

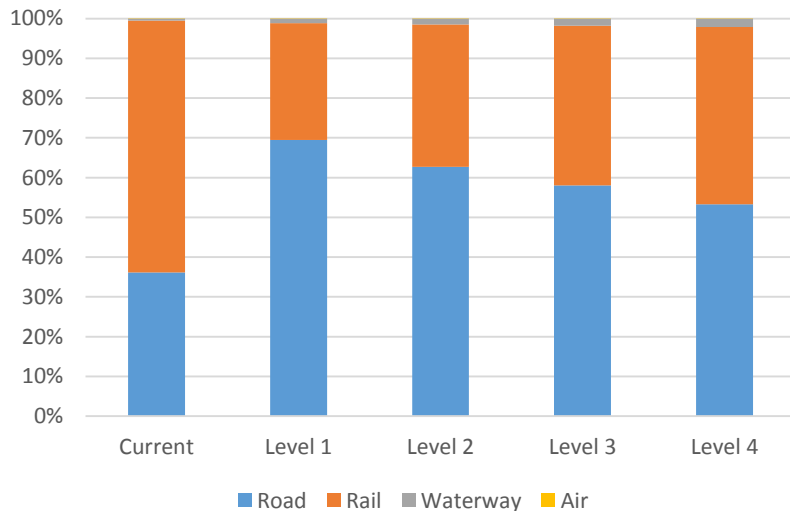
# Freight transport mode

## Level 1

Level 1 assumes that the past trend continues till 2050, with the modal share rising significantly in favor of roadways. Investments in highways and expressways, including industrial corridors, are expected to encourage the use of road over railways. However, it would also lead to congestion due to the increase in road freight traffic which could decrease transport efficiencies after a certain point of time. Share of rail is expected to decrease to 29%, by 2050, and that of waterways increasing to 1.1%.

## Level 2

Level 2 assumed the electrification of 332 route km of railway and superior technology to improve rail efficiency and capacity. High speed freight trains will be introduced running at 100+kmph. This would also be accompanied with tariff rationalization, both of which would work towards retaining more rail based transport, reaching 36% in 2050. As more stretches of NW2 are developed, 1.5% of freight share will move from road to waterway by 2050.



Railways in Assam carried ~8.2 BTKM of freight in 2015, which accounted for ~63% of the total freight transport, the remaining being transported by road. The trend in the last few decades has seen an increase in the share of traffic on roads in the total share of surface freight transportation. This is mainly due to limited reach of railways. Assam also serves as the transit state for goods to be transported to and from the North Eastern states to mainland India. The share of road has also increased due to the highly competitive nature of road transport, convenience and flexibility in tariffs, and the capability of road to handle smaller loads. Assam also has plans to develop inland water ways along National Waterway 2 for movement of freight, which is an energy efficient mode of transport. The share of waterways in the freight transport modal mix is thus expected to increase in the future.

## Level 3

Level 3 sees higher investments in rail based freight transport. This level sees further rationalization in the tariff regime of railway freight transport, coupled with increased speeds and a shift towards containerization. This would increase the share of the freight traffic on railways to 40% by 2050. Waterway development is further strengthened and its share in the freight modal mix increases to 1.75% by 2050.

## Level 4

Level 4 assumes quick implementation of state policies to encourage a modal shift towards rail freight in alignment with central policies, along with tariff rationalization, increased privatization etc. New technologies, such as RoadRailers (highway trailers that are specially equipped for intermodal movement on railway tracks and highways) would further help increase the intermodal share of Railways to 45% in 2050. Waterways will have a 2.1% share in freight transport by 2050.