

**Development of Low-cost Fare Collection System
Suitable for Medium-scale City Areas**

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In the medium-scale cities, simple checking machines have been disposed to unattended stations, where illegal uses occurred. Accordingly, we designed new ticket checking systems. Prototype machinery accepts new-type ticket where “optically reading code” is printed. Therefore, it realizes a much simpler mechanism, and reduces the cost. However, it is impossible to add any information onto the ticket. Moreover, an illegal use by copying is possible. In order to prevent such use, we designed a checking methodology. The proposed system is capable of organizing a checking system without a network system. In addition, this checking system allows for conventional machinery; hence, the previous type machinery may be replaced gradually.