



A Joint Sandhouse Group and NUTC Seminar.....

David Burns

Railroad Industrial Engineering Consultant

Nov. 12, 2015

3:00 – 5:00 pm

Location: Transportation Center
Chambers Hall – 600 Foster, Evanston
Lower Level – Ruan Conference Center



The Business Case for Higher Speed Freight Trains

Rail is usually considered to be the transport mode of choice for transporting freight longer distances, yet in the USA only 15% of freight, for distances more than 2000 miles, is by rail. For long distances many shippers are spending 2 to 3 times rail freight rates as they need faster and more reliable service than the railroads can provide. As an indication of the rail potential shippers are spending, annually, \$28 billion dollars on moving freight by truck over 1000 miles.

There are a number of reasons rail is not able to take advantage of the long distance market. A higher speed freight train will consume up to 3 train paths of 50 mph freight trains. There is significant increase in track maintenance cost if heavy freight trains travel at higher speeds, signaling for higher speeds and longer stopping distances, and the lack of a reliable low maintenance, high axle load, track friendly freight wagon truck for speeds over 70 mph.

As part of the FRA's research into higher speed passenger trains, research was funded for higher speed freight. As part of the justification for this research, a study was commissioned to focus on the business case for higher speed freight trains.

The study came to interesting specific conclusions. If higher speed freight trains could be operated as the second section of a passenger train, this would minimize the impact on line capacity and could generate a rail revenue of as much as \$1 million per train! Overall, higher speed freight trains could produce about \$3 billion revenue from fresh produce and other priority food products. Revenues of about \$250 million from overnight intermodal and \$750 million from mail and express/courier are possible. Importantly, the potential rail revenue could reduce the freight railroads' opposition to passenger trains.

The presentation will explain the problems of operating freight at higher speeds, the logistics chain requirements, and the potential market for this premium type of service.

BIO: David Burns gained his railroad experience working 8 years for the Illinois Central Railroad, and then for 38 years he has been a railroad industrial engineering consultant. He has undertaken numerous industrial engineering, economic, and financial studies covering most aspects of railroad operations, maintenance, and the railroad's role in the logistics chain. Recently he researched a FRA funded study for the business case for higher speed freight trains. He has written and had published 60 plus articles and papers on various aspects of technical and marketing of rail operations. He also brings an international perspective to his experience in that he has had consulting assignments on 45 national railway systems around the World.