



Abstract

Operation Policy Plan for Gyeonggi Province Urban Railway

Three lines of urban railways in Gyeonggi Province are in operation, and three lines of metropolitan railways are under construction. In the future, nine urban railway lines and one metropolitan railway line will be added. Currently, Gyeonggi-do provides subsidies to operating institutions due to transfer discount losses. As the number of urban rail lines, public transportation fares, or the number of passengers increase, the transfer discount subsidies continue to increase, and the rational adjustments become necessary. The purpose of this study is to establish a direction for railroad construction and operation policies in accordance with the diversification of the operation in Gyeonggi Province and to prepare specific policy promotion plans.

In 2019, the operating deficit of the Gyeonggi-do urban railway was 12 billion won for the Uijeongbu light rail, 16.6 billion won for the Yongin light rail, and 1.5 billion won for the Gimpo urban railroad. Excluding the transfer discount subsidy, the ratio of fare income to management and operation costs was 39.3% for Uijeongbu light rail, 31.4% for Yongin light rail, and 54.0% for Gimpo city rail.

In this study, a method of differential payment of transfer discount subsidies according to the ratio of fare income to operating expenses was proposed. If the ratio of fare income to operating expenses is less than 60%, the support ratio for Gyeonggi Province is 30%. More than 60% and less than 70% shall be 25%, and more than 70% and less than 80% shall be 20%. In the case of more than 80% and less than 100%, 13.8% of the Gyeonggi-do support rate is applied to the transfer loss in the metropolitan

area. If it exceeds 100%, the transfer discount subsidy will be stopped. It also proposed a plan to set the support period for the transfer discount subsidy for Gyeonggi-do urban railways to 10 years. It is desirable to induce the city to improve its operation after 10 years, since the development of the station area will stabilize to some extent after 10 years of construction of the urban railway.

Considering the ratio of fare income to operating expenses and the 10-year transfer discount support period, the Gyeonggi-do subsidy for the three urban railroad transfer discounts in 2025 is expected to decrease by 2.9 billion won, from 5.38 billion won to 2.48 billion won. By 2030, it is expected to show a decrease of 3.14 billion won, from 5.83 billion won to 2.69 billion won.

In order to resolve the deficit in railroad operation, it is necessary to seek measures to reduce operating costs such as labor, power and maintenance costs, and to increase the income of subsidiary businesses. In addition, it is necessary to induce the increase of passengers using railroads by revitalizing the development of station areas. Gyeonggi-do's support is required for the replacement of facilities in individual cities related to railroad safety. The connection between railroads, roads, and buses should be facilitated to induce convenient transfers. A plan to establish and operate Gyeonggi Transportation Corporation should also be promoted to provide safe and efficient railroad operation services.

Keyword

Gyeonggi Province, Urban Railroad, Railroad Operation, Transfer Discount Subsidy, Operating Balance