Adoption of Advanced Road Technologies in India
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Positive Political Will !

Congratulations!

Honourable Minister

The Senior Officers of the Ministry

NHIDCL

for

facilitating the growth and **advancement of road technologies** in the **Indian road sector**

through

implementation of various

Memos & Modifying IRC Norms.

Perspective

A Nation where **GDP** Growth Rate touches **8%** there. . .

A ROAD IS NOT JUST A PAVEMENT . . .

Its actually

AN ECONOMIC CORRIDOOR

Adoption still a challenge!

In spite of modified of policies,
technology adoption
still a Challenge !!!

Does this imply - Hesitation to place the technologies in Practice?

Reasons

Accountability Issue

a hurdle in **fearless** implementation

Knowledge Gap

on Global Aspects on technology adoptions

Inadequate exposure

towards world Road technologies

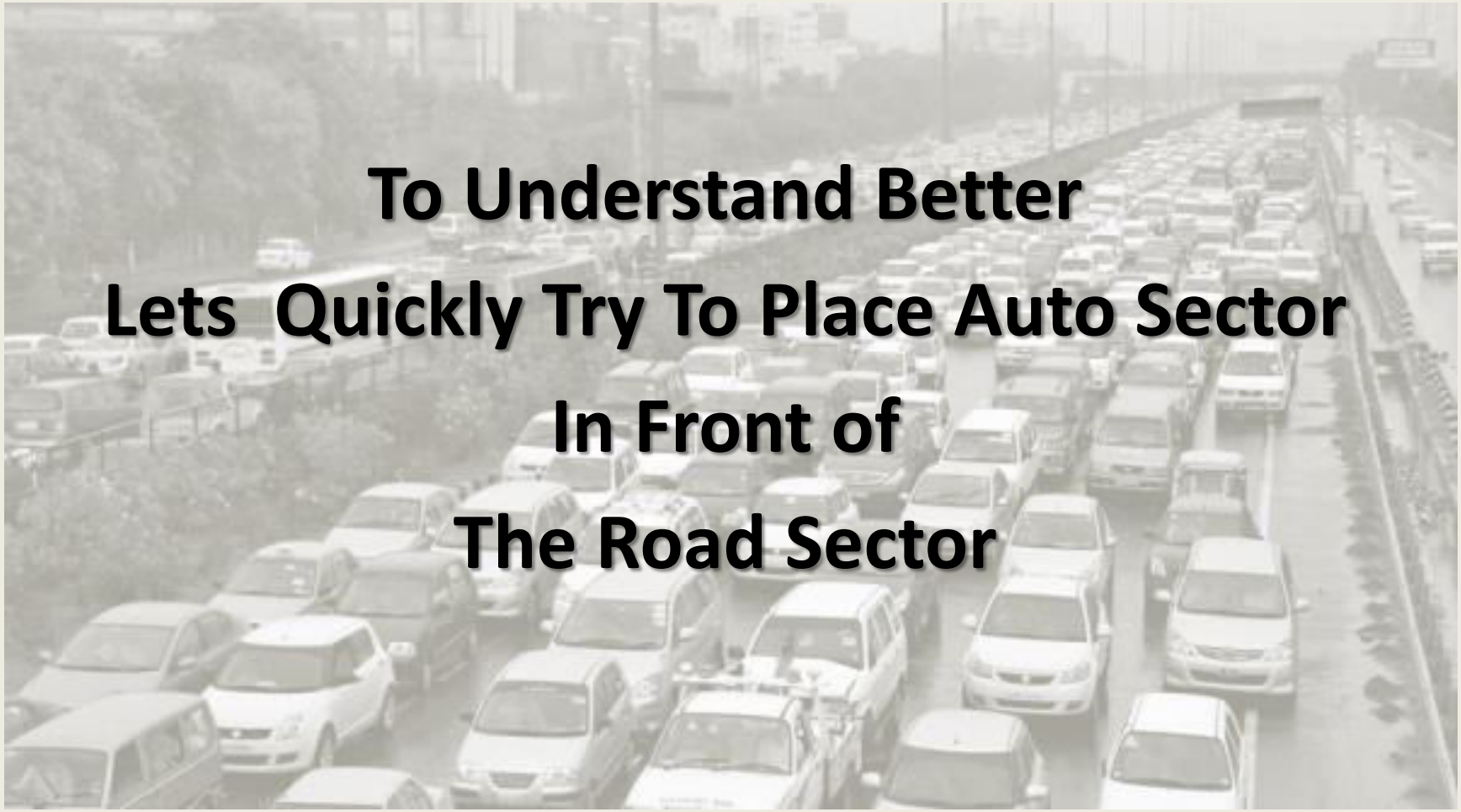
Engineers Gridlock

to Unlearn and then Learn advanced technologies

Government Policy Makers

hail from the **Old School**

An Eye Opener!



Growth Rate Auto sector – A Rationale

Why Auto Sector Grew Rapidly from 1984 to 1992 to 2016???

- **Liberal Adoption** of Growth Facets by Govt. and Private Sector by way of Science &Technology, Regulations, Commerce, and Industrial Policies.
- This led to a **Quick Knowledge Import** by the Corporate : ISO, QS, Euro Norms, International Test Labs, Management Systems, International Human Capital raised the QUALITATIVE BAR of the sector.
- This positively impacted the domestic outlook – resulting quick indigenization of institutes like **Natrip**, Domestic Test Labs, Bharat Norms etc.

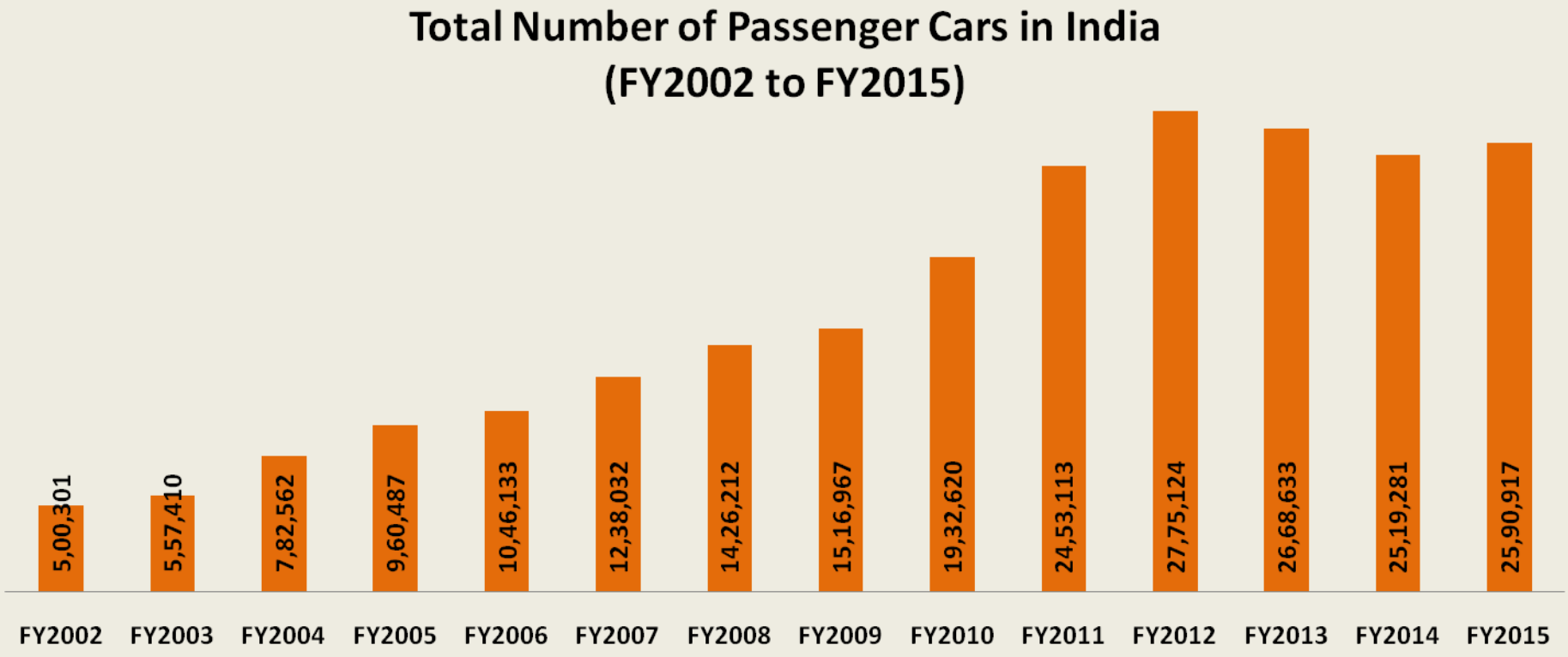
Growth Rate Road Sector – A Rationale

Why Road Sector could not grow as Rapidly from 1984 to 1992 to 2016

- **Conservative Adoption** of Advance Technologies by Govt. & Private Sector
- **Old School Approach** towards bringing Science &Technology, Regulations, Commerce, Policies into the MAIN STREAM.
- **No Focus towards Standardization**: Systems such as ISO, QS, Intl Norms, International level Test Labs, globalization of Human Capital etc. were overlooked.
- **Example: IRC Norms** last modified in **2012, after 2001**, are still to be fully implemented

Results

The industry produced a 23.3 Mn vehicles in April-March 2015 compared to 21.5 Mn in April-March 2014, registering a growth of 8.68% over the period.



Lead to Globalization of Auto Sector

Automobile Brands in India:

Technology Influx in India

- **Worlds best 3D Mechanical Design Tools in India:**

For Simulation

Results – Road Sector

- **No. of cases of Accidents registered (2014): 111,218**
- **India total Roads:** 2 Mn Kms and about **1 Mn Kms are poorly constructed.**
- India has 53 NHs & >> carrying about 40 % of road traffic. Although its impressive but 25% of villages in India still have poor road links.
- Pot Holes, Surface Cracks, Depleted Shoulders, Water Logging is quite common.
- Plans show that MoRTH wants to build **34km of roads per day but its** without significant improvements. **Advanced technologies will help**.
- **Safety Norms in Road Construction:** We have no Safety Data Sheets for meterials being used for Road construction. Health Hazard…..
- **Political Impact:** Government includes **Qualitative Growth** of roads in its Manifestos but unfortunately fails every time. Society is deprived of good roads
- Litigation, Bank NPAs increase because of delays, non performance. Advanced Technologies are **more organized and better defined** to avoid such situations.

Status of Advanced Technologies in India

- **World's best Products and Technologies** facing hardships in entering Indian road sector
- **Waiting** for almost a decade to be adopted even after technical accreditation
- **Best Brains** in the Industry have been harassed and forced out
- An **environment of discouragement** created for new and genuine market players

Opportunity Cost

The Budgetary Effect:

Loss to the Exchequer:

6% to 23% in **INITIAL COST** of Road Construction

And

Loss to the Exchequer:

25% to 44% in **MAINTAINENCE** of roads

Source: Feditech, The Netherlands

Opportunity Ignored

Advanced Technologies bring in:

- Environmentally Friendly Aspects
  - Avoids Mining Menace
  - Speed in Road Construction
  - Durability in Road Construction

THUS SPEEDEN UP ECONOMIC GROWTH

Conclusion

- Completely **Fresh Policy** to be structured
- Advanced Technologies to be **Tendered**
- Focus on Human Capital
- Laboratories, Test Methods, Modern Equipment for **Best Practices**
- Best of **Old School** with **Advanced School** to be Merged for best results

Meet You Next Time

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Thank You