



Ohio Freight System

Freight transportation is vital to everyday life and economic activity in Ohio. It provides well over 100,000 Ohio jobs, but even more critically, it brings food for our homes, gas for our cars, and helps our businesses reach and compete in global markets.

Stakeholder Insights

Freight stakeholder discussions and information stakeholders maintain revealed important insights:

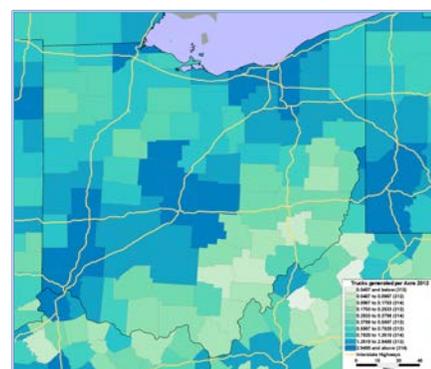
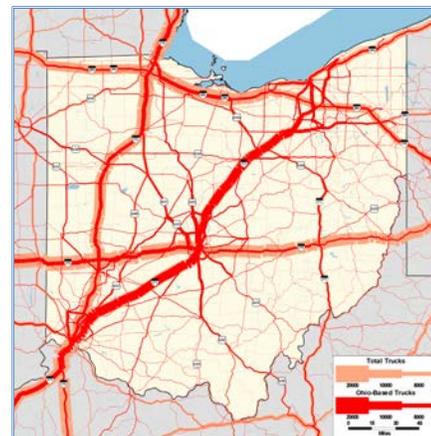
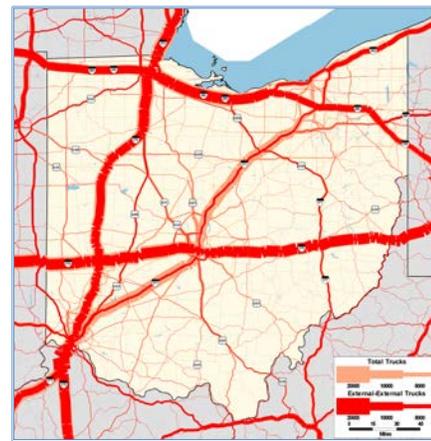
- Ohio companies continue to cut inventory, relying on freight service to keep supply chains working;
- Supply chains are shifting. Ohio's strong pool of suppliers and labor, plus multiple modes to ship freight, are advantages for locating here;
- Ohio's highway system is viewed favorably in terms of congestion and condition, and our two-lane road network is a key component;
- Businesses depend most on trucking, yet truck lines are faced with driver shortages and productivity issues;
- The Ohio rail system is very capable in light of recent investments in intermodal terminals and double stack clearance projects.

Asset Inventory

Ohio is a crossroads state with a mature, intermodal transportation system. Many assets are aging, some face pressures of growth while others have excess capacity, and major rail improvements have occurred.

- Through shipping by truck begins and ends outside the state. It favors interstate highways, especially east-west corridors (map top right);
- Ohio-based truck shipping begins or ends serving Ohio industry and people. Its backbone is I-71 connecting Cincinnati, Columbus, and Cleveland, but it relies extensively on our two-lane road network to reach Ohio towns (middle right);
- Starting points for truck shipping concentrate by county (bottom right) in a mirror of population;
- Ohio's rail network is comprised of major North American carriers and regional and short line rail;
- New intermodal corridors and hubs are expanding rail service, while legacy lines through urban areas are constrained by capacity, curvature, and grade-crossings with other railroads;

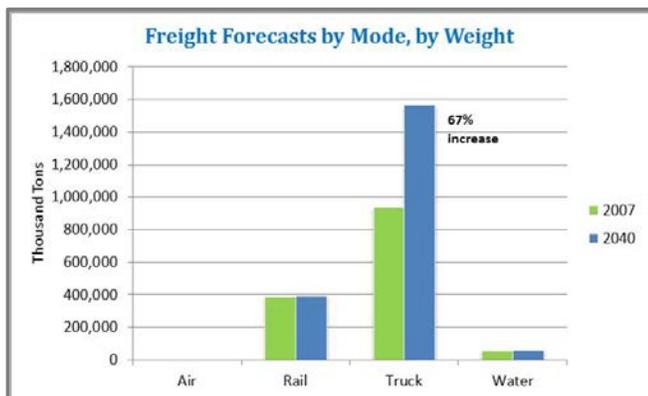
- Shippers have access to the Ohio and Mississippi Rivers, the Great Lakes, St. Lawrence Seaway, and the Atlantic Ocean through public and private waterway assets;
- Major ports in Toledo, Cleveland, and Ashtabula stand out in terms of capacity and demand, while river trade is limited by aging facilities;
- Air cargo facilities are adequate for expected demand in this increasingly competitive market.





Freight Forecasts

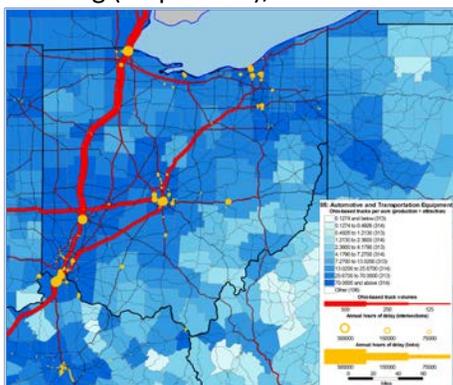
The FHWA Freight Analysis Framework (FAF) forecasts Ohio freight volume. As measured by weight, Ohio truck volume is projected to increase 67 percent from 2007 – 2040; all other mode forecasts are flat.



Future Needs

While forecasts emphasize the importance of roadways for freight performance, multimodal capabilities are one of Ohio’s core strengths.

- Roadway needs stem from growth pressures and supply chain requirements for end-to-end service;
- Both Ohio-based and through traffic are affected, but Ohio-based traffic needs are more pervasive due to dependence on the two-lane network;
- Freight bottlenecks affect key industries, such as the Ohio-based shipping lanes for automotive manufacturing (map below);



- Immediate roadway needs are bottleneck solutions in urban areas, plus route options with real time conditions data for logistics management over the two-lane system;
- As Ohio grows in the long-term, the two-lane network will need capacity expansion;
- Private railroads can be expected to address most bottlenecks on the freight rail system;

- Standard heavyweight (286K) track still is not everywhere, and shale energy resource development may prompt demand for rail line reactivation;
- Dredging Lake Erie ports and upgrades to Ohio River lock and dam systems are the main needs for existing marine assets;
- Current air cargo facilities are adequate for the market.

Themes for Strategy

Future needs point to major themes that Ohio can use to build effective strategies for freight transportation:

- Roadway freight performance is the key challenge, but Ohio-based shipping and through shipping demand action in different parts of the system;
- The two-lane network and urban road systems are crucial to performance delivery for Ohio;
- Ohio performance requires information technology and route alternatives as well as lane capacity;
- Managing truck growth means that productivity improvements like high capacity truck lanes may make sense;
- Rail can absorb more growth through track upgrades to handle 286,000 lb. rail cars, and accommodation of new intermodal service;



- Federal fund constraints limit waterway growth, which may benefit from development priorities;
- Natural gas is clean Ohio energy. Support to more rail service in shale country, and promoting fueling stations so truck fleets can convert from diesel, could help our energy industry expand.