

Triangle Regional Freight Plan (Draft)

DCHC MPO Board Questions

The Durham-Chapel Hill-Carrboro Metropolitan Planning Organization (DCHC MPO) released the draft Triangle Regional Freight Plan for public comment at their September meeting. At that time, several members of the MPO Board had questions about specific topics in the Freight Plan that staff were not able to answer. This document provides answers to those questions by identifying where detailed information is available in the draft report, shown in the text box, and providing a summarized answer, as well.

What is the Freight Growth Rate and Forecasts?

Table 21 and 22 on pages 84 and 85 provide a summary of Triangle freight forecasts. Detailed data on Triangle freight trends in terms of tonnage, value, mode and commodity can be found in Chapter 5, Existing Trends and Conditions, page 71. Forecasts begin on page 83.

Summary

In terms of trends, the economic recession of 2008 had a different impact on different supply chains. From 2007 to 2012, freight in the Raleigh-Durham area decreased significantly especially for the truck mode. Inbound shipments also decreased considerably as consumer spending contracted from the deleveraging of household debt. However, at the same time, outbound shipments increased over this period, as the high-tech economy demonstrated resilience in the face of the broader economic downturn.

In the future, the Freight Analysis Framework (FAF) reports expected freight flows in tons and value out to 2045. Overall, tonnages to, from and within the Raleigh-Durham region are expected to increase over the following decades at an average rate of 0.82 percent per year. The truck modes is expected to see the fastest growth in tonnages, going from 54 percent mode share of inbound tonnage in 2012 to 66 percent mode share in 2045. In contrast, rail is anticipated to see slower growth over this time period, which will translate into a 10 percent loss of inbound mode share. Freight value is also expected to increase at 2.4 percent per year on average out to 2045. Truck mode share will actually decrease about 5 percent in this period because air freight is expected to increase by about five-fold, which is much faster than other modes.

How Does the Plan Address Pipelines?

Detailed data and maps on pipeline commodities, capacity and future demand can be found in Chapter 7, starting on page 159.

Summary

There are about 750 miles of pipelines running through all nine counties in the Triangle Region. These pipelines carry three major commodity types: natural gas (65% of the total), non-highly volatile liquid (HVL) petroleum products (32% of the total) such as gasoline, and liquefied petroleum gas. The largest pipeline operator by mileage is Public Service Company of North Carolina (known as PSNC Energy), comprising 38 percent of total mileage and carrying exclusively natural gas through every county in the area. Colonial Pipeline is another major operator, comprising 32 percent of total mileage for non-HVL products only. The pipelines are commonly connected to breakout tanks for petroleum products and other facilities that often allow transfer to trucks and rail.

Future pipeline demand data is limited but it is expected to at least grow with the increasing population and commerce. The only pending pipeline project in North Carolina is the Atlantic Coast Pipeline (ACP) project, which will traverse Johnston County. The construction of the ACP suggests that natural gas capacity is limited in the Triangle Region, as well as in other parts of North Carolina.

How Does the Plan Address Roadway Resilience (for example, roads lasting longer)?

Not applicable.

Summary

The freight plan does not collect and analyze data, and does not have any recommendations that directly relate to the resiliency of roadways and freight travel. The plan focused on the topics and concerns identified through the surveys and stakeholder interviews. The resiliency of roadways in terms of pavement condition and how often the road needs repairs was not identified as a key concern. However, the importance of resiliency to disruptions such as severe weather events is pointed out as an aspect of system reliability and redundancy (pages 67-68), and a test of the resiliency of the system to highway network disruptions appears on page 140. This used a modeled evaluation of closures on I-40, and showed traffic being pushed onto local roads.

How Does the Plan Address Other Users in the Rail Corridors?

The Plan focuses on rail freight in several separate sections that address topics such as the existing network, freight forecasts, future conditions, intermodal connections and recommendations. The recommendations section, which starts on page 251, provides the most information on other users of the freight corridor such as passenger rail and roadway vehicles.
--

Summary

The Freight Plan addresses other users of the rail corridor in several ways. The passenger rail program in the Triangle, which is estimated to operate up to 44 new trains daily over the North

Carolina Railroad right-of-way, will be transformative. Freight shippers support the passenger rail program because it diverts freight movement from the congested roadways to the rails, and the transit agencies are dedicated to avoiding the impedance of freight shipping on the rail lines by making needed capacity and safety improvements.

Improvements at railway-roadway at-grade crossing is another way in which rail freight and roadway vehicle have a similar interest and therefore must coordinate and cooperate. These crossing improvements produce greater safety and efficiency for many travel modes, including truck and rail freight. The Freight Plan recommends ten key crossing improvements.