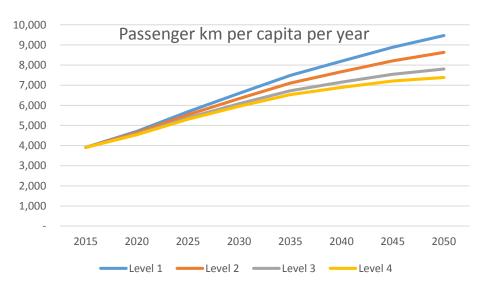# Passenger transport demand

Level 1
A steady growth is assumed in Level 1 in line with GDP growth. As per capita income and economic activity increases, vehicle ownership per capita is expected to increase, the annual demand for mobility is expected to increase to 9,454 km per capita in 2050. Rapid urbanization also created increased demand for inter and intra city travel, as urban centers depend on nearby areas for food, raw materials, labor etc.

Level 2
Level 2 assumes that with rise in urban and economic activity centers, demand for inter city travel by people migrating for employment opportunities will be lower. Improved planning and efficient designs for new and expanded cities would also reduce intra city travel. Annual demand for mobility would be about 9% lower than Level 1 in 2050, at 8,634 km per capita.

The average distance travelled per person per annum in Andhra Pradesh in 2015 was ~3907 km, about 40% lower than an all India average of ~6,914 km. This can be surmised from indicators such as length of roads per unit area, which for AP is 22% lower than the national average. Further, vehicle ownership per capita is also about 50% lower than the all India average. With growth in economic activity, development of urban centers and improvements in transport infrastructure, demand for inter and intra city transport in AP is expected to increase over the next few decades. However, rate of growth will depend on the approach towards planning the transport infrastructure where increased efforts would lead to more efficient planning and a lower rate of growth. This lever provides choices for selecting four different levels of passenger transport demand in the state. The figures shown are for Scenario 1 of GDP (CAGR 12.2%), numbers for lower GDP growth scenarios would be proportionately lower.

Level 3
Level 3 assumes that all new cities are designed on the principles of Transit Oriented Development, where the focus is on compact, walkable, pedestrian oriented communities around high quality train systems. IT enabled transport would also enable route optimization, reducing demand for mobility further. Annual demand for mobility would be about 18% lower than Level 1 in 2050, at 7,803 km per capita.

Level 4
In this scenario, it is assumed that focused policy initiatives would be taken to optimize transport systems and manage transport demand. Significant economic development in rural areas would reduce transport demand for migrant workers. Further strengthening of Transit Oriented Development and IT enabled transport would reduce the need for commute trips. Annual demand for mobility would be about 22% lower than Level 1 in 2050, at 7,387 km per capita.

Passenger km per capita per year