



ENHANCED COMMODITY FLOW DATA FOR STATE & LOCAL FREIGHT PLANNING

QFIT FREIGHT & COMMODITY FLOW DATA

Quetica's Freight Intelligence Tracker (QFIT) provides a robust, affordable solution for commodity flow and freight data intelligence designed to overcome the common data challenges encountered in state and local freight planning efforts.

- Delivers commodity flow data at county level to provide detail needed to support effective freight planning at a local, regional or state level
- Proprietary, industry-specific algorithms across 42 commodity groups increases data accuracy and relevance
- Enhanced with millions of private sector and mode-specific data records to deliver comprehensive freight cost, equipment and benchmark information needed for performance-based planning
- Optional import/export enhancement with commodity flows to/from 41 countries/country groups, addressing challenges with origin information for agricultural exports and other commodities
- Flexible, cost-effective options for one-time data purchase or ongoing access to data visualization tools and updates

ABOUT QUETICA

With over 20 years of experience optimizing complex global supply chains, Quetica delivers robust data and cutting-edge, data-driven analytics to help public agencies understand the highest priority freight investment needs across public-private freight transportation networks.

Quetica, LLC is a Service-Disabled Veteran-Owned Small Business.

www.quetica.com

QFIT DATASET



County-to-County Origins & Destinations across U.S.

U.S Ports of Exit/Entry

Tonnage & Value Data for 42 Commodity Groups

Baseline & Forecast Years

7 Domestic & International Freight Modes/Combos

Private Sector Freight Costs, Equipment & Benchmarks

Import/Export Trade data for 40+ Countries/Regions, including Canada & Mexico

Data Visualization Tools & Analytics

Custom Data, Analysis & Planning Services

Eastern
Transportation
Coalition Members
Save 10%+

USING INTEGRATED PUBLIC & PRIVATE DATA FOR FREIGHT PLANNING

Assessing Supply Chain Performance & Freight Fluidity

Freight fluidity refers to performance analytics (cost, reliability, speed, resilience) associated with supply chains and multimodal freight networks. Private sector firms routinely measure their supply chain performance by tracking metrics like cost, reliability, and on-time delivery.

The hurdle facing public agencies wanting to understand supply chain performance is access to data. While useful in establishing baselines for commodity movements, public commodity flow data lacks freight costs and other details needed to support a strategic, performance-based approach to freight planning.

By integrating commodity flow and shipping records, Quetica provides public agencies with critical information needed to effectively analyze and prioritize infrastructure investments for freight fluidity, including:

- **Average Length of Haul by Commodity, Mode and Region:** Allows planners to do time-series analysis regarding heavy haul industries, access to services or trends in last mile delivery.
- **Equipment Type:** Used to understand equipment needs (e.g., dry van, refrigerated van, flatbed/flat car) critical to evaluating potential facility investments.
- **Modal Cost Benchmarks:** Perform cost analysis of various mode options for shippers in a state or region to determine value of freight investments in the transportation network.
- **Shipper Industry:** Three-digit NAICS code for shipper provides analysis of critical and growing supply chains.

Applying Supply Chain & Cost Benchmarks to Freight Planning

Commodity flow data enhanced with multimodal freight cost and other benchmarks provides public agencies with a method for analyzing freight fluidity and planning infrastructure investments using the same measures as private sector firms to assess their own supply chain performance. Applications include:

- Statewide, Regional, Urban and Corridor Freight Plan Development
 - Commodity Flows to/from/within state to domestic and international locations
 - Analysis of Key Supply Chains
 - Competitive Analysis of State Freight Transportation Services
 - Modal and Transportation Cost Analysis
 - Freight Facility and Infrastructure Investment
- Adaptive Freight Network Optimization Modelling and Analytics
- Economic Development to Support Private Sector Investment within State
- Freight Demand for Travel Demand Modelling
- Freight Infrastructure Cost-Benefit Analysis for Grants and Other Funding Initiatives

Online Data Visualization and Analytics Tool and Custom Data Requests

To assist states and MPO's answer key questions about freight operations, Quetica has developed a data visualization tool to query and analyze QFIT commodity flow data through a series of dashboards. Designed in a user-friendly, Tableau® platform, the tool provides users with online access to analyze commodity flows, demand and costs of commodity transport, and the location of important freight facilities.

*The data visualization tool and custom data analysis services, such as Traffic Analysis Zone (TAZ) level disaggregation, are offered as ancillary services.



QFIT FREIGHT INTELLIGENCE TRACKER & DATA VISUALIZATION TOOL

Disaggregated Freight Analysis Framework Data

Commodity flow data captures origin, destination, mode, volume and value of goods being consumed and produced by a state or region. It is a primary means to examine demand on a freight transportation network, as well as provide insights into key trade relationships. With QFIT, Quetica disaggregates or breaks down the latest version of FHWA's Freight Analysis Framework (FAF) commodity flow data from 132 FAF regions to over 3100 domestic county level geographies, providing detail needed for local and regional planning.

- County-to-county level origin/destination data*
- Spans 42 commodities by Standard Classification of Transported Goods (SCTG) code
- Aligned by NAICS code for validation or integration with other economic datasets
- Proprietary regression equations tailored to each commodity group to increase accuracy
- Overcomes limitations of traditional statistical techniques for agriculture and other commodity groups

Enhanced with Private Sector Bill of Lading & Mode-Specific Data

While useful in establishing baselines for commodity movements, public commodity flow data lacks detail needed to support a strategic, performance-based approach to freight planning. Leveraging a deep history in freight audit & payment, Quetica enhances QFIT commodity flow data with privately-sourced, private-sector shipping records and other mode-specific data needed to effectively prioritize infrastructure investments for freight fluidity.

- Access to 30+ million private shipment records for domestic freight movements
- Ability to integrate confidential rail waybill data sourced through state DOT's
- Desensitized, private sector shipment detail including shipment cost, distance and equipment type
- Mode-specific benchmarks, including truckload (TL) and less-than truckload (LTL) cost differences
- Insights into equipment and service needs for dry, refrigerated and liquid commodities across industries

Import/Export Enhancement for Agriculture & Other Commodities

The QFIT dataset includes commodity flows to/from Canada and Mexico, as well as 6 international regions. Available as an option, QFIT International expands the import/export dataset to include commodity flows to/from 41 countries/country groups. It also addresses anomalies in Census Bureau source data for export origin that can be misleading for some commodities, such as agricultural and food exports.

CONTACT

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