

Limitations of Global Transport Infrastructure Comparisons and the Development of New Indicators

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Summary

1. Background: When assessing the adequacy of the nation's transport infrastructure and the need for investment in that infrastructure, the Korean government has relied on comparisons with major developed countries.

- Korea's transport infrastructure has been compared with that present in other developed countries at international meetings such as the G20 and within international organizations such as the Organization for Economic Cooperation and Development.

- The level of infrastructure in different countries was assessed by comparing indicators and conducting regression analysis (global trend line).

2. Global comparisons: Global comparisons are based on simple indicators such as units of length of road per person or per unit of area. They often produce inconsistent numbers, creating a need for further study.

- Compared with other G20 countries, Korea ranks first in terms of the ratio of kilometers of highway to kilometers squared of national territory; second in the absolute number of roads nationwide; and sixth in kilometers of road (also measured in absolute terms). However, when infrastructure is considered relative to the population, the figures are less impressive. Korea ranks eighth in terms of kilometers of highway per person, thirteenth in number of roads nationwide per person, and eighteenth in kilometers of road per person.

3. Developing new indicators: Indicators should reflect shifting paradigms. They should be based on a worldview in which transport systems are considered an essential service and an essential aspect of social welfare, rather than simply a good measurable in quantities supplied.

Policy Implications

- ① Existing global transport infrastructure comparisons should be used only as points of reference, not as the basis for investment decisions.
- ② Global comparisons should consider changes in the transport paradigm. Efforts should be made to develop indicators tied to levels of user satisfaction and to the effective management of transport services as borne out in the stable delivery of those services.
- ③ To develop more accurate comparisons of Korea's transport infrastructure and that found elsewhere in the world, international materials should be monitored on an ongoing basis and compiled in a systematic way.