata that indicates when a document was created. It is crucial for establishing a timeline of when electoral data was generated and stored.

SHA-256 Hash

A unique value generated from a document's content using the SHA-256 algorithm. It acts like a digital fingerprint: any change to the document alters the hash, making it a key integrity mechanism for verifying that the content has not been tampered with.

Timestamp Data

A time marker indicating when a specific action was performed on a document (e.g., creation, modification, or access). It is vital for auditing the sequence of events in the handling of electoral documents.

EXIF Data (Exchangeable Image File Format)

Contains detailed technical information from image or multimedia files, such as the date, time, and device settings used to capture a photo or record a video. In the electoral context, EXIF data helps verify the authenticity and origin of images of electoral records.

Time Zone Configuration

Ensuring that devices used to create or modify voting documents are set to the correct time zone is essential. This guarantees that timestamps accurately reflect the actual time when specific actions were performed, which is crucial for investigations and post-electoral audits.

The Immutable Proof Service (Respaldo Inalterable):

The Key Differentiator in Electoral System Integrity

The Immutable Proof Service (Respaldo Inalterable) was first implemented in 2023. It ensures that any digital alteration to documents published through TREP becomes immediately detectable. In addition, it generates a clear and immutable timeline by anchoring each document to the Bitcoin blockchain. This is a powerful digital forensic tool, and there is no justification for restricting its use solely to the yellow triplicate copies of Acta#4.

Why not provide the same level of protection to all Electoral Records?

To effectively protect future elections from potential cyberattacks, the Immutable Proof Service should be applied to Actas#1 through Actas#8. We also urge the TSE to expand the use of this tool to include all Magistrate Resolutions (Acuerdos de Magistrados) as soon as they are published online.

In 2023, misconfigured time zones on data-entry devices caused controversy regarding the creation timestamps of several electoral documents. To evaluate the issue, timestamps were corrected to reflect the appropriate time zone and then compared with the records stored in the Immutable Proof Service. It was determined that the nearly one-hour differences were due to documents being created at around minute 59 at the polling station and then registered in the backup system at minute 0 of the following hour.
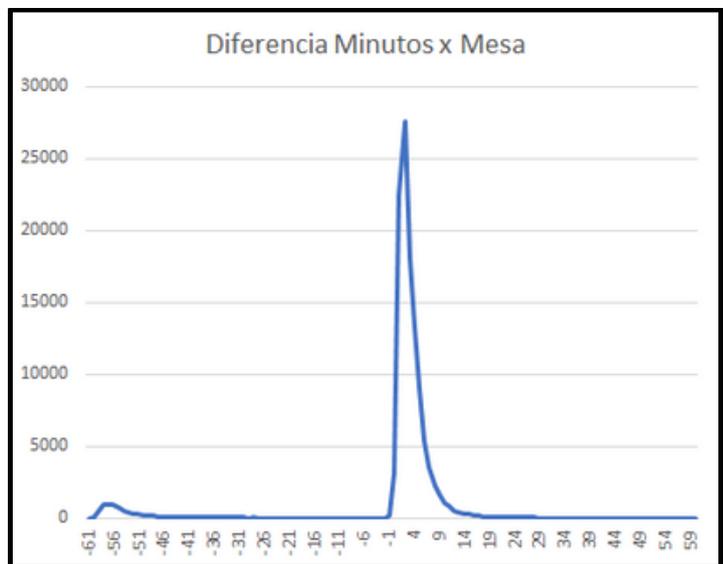
If such a discrepancy were authentic, it would imply that someone had the ability to travel back in time to insert data into the Bitcoin blockchain. Since time travel is not possible, the conclusion was that these discrepancies resulted from device misconfiguration. Once corrected, the data showed a normal distribution, with an average time difference of four minutes between the creation timestamp and its registration in the Immutable Proof Service.
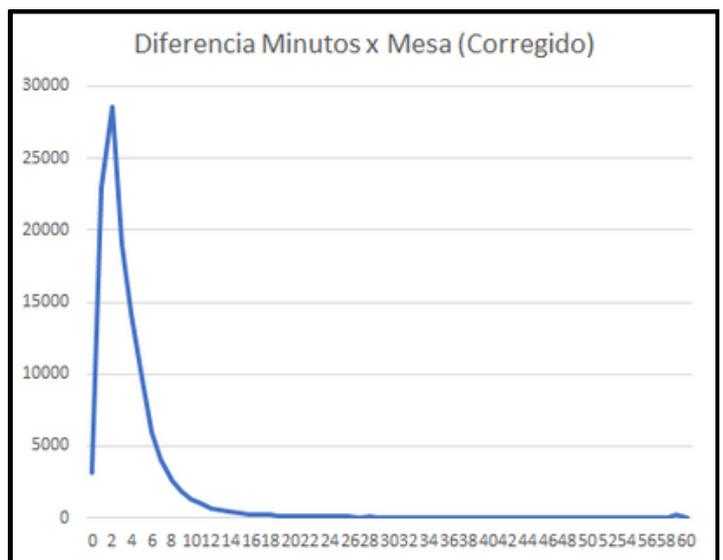
This incident highlights two key weaknesses: the need for proper training of personnel responsible for configuring and operating electoral IT equipment, and the lack of technical forensic capacity within the Public Prosecutor's Office (Ministerio Público, MP).

Access to Metadata and
Timestamp Information in Acta Creation

The Immutable Proof Service of the Acta#4 tellow triplicates published through TREP marked a significant improvement over previous election years. However, there remains substantial room for improvement in future processes. It is regrettable that the Immutable Proof Service was applied exclusively to the yellow triplicates of Actas#4, when it could have been easily extended to all Electoral Records. This limitation significantly affected the overall score for 2023, constraining the measurable progress that could otherwise have been achieved.

	2015	2019	2023
Total Electoral and Runoff Records (Actas)	664,703	1,095,107	1,275,417
Accessible Actas (Through Trep or The Office of Public Information Access)	75,532	125,194	145,633
EXIF Data	0	0	145,610
Tamper-Proof EXIF Data	0	0	0
Hash Signature	75,509	125,171	145,610
Timestamp Data	0	0	145,610
Tamper-Proof Hash Signatures and Timestamps	0	0	145,610
Metadata Backup Score	3.8%	3.8%	9.5%

The Immutable Proof Service provides permanent, verifiable protection for electoral data. Although it had a strong and positive impact in 2023, it was severely underutilized. The current volume and types of electoral documents that remain unprotected represent a significant opportunity cost. The opportunity for improvement not only exists; it has already been successfully piloted and falls fully within the TSE's operational capacity.

DigitalWitness has assessed the performance of data backup across the last three electoral cycles using the previously described metric. While the TSE's performance in 2023 more than doubled compared to previous years, the opportunity to go much further was missed.

Was There Electoral Fraud on June 25, 2023?

This question has become a false dichotomy because of how most people define 'electoral fraud.' Too many focus exclusively on the presidential election while ignoring the broader context. To have a serious and accurate conversation, it is crucial to avoid generalizations and ambiguities.

On June 25, 2023, a total of 366 elections were held to elect 3,169 positions. It is an extremely complex process.

It is important to recognize that the presidential election was only one of those 366 elections. Given the data, it is mathematically improbable that the published presidential result is incorrect—but that is not the case for the other 365 elections.

	Elections	Mismatched Elections	Positions (Elected Offices)	Contested Positions	Positions with Mismatched Results
Presidency and Vicepresidency	1	0	2	0	0
National Congress	1	1	32	1	0
Distrital Congress	23	14	128	18	4
Municipal Corporation	340	48	2,987	148	115
PARLACEN	1	1	20	1	0
TOTALS	366	64	3,169	168	119

Comparison
TREP.gt vs DigitalWitness

To address this issue effectively, we suggest adopting a practical mindset and asking:

Does it match, or doesn't it?

This question requires a rational, data-based analysis rather than reliance on emotions, legal arguments, or personal opinions. The discussion should focus on simple mathematical consistency, not subjective interpretations.

Of 145,812 Actas#4, a total of 127,794 matched 100% between DigitalWitness and TREP. This high number demonstrates that our technology works. By producing such a large volume of exact matches, DigitalWitness's independent methodology is validated. If it were not working, we would not have achieved such consistent results.

At the same time, these findings reveal a concerning number of Actas#4 with discrepancies generated by JRVs. Given the large number of unmatched records, we conclude that the core issue lies with the TSE. The Vote Reception and Electoral Boards are not to blame, as this is a systemic failure for which the TSE holds ultimate legal responsibility

Exceeding mismatches
12.2%

Threshold
1%

Matching Tally Sheets
86.8%
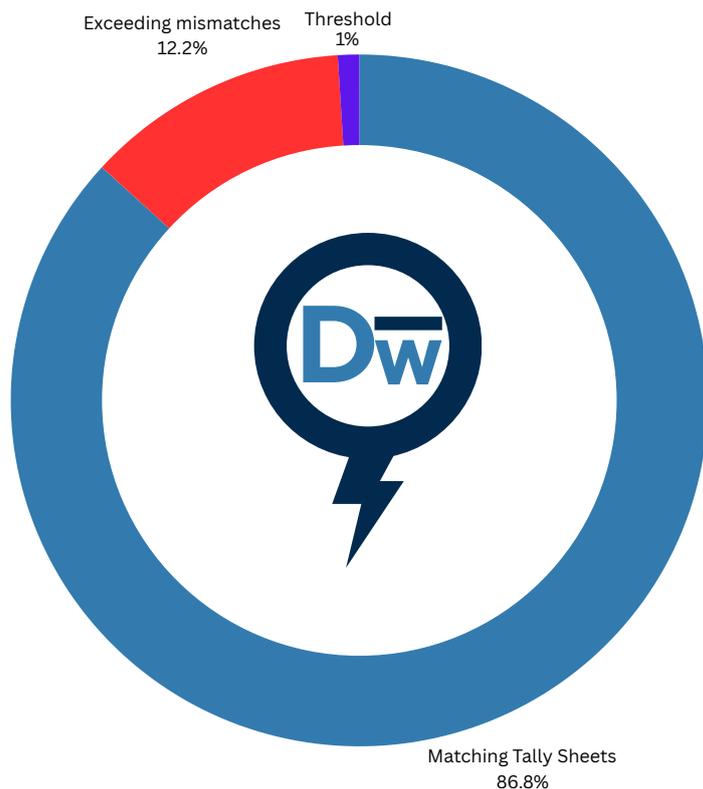
The shared goal must be the full and transparent reconciliation of results. We all want elections to faithfully reflect the will of the people, without a reasonable doubt.

#IWantItToMatch - Who doesn't?

Does it match, or doesn't it?

ACTAS (TALLY SHEETS)

Position	Percentage
ParlaCen	13.55%
Municipal Corp.	8.46%
Distrital Congress	23.27%
National Congress	15.28%
President	11.53%
Runoff	4.15%

Axis: 0, 5000, 10000, 15000, 20000, 25000
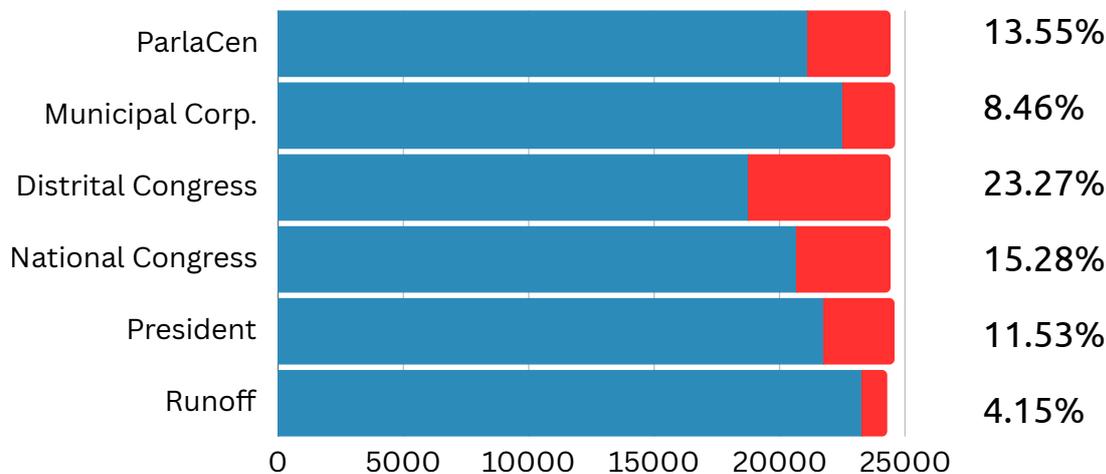
DATA POINTS (PARTY RECOUNT CELLS)

Position	Percentage
ParlaCen	1.02%
Municipal Corp.	0.88%
Distrital Congress	3.28%
National Congress	1.18%
President	0.87%
Runoff	2.17%

Axis: 0, 100000, 200000, 300000, 400000, 500000, 600000, 700000
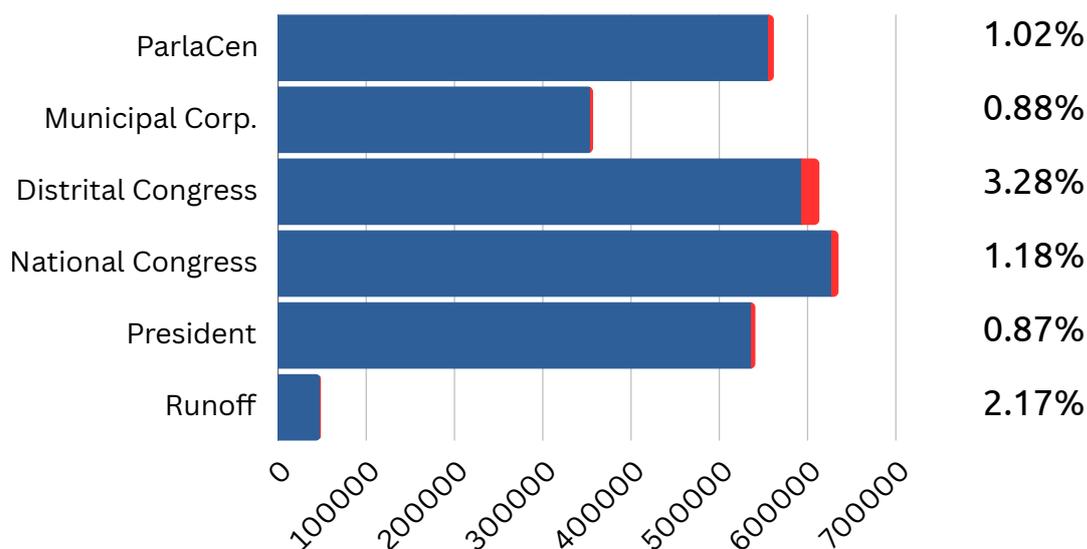
482,764 Valid Votes Did Not Match
Affecting 168 contested positions in 64 separate elections.

Comparison of Matching Actas

In our analysis, we focused on the exact data alignment between DigitalWitness and TREP.gt, comparing electoral records from the 2015, 2019, and 2023 elections.

For an Acta to be considered a perfect match, every single cell (representing data from each polling station) must correspond exactly between both systems. This strict verification criterion ensures the accuracy and reliability of the election results.

	2015		2019		2023	
	Matching Actas	Match %	Matching Actas	Match %	Matching Actas	Match %
Presidency and Vicepresidency	323	1.6%	14,358	68.1%	21,751	82.2%
National Congress	2,238	11.4%	14,788	70.5%	20,695	73.4%
Distrital Congress	8,973	45.8%	14,667	69.9%	18,750	60.8%
Municipal Corporation	9,743	49.8%	14,424	68.7%	22,360	87.7%
PARLACEN	2,068	10.6%	15,080	71.8%	21,116	78.7%
TOTALS	23.84%		69.79%		76.55%	

Comparison of Matching Cells

In our comparative analysis between DigitalWitness and the preliminary results transmission systems of 2015, 2019, and 2023, we meticulously reviewed the per-table data alignment, allowing us to verify the true level of consistency in the documents.

Although the Acta#4 verification for 2015 and 2019 is still ongoing, we already have substantial data available, all of which will be included in our upcoming report.

	2015		2019		2023	
	Matching Cells	Match %	Matching Cells	Match %	Matching Cells	Match %
Presidency and Vicepresidency	84,221	27.5%	387,121	96.6%	536,158	99.1%
National Congress	219,949	79.2%	529,411	97.0%	627,601	98.8%
Distrital Congress	241,361	90.7%	479,806	96.2%	601,283	98.0%
Municipal Corporation	232,959	86.8%	258,164	90.1%	352,350	99.1%
PARLACEN	229,461	84.3%	468,316	97.0%	556,117	99.0%
TOTALS	73.70%		95.37%		98.48%	

Interannual comparisons show that, despite the issues in 2023, the TSE's performance that year was significantly better than under the previous magistracy.

Where Did It Not Match in 2023?

The 'Contested Positions' column highlights in red the elections where discrepancies exist between DigitalWitness and the TREP database.

#	Election	Department	Municipalty	Votes Difference	Difference Last winner vs. 1st Loser	Seat Allocation Threshold	Contested Position	Matching Winners
1.0000	Presidente y Vicepresidente	Nacional		31,668	218,903		🟢 0	100%
1.0000	Presidente y Vicepresidente	Nacional 2nda vuelta		104,649	868,624		🟢 0	100%
2.0000	Diputados Lista Nacional	Nacional		40,364	8,960		🔺 1	100%
3.0000	Diputados Distritales			211,649	2,791		🔶 18	93%
4.0000	Municipalidades			64,895	1,342	1,628	🔶 148	97%
5.0000	Parlacen	Nacional		29,539	1,111		🔺 1	100%
4.1305	Municipalidades	Huehuetenango	Nentón	335	303	2,096	🔶 14	0%
4.0204	Municipalidades	Sacatepéquez	Sumpango	452	178	766	🔶 11	0%
4.1224	Municipalidades	San Marcos	San José Ojetenam	229	134	1,916	🔶 11	0%
4.1020	Municipalidades	Suchitepéquez	Río Bravo	102	35	2,944	🔶 11	0%
4.0703	Municipalidades	Sololá	Santa María Visitación	100	63	628	🔶 10	0%
4.1011	Municipalidades	Suchitepéquez	San Miguel Panán	100	51	1,562	🔶 10	0%
4.1004	Municipalidades	Suchitepéquez	San Bernardino	61	45	296	🔶 10	0%
4.1420	Municipalidades	Quiché	Ixcán	559	426	471	🔶 5	74%
4.0115	Municipalidades	Guatemala	Villa Canales	455	2,612	644	🔶 5	74%
4.2101	Municipalidades	Jalapa	Jalapa	103	7,162	2,771	🔶 5	74%
4.0909	Municipalidades	Quetzaltenango	Ostuncalco	1,864	219	300	🔶 4	71%
4.1010	Municipalidades	Suchitepéquez	San Antonio Suchitepéquez	330	2,757	139	🔶 4	71%
4.1107	Municipalidades	Retalhuleu	Champerico	1,582	1,055	339	🔶 3	73%
4.1009	Municipalidades	Suchitepéquez	San Pablo Jocopilas	240	175	14	🔶 3	73%
4.0302	Municipalidades	Chimaltenango	San José Poaquil	200	3,163	2,615	🔶 3	73%
4.1208	Municipalidades	San Marcos	Sibinal	306	614	13	🔶 3	70%
4.0605	Municipalidades	Santa Rosa	San Rafael Las Flores	106	1,003	1,207	🔶 3	70%
3.0200	Diputados Distritales	Sacatepéquez		107,657	1,049		🔶 3	0%
4.1313	Municipalidades	Huehuetenango	San Miguel Acatán	375	132	350	🔶 2	100%
4.0804	Municipalidades	Totonicapán	San Andrés Xecul	300	128	207	🔶 2	100%
3.0700	Diputados Distritales	Sololá		11,507	4,220		🔺 1	100%
3.0500	Diputados Distritales	Escuintla		7,807	5,021		🔺 1	100%
3.0900	Diputados Distritales	Quetzaltenango		7,116	1,356		🔺 1	100%
4.0001	Municipalidades	Distrito Central	Guatemala	5,768	522	13,813	🔺 1	100%
3.0000	Diputados Distritales	Distrito Central		4,616	214		🔺 1	100%
3.1400	Diputados Distritales	Quiché		4,485	1,083		🔺 1	100%
3.1000	Diputados Distritales	Suchitepéquez		3,893	919		🔺 1	100%

Excerpt from page 1 of Annex 01. For the full report, please refer to the corresponding annex.

Where Did It Partially Match?

When the winning candidates match but the vote margin allows for a potential discrepancy, a contested position is added and marked in yellow to highlight this possibility.

#	Election	Department	Municipalty	Votes Difference	Difference Last winner vs. 1st Loser	Seat Allocation Threshold	Contested Position	Matching Winners
3.0300	Diputados Distritales	Chimaltenango		2,652	1,790		⚠ 1	100%
3.1200	Diputados Distritales	San Marcos		2,142	298		⚠ 1	100%
3.1600	Diputados Distritales	Alta Verapaz		1,926	1,799		⚠ 1	100%
4.0701	Municipalidades	Sololá	Sololá	1,880	1,454	6,403	⚠ 1	100%
3.0600	Diputados Distritales	Santa Rosa		1,201	594		⚠ 1	100%
4.1101	Municipalidades	Retalhuleu	Retalhuleu	1,030	904	1,291	⚠ 1	100%
4.0719	Municipalidades	Sololá	Santiago Atitlán	1,001	732	1,149	⚠ 1	100%
4.0403	Municipalidades	El Progreso	San Agustín Acasaguastlán	828	719	2,990	⚠ 1	100%
3.1500	Diputados Distritales	Baja Verapaz		792	321		⚠ 1	100%
4.1710	Municipalidades	Petén	Sayaxché	754	93	2,546	⚠ 1	100%
4.0513	Municipalidades	Escuintla	Nueva Concepción	726	1,656	414	⚠ 1	100%
4.0713	Municipalidades	Sololá	San Lucas Tolimán	640	721	223	⚠ 1	100%
4.1405	Municipalidades	Quiché	Chajul	636	594	1,746	⚠ 1	100%
4.1412	Municipalidades	Quiché	Joyabaj	629	608	4,439	⚠ 1	100%
4.0510	Municipalidades	Escuintla	Iztapa	586	11	5,252	⚠ 1	100%
4.0907	Municipalidades	Quetzaltenango	Cajolá	525	59	611	⚠ 1	100%
4.0911	Municipalidades	Quetzaltenango	Concepción Chiquirichapa	455	513	103	⚠ 1	100%
4.0806	Municipalidades	Totonicapán	Santa María Chiquimula	451	1,901	310	⚠ 1	100%
4.0104	Municipalidades	Guatemala	Palencia	420	1,281	139	⚠ 1	100%
4.1613	Municipalidades	Alta Verapaz	Chisec	405	278	1,554	⚠ 1	100%
4.2213	Municipalidades	Jutiapa	Conguaco	345	312	691	⚠ 1	100%
4.0501	Municipalidades	Escuintla	Escuintla	302	1,650	82	⚠ 1	100%
4.1608	Municipalidades	Alta Verapaz	Senahú	300	137	2,115	⚠ 1	100%
4.1904	Municipalidades	Zacapa	Gualán	260	211	1,377	⚠ 1	100%
4.0207	Municipalidades	Sacatepéquez	San Bartolomé Milpas Altas	257	176	289	⚠ 1	100%
4.0306	Municipalidades	Chimaltenango	Tecpán Guatemala	254	1,264	245	⚠ 1	100%
4.0301	Municipalidades	Chimaltenango	Chimaltenango	204	1,745	53	⚠ 1	100%
4.0208	Municipalidades	Sacatepéquez	San Lucas Sacatepéquez	183	1,707	178	⚠ 1	100%
4.1617	Municipalidades	Alta Verapaz	Raxruhá	151	82	433	⚠ 1	100%
4.1207	Municipalidades	San Marcos	Tacaná	148	132	158	⚠ 1	100%
4.1332	Municipalidades	Huehuetenango	Unión Cantinil	74	58	762	⚠ 1	100%
4.1616	Municipalidades	Alta Verapaz	Santa Catalina La Tinta	6	2	1,742	⚠ 1	100%

Excerpt from page 2 of Annex 01. For the full report, please refer to the corresponding annex.

Comparative Report

Actas#8 vs. Premliminary results
of 2015, 2019 y 2023

Digital Witness

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Are There Discrepancies Between the Preliminary and Official Results of 2023?

In the context of election results, it is important to highlight that, while most citizens trust the legitimacy of the preliminary results issued by the Preliminary Results Transmission System (TREP), there is a notable lack of scrutiny regarding the significant discrepancies between these preliminary results, which are based on carbon-copies of Actas#4, and the official results recorded in Actas#8.

This situation underscores the need to reevaluate and strengthen the validation and transparency mechanisms within the voting process, in order to ensure public trust in every phase of vote counting and in the overall integrity of the electoral system.

	Elections	Mismatched Elections	Positions (Elected Offices)	Contested Positions	Positions with Mismatched Results
Presidency and Vicepresidency	1	0	2	0	0
National Congress	1	1	32	1	0
Distrital Congress	23	18	128	20	4
Municipal Corporation	340	21	2,987	56	47
PARLACEN	1	1	20	1	0
TOTALS	366	41	3,169	78	51

Comparison 2023
TREP.gt vs Acta#8

To address this situation effectively, it is recommended to focus on the fundamental question: Is a discrepancy greater than 1% between the official results and the preliminary results acceptable? This question encourages a rational, data-driven analysis, avoiding emotional responses or subjective interpretations.

It has been observed that out of 366 elections, 326 show full agreement between the final documents and the preliminary results. However, 41 elections present potential disputes in the allocation of seats, representing an 11% discrepancy. While even a 1% mismatch would already be cause for concern, this 11% figure underscores a critical need for review and improvement in the Preliminary Results Transmission System to safeguard the integrity of the electoral process.

This situation suggests that beyond the technical performance of the system, there are systemic challenges that must be addressed urgently in order to preserve public trust in election results.
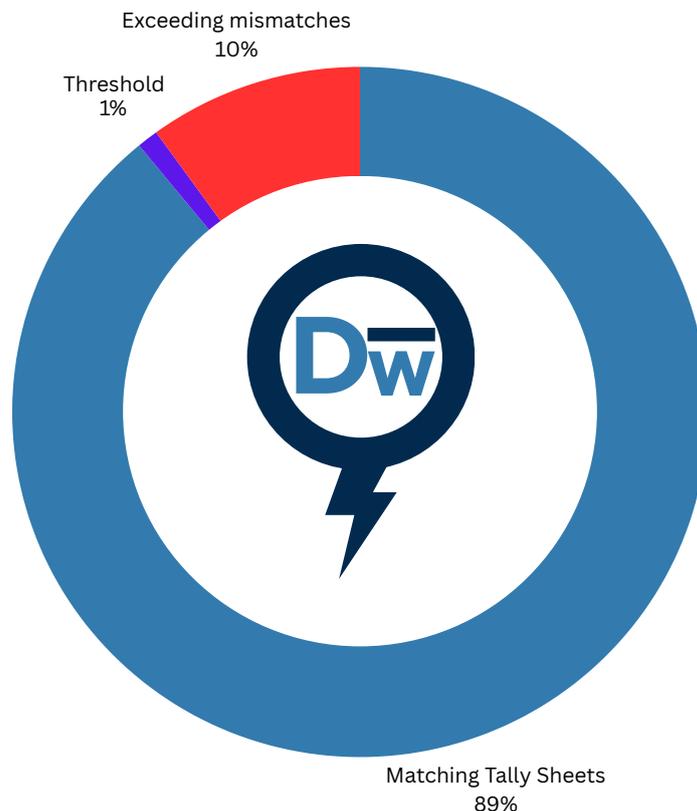
The Shared Goal: Full and Transparent Consistency
We all want elections to faithfully reflect the will of the people, without doubt.

#IWantItToMatch - Who Doesn't?

Preliminary vs. Official Differences Over Time

Each election cycle includes 366 contests to fill 3,170 positions. The difference between the results in the preliminary data system and the official results recorded in Actas#8 is considered by DigitalWitness to be a key indicator of the electoral system's health.

These discrepancies in votes and outcomes highlight the urgent need to grant public access to all documents involved in the voting process. Despite a clear improvement in TSE performance in 2023 compared to previous years, public perception does not yet reflect this progress. It is therefore urgent that the TSE reduce the discrepancy rate to below 1% in order to counter disinformation efforts and regain the trust of the Guatemalan people.

	2015		2019		2023	
Elections	365		366		366	
Mismatched Elections	75	20.5%	41	11.2%	41	11.2%
Positions (Elected Offices)	3,161		3,170		3,170	
Contested Positions	443	14.0%	147	4.6%	78	2.5%
Vote Difference	1,482,787	5.9%	495,605	2.0%	303,146	1.2%
Preliminary and Official Results Discrepancy	87%		94%		95%	

These findings are based exclusively on the comparison between Actas#8 and TREP.gt for 2023, 2019, and 2015.

Where Do Actas#8 Not Match TREP.gt in 2023?

The 'Contested Positions' column displays a red icon in elections where discrepancies exist between the official results in Actas#8 and the Actas#4 from the Preliminary Results Transmission System (TREP.gt).

#	Election	Department	Municipalty	Votes Difference	Difference Last winner vs. 1st Loser	Seat Allocation Threshold	Contested Position	Matching Winners
1	Presidente y Vicepresidente	Nacional		40,856	228,565		🟢 0	100%
1	Presidente y Vicepresidente	Nacional 2nda vuelta		24,319	459,666		🟢 0	100%
2	Diputados Lista Nacional	Nacional		30,674	8,739		△ 1	100%
3	**Diputados Distritales**			**110,804**	**3,607**		◆ 20	**93.3%**
4	**Municipalidades**			**69,944**	**1,638**	**19**	◆ 56	**98.5%**
5	Parlacen	Nacional		26,549	604	1,173	△ 1	100%
4.1017	Municipalidades	Suchitepéquez	Santo Tomás La Unión	7,411	424	0	◆ 12	0%
4.1009	Municipalidades	Suchitepéquez	San Pablo Jocopilas	759	0	89	◆ 8	0%
4.1417	Municipalidades	Quiché	San Bartolomé Jocotenango	3,113	0	510	◆ 7	30%
4.1605	Municipalidades	Alta Verapaz	Tamahú	2,705	1,704	498	◆ 4	50%
3.01	Diputados Distritales	Guatemala		1,943	20,220	601	◆ 2	89%
3.03	Diputados Distritales	Chimaltenango		2,060	7,756	510	◆ 2	60%
4.0108	Municipalidades	Guatemala	San Pedro Sacatepéquez	3,000	2,239	530	◆ 2	80%
4.0501	Municipalidades	Escuintla	Escuintla	4,716	162	283	◆ 2	86%
4.0608	Municipalidades	Santa Rosa	Chiquimulilla	212	6,381	15	◆ 2	80%
4.0710	Municipalidades	Sololá	Panajachel	221	124	15	◆ 2	71%
4.0905	Municipalidades	Quetzaltenango	Sibilia	270	1,884	205	◆ 2	71%
4.1320	Municipalidades	Huehuetenango	San Sebastián Huehuetenango	3,000	3,349	470	◆ 2	75%
4.1802	Municipalidades	Izabal	Lívingston	3,014	1,295	31	◆ 2	80%
4.2213	Municipalidades	Jutiapa	Conguaco	1,000	691	10	◆ 2	75%
3.00	Diputados Distritales	Distrito Central		15,495	1,228	75	△ 1	100%
3.04	Diputados Distritales	El Progreso		3,593	28	0	△ 1	100%
3.06	Diputados Distritales	Santa Rosa		8,971	2,935	323	△ 1	100%
3.07	Diputados Distritales	Sololá		6,062	656	41	△ 1	100%
3.08	Diputados Distritales	Totonicapán		1,868	203	15	△ 1	100%
3.09	Diputados Distritales	Quetzaltenango		1,473	1,336	4	△ 1	100%
3.11	Diputados Distritales	Retalhuleu		4,751	885	31	△ 1	100%
3.13	Diputados Distritales	Huehuetenango		4,016	3,952	8	△ 1	100%
3.15	Diputados Distritales	Baja Verapaz		323	34	3	△ 1	100%
3.16	Diputados Distritales	Alta Verapaz		4,944	1,744	38	△ 1	100%
3.17	Diputados Distritales	Petén		4,137	1,206	463	△ 1	100%
3.18	Diputados Distritales	Izabal		10,516	1,325	44	△ 1	100%
3.19	Diputados Distritales	Zacapa		5,345	1,311	31	△ 1	100%
3.20	Diputados Distritales	Chiquimula		13,692	959	30	△ 1	100%
3.21	Diputados Distritales	Jalapa		1,429	789	153	△ 1	100%
3.22	Diputados Distritales	Jutiapa		7,481	393	9	△ 1	100%
4.0105	Municipalidades	Guatemala	Chinautla	3,564	486	246	△ 1	100%
4.0210	Municipalidades	Sacatepéquez	Magdalena Milpas Altas	281	15	14	△ 1	100%
4.0214	Municipalidades	Sacatepéquez	Alotenango	318	32	14	△ 1	100%
4.0301	Municipalidades	Chimaltenango	Chimaltenango	175	53	14	△ 1	100%
4.0312	Municipalidades	Chimaltenango	Yepocapa	6,451	2,592	942	△ 1	100%
4.0614	Municipalidades	Santa Rosa	Nueva Santa Rosa	2,538	1,395	429	△ 1	100%
4.0806	Municipalidades	Totonicapán	Santa María Chiquimula	379	312	153	△ 1	100%
4.1202	Municipalidades	San Marcos	San Pedro Sacatepéquez	542	276	8	△ 1	100%
4.1414	Municipalidades	Quiché	San Andrés Sajcabajá	1,476	1,306	153	△ 1	100%

Excerpt from page 1 of Annex 02. For the full report, please refer to the corresponding annex.

Where Do Actas#8 Not Match SITREP in 2019?

The 'Contested Positions' column displays a red icon in elections where discrepancies exist between the official results in Actas#8 and the Actas#4 from the Preliminary Results Transmission System (SITREP).

#	Election	Department	Municipalty	Votes Difference	Difference Last winner vs. 1st Loser	Seat Allocation Threshold	Contested Position	Matching Winners
1.00000	Presidente y Vicepresidente	Nacional		42,559	505,804		● 0	100%
1.00000	Presidente y Vicepresidente	Nacional 2nda vuelta		79	523,756		● 0	100%
2.00000	Diputados Lista Nacional	Nacional		44,089	22,926		⚠ 1	100%
3.00000	**Diputados Distritales**			**211,649**	**2,791**		◆ **15**	**95.4%**
4.00000	Municipalidades			128,544	2,418	153	◆ 130	95%
5.00000	Parlacen	Nacional		68,685	4,616	2,765	⚠ 1	95%
4.19040	Municipalidades	Zacapa	Gualán	16,728	162	1,827	◆ 12	0%
4.12090	Municipalidades	San Marcos	Tajumulco	5,666	0	620	◆ 10	0%
4.21030	Municipalidades	Jalapa	San Luis Jilotepeque	4,481	1,551	502	◆ 10	0%
4.05100	Municipalidades	Escuintla	Iztapa	3,362	0	426	◆ 8	0%
4.09070	Municipalidades	Quetzaltenango	Cajolá	540	505	263	◆ 8	0%
4.12210	Municipalidades	San Marcos	La Reforma	1,333	3,454	2,770	◆ 7	13%
4.13110	Municipalidades	Huehuetenango	La Libertad	1,333	3,454	2,770	◆ 7	13%
4.14010	Municipalidades	Quiché	Santa Cruz Del Quiché	1,333	3,454	2,770	◆ 7	13%
4.06130	Municipalidades	Santa Rosa	Pueblo Nuevo Viñas	0	3,105	1,965	◆ 6	25%
4.07030	Municipalidades	Sololá	Santa María Visitación	0	3,105	1,965	◆ 6	25%
4.07170	Municipalidades	Sololá	San Juan La Laguna	251	4,102	1,468	◆ 6	14%
4.08070	Municipalidades	Totonicapán	Santa Lucía La Reforma	251	4,102	1,468	◆ 6	14%
4.07150	Municipalidades	Sololá	San Pablo La Laguna	11	14	0	◆ 5	29%
4.08050	Municipalidades	Totonicapán	Momostenango	11	14	0	◆ 5	29%
4.19010	Municipalidades	Zacapa	Zacapa	4,363	736	227	◆ 4	60%
4.12110	Municipalidades	San Marcos	San Rafael Pie De La Cuesta	150	482	6	◆ 3	57%
4.13010	Municipalidades	Huehuetenango	Huehuetenango	150	482	6	◆ 3	57%
3.01000	Diputados Distritales	Guatemala		3,179	1,959	3	◆ 2	89%
3.09000	Diputados Distritales	Quetzaltenango		7,116	3,553	54	◆ 2	71%
3.10000	Diputados Distritales	Suchitepéquez		3,893	534	369	◆ 2	60%
3.14000	Diputados Distritales	Quiché		4,485	815	272	◆ 2	75%
4.02080	Municipalidades	Sacatepéquez	San Lucas Sacatepéquez	1,432	364	45	◆ 2	75%
4.03130	Municipalidades	Chimaltenango	San Andrés Itzapa	3,130	432	3,031	◆ 2	75%
4.04030	Municipalidades	El Progreso	San Agustín Acasaguastlán	3,130	432	3,031	◆ 2	75%
4.05010	Municipalidades	Escuintla	Escuintla	544	65	29	◆ 2	86%
4.19050	Municipalidades	Zacapa	Teculután	1,297	1,250	16	◆ 2	75%
4.19070	Municipalidades	Zacapa	Cabañas	1,918	1,165	391	◆ 2	71%
3.02000	Diputados Distritales	Sacatepéquez		107,657	353	210	⚠ 1	100%
3.03000	Diputados Distritales	Chimaltenango		2,652	1,673	23	⚠ 1	100%
3.05000	Diputados Distritales	Escuintla		7,807	1,758	949	⚠ 1	100%
3.07000	Diputados Distritales	Sololá		11,507	5,410	601	⚠ 1	100%
3.13000	Diputados Distritales	Huehuetenango		3,634	3,449	44	⚠ 1	100%
3.17000	Diputados Distritales	Petén		3,625	284	1	⚠ 1	100%
3.22000	Diputados Distritales	Jutiapa		1,674	1,446	1	⚠ 1	100%
4.06140	Municipalidades	Santa Rosa	Nueva Santa Rosa	3,000	2,057	5,666	⚠ 1	88%
4.07040	Municipalidades	Sololá	Santa Lucía Utatlán	3,000	2,057	5,666	⚠ 1	88%
4.12280	Municipalidades	San Marcos	Río Blanco	4,463	4,321	2,382	⚠ 1	86%
4.13180	Municipalidades	Huehuetenango	San Mateo Ixtatán	4,463	4,321	2,382	⚠ 1	86%
4.14080	Municipalidades	Quiché	San Antonio Ilotenango	4,463	4,321	2,382	⚠ 1	86%

Excerpt from page 1 of Annex 03. For the full report, please refer to the corresponding annex.

Where Do Actas#8 Not Match SITREP in 2015?

The 'Contested Positions' column displays a red icon for elections where discrepancies exist between the official results in Actas#8 and the Actas#4 from the Preliminary Results Transmission System (SITREP).

#	Election	Department	Municipalty	Votes Difference	Difference Last winner vs. 1st Loser	Seat Allocation Threshold	Contested Position	Matching Winners
1	Presidente y Vicepresidente	Nacional		59,646	215,296		● 0	100%
1	Presidente y Vicepresidente	Nacional 2nda vuelta		58,804	1,385,096		● 0	100%
2	Diputados Lista Nacional	Nacional		83,817	62,870		◆ 3	100%
3	**Diputados Distritales**			**399,071**	**2,791**		◆ 15	**95.9%**
4	Municipalidades			541,258	1,627	173	◆ 424	87%
5	Parlacen	Nacional		340,191	9,302	2,765	⚠ 1	95%
4.121	**Municipalidades**	**San Marcos**	**El Rodeo**	**24,648**	**0**	**1,854**	◆ 14	**0.0%**
4.1410	Municipalidades	Quiché	Cunén	20,970	0	1,873	◆ 14	0%
4.142	Municipalidades	Quiché	Canillá	22,774	0	1,668	◆ 14	0%
4.1420	Municipalidades	Quiché	Ixcán	16,101	1,657	2,026	◆ 14	0%
4.0705	Municipalidades	Sololá	Nahualá	11,886	2,787	920	◆ 12	0%
4.1102	Municipalidades	Retalhuleu	San Sebastián	6,170	1,120	35	◆ 12	0%
4.12	Municipalidades	San Marcos	San Marcos	14,802	1,445	75	◆ 12	0%
4.1205	Municipalidades	San Marcos	San Miguel Ixtahuacán	14,083	617	146	◆ 12	0%
4.1504	Municipalidades	Baja Verapaz	Cubulco	20,788	18,151	3,847	◆ 12	14%
4.1608	Municipalidades	Alta Verapaz	Senahú	25,865	2,332	2,779	◆ 12	0%
4.1615	Municipalidades	Alta Verapaz	Fray Bartolomé De Las Casas	7,353	608	654	◆ 12	0%
4.0302	Municipalidades	Chimaltenango	San José Poaquil	17,607	1,679	1,825	◆ 10	0%
4.03	Municipalidades	Chimaltenango	Santa Cruz Balanyá	3,509	700	451	◆ 10	0%
4.07	Municipalidades	Sololá	San Juan La Laguna	5,748	407	132	◆ 10	0%
4.0801	Municipalidades	Totonicapán	Totonicapán	25,186	829	2,287	◆ 10	0%
4.1009	Municipalidades	Suchitepéquez	San Pablo Jocopilas	2,314	0	194	◆ 10	29%
4.1101	Municipalidades	Retalhuleu	Retalhuleu	17,519	1,567	2,689	◆ 10	0%
4.11	Municipalidades	Retalhuleu	San Andrés Villa Seca	6,385	649	339	◆ 10	0%
4.12	Municipalidades	San Marcos	Río Blanco	3,620	1,843	616	◆ 10	0%
4.19	Municipalidades	Zacapa	Teculután	6,221	2,330	255	◆ 10	0%
4.19	Municipalidades	Zacapa	San Diego	8,762	1,422	1,262	◆ 10	0%
4.03	Municipalidades	Chimaltenango	Parramos	6,678	484	145	◆ 9	0%
4.1105	Municipalidades	Retalhuleu	San Felipe	8,941	670	109	◆ 9	0%
4.06	Municipalidades	Santa Rosa	Santa Cruz Naranjo	326	0	40	◆ 8	0%
4.10	Municipalidades	Suchitepéquez	Cuyotenango	5,779	0	891	◆ 8	0%
4.12	Municipalidades	San Marcos	San José Ojetenam	2,396	66	100	◆ 8	0%
4.22	Municipalidades	Jutiapa	Jutiapa	11,532	0	1,927	◆ 8	0%
4.22	Municipalidades	Jutiapa	Comapa	9,259	0	1,509	◆ 8	0%
4.0306	Municipalidades	Chimaltenango	Tecpán Guatemala	17,215	1,155	1,217	◆ 7	0%
4.0402	Municipalidades	El Progreso	Morazán	13,402	0	2,900	◆ 7	13%
4.07	Municipalidades	Sololá	Santa Catarina Ixtahuacán	3,729	0	814	◆ 7	0%
4.07	Municipalidades	Sololá	Panajachel	1,677	0	242	◆ 7	0%
4.10	Municipalidades	Suchitepéquez	San Antonio Suchitepéquez	4,472	0	722	◆ 7	13%

Excerpt from page 1 of Annex 04. For the full report, please refer to the corresponding annex."

Where Do Actas#8 Not Match SITREP in 2015?

The 'Contested Positions' column displays a red icon for elections where discrepancies exist between the official results in Actas#8 and the Actas#4 from the Preliminary Results Transmission System (SITREP).

#	Election	Department	Municipalty	Votes Difference	Difference Last winner vs. 1st Loser	Seat Allocation Threshold	Contested Position	Matching Winners
4.12	Municipalidades	San Marcos	San José Ojetenam	2,396	66	100	◆ 8	0%
4.22	Municipalidades	Jutiapa	Jutiapa	11,532	0	1,927	◆ 8	0%
4.22	Municipalidades	Jutiapa	Comapa	9,259	0	1,509	◆ 8	0%
4.0306	Municipalidades	Chimaltenango	Tecpán Guatemala	17,215	1,155	1,217	◆ 7	0%
4.0402	Municipalidades	El Progreso	Morazán	13,402	0	2,900	◆ 7	13%
4.07	Municipalidades	Sololá	Santa Catarina Ixtahuacán	3,729	0	814	◆ 7	0%
4.07	Municipalidades	Sololá	Panajachel	1,677	0	242	◆ 7	0%
4.10	Municipalidades	Suchitepéquez	San Antonio Suchitepéquez	4,472	0	722	◆ 7	13%
4.1901	Municipalidades	Zacapa	Zacapa	7,738	1,305	1,014	◆ 7	13%
4.1421	Municipalidades	Quiché	Pachalum	10,431	2,187	119	◆ 6	25%
4.1904	Municipalidades	Zacapa	Gualán	4,059	1,423	390	◆ 6	14%
4.19	Municipalidades	Zacapa	La Unión	4,665	726	242	◆ 6	14%
4.2205	Municipalidades	Jutiapa	Asunción Mita	100	1,172	7	◆ 6	25%
4.07	Municipalidades	Sololá	Sololá	2,204	1,018	57	◆ 5	29%
4.0702	Municipalidades	Sololá	San José Chacayá	2,108	230	255	◆ 5	38%
4.1505	Municipalidades	Baja Verapaz	Granados	5,890	622	863	◆ 5	50%
4.18	Municipalidades	Izabal	Los Amates	4,708	3,108	1,138	◆ 5	29%
4.19	Municipalidades	Zacapa	San Jorge	7,104	985	1,045	◆ 5	29%
3.1600	Diputados Distritales	Alta Verapaz		79,280	2,673	3,036	◆ 4	56%
4.0511	Municipalidades	Escuintla	Palín	2,707	2,581	238	◆ 4	60%
4.0709	Municipalidades	Sololá	San Andrés Semetabaj	5,230	1,269	594	◆ 4	43%
4.1508	Municipalidades	Baja Verapaz	Purulhá	50,706	707	7,708	◆ 4	43%
3.0800	Diputados Distritales	Totonicapán		46,074	9,453	3,884	◆ 2	50%
4.0203	Municipalidades	Sacatepéquez	Pastores	901	2,143	415	◆ 2	80%
4.0713	Municipalidades	Sololá	San Lucas Tolimán	6,423	665	1,122	◆ 2	71%
4.0719	Municipalidades	Sololá	Santiago Atitlán	2,700	1,125	72	◆ 2	71%
4.1220	Municipalidades	San Marcos	El Quetzal	3,519	194	47	◆ 2	75%
4.1225	Municipalidades	San Marcos	San Cristóbal Cucho	483	1,031	76	◆ 2	75%
4.1411	Municipalidades	Quiché	San Juan Cotzal	1,000	2,882	175	◆ 2	75%
4.16	Municipalidades	Alta Verapaz	Tactic	7,247	3,249	765	◆ 2	80%
4.2004	Municipalidades	Chiquimula	Jocotán	7,993	2,025	1,237	◆ 2	75%
3.0200	Diputados Distritales	Sacatepéquez		10,909	5,067	80	⚠ 1	100%
3.0400	Diputados Distritales	El Progreso		10,884	5,914	4,282	⚠ 1	100%
3.0600	Diputados Distritales	Santa Rosa		19,032	2,480	1,134	⚠ 1	100%
3.0900	Diputados Distritales	Quetzaltenango		461	357	11	⚠ 1	100%
3.1000	Diputados Distritales	Suchitepéquez		12,556	1,694	312	⚠ 1	100%
3.1200	Diputados Distritales	San Marcos		49,275	1,756	2,460	⚠ 1	100%
3.1400	Diputados Distritales	Quiché		53,179	12,982	6,161	⚠ 1	100%
3.1800	Diputados Distritales	Izabal		35,199	16,452	10,159	⚠ 1	100%
3.2000	Diputados Distritales	Chiquimula		42,428	10,254	6,265	⚠ 1	100%
3.2200	Diputados Distritales	Jutiapa		22,323	6,745	268	⚠ 1	100%

Excerpt from page 2 of Annex 04. For the full report, please refer to the corresponding annex.

Top 20 Parties with the Most Contested Positions and Vote Differences (2015, 2019, and 2023)

The columns reflect the absolute variations in votes and potentially affected positions, showing concerning figures even though they decreased notably in 2023. By simply counting the 20 most affected political parties, we can clearly see why comprehensive oversight of all electoral records must once again become a priority for political organizations. It is the responsibility of political parties to demand the elimination of these gaps. Defending the vote is ultimately the obligation of political organizations, as they are the only entities with the legal mandate to do so.

Why Are Political Organizations Performing So Poorly?

	Party	2015		2019		2023		Totals	
		Positions	Votes	Positions	Votes	Positions	Votes	Positions	Votes
1	UNE	61	213,010	319	77,740	5	48,965	385	339,715
2	UCN	32	29,851	104	25,152	-	-	136	55,003
3	VAMOS	-	-	115	27,382	20	31,554	135	58,936
4	TODOS	28	65,602	67	8,159	-	5,970	95	79,731
5	PP	86	83,433	-	-	-	-	86	83,433
6	PC	-	-	85	11,059	-	-	85	11,059
7	FCN-NACION	-	10,717	77	6,432	-	3,458	77	20,607
8	LIDER	60	235,413	-	-	-	-	60	235,413
9	CREO	-	1,030	60	7,165	-	6,441	60	14,636
10	VIVA	13	31,021	39	3,204	7	23,516	59	57,741
11	URNG MAIZ	23	28,986	25	11,488	-	-	48	40,474
12	FUERZA	2	11,939	42	3,079	-	-	44	15,018
13	VALOR	-	-	38	4,507	2	3,739	40	8,246
14	PHG	-	-	38	4,231	-	9,480	38	13,711
15	BIEN	-	-	32	10,713	-	3,896	32	14,609
16	CONVERGENCIA	11	12,080	12	4,775	-	-	23	16,855
17	PODEMOS	-	-	17	1,868	5	9,661	22	11,529
18	SEMILLA	-	-	21	6,841	-	9,509	21	16,350
19	PRI	17	21,502	-	-	-	-	17	21,502
20	UNIONISTA	-	-	16	5,335	-	412	16	5,747