California Private Passenger Auto: Data Integrity Gaps and Underwriting Risk Factors

An Assessment of Statutory and Administrative Factors Affecting Driver Record Accuracy, Evidence Collection, and Claims Data Reliability in the California Auto Insurance Market

March 2026

Key Findings at a Glance

Metric	**California**	**National / Benchmark**	**Source**
PPA direct written premiums, 2024	$43.6 billion	Largest state market	CDI/NAIC, April 2025
PPA share of state P&C premiums	40.94%	--	CDI/NAIC, April 2025
PPA share of state P&C losses	47.32%	--	CDI/NAIC, April 2025
PPA liability direct loss ratio, 2024	83.1%	--	CDI/NAIC, April 2025
PPA liability direct loss ratio, 2023	84.7%	--	CDI/NAIC, April 2024
PPA physical damage loss ratio, 2024	54.7%	--	CDI/NAIC, April 2025
PPA physical damage loss ratio, 2023	76.2%	--	CDI/NAIC, April 2024
Uninsured motorist rate (2023 data)	20.4%	15.4% national average	IRC, March 2025
Estimated uninsured vehicles	4.7 million	--	CA DMV

Metric	California	National / Benchmark	Source
Alcohol-impaired fatality share (2023)	33%	30% national	NHTSA FARS 2023 ARF
BAC testing rate, all fatal crash drivers	26%	36% national	NHTSA FARS 2023 ARF
BAC testing rate, surviving drivers	16%	19% national	NHTSA FARS 2023 ARF
DMV negligent operator case rate	~6% of fatal/serious crashes	--	CA DMV evaluation
Unreported vehicular manslaughter convictions	~400 cases (2019-2024)	--	CalMatters, June 2025
Diversion cases with no DMV record	~36+ identified	--	CalMatters, Dec. 2025

---

1. Purpose

This assessment identifies structural factors in California's statutory and administrative framework that degrade the quality of driver record data, suppress the collection of crash investigation evidence, and compromise the reliability of the claims data on which auto insurance pricing depends. It is based on publicly available data from the California Department of Insurance (CDI), the National Association of Insurance Commissioners (NAIC), the National Highway Traffic Safety Administration (NHTSA), the Fatality Analysis Reporting System (FARS), the California Office of Traffic Safety (OTS), the California DMV, the Insurance Research Council (IRC), and investigative reporting by CalMatters.

The assessment focuses on data integrity and underwriting risk. It does not address criminal sentencing policy, deterrence frameworks, or individual case outcomes.

---

2. Market Context

California's private passenger auto market totaled $43.6 billion in direct written premiums in 2024, representing 40.94% of the state's total property and casualty market. PPA absorbed

47.32% of total state P&C incurred losses in the same period, a gap of 6.4 percentage points between premium share and loss share. (CDI, NAIC data, April 2025.)

The PPA liability line recorded a direct loss ratio of 83.1% in 2024. This is a direct loss ratio: incurred losses as a percentage of direct written premiums, reflecting only loss payments and reserves. It excludes loss adjustment expense (LAE) and all underwriting expenses (commissions, general expenses, taxes). For comparison, the NAIC's Report on Profitability shows the national PPA liability pure loss ratio at 68.0% for 2023 (the most recent year available in the NAIC report), with LAE adding approximately 8 percentage points and underwriting expenses adding approximately 22 points. California's direct loss ratio of 83.1%, before any expenses are added, is already 15 points above the national pure loss ratio and approaches the level at which the national market reaches its all-in combined ratio. When California-specific LAE and underwriting expenses are applied, the implied combined ratio substantially exceeds the national PPA combined ratio. (Note: the CDI figure is calculated on a written-premium basis; the NAIC Profitability Report uses an earned-premium basis. In a market with rapidly growing premiums, written premiums exceed earned premiums, meaning the CDI loss ratio is slightly lower than it would be on an earned-premium basis. The 15-point gap between California and the national figure is therefore slightly understated.)

For context, the national PPA market has recovered. AM Best revised its U.S. personal auto market segment outlook to stable in late 2024, and the national PPA combined ratio (all losses, LAE, and underwriting expenses) improved to 98.7 in 2024 from 104.9 in 2023. S&P Global Market Intelligence estimated the 2024 PPA combined ratio at 95.3. California's PPA liability line has not participated in this recovery. The state's direct loss ratio alone, before any expense loading, consumes 83 cents of every premium dollar, leaving approximately 17 cents to cover all LAE, commissions, general expenses, and taxes, an amount that is insufficient under any reasonable expense assumption. This indicates persistent underwriting losses on the state's largest line of business and suggests the presence of state-specific structural factors beyond the cyclical pressures that have eased nationally.

Despite a 16% increase in PPA liability premiums from 2023 to 2024 ($19.1 billion to $22.2 billion), the liability loss ratio improved by only 1.6 points (from 84.7% to 83.1%). Over the same period, the PPA physical damage loss ratio improved from 76.2% to 54.7%, reflecting the normalization of cyclical cost pressures including supply chain disruptions and parts inflation. The divergence between these two lines is notable: both are subject to the same cyclical factors, but only the liability line is subject to the behavioral and data integrity factors identified in this assessment.

Over the past decade, nearly 40,000 people have died on California roads. The state's fatality rate has risen by more than 60% since 2010, outpacing the national trend. (CalTrans; CalMatters, citing FARS and SWITRS data.) Alcohol-impaired driving fatalities (crashes involving a driver with a BAC of 0.08 or higher) have increased by more than 50% over the past decade, an increase more than twice as steep as the national trend. (NHTSA estimates cited by CalMatters.)

California's uninsured motorist rate reached 20.4% in 2023, compared to a national average of 15.4%, ranking 8th highest among all states. California was among several states that crossed the 20% threshold in 2023, having been below it the prior year. (IRC, "Uninsured and Underinsured Motorists: 2017-2023," published March 2025; U.S. News, February 2026.) Approximately 4.7 million California vehicles are uninsured. (CA DMV estimates.) The IRC estimates that insured drivers nationally pay approximately $16 billion per year in costs attributable to uninsured motorists. California's share, given its market size and above-average uninsured rate, is estimated at approximately $1.9 billion per year.

---

3. Data Integrity Findings

The auto insurance industry prices risk based on driver records, claims history, and actuarial models that assume the underlying data is reasonably complete. In California, multiple layers of the data pipeline are compromised.

3.1 Driver record gaps from pretrial diversion.

Under California's misdemeanor diversion statute (Penal Code section 1001.95, effective January 1, 2021), defendants charged with misdemeanor vehicular manslaughter may receive pretrial diversion at judicial discretion. Upon completion, the charge is dismissed and the arrest is deemed to have never occurred. The statute permits a judge to grant diversion over the objection of the prosecuting attorney and does not limit the number of times diversion may be granted to a particular defendant.

Critically, no mandatory DMV reporting mechanism exists for diversion dispositions. When diversion is granted, the driver's record reflects no arrest, no charge, and no points. The driver presents to insurers, employers, and licensing authorities as a clean-record driver regardless of having caused a fatal crash.

Investigative reporting has identified approximately three dozen drivers who have avoided a vehicular manslaughter conviction through the diversion statute. The actual number is likely higher, as such cases are frequently sealed and removed from searchable courthouse databases. (CalMatters, December 2025.)

The underwriting implication is direct: a driver who has caused a fatal crash and received diversion enters the insured pool as a clean-record risk. The insurer cannot price the policy to reflect the actual risk because the data that would reveal it is not available under the current statutory framework.

3.2 Low investigation rate.

Between 2022 and 2024, the California DMV opened approximately 3,300 negligent operator cases despite state data showing approximately 55,500 fatal or serious injury crashes during the same period, a rate of approximately 6%. (DMV case data provided to CalMatters; crash data from SafeTREC, UC Berkeley, using SWITRS. CalMatters, "License to Kill" series, March 2026. These figures were subsequently cited in a March 2026 California Senate Public Safety Committee hearing with DMV Director Steve Gordon.) The raw comparison overstates the gap to some degree, as the denominator includes crashes in which the at-fault driver is already being prosecuted, cases in which the driver died, and crashes in which the driver was not at fault. Even adjusting for these factors, the investigation rate remains low relative to the volume of crashes that could warrant administrative review. The DMV's own evaluation of its negligent operator treatment program describes the program as "discretionary rather than statutorily mandated." The investigation authority under Vehicle Code section 13800 uses "may," not "shall."

For insurers, the practical result is that the vast majority of fatal and serious injury crashes produce no DMV review of the at-fault driver's fitness to continue operating a vehicle. These drivers return to the road, and to the insured pool, without administrative review.

3.3 Court reporting failures.

Courts in multiple California counties have failed to report vehicular manslaughter convictions to the DMV. Investigative reporting identified approximately 400 cases from 2019 to 2024 in which drivers' convictions were not listed on their driving records, primarily because courts failed to report them. (CalMatters, June 2025.) The total number of vehicular manslaughter convictions during this period has not been publicly reported by any state agency, which itself constitutes a data transparency gap. In multiple instances, the DMV was not informed of a conviction until contacted by reporters, at which point the agency took belated action to revoke driving privileges, effectively confirming the reporting failure. (CalMatters, June 2025.)

Vehicle Code section 12810 requires the DMV to assign points to convictions involving the safe operation of a motor vehicle. Vehicle Code section 12810.5 provides that a driver reaching specified point thresholds "shall be prima facie presumed to be a negligent operator." These mandatory tracking mechanisms cannot function if the triggering data is not transmitted.

3.4 Evidence collection gaps.

Under Vehicle Code section 23612, mandatory chemical testing of drivers is triggered only upon a lawful arrest for DUI. Drivers involved in fatal crashes who are not arrested at the scene may avoid testing entirely. Phone records and vehicle forensic data are frequently not preserved unless the case proceeds to criminal prosecution.

The scope of the evidence gap is reflected in BAC testing rates. In 2023, only 26% of all drivers involved in fatal crashes in California had known BAC test results, compared to 36% nationally.

Among surviving drivers, only 16% had known BAC results, compared to 19% nationally. (NHTSA, FARS 2023 ARF; SafeTREC, UC Berkeley, 2025.) California's alcohol-impaired fatality statistics are therefore more heavily dependent on NHTSA's statistical imputation model than those of most states, meaning that the state's reported figures are estimates rather than measurements.

The claims data that insurers rely on systematically underrepresents the actual scope of impaired and distracted driving on California roads.

3.5 Cumulative effect on underwriting.

The combination of these four data integrity failures creates a structural information gap. Driver records are incomplete because diversion dispositions are not reported and court convictions are not transmitted. Investigation records are incomplete because the vast majority of fatal and serious crashes produce no DMV review. Evidence records are incomplete because chemical testing and digital evidence preservation are not mandated outside of arrest contexts.

Insurers operating in California are pricing policies against a risk profile that is, by statutory and administrative design, less complete than the actual risk.

Quantifying the precise impact of these data integrity gaps on California auto loss ratios would require matching diversion disposition records against subsequent claims data, cross-referencing court conviction records with DMV driver files, and comparing loss experience for tested vs. untested fatal crash drivers. None of these analyses is currently possible, because the data needed to perform them is the data that the gaps identified above prevent from being collected or retained. The absence of the data needed to measure the impact is itself a consequence of the data integrity problem this assessment documents.

---

4. Comparable Market Precedent

The insurance industry has previously responded to situations in which state-level failures in risk mitigation created structural market distortions. The most prominent recent example is California's property insurance market, where carrier withdrawals, non-renewals, and rate increases followed a determination that the state's regulatory and mitigation framework was inadequate to address wildfire risk.

The reinsurance industry's evolving treatment of secondary perils provides additional context. Swiss Re's sigma report covering 2025 losses (sigma 01/2026, published March 2026) found that secondary perils (severe convective storms, wildfires, floods) accounted for a record 92% of $107 billion in global insured natural catastrophe losses that year. These are not concentrated catastrophic events but frequent, individually modest events that accumulate into large aggregate totals. While Swiss Re's framework was developed for natural catastrophe

classification, the conceptual model of frequent, individually modest losses accumulating to significant aggregate totals provides a useful lens for understanding the cumulative frequency dynamics observed in California's auto liability market.

The distinction between catastrophe risk and frequency risk is important. Auto losses do not threaten carrier solvency through concentrated events. They erode profitability through persistent, structurally elevated frequency. The underlying loss parameters are elevated across the entire California auto portfolio simultaneously, driven by the data integrity and regulatory factors documented in this assessment. The mechanism differs from catastrophe risk, but the pattern of state-level failure creating structural market distortion is consistent.

---

5. Recommendations

The following reforms would address the data integrity gaps identified in this assessment. Each targets a specific mechanism by which the current framework degrades the accuracy of the driver record and claims data on which auto insurance pricing depends.

5.1 Driver record integrity.

All pretrial diversion dispositions in vehicular manslaughter cases should be reported to the DMV and reflected in the driver's record. A mandatory reporting mechanism would ensure that insurers, employers, and licensing authorities have access to complete driver histories. Current law permits a driver who has caused a fatal crash to present as a clean-record driver, which undermines actuarially sound pricing.

5.2 Evidence preservation in fatal crash investigations.

Mandatory chemical testing, phone record preservation, and vehicle forensic inspection should be required in all fatal crash investigations, regardless of whether an arrest is made at the scene. The current testing gap (26% of fatal crash drivers tested in California vs. 36% nationally) produces systematically incomplete data on the causes of fatal crashes. Closing this gap would improve both the accuracy of crash cause data and the reliability of the claims information insurers use for pricing and underwriting.

5.3 Court reporting compliance.

Courts should be required to report all traffic-related convictions to the DMV within a specified timeframe. An audit mechanism should be established to identify and correct reporting failures. The approximately 400 unreported convictions identified by investigative reporting represent a breakdown in a mandatory data pipeline that insurers depend on for driver risk assessment.

Effect on risk classification and pricing.

Improved data integrity would support more accurate risk classification, aligning individual policyholder premiums more closely with actuarial risk. Drivers whose records are currently incomplete due to unreported diversion dispositions or missing conviction data may see their risk profiles adjusted to reflect their actual loss history. This represents a refinement of existing pricing models rather than a systemic cost increase. Under the current framework, the cost of unidentified high-risk drivers is distributed across the insured pool through aggregate rate levels that are higher than they would be if risk were classified accurately. Restoring data integrity would reduce this cross-subsidization and improve the accuracy of the rate-making process.

Sources

AM Best. Best's Market Segment Report: "Private Passenger Auto: On the Road to Recovery." November 2024. (National PPA combined ratio, market segment outlook.)

California Department of Insurance. 2024 California P&C Premium and Loss Distribution by Line. Rate Specialist Bureau, April 30, 2025. (CDI/NAIC data.)

California Department of Insurance. 2023 California P&C Premium and Loss Distribution by Line. Rate Specialist Bureau, April 30, 2024. (CDI/NAIC data.)

California Department of Motor Vehicles. Negligent Operator Treatment System evaluation. (Investigation rate data.)

California Office of Traffic Safety. California Traffic Safety Quick Stats. Updated July 2025. (Fatality data.)

CalMatters. "License to Kill" investigative series. Robert Lewis and Lauren Hepler. April 2025-March 2026. (Diversion data, court reporting failures, DMV investigation rate data, legislative hearing coverage.)

Insurance Research Council. "Uninsured and Underinsured Motorists: 2017-2023." Published March 2025. (Uninsured motorist rates by state, 2023 data.)

National Association of Insurance Commissioners. Report on Profitability by Line by State in 2023. April 2025. (National PPA liability loss ratio, LAE ratio, expense ratio components.)

National Association of Insurance Commissioners. 2022/2023 Auto Insurance Database Report. Adopted December 2025. (In-force expenditure data.)

National Highway Traffic Safety Administration. The Economic and Societal Impact of Motor Vehicle Crashes, 2019. Report No. DOT HS 813 403. February 2023. (Crash cost data.)

National Highway Traffic Safety Administration. State Alcohol-Impaired-Driving Estimates: 2023 Data. (State-level alcohol-impaired fatality rates, BAC testing rates.)

National Highway Traffic Safety Administration. Fatality Analysis Reporting System (FARS), 2023 Annual Report File. (Fatality data, alcohol involvement data.)

S&P Global Market Intelligence. "U.S. P&C industry achieves best underwriting results in over a decade in 2024." 2025. (National PPA combined ratio by line.)

SafeTREC, UC Berkeley. 2025 Traffic Safety Facts: Alcohol-Impaired and Alcohol-Involved Driving. (California BAC testing analysis.)

Swiss Re Institute. sigma 01/2026: "Natural catastrophes in 2025: the persistent rise of wildfire and storm risk." Published March 19, 2026. (Secondary perils framework, global insured loss data.)