

# Freight transport demand

## Level 1

With an increasing growth in industrial activity and lack of logistical planning, Level 1 sees a continuous rise in freight demand. Sectors such as general and electrical engineering, manufacture of textiles, vegetable oils, chemicals, soda ash, cement, fertilizers, and petrochemicals are likely to contribute to significant growth in freight transport demand. Increasing cargo handled at ports would also increase freight demand. All this could lead to an increase in the freight transport requirement from present levels to about 761 BTKMs by 2050.

## Level 2

Level 2 assumes that as the demand for freight transportation grows, there is a slight moderation and optimization in the distances of cargo transportation, as economic activities get more organized through formation of logistics hubs and industrial clusters. Export oriented hubs are being developed nearer to ports. With this the freight transport demand is expected to be 9% lower than that of Level 1 in 2050, reaching 694 BTKMs by 2050.

Demand for freight transport depends on nature of economic activity in the state and its growth is linked to the growth of the overall GSDP, depending mainly on the agricultural, industrial, mining, manufacturing, and service sector growth. Measured in terms of ton-kilometers moved, the demand for freight transport has grown rapidly in the last decade, in line with the growth of the GSDP. Given the high growth potential of Tamil Nadu in the future, development of dedicated freight and industrial corridors (e.g. Chennai-Kanniyakumari and Bengaluru-Chennai Industrial Corridor), and the presence of four major and eleven minor ports, the demand for freight movement is expected to significantly increase in the future from the base level of ~97 billion ton-kilometers (BTKMs) in 2015. This lever generates scenarios of freight demand under different conditions.

## Level 3

Level 3 envisages an improved scenario with organized logistics assisted by IT enabled solutions to optimize route planning and more efficient movement of goods. Industrial clusters could be planned at proximity to ports and markets, along with optimized transport logistics serving commercial and industrial needs. These measures would result in total freight transport demand reaching 661 BTKMs by 2050, about 13% lower than the demand in Level 1.

## Level 4

Level 4 envisions a scenario with significantly improved logistic planning along with a movement towards local production and local consumption. Concentrated economic activity in the form of logistics parks, industrial clusters, and industrial centers could result in reduction in the average distance for freight transport on both rail and road. This could lead to total freight transport demand of 627 BTKMs, about 18% lower than the demand in Level 1.

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