# *Fiscal Impact Statement*

San Andreas General Assembly
Office of the Legislative Legal Council
Nonpartisan Services for the General Assembly
State Capitol, Room A122

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House Bill 25-470 "Online Voting Implementation Act of 2025"

## Overview:

HB 25-470 requires the state to stand up, certify, and operate a secure, end-to-end-verifiable online voting option statewide beginning November 2026, with pilots beforehand; it creates an Online Voting Oversight Commission (OVOC), mandates audits, outage failover, accessibility, education, and county support, and authorizes funding and vendor certification.

## Bottom line (order-of-magnitude, scalable):

1. One-time state startup (IT + standing up operations + pilots + certification + comms): $9.5M – $21.5M
2. Ongoing state annual operations (security, cloud, help desk, audits, education, refresh): $5.8M – $13.6M / year
3. Local pass-through grants (access centers, staff training, outreach, contingency): $2.0M – $6.0M / year
4. All-in annualized cost after Year 1: $7.8M – $19.6M / year, plus depreciation/refresh of capital every 3–4 years.
5. Scaling rule of thumb: add ~$350k–$900k per additional 100,000 online voters for identity/MFA, capacity, support, and DDoS/WAF as adoption rises (see unit costs below). Sources throughout.

## Key assumptions used for costing:

1. Online voting launches for Nov. 2026, with county pilots in FY25-26; legacy paper voting remains available (dual-track).
2. Adoption scenarios modeled via unit costs per 100,000 online voters (so state can scale to actual turnout).
3. Security posture targets: managed SOC (or equivalent in-house), annual pen tests, SOC 2-style audits, HSM-backed key mgmt, DDoS/WAF, MFA, code review, and VVSG-aligned certification.
4. Staffing priced at BLS medians for state hiring (e.g., InfoSec Analyst median $124,910 in May 2024).
5. Bureau of Labor Statistics
6. Outreach sized to reach most active voters with mixed TV/radio/digital PSAs using CPM benchmarks.

## Cost detail (with current market benchmarks):

1. Identity, access & voter MFA (per voter licensing). Enterprise IAM/MFA is typically **$3–$9 per user/month** (Duo tiers; Okta suites start **$6–$17**/user/month; often billed annually).**Planning figures: $3–$7 per active online voter per election cycle** (assuming 1–2 months active window, volume discounts). Duo Security+1 **Per-100k online voters: $300k–$700k per cycle.**
2. Cryptographic key management (HSMs). FIPS 140-2/3 network HSM appliances price **~$16k–$36k per unit**; plan for **4–6 units** (HA, staging, DR). **One-time $65k–$200k**, maintenance **$10k–$25k/yr**. Information Security Service
3. DDoS protection, WAF & edge security. Cloud DDoS + WAF enterprise plans run **~$3k+/mo** at baseline before egress/overage. **Budget $50k–$150k/yr** for always-on protection sized for election load. Microsoft Azure+1

**Per-100k online voters (peak hardening):** add **$15k–$40k** during a general election.

4. Security Operations Center (SOC) / MDR. Managed SOC typical **$360k–$1.2M/yr**; building in-house comparable capability can reach **$2M–$4M/yr**. **Planning choice:** start with **Managed SOC $600k–$900k/yr**; reassess in Year 3. TechMagic
5. Testing, audits & compliance. **Penetration testing: $4k–$15k per app/network scope** (multiple scopes needed annually: web app, mobile, infra). Plan **$80k–$200k/yr**. Op-C **SOC 2-style readiness + audit & upkeep: $80k–$350k first year; $10k–$60k annual maintenance.** Budget **$120k–$250k/yr ongoing** after Year 1. Secureframe+1 **VVSG lifecycle reviews/updates** (process and external lab/test costs) — **$150k–$400k/yr** depending on change volume. U.S. Election Assistance Commission **Independent academic/security reviews** as contemplated by OVOC — reserve **$100k–$300k/yr**. (Bill authorizes independent experts/audits.)
6. Cloud hosting & storage (application, logs, audit proofs). Pricing varies by provider/region; for planning: **$200k–$600k/yr** for prod + staging + DR (compute, storage, CDN, logging, load-test buffers). Benchmarks and calculators show 10–100 TB storage runs **~$2k–$11k/mo** by provider/region; compute dominates during peaks. EffectiveSoft+1 **Per-100k online voters (election surge): $30k–$80k** capacity headroom and log retention.
7. Help desk & voter support (call center + chat). Industry **cost per inbound call** commonly **$2.7–$7.0**; US agents **$0.75–$0.90/min**; answering service baselines **$330–$525/mo for ~250 mins** (small scale).
   **Planning:** assume **2–5%** of online voters contact support once: **$200k–$700k per 100k online voters** (during election month), depending on complexity and call length. Ambs Call Center+3https://callin.io/+3Sprinklr+3
8. Accessibility (WCAG/ADA) & content remediation. Web audit **$100–$350/page**; remediation **$350–$550/page** for complex templates; PDF remediation **$7.50–$11.50/page**. Budget initial **$50k–$150k** and **$20k–$60k/yr** for ongoing updates. Accessible.org+2CourseVector+2
9. Public education & outreach (bill requires statewide education 7+ months pre-launch). Mixed PSA/paid media using CPM norms **$5–$15** (digital) plus TV/radio placements (typical distribution packages **$19k–$26k** per channel).
   **Planning: $400k–$1.2M** per statewide cycle (creative + media + tracking) depending on reach goals. Adzze+1 (Bill mandates education and local support.)
10. State staffing (core team). **Security/Cloud/QA/Product/Accessibility** core of **7–12 FTE** across the Secretary of State + OVOC support (mix of employees/contract). Using BLS medians (e.g., InfoSec Analyst **$124,910**), annual salary/benefits envelope **$1.3M–$2.6M/yr**. Bureau of Labor Statistics (OVOC admin and per-diem expert panels additional.)
11. County pass-throughs (access centers, training, pilots). For pilot + statewide: grants for **secured kiosks/devices, connectivity, training, extended hours during failover**, and local outreach. **Planning: $2.0M–$6.0M/yr** statewide pool; pilot year add **$1.0M–$2.0M**. (NCSL & EAC note locals carry major admin burdens; grants offset that.) NCSL+1 (Bill authorizes grants/reimbursements.)
12. Audits & post-election verification. End-to-end verifiability reviews, cryptographic proof publication, third-party audits and penetration testing refreshes: **$250k–$600k/yr** (overlaps with §5 above; listed here to align with bill's audit mandate).

## One-time vs. ongoing (state-level) — planning ranges:

| Category | One-time (FY25-26) | Ongoing (annual) |
|---|---|---|
| **IAM/MFA bootstrap & integrations** | $250k–$600k | see unit costs (per 100k online voters) |
| **HSMs & key infrastructure** | $65k–$200k | $10k–$25k |
| **Cloud infra setup & IaC** | $300k–$700k | $200k–$600k |
| **Managed SOC onboarding** | $100k–$200k | $600k–$900k |
| **Pen tests + initial SOC2/readiness** | $180k–$450k | $120k–$250k |
| **VVSG/certification & lab/test** | $250k–$600k | $150k–$400k |
| **Education campaign (launch)** | $400k–$1.2M | $300k–$900k (each general cycle) |
| **Accessibility audit/remediation** | $50k–$150k | $20k–$60k |
| **Staffing ramp (hiring/contract)** | $300k–$600k | $1.3M–$2.6M |
| **Pilots (counties)** | $1.0M–$2.0M | — |
| **Subtotal (state)** | **$3.1M–$6.7M** | **$2.8M–$6.3M/yr** |
| **Security capacity during elections (DDoS/WAF, surge)** | **$400k–$900k** | **$400k–$900k/yr** |
| **Help desk surge (per 300k online voters)** | — | **$0.6M–$2.1M per cycle** |
| **State total (typical year after launch)** | — | **$5.8M–$13.6M/yr** |

## Policy notes & risk-cost modifiers:

- Security risk posture must be higher than standard e-gov portals. Federal guidance (NIST, EAC, CISA/IC) stresses strict controls for any online ballot handling; many authorities still caution against full electronic ballot return, implying extra audit/assurance spend (red teams, code reviews, verifiability proofs). Budgetary impact: +$300k–$800k/yr above a standard portal. -CSP Berkeley, U.S. Election Assistance Commission, CISA
- Historical pilots had high per-vote costs at small scale (e.g., DoD pilot ~$74k per vote two decades ago) — reinforcing the need to avoid boutique implementations and drive scale/standardization. WIRED
- International experience (Estonia) shows internet voting can be cost-efficient per vote at scale, though security hardening costs grow with maturity; staffing remains a major driver. This supports scaling unit-cost planning above.
- Bill-specific drivers increasing fiscal needs: OVOC staffing and expert contracting; mandatory pilots before 2026; public education 7+ months before launch; incident reporting & failover centers; periodic re-certification

## Sensitivity & scenarios (how costs move):

1. Adoption ↑ → linear growth in MFA/licensing, support, bandwidth; SOC/WAF scale steps.
2. Stronger assurance posture (e.g., 2× pen tests, formal code audits, bug bounties) → +$400k–$900k/yr.
3. In-house SOC instead of managed → +$1.4M–$3.1M/yr net.
4. Media market CPM spikes (election cycles) → outreach swings ±$300k.

## Compliance mapping to HB 25-470 (cost-relevant sections):

- §4–5 Effective date; mandatory option by Nov 2026; pilots → drives FY25-26 startup and pilot grants.
- §6 OVOC creation & expert engagement → FTE + expert services $400k–$900k/yr.
- §7 Outage/failover with extended hours → local staffing overtime & center ops $500k–$1.5M in a severe incident year.
- §8 Audits/verification logs → annual audits $250k–$600k.
- §9 Education, support, accessibility → $400k–$1.2M campaign + help desk.
- §10 Certification & security standards → VVSG lifecycle + SOC2-style oversight $270k–$650k/yr.
- §11 Funding & appropriations; §12 legal protections → enables structuring of state + federal + PPP financing with oversight.

## Unit-cost appendix (use to scale the totals):

- IAM/MFA: $3–$7 per active online voter per cycle.
- Help desk (1 contact per 20–50 online voters): $3–$7 per call → $200k–$700k / 100k voters.
- DDoS/WAF election-month surge: $15k–$40k / 100k voters on top of baseline.
- Cloud surge & logging: $30k–$80k / 100k voters (compute, storage, CDN, egress).

## Professional judgement & readiness:

Given federal guidance and expert statements about the elevated risks of internet ballot return, the fiscal plan above intentionally overweights security, audit, and resilience line items compared with standard e-government portals. This aligns with HB 25-470's explicit mandates for audits, transparency, pilots, failover, accessibility, and independent oversight, and is consistent with cost drivers seen in international deployments where cost-efficiency improves only as systems reach scale and maturity.

## Fiscal Impact By County

LOW

| | County | Registered Voters | Online Voters (est.) | Blocks of 100k | IAM/MFA - Low | IAM/MFA - High | Help Desk - Low | Help Desk - High | DDoS/WAF Surge - Low | DDoS/WAF Surge - High | Cloud Surge & Logging - Low | Cloud Surge & Logging - High | Share of Voters | County Grants - Low | County Grants - High | Total Scalable - Low | Total Scalable - High |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | Alameda | 1649060 | 164906 | 1.64906 | 494718 | 1154342 | 329812 | 1154342 | 24736 | 65962 | 49472 | 131925 | 0.3517766528 | 703553 | 2110660 | 1602291 | 4617231 |
| 1 | Blaine | 7671 | 767 | 0.00767 | 2301 | 5369 | 1534 | 5369 | 115 | 307 | 230 | 614 | 0.001636373876 | 3273 | 9818 | 7453 | 21477 |
| 2 | El Paso | 581472 | 58147 | 0.58147 | 174441 | 407029 | 116294 | 407029 | 8722 | 23259 | 17444 | 46518 | 0.1240393156 | 248079 | 744236 | 564980 | 1628071 |
| 3 | Lake | 67764 | 6776 | 0.06776 | 20328 | 47432 | 13552 | 47432 | 1016 | 2710 | 2033 | 5421 | 0.01445538252 | 28911 | 86732 | 65840 | 189727 |
| 4 | Los Santos | 2381837 | 238184 | 2.38184 | 714552 | 1667288 | 476368 | 1667288 | 35728 | 95274 | 71455 | 190547 | 0.5080922752 | 1016185 | 3048554 | 2314288 | 6668951 |
| 5 | Total | 4687804 | 468780 | 4.6878 | 1406340 | 3281460 | 937560 | 3281460 | 70317 | 187512 | 140634 | 375024 | 1 | 2000000 | 6000000 | 4554851 | 13125456 |

MEDIUM

| | County | Registered Voters | Online Voters (est.) | Blocks of 100k | IAM/MFA - Low | IAM/MFA - High | Help Desk - Low | Help Desk - High | DDoS/WAF Surge - Low | DDoS/WAF Surge - High | Cloud Surge & Logging - Low | Cloud Surge & Logging - High | Share of Voters | County Grants - Low | County Grants - High | Total Scalable - Low | Total Scalable - High |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | Alameda | 1649060 | 412265 | 4.12265 | 1236795 | 2885855 | 824530 | 2885855 | 61840 | 164906 | 123680 | 329812 | 0.3517766528 | 703553 | 2110660 | 2950398 | 8377088 |
| 1 | Blaine | 7671 | 1918 | 0.01918 | 5754 | 13426 | 3836 | 13426 | 288 | 767 | 575 | 1534 | 0.001636373876 | 3273 | 9818 | 13726 | 38971 |
| 2 | El Paso | 581472 | 145368 | 1.45368 | 436104 | 1017576 | 290736 | 1017576 | 21805 | 58147 | 43610 | 116294 | 0.1240393156 | 248079 | 744236 | 1040334 | 2953829 |
| 3 | Lake | 67764 | 16941 | 0.16941 | 50823 | 118587 | 33882 | 118587 | 2541 | 6776 | 5082 | 13553 | 0.01445538252 | 28911 | 86732 | 121239 | 344235 |
| 4 | Los Santos | 2381837 | 595459 | 5.95459 | 1786377 | 4168213 | 1190918 | 4168213 | 89319 | 238184 | 178638 | 476367 | 0.5080922752 | 1016185 | 3048554 | 4261437 | 12099531 |
| 5 | Total | 4687804 | 1171951 | 11.71951 | 3515853 | 8203657 | 2343902 | 8203657 | 175793 | 468780 | 351585 | 937561 | 1 | 2000000 | 6000000 | 8387133 | 23813655 |

HIGH

| | County | Registered Voters | Online Voters (est.) | Blocks of 100k | IAM/MFA - Low | IAM/MFA - High | Help Desk - Low | Help Desk - High | DDoS/WAF Surge - Low | DDoS/WAF Surge - High | Cloud Surge & Logging - Low | Cloud Surge & Logging - High | Share of Voters | County Grants - Low | County Grants - High | Total Scalable - Low | Total Scalable - High |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | Alameda | 1649060 | 659624 | 6.59624 | 1978872 | 4617368 | 1319248 | 4617368 | 98944 | 263850 | 197887 | 527699 | 0.3517766528 | 703553 | 2110660 | 4298504 | 12136945 |
| 1 | Blaine | 7671 | 3068 | 0.03068 | 9204 | 21476 | 6136 | 21476 | 460 | 1227 | 920 | 2454 | 0.001636373876 | 3273 | 9818 | 19993 | 56451 |
| 2 | El Paso | 581472 | 232589 | 2.32589 | 697767 | 1628123 | 465178 | 1628123 | 34888 | 93036 | 69777 | 186071 | 0.1240393156 | 248079 | 744236 | 1515689 | 4279589 |
| 3 | Lake | 67764 | 27106 | 0.27106 | 81318 | 189742 | 54212 | 189742 | 4066 | 10842 | 8132 | 21685 | 0.01445538252 | 28911 | 86732 | 176639 | 498743 |
| 4 | Los Santos | 2381837 | 952735 | 9.52735 | 2858205 | 6669145 | 1905470 | 6669145 | 142910 | 381094 | 285820 | 762188 | 0.5080922752 | 1016185 | 3048554 | 6208590 | 17530126 |
| 5 | Total | 4687804 | 1875122 | 18.75122 | 5625366 | 13125854 | 3750244 | 13125854 | 281268 | 750049 | 562537 | 1500098 | 1 | 2000000 | 6000000 | 12219415 | 34501855 |

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FIBC - Fiscal_Impact_by_County

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