

Development Seminar at Brookings India

Transporting India to the 2030s: What Do We Need To Do?

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- I. Introduction**
- II. Trends in Growth of Transport**
- III. Investment for Growing Transport Needs**
- IV. Need for a Coherent Integrated Strategy**
- V. Governing Transport Development**



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Trends in growth of transport

Railways

- Share of railways in freight traffic has fallen from 90% in 1951 to 65% in 1980 to 30% in 2010.
- Passenger traffic share has fallen from 70% in 1951 to 35% in 1971 to 10% in 2011

Road

- Annual deaths increased from 40,000 in 1991 to almost 140,000 by 2011.
- Public sector investment share has increased from 20-30% in 1990s to 45-55% since then.

Air

- Domestic passenger traffic increased from 7.5 million in 1990-91 to 60 million in 2011-12.
- 2030s could see passenger traffic around 300 to 400 million

The progress made in the transport sector in India since the mid-1990s has been a mixed bag

What has improved



East-West & North-South highways;
Golden quadrilateral;



Increased competition and large scale transformation in civil aviation



What has remained the same



Inefficient port structure



Inadequate and unreliable urban transport

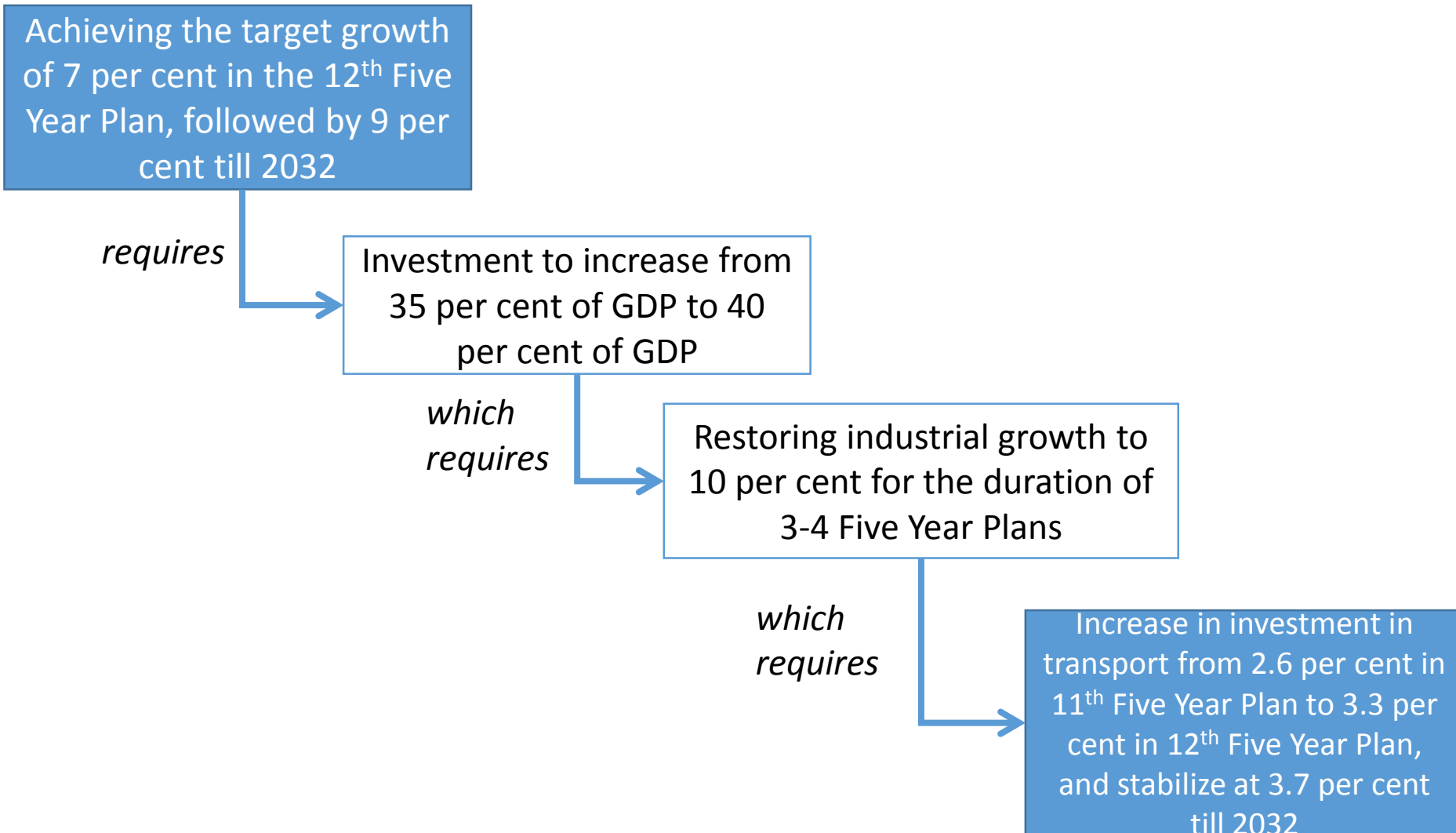


Absence of a comprehensive framework for capacity expansion; Lack of reform in railways for separation of roles – policy, regulatory and management

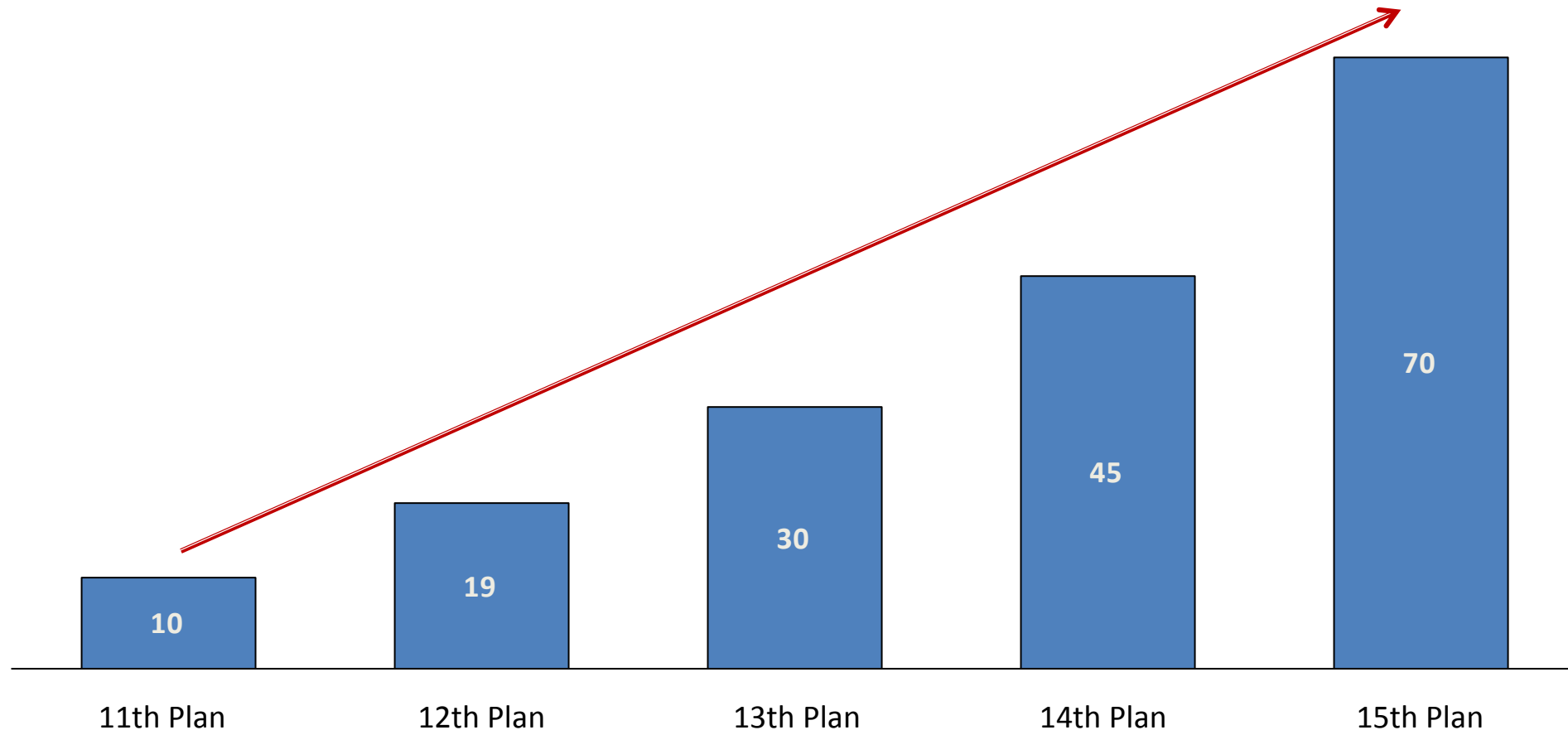


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Investment in transport is a key factor that will enable India to continue on a strong growth trajectory

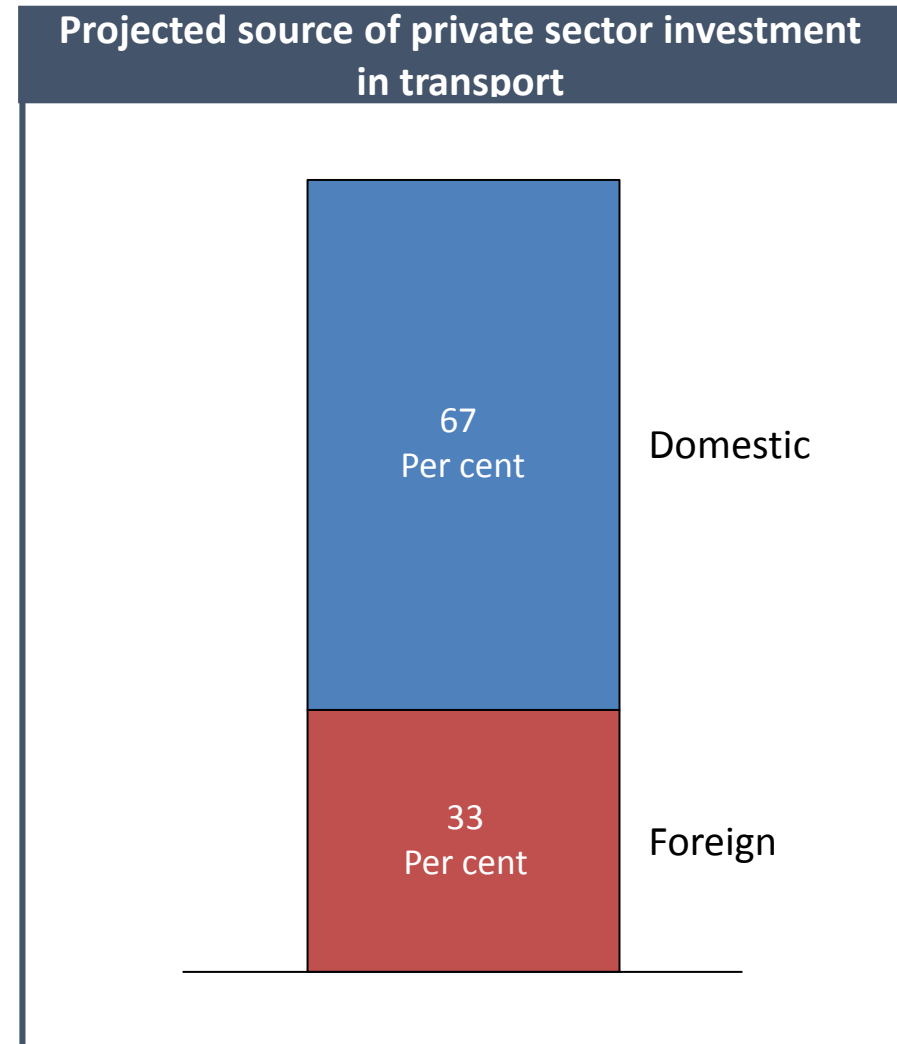
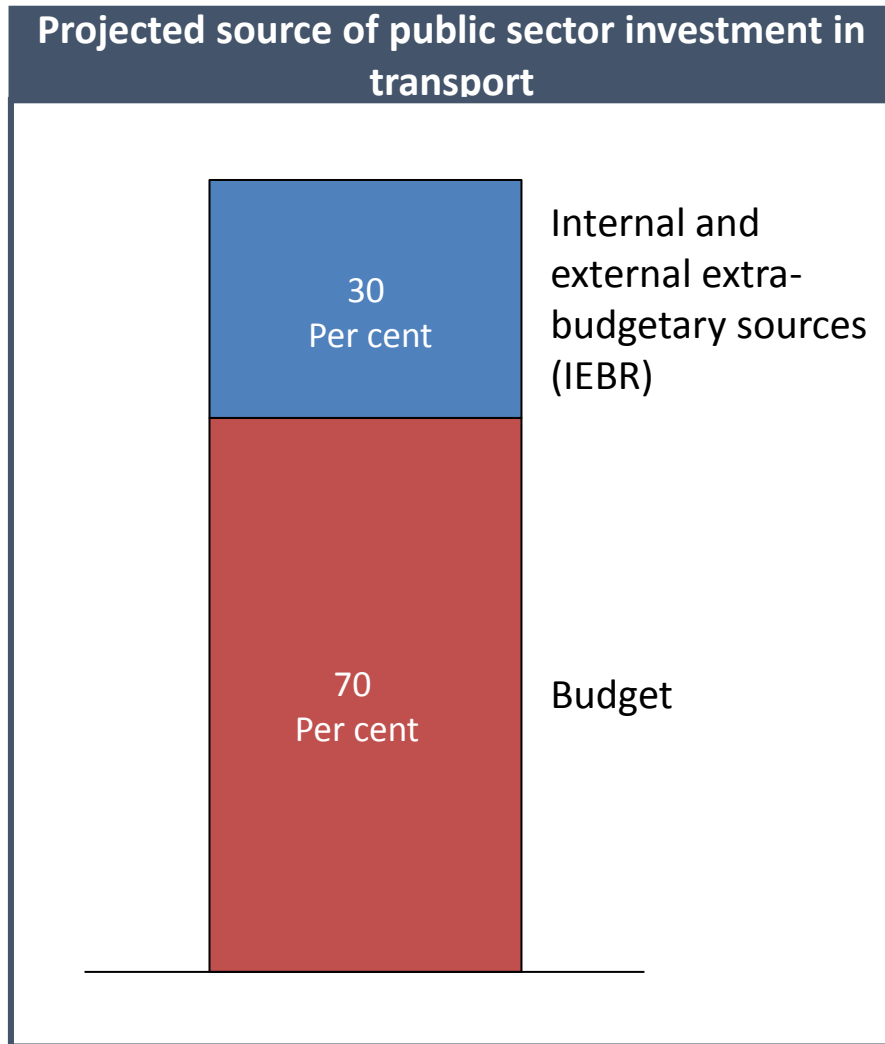


In absolute terms, this indicates a seven-fold increase in transport investment from the 11th Plan to the 15th Plan (Rs trillion)



Note: These projections were made top-down in a macro-economic modeling framework

NTDPC has projected where the increased investment in transport to come from



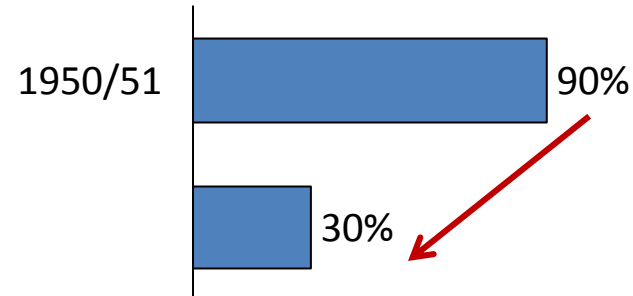
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There is significant need for investment in railways, which will not happen in a business as usual scenario

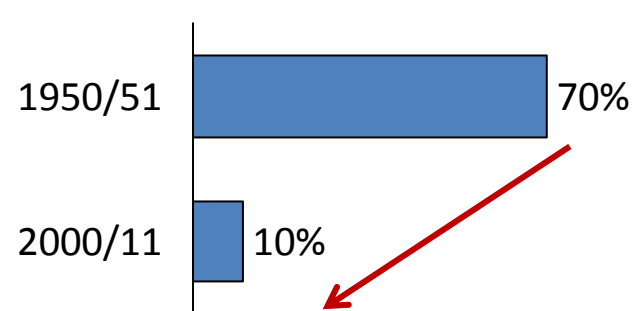


The downward spiral of the Indian Railways

Share in railways of freight traffic



Share in railways of passenger transport



Observations

- » This is a **steeper decline** than that witnessed in other large economies
- » This decline is particularly poignant given the expected **uncertainty of future crude oil supplies**, and damaging **environmental impact** of fossil fuels
- » It is essential that an attempt be made to **reverse** this trend, or at a minimum, **arrest** it
- » This will require making strategic decisions regarding relative allocation of investments to railways rather than roads, and accompanying pricing and taxation policies that can be used to **nudge transport demand towards desired modal shares**
- » The key issue facing the country is therefore the desired strategy for **capacity extension of the railways sector** over the next two years

A similar vision to that of the National Highway Development Project should be laid down for the railways

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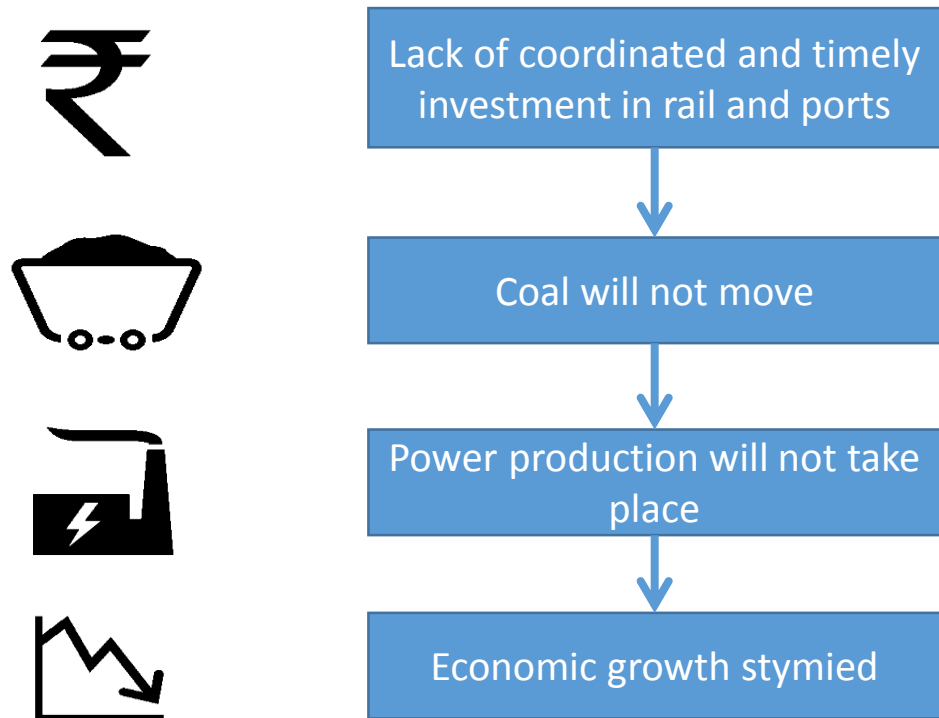
Urgent action is required to ensure that India's transport infrastructure can service the increasing needs for the transportation of energy commodities (I/II)

Current situation

- The demand for energy in India could increase by a factor of 4 over the next 20 years
- Production of domestic coal is expected to increase by about 2.5 times over the next two decades – it already accounts for half freight volume in Indian Railways
- The intensity of steel use is expected to possibly go up by a factor of 8
- These very large increases in the transport requirement of bulk commodities pose a great challenge because our transport system is barely able to cope with the traffic today

Urgent action is required to ensure that India's transport infrastructure can service the increasing needs for the movement of bulk energy commodities (II/II)

Implications of "business as usual"



NTDPC's recommendations

- Focus on railway investments on the **feeder routes from the coal and iron ore mines** located mostly in the tri-state area of Chhattisgarh, Orissa and Jharkhand
- Among the DFCs, the highest priority may be given to the **completion of the Eastern Freight Corridor**
- Adequate attention be given to promoting **coastal shipping from the coal producing areas on the eastern coast** to avoid long over-the-land transportation of coal
- Selection of sites of the **4-6 mega ports** should be influenced by the transportation needs of coal and petroleum

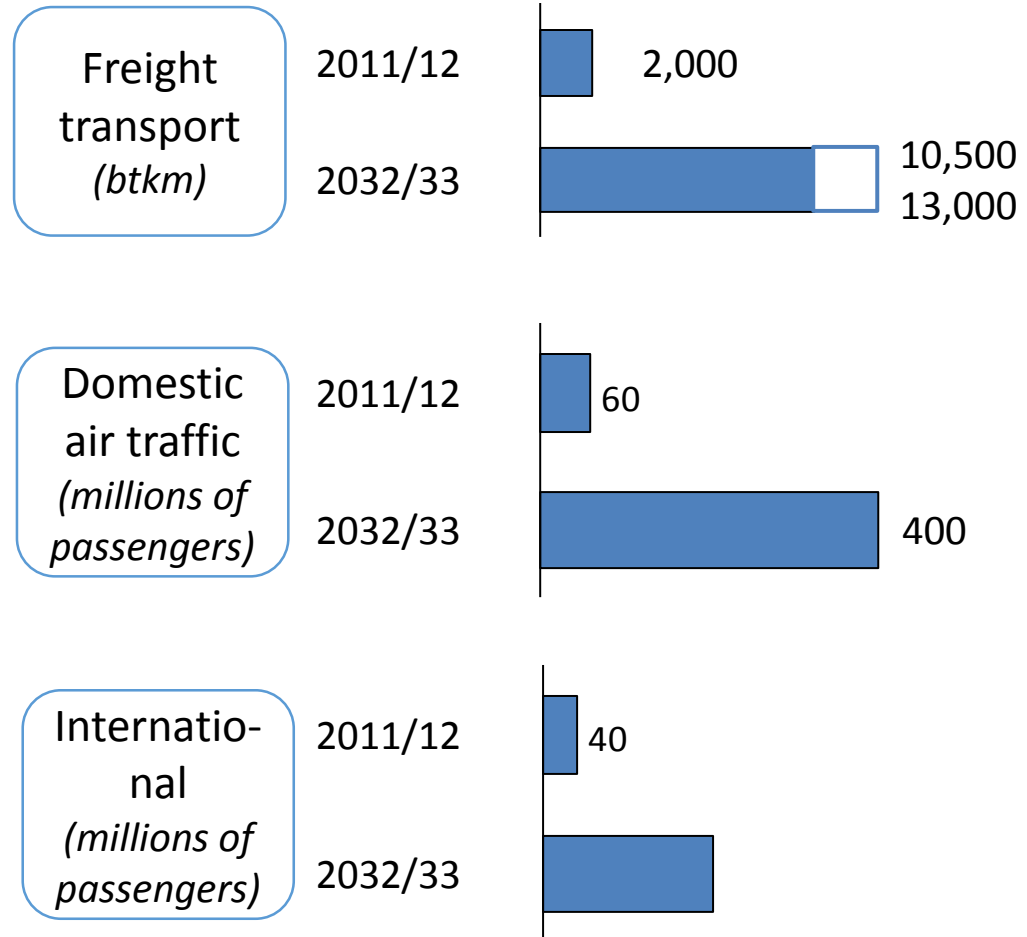
Execution in a timely manner of the NTDPC's recommendations on this front will ensure that the potential and prospects of Indian economic growth are not jeopardised

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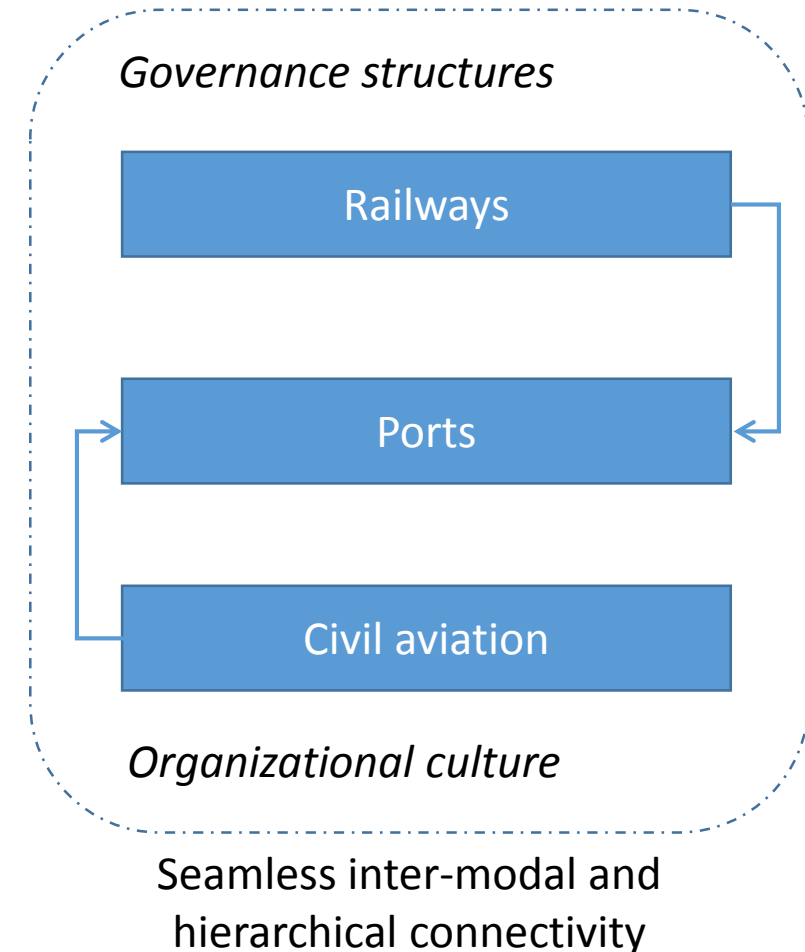


Given the projected increase in demand in the transport sector, a holistic approach is required to design an integrated transport network

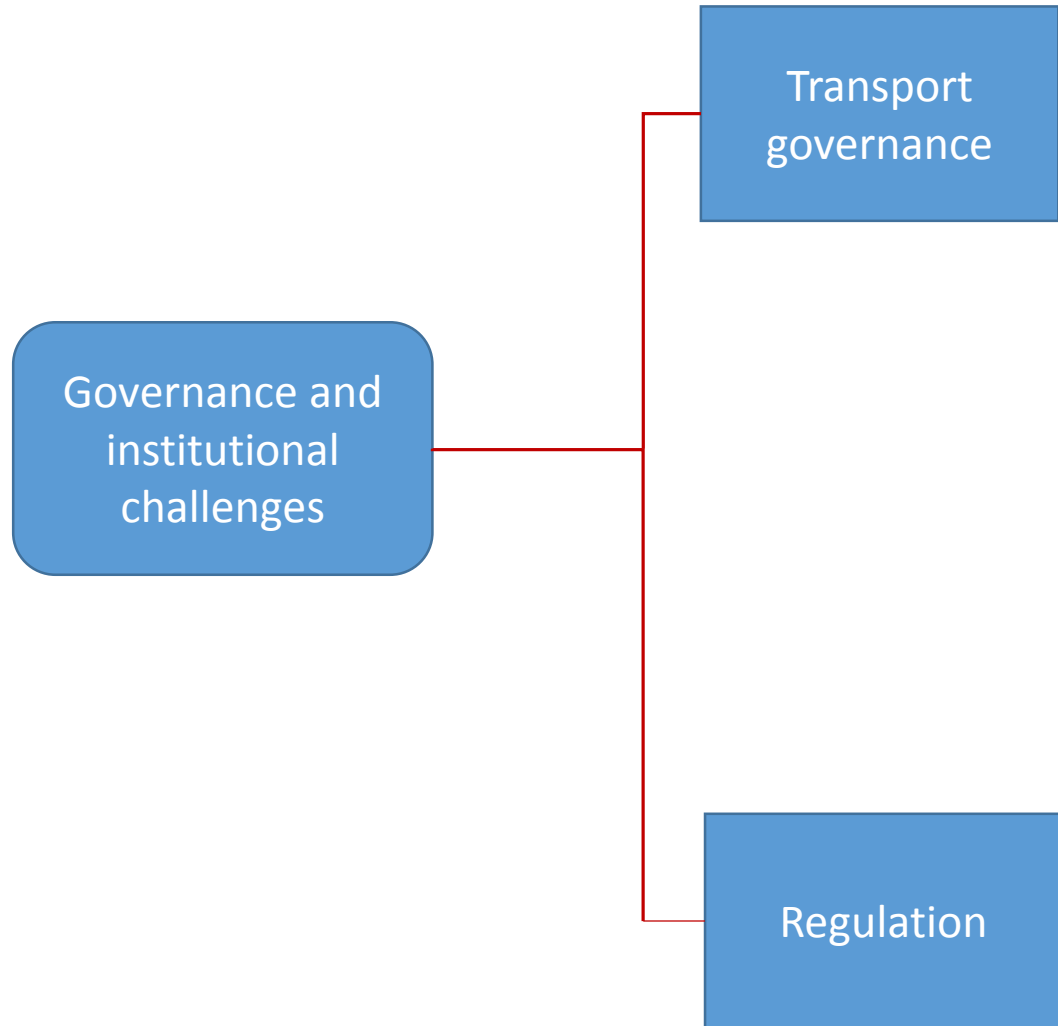
Projected increase in demand



Designing an integrated transport network

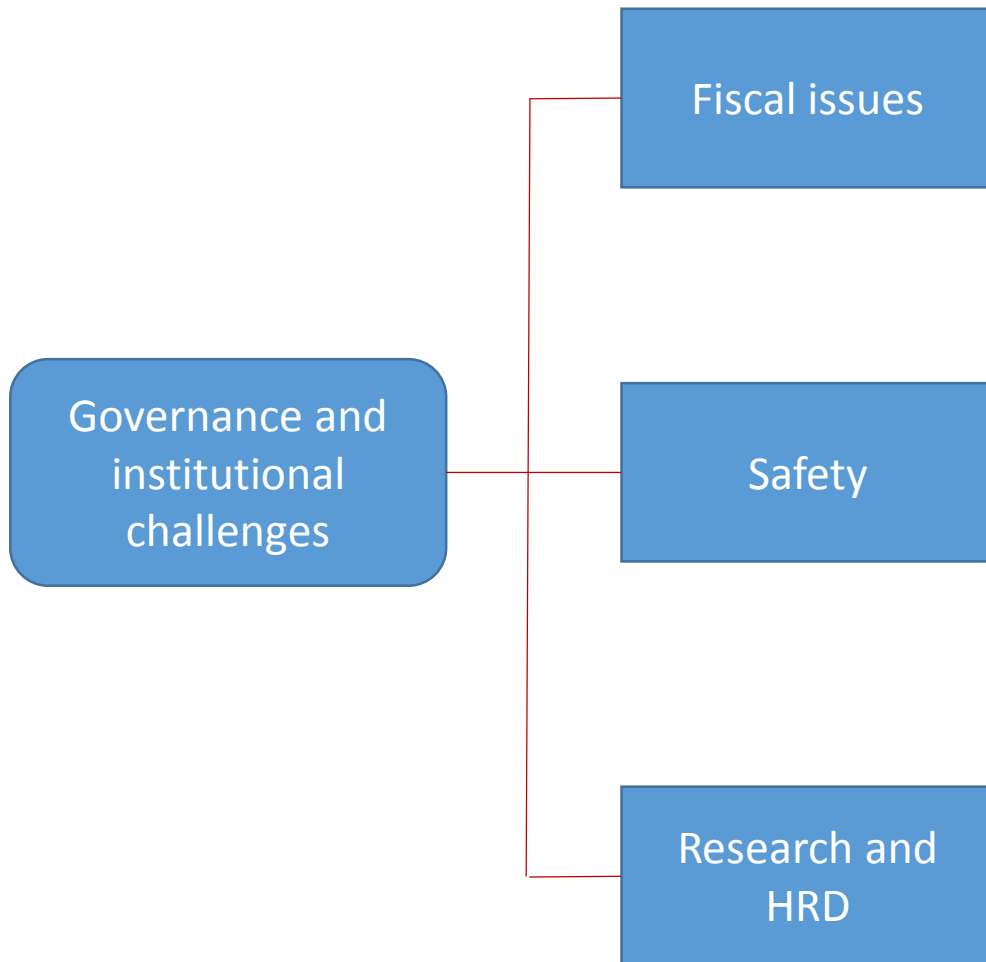


Governance and institutional challenges to investment and growth in the transport sector (I/II)



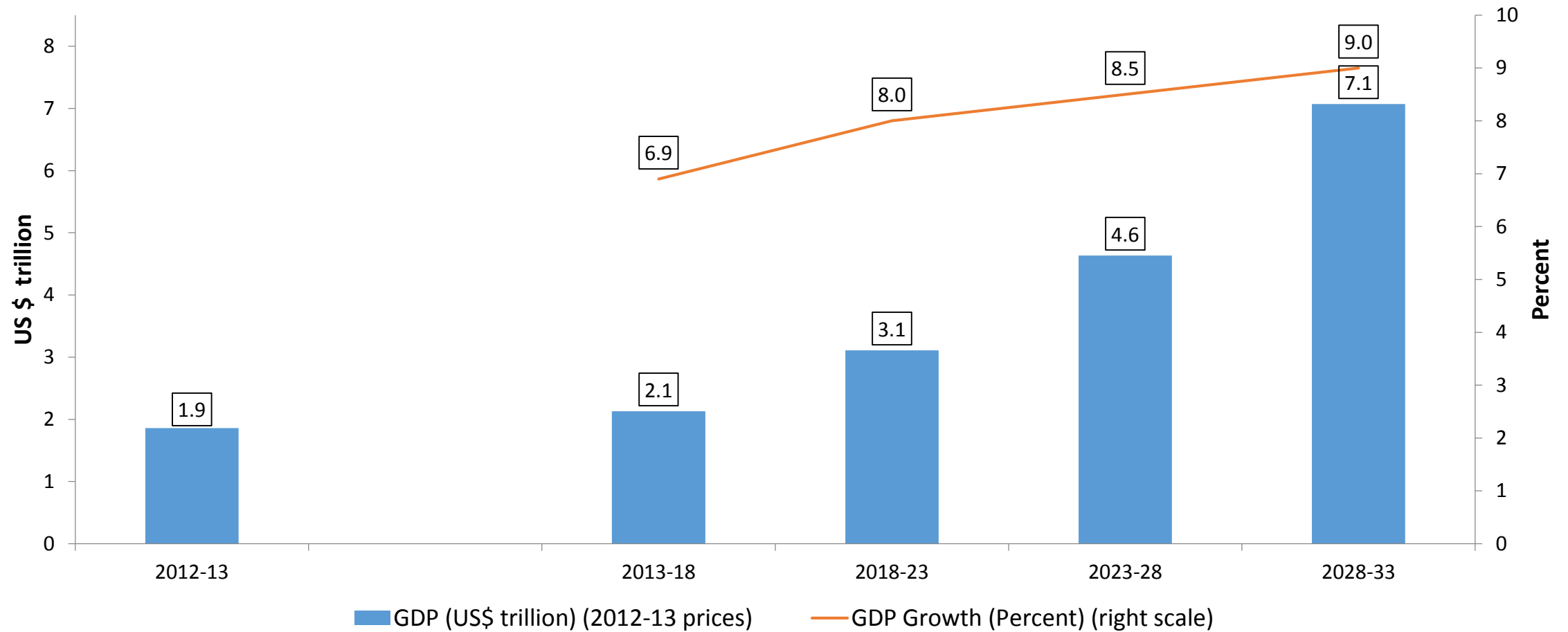
- Form central and state-level **Office of Transport Strategy** in short-term
 - As an independent agency associated with the Planning Commission / or its successor.
 - That has the resources to build a strong technical team, manage and analyse transport data, and assert itself as a compelling advocate of policies that leverage transport for development goals
 - To provide ongoing technical support for sectoral investment programmes to build on the work of the NTDPC
- Form **unified Ministry of Transport** encompassing all transport sectors in medium to longer-term
 - Existing ministries, including Railways should become departments focused on delivering effective transport infrastructure and services for each mode
 - New ministry should be carefully structured to create and maintain an incentive structure that encourages technical excellence, open-minded consideration of all available options, and consistent attention to transport system goals rather than particular means
 - Similar unification of transport functions can also take place at the state level

Governance and institutional challenges to investment and growth in the transport sector (II/II)



- **Simplify the multiplicity of state level taxes** through a mechanism akin to that used for transforming the complex state-level sales taxes to the simplified state VAT system
- Establish independent **National Safety Boards** for road, railways, water/marine and air headed by professionals at the highest levels
- These boards should be **independent of the respective operational agencies**
- **Set up safety departments** within operating agencies at different levels for ensuring day-to-day compliance with safety standards and study effectiveness of existing policies and standard
- **Earmark 1% of investment in each transport sector for R&D, institution and capacity building** in both public and private sector
- Initiate process to **set up a variety of research institutions**: Indian Institute of Transport Research, Indian Institute for Transportation Statistics, Roads Standards Institute, and others
- **Set up centers of excellence** in selected universities and research institutes in each transport sector
- **Sponsor further education** for 2-5% of existing personnel in transport-related engineering organizations, both public and private

GDP Trajectory



For More

See

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