

Where extremely heavy truck freight volume exists in a highway corridor, congestion often results. Transportation planners, seeking solutions, must consider all options for adding new capacity. Especially when a railroad mainline parallels the highway, a life-cycle cost and benefit analysis needs to compare the economic and environmental costs of adding new freight capacity on the highway or on the railroad, ensuring that taxpayers' dollars are well spent.

In 2015 Nevada DOT, in conjunction with the Transportation Center at UNLV, pursued a feasibility study of moving trucks through Nevada on trains as an alternative to new construction on Interstate 80. While the study was not detailed or rigorous enough to inform future transportation investments, their concept represents creative, out-of-the-box thinking and should not be discarded hastily.

In spite of the growth and development of railroad double-stack intermodal service in recent decades, overwhelmingly freight continues to move by truck on Interstate highways. Limitations to the double-stack business model preclude the railroads' capturing more of this traffic. A more efficient, nimble, and responsive "open intermodal" concept is needed to lure trucks in markets under 1,000 miles and to accommodate all kinds of trucks. Only containers and specially designed dry van trailers can move in rail intermodal trains today, so open intermodal can bring freight efficiency and reliability to new traffic and new markets.

In an open intermodal operation, entire trucks drive on, and drive off, trains. Terminals are compact and loading and unloading is rapid. Truckers benefit by having their trucks continue to move while they get mandatory rest, a big productivity benefit. This also reduces asset and inventory holding cost, and leverages local and regional economic development with competitive, lower cost access, (e.g., to/from the Tahoe Reno Industrial Center). Railroads get new freight traffic. The public sees fewer trucks on the highway, reducing congestion and improving safety. The environment benefits from less fuel consumption and lowered pollution, congruent with the decarbonization of transportation that climate advocates seek.

Nearly all Nevada's trucks on I-80 are moving to or from California. This concentrated freight flow makes it a suitable candidate for a successful drive-on, drive-off open intermodal operation. Because the private sector railroads would be involved, a public/private partnership, along the lines of a Joint Powers Authority, would be needed to offer highway-competitive speed, reliability, and cost for these trains. Connect Rail Nevada could facilitate such a partnership to assess rigorously the financial, engineering, and market feasibility of this concept. Hupac, RAAlpin, and Ökombi are examples of private companies in Europe offering a wide range of "rolling highway" service, as it is known there. They handle loading and unloading of trains, which are turned over to railroads for transportation.

Because railroads in the United States are privately owned, virtually all public investment in surface transportation has gone to highways, shortchanging the public and depriving them of many energy, economic, and environmental benefits that increased use of rail could provide. In a State Rail Plan it is appropriate to ask what can be done to broaden the use of rail and thereby enhance public benefit. A prototype open intermodal operation is a singular investment strategy with potential to actually remove trucks from the road, and it merits retention for analysis of its applicability to Nevada's transportation future.