



Insurance Telematics Data Integration Checklist 2026

Hardware & IoT Connectivity Verification

Ensuring all telematics devices, OBD-II dongles, or mobile sensors are properly installed, powered, and transmitting a stable signal to the central server.

Installed Hardware Types

- ☐ OBD-II Dongle
- ☐ Mobile App GPS
- ☐ Embedded OEM Telematics
- ☐ In-Vehicle Sensor (Accelerometer/Gyroscope)
- ☐ Dashcam Integrated Sensor

Device Connection Status

- ☐ Connected
- ☐ Intermittent
- ☐ Disconnected
- ☐ Error/Fault

Signal Strength (RSSI) Decibels

Last Hardware Sync Date

Hardware Installation Photo/Certificate



Upload File

Hardware Installation Notes

Data Ingestion & Stream Integrity

Validation of real-time data streams, latency monitoring, and ensuring continuous data flow from edge devices to the cloud infrastructure.

Data Stream Start Date

Average Data Latency (ms)

Data Source Protocols Detected

- ☐ MQTT
- ☐ HTTPS
- ☐ WebSockets
- ☐ FTP/SFTP

Ingestion Status

- ☐ Operational
- ☐ Intermittent
- ☐ Failure
- ☐ Maintenance

Error Logs & Discrepancy Notes

Write something...

Data Sample Log File

 Upload File

Data Accuracy & Sensor Calibration

Verifying the precision of GPS coordinates, accelerometer readings, and speed data to ensure high-fidelity telemetry for risk assessment.

Sensor Calibration Status

- ☐ Calibrated
- ☐ Pending Calibration
- ☐

GPS Error Margin (Meters)

Enter a number...

Last Calibration Date

Enter date...

Verified Sensor Components

- ☐ Accelerometer
- ☐ Gyroscope
- ☐ GPS Module
- ☐ OBD-II Interface

Calibration Certificate/Log

 Upload File

Discrepancy Notes

Write something...

Data Privacy & GDPR/CCPA Compliance

Audit of encryption protocols, anonymization of driver identities, and ensuring consent management for location-based data tracking.

Data Processing Methods Verified

- ☐ Anonymization/Pseudonymization
- ☐ Data Encryption at Rest
- ☐ Data Encryption in Transit
- ☐ Access Control Implementation

Compliance Framework Audit Target

- ☐ GDPR
- ☐ CCPA/CPRA
- ☐ HIPAA (if applicable)
- ☐ Local/State Specific Regulations

Last Data Privacy Impact Assessment (DPIA) Date

Enter date...

Data Protection Impact Assessment Report

 Upload File

Description of Data Anonymization Process

Write something...

Data Protection Officer (DPO) Approval

API & Third-Party Integration Testing

Testing the seamless integration between telematics data feeds and existing core insurance platforms, policy management systems, and claims databases.

API Endpoint Status

- ☐ Operational
- ☐ Degraded Performance
- ☐ Down/Connection Failure

Connected Systems Verified

- ☐ Policy Management System
- ☐ Claims Processing Engine
- ☐ CRM/Customer Database
- ☐ External Telematics Data Provider
- ☐ Payment Gateway

Integration Error Logs Summary

Write something...

Last Successful Integration Sync Date

Enter date...

API Response Payload Sample (JSON)



Upload File

Average Latency (ms)

Enter a number...

Technical Lead Verification

Data Processing & Feature Engineering

Evaluation of the algorithms used to transform raw sensor data into actionable risk scoring metrics, such as harsh braking, rapid acceleration, or cornering intensity.

Algorithm Version

- ☐ v1.0 (Legacy)
- ☐ v2.0 (Current)
- ☐ v3.0 (Beta/AI-Driven)

Calculated Risk Features Enabled

- ☐ Harsh Braking Frequency
- ☐ Rapid Acceleration Detection
- ☐ Cornering Intensity
- ☐ Speeding Threshold Violations
- ☐ Time of Day/Night Driving Analysis

Threshold Deviation Tolerance (%)

Enter a number...

Feature Engineering Logic Documentation

Write something...

Model Validation Test Results

 Upload File

Last Model Retraining Date

Enter date...

Storage & Big Data Management

Checking the scalability of data lakes, data retention policy adherence, and the efficiency of long-term historical data storage for trend analysis.

Data Retention Policy Review Date

Enter date...

Storage Infrastructure Type

- ☐ Cloud-Native (AWS/Azure/GCP)
- ☐ On-Premise Data Center
- ☐ Hybrid Cloud

Estimated Daily Data Volume (GB)

Enter a number...

Data Encryption Standards Applied

- ☐ AES-256
- ☐ TLS 1.3
- ☐ RSA Encryption

Data Backup & Disaster Recovery Summary

Write something...

Storage Compliance Audit Report

 Upload File

Automated Trigger & Alert Verification

Testing the functionality of automated alerts for high-risk driving events or vehicle maintenance needs sent to both underwriters and policyholders.

Triggered Alert Types Verified

- ☐ Hard Braking/Rapid Deceleration
- ☐ Excessive Speeding
- ☐ Sharp Cornering
- ☐ Sudden Impact/Crash Detection
- ☐ Geofence Breach
- ☐ Device Disconnection/Tampering

Notification Delivery Channel

- ☐ In-App Push Notification
- ☐ SMS/Text Message
- ☐ Email Alert
- ☐ Broker Dashboard Alert

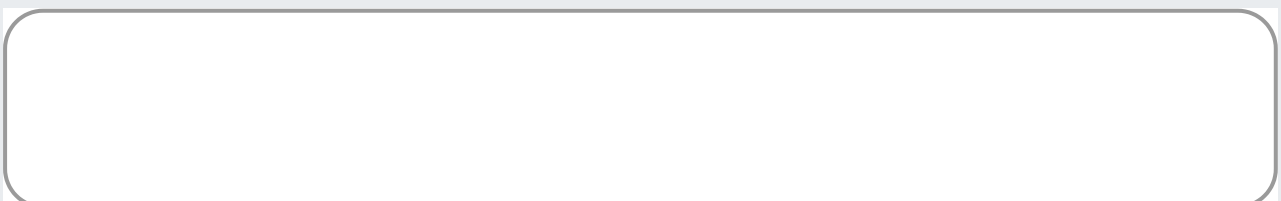
Maximum Latency Threshold (Seconds)

Enter a number...

Last Verification Date

Enter date...

Verification Officer Signature



Edge Case & Connectivity Failure Protocol

Reviewing system responses to 'dead zones', signal loss, or hardware malfunctions to prevent data gaps in the policyholder's driving profile.

Primary Connectivity Failure Trigger

- ☐ GPS Signal Loss
- ☐
- ☐ Device Hardware Malfunction
- ☐ Data Packet Corruption

Maximum Allowable Data Gap Duration (Minutes)

Enter a number...

Mitigation Steps Taken

- ☐ Device Reboot Initiated
- ☐ Secondary Network Failover Activated
- ☐ Manual Log Upload Requested
- ☐ Alert Sent to Technical Support

Error Logs or System Diagnostic Report

 Upload File

Detailed Incident Description

Write something...

Compliance Officer Verification

Dashboard & Reporting Visualization

Ensuring the end-user interface provides clear, actionable insights for underwriters, claims adjusters, and customers regarding driving behavior.

Report Frequency

- ☐ Daily
- ☐ Weekly
- ☐ Monthly
- ☐ Quarterly

Key Metrics to Visualize

- ☐ Hard Braking Events
- ☐ Speeding Violations
- ☐ Trip Duration
- ☐ Driver Safety Score
- ☐ Fuel Consumption

Dashboard User Access List

Data Visualization Requirements & Customization Notes

Write something...

Last Dashboard Audit Date

Enter date...

UI/UX Mockup or Wireframe Reference



Upload File

Data Architect Approval

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🏁 Finish

🔧 Generate Sample Report