

Oklahoma Freight Transportation Plan | October 2022 Appendix B - Selection of Analysis Years for Data Analysis 2023-2030

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Appendix B Selection of Analysis Years for Data Analysis

This appendix outlines the data source and year(s) selected for each of the major new data analyses performed as part of this Plan update.

B.1 COMMODITY FLOW

The Plan includes evaluations of freight tonnage and value derived from the US Department of Transportation's FAF version 5.3, which has a base year of 2017 and updated/forecasted years through 2050. Two forecast periods were evaluated.

B.1.1 Short-Term

For the short-term analysis, FAF projections years 2023-2030 were compared (see Chapter 6). This represents the eight-year period, consistent with IIJA freight plan horizon requirements.

B.1.2 Long-Term

For the long-term analysis, FAF base year 2017 and FAF forecast year 2045 were compared (see Chapter 4). For consistency with other state planning documents, the year 2045 was chosen as the end year for the analysis. While state freight plans should generally prefer the most recent available data where possible, in this case 2017 was chosen as the start year for two reasons:

- As the base year for FAF and its key data sources such as the US Census Commodity Flow Survey, 2017 has the least amount of projection and adjustment.
- 2. Subsequent FAF years showed considerable variation:
 - Solid growth 2018 and 2019
 - Rapid decline in 2020
 - Recovery (but not to 2017 levels) in 2022

Given these variations, year 2017 tonnage is extremely close to the average of all years between 2017 and 2022, deviating by only 2.2 million tons—meaning that of all the years in this period, 2017 is the most representative of "average" Oklahoma conditions and the most solid basis for long-term freight forecasting.



Table B-1 FAF 5.3 Oklahoma Tonnage (millions)

Year	Within	Outbound	Inbound	Total
2017	158.0	148.0	129.5	435.5
2018	161.5	158.6	133.2	453.3
2019	166.1	165.5	138.3	469.9
2020	152.9	132.1	122.6	407.6
2021	(not available)			
2022	155.3	136.6	130.1	421.9
Average	158.8	148.2	130.7	437.7
2017 vs Average	(8.0)	(0.1)	(1.3)	(2.2)

Source: USDOT FAF 5.3 Summaries

B.2 HIGHWAY BOTTLENECKS

The Plan includes evaluations of bottleneck locations across the state, derived from network system performance data from the U.S. DOT's NPMRDS speed data for Oklahoma roadways on the NHS. The data had a base year of 2021, which is the latest year with full-year data available.

B.3 TRUCK PARKING

The Plan includes evaluations of designated parking demand for trucks at truck stops and rest areas across the state. To better understand truck parking demand in the state, GPS data was acquired from Geotab, a telematics data provider, showing a sample of truck operations in Oklahoma. The parking facilities identified in the Truck Parking Inventory were georeferenced to isolate the trucking activity in the Geotab dataset using these facilities. Geotab data was collected for the three whole months of February 2021, April 2021, and October 2021 in order to analyze a representative sample of trucking activity across the whole year.

