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The Allocation of Switching Work in a  
System of Classification Yards <sup>1/2/</sup>

abstract

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The switching work of a given system of classification yards through which fixed traffic flows move is examined from an economic point of view. Classification problems arise in rail transportation because the size of an individual shipment, measured in cars, is usually much less than the range of economic train lengths. A description is given of the work of a single yard and the way in which work can be shifted from one yard to another by the device of prior classification. The object of this practice is the evening out of congestion over the system, or better, the reduction of various costs, where the latter consist of the costs of time losses to the various components of traffic and the more direct costs of switch-engine use and labor. The traffic characteristics influencing these costs are examined

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1/ Abstract of a paper to be presented at the November meeting of the Railway Systems and Procedures Association in Chicago.

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and an attempt is made to show how different degrees of prior classification affect them. The more important factors are (1) the variability of train arrival times and switching times, which leads to queuing delays, (2) the scramble of incoming trains, and (3) the bunching of different components of traffic. Lastly, the concept of a "classification policy" is introduced as a means of precisely describing a particular allocation of work to the system of yards.