

# Trucking Compliance and Dispatch Platform Framework

## 1. Overview

This document outlines the framework for building a web-based platform that integrates both trucking compliance management and dispatch service support. The goal is to help US-based owner-operators manage regulatory compliance, store important documents, calculate trip profitability, and manage dispatch records.

## 2. Suggested Tech Stack

- Frontend: React.js (with Tailwind CSS or Material UI)
- Backend: Node.js + Express.js
- Database: Firebase Firestore or PostgreSQL
- Authentication: Firebase Auth or Auth0
- File Storage: Firebase Storage or AWS S3
- Notifications: SendGrid (Email), Twilio (SMS)
- Hosting: Vercel / Netlify / Firebase Hosting
- Payment (Optional): Stripe

## 3. Core Modules

### A. Compliance Management:

- Track document expiry (CDL, Med Card, IFTA, etc.)
- Upload and store driver/vehicle documents
- Send alerts for upcoming renewals
- Compliance status dashboard

### B. Dispatch Document Storage:

- Store Rate Confirmations, BOLs, Broker Info, Load Data
- Search by broker, date, destination
- Secure file uploads and tagging by Trip ID

### C. Dispatch Calculator:

- Input Load Pay, Miles, Fuel Cost, MPG, Dispatch Fee
- Auto-calculate Fuel Cost, Net Profit, RPM

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- Save load records, export trip earnings

### **4. Dashboard UI Concept**

The dashboard provides a visual summary of compliance status and dispatch loads:

- Upcoming Renewals
- Recent Documents
- Dispatch Calculator and Trip Reports