

84 Lumber Delivery Track Proposal and Data Dictionary

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PROPOSAL

Data Description

PRIMARY DATA: 84 Lumber truck deliveries in Denton, TX from 1/3/2022 to 3/17/2025, linked [here](#).

Second-hand Data

- Denton Airport weather starting July 1996, linked [here](#). Source: [NCEI](#)
- Lumber prices starting Nov. 1972, linked [here](#). Source: [Macrotrends](#)

Data Objective

Problem Statement: In 84 Lumber's Denton, TX location, the supply chain management cycle needs to be optimized so it can make more truck deliveries. Using truck delivery data from 1/3/2022 to 3/17/2025, the goal is to create a Business Intelligence dashboard/report to demonstrate the current truck patterns and recommendations to improve them.

Project Scope

- Week 1: Data preprocessing and manipulation with Excel and SQL.
- Weeks 2-3: Analytics techniques and visualizations with Python.
- Weeks 4-5: Business Intelligence dashboard and report creation.

DATA DICTIONARY

Dimensions

Date: **Primary key:** truck deliveries from 1/3/2022 to 3/17/2025.

Measures

PRIMARY DATA

Trucks (qty): Total number of **actual** trucks across all truck types.

Deliveries (lbs.): Total weight of deliveries across all sizes.

Deliveries (qty): Total number of deliveries across all sizes.

Reschedules (qty): Total number of rescheduled deliveries.

Reschedules (lbs.): Total weight of rescheduled deliveries.

SECOND-HAND DATA

Temperature (°F): Average Fahrenheit temperature.

Precipitation (in): Total inches of rainfall.

Lumber (\$): In U.S. dollars.

Missing Values

Reschedules (lbs.), Reschedules (qty): Some values are 0 in one column with positive values in the other, indicating inaccurate reschedule data for some entries. Since most are unaffected, the affected ones will be dropped to maintain data accuracy.

Precipitation (in): Some entries are blank, especially for earlier dates. This affects very few entries within our dates, so dropping these shouldn't affect the overall outcome of the analysis.