

GOVERNMENT OF INDIA
MINISTRY OF ROAD TRANSPORT AND HIGHWAYS
RAJYA SABHA
UNSTARRED QUESTION NO- 1681
ANSWERED ON- 21/12/2022

BITUMINOUS ROADS

1681. SHRI DHANANJAY BHIMRAO MAHADIK:

Will the Minister of ROAD TRANSPORT AND HIGHWAYS be pleased to state:

- (a) whether it is fact that preferred option for building roads is bituminous roads which are particularly prone to damage on account of water-logging;
- (b) if so, the details of maintenance cost of bituminous roads in comparison to concrete roads; and
- (c) the steps taken by Government to upgrade the bituminous road with concrete roads and the timeframe by which all the roads could be converted to concrete roads?

ANSWER

THE MINISTER OF ROAD TRANSPORT AND HIGHWAYS

(SHRI NITIN JAIRAM GADKARI)

(a) & (b) The construction cost of bituminous road (flexible pavement) and concrete road (rigid pavement) depends upon the pavement thickness based on subgrade soil characteristics, design life and traffic volume and loading, price of construction materials such as bitumen, sand, aggregate, cement, etc. and hiring charges of machinery. The prices of these ingredients vary widely in different parts of the country depending upon the carriage distance from the production centers/refineries/quarries, etc. As such construction cost of rigid pavement and flexible pavement may be higher or lower depending on above factors. However, in general the initial construction cost of rigid pavement is higher than that of flexible pavement whereas the maintenance cost of rigid pavement is lower than that of flexible pavement.

The mode of selection of type of pavement is decided on the basis of life cycle costing of rigid pavement vis-à-vis flexible pavement for each project during preparation of detailed project report.

(c) There is no such plan to upgrade all bituminous roads to concrete roads. Decision is taken on case to case basis depending upon necessity and life cycle cost.
