Visualization of Dynamic Intermodal Transportion Modeling Reveals Workload Patterns

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Abstract

Currently, intermodal corporations have flat fee systems which do not incorporate a multidimensional pricing platfom. This flat fee system leads to a loss of producer surplus that could be captured with a more discriminatory pricing system. One aspect which has yet to be utilized is freight capacity, which is difficult to conceptualize. We plan on creating a spatial visualization of this traffic using obfuscated data provided by a "door-to-door" transportation company. We expect to find patterns based on time, location, and customer parameters which we can then use to develop a pricing model weighted on traffic. This model will open up possibilities for developing more sophisticated pricing systems in the future.