

## Overseas Examples of Three-Dimensional Road Development for Efficient Use of Urban Space and Their Implications

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(Background) Expansion of surface roads to relieve traffic congestion in large metropolitan areas is becoming increasingly difficult, while “three-dimensionalization” of roads is emerging as a potential approach to minimize negative effects on the surrounding environment and permit upper-level development.

(Current conditions) Underground repositioning is currently being considered for individual roads in South Korea to relieve traffic congestion and improve environments, but this perspective should be broadened into a macro-level policy approach toward the three-dimensional use of road spaces.

(Overseas examples) Different combinations of underground repositioning of existing roads, the building of new underground roads, and upper-level development are currently being applied overseas, with increasing examples of efficient urban space usage and urban environment improvements based on public and private investment.

(Risk factors) While private investment in three-dimensional development may permit creative and efficient use of urban space, its feasibility is strongly influenced by the real estate market, which suggests a need for measures to ensure stability in reflection of real estate conditions and locational factors.

(Implementation strategy) The policy approach should take into account transportation and urban environment improvements as well as the efficient use of urban space, with institutional measures adopted to mitigate skewed distribution of profits from public investment.

### [Policy Measures]

① Underground repositioning of roads and upper-level development should be instituted as a policy approach from a broad-based perspective to resolve transportation issues and address urban issues such as establishment of green spaces, re-linking of lifestyle zones, and acquisition of urban land.

② Institutional measures are needed to ensure underground road repositioning serves the public good while mitigating side effects such as gentrification and the skewing of profit distribution from massive public investment.

③ When utilizing private resources for three-dimensional urban space development, resource acquisition and public sector cooperation measures tied to real estate market trends and policies should be established to permit efforts to remain stable amid fluctuating economic conditions.