Effects of Panama Canal Expansion on total truck VMT in the U.S.A

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Abstract

Panama Canal is projected to be doubled in capacity by 2015 which will allow more and larger ships to move through this canal. But what would be the effect of this expansion on the entire truck network in the U.S.A. It’s reasonable to think that by making the Origins and Destinations closer, the total Truck Vehicle Miles Traveled (TVMT) will be reduced. However we already have congested network near east coasts. This issue is going to be investigated in this study. Using the results of Panama Canal Expansion model, the percentile of shifting between ports in terms of Imports and Exports will be achieved. Knowing this will result in a new Freight Analysis Framework (FAF) origin and destination matrix and consequently need a new network assignment. This will show us the changes in the whole truck network, congested areas and also the total TVTM after Panama Canal expansion.

Keywords: Panama Canal, FAF network, Total TVMT, Congested links