

Evaluation Methods of Measures Against Delay based on Propagation Score and Affected Passengers

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In recent years, train delay is one of the most serious problems in rail transportations in Japan. Although timetable planners try to improve punctuality by modifying a current timetable, there are no clues as to increase of trains or stations running time/ dwell time supplements should be increased. In this research, we developed an evaluation method of train delay based on its propagation range. We also proposed an evaluation method from the viewpoints of passengers. We applied these methods to the timetable change in existing rail lines and confirmed that the proposed methods can pick up critical trains for which taking measures are effective for improving overall punctuality of the railway lines.