

# **Key Recommendations on Roads & Road Transport**

**5<sup>th</sup> January, 2013**

# Policy and Planning

- Roads, road transport – part of transport network
  - Identify distortions (intermodal) through periodic regional transport surveys for mid-course policy corrections
  - Dedicated data centre for roads/road transport
  - Review hierarchy, classification and numbering system of road network
    - Primary: NH, SH (Expressways included)
    - Secondary: MDR
    - Tertiary: ODR + VR
- Need for well laid-down criteria for each class

# Policy and Planning (contd..)

- **Development Programme objectives:**
  - **Achieve universal connectivity (Accessibility)**
  - **Meet Traffic Demand, provide capacity ahead of demand**
  - **Improve Productivity of Trucks, Buses**
  - **Enhance safety and energy efficiency**
  - **Reduce noise and pollution**
  - **Address social concerns**
  - **Balanced development of**
    - **All regions**
    - **All classes of roads**

# Strategies for Development

## Primary Network

- Stress on consolidation rather than expansion
- NHDP well conceived and should continue
- State Highways be developed on lines of NHDP, Minimum two lane, some four-lane
- Accelerate two-laning under NHDP
- Slow down/stop six-laning of existing roads
- Expressways be planned based on needs of economy and progress of railway capacity augmentation
- Special needs of ports, airports, mining areas and power plants

# Strategies for Development (contd...)

## Secondary Network

- Stress on consolidation, minimal addition
- Past neglect to be corrected
- Riding quality and capacity augmentation
- Reconstruction of weak bridges

## Tertiary Network

- PMGSY well conceived. Need to accelerate progress
- Expand scope to achieve universal connectivity

# Development Needs

- **Primary network**
    - Expressways
    - Four-laning NHs, some SHs, bypasses
    - Two laning, bridges (2-lane)
  - **Secondary Network**
    - Two-laning, riding quality improvement, bridges
  - **Rural roads**
    - PMGSY
    - Non-PMGSY (for universal connectivity)
- BOT (Toll)
  - VGF cap 40%
  - Govt. funds
  - No annuity
  - Govt. funds
  - Govt. funds

**For Govt. funds: Increase CRF, levy on fuel on ad valorem basis**

# **Maintenance and Preservation of Road Assets**

- **Huge assets, high erosion, justify preservation**
- **Vicious cycle of build, neglect and rebuild to be broken**
- **PPP addresses the issue but covers part of network**
- **Make highway agency accountable for non-performance**
- **Finance Commission recommends central grants**
- **Asset Management System to help plan condition based requirements**
- **Technology upgradation and control on quality as in construction**
- **Non-engineering measures on primary roads**
- **Build cadre of O&M contractors**

# Safety

- Looming crisis
- Road Safety and Traffic Management Board to be established (Sundar Committee)
- Safety be integral to road design and factor needs of VRUs
- Road safety audits
- Highway Police Patrol and Incident Management on high density corridors
- Network of Trauma Care Centres
- Evidence based research and identification of engineering measures
- Centres of Excellence (Accident Investigation, Training, RSAs)

# Road Transport

- Streamlining of taxation and permit regime
- Stricter driver licencing
- Control on overloading
- Safety enhancement
- Modernising trucking and bus operations
- Inspection and maintenance of vehicles
- Improving fuel efficiency of vehicles and emission norms
- Promoting use of alternative fuels
- Trans-shipment facilities (logistics, transport nagars)
- Toll rates, taxes on MAVs: Incentive
- ELV recycling industry to be developed (Scrapping methodology, centres to disassemble)
- ITS applications
- National Automotive Board (NATRIP enhancement)

# Capacity Building

- **Current road design standards outdated**
- **Need for strong standards for uniform quality of roads, capacity norms irrespective of road hierarchy**
- **Standards for road safety, road signs and other engineering requirements**
- **Base documents for standards through academia, research for IRC**
- **Ensure adherence of standards on ground (DPR, Supervision, RSA)**
- **Apex Design Institute (400-500 professionals) at centre supplemented by regional/state level institutes (50-70 professionals)**
- **Introduce capacity and performance indicators in highway agencies – RFD to be enhanced and upscaled.**
- **Earmark one percent of investments towards capacity building and R&D effort.**

# Capacity Building (contd..)

- **Training, skill development: Quantum jump**
  - **Current 5000 to 20000 engineers of NHAI, state PWDs, rural road agencies every year**
  - **Engineers of consultants, contractors also**
  - **M.Tech courses in various disciplines for identified staff**
  - **Construction workers, equipment operators and site supervisors**
  - **State level training centres, construction academics**
  - **Capacity enhancement and infrastructure for civil engineering in IITs, NITs, other engineering colleges**
- **Technology and R&D**
  - **Innovative materials, technologies**
  - **Promote use of local / marginal materials**
  - **Recycling of pavements**
  - **Fast construction technologies**
  - **Electronic toll collection**

# PPP in Road Sector

**Policy well laid down, standard documents are worldclass**

**Following are further suggestions for consideration:**

- **Continue current strategy of phased development, but minimum 10-12 years for next phase, providing land width in first phase**
- **Value for money analysis to be insisted at the time of procurement and post construction**
- **Invest in knowledge acquisition (traffic forecasting, pavement deterioration prediction, highway capacity norms)**
- **Stop/discourage BOT (Annuity)**
- **Revisit strategy for traffic risk sharing in BOT Toll (share both upside and downside of a predecided/predetermined traffic band, and address concern of competing facility)**

# PPP in Road Sector (contd..)

- **Bring preconstruction activities under control before project award and streamline system of various clearances**
- **Increase corpus of VGF by enhancing levy on fuel**
- **Debt component while relating to receivables should have a cap based on TPC**
- **Reforms in toll policy and technology**
  - **No toll on two-lane roads**
  - **Reduction in toll rates on recovery of capital costs**
  - **No toll during construction**
  - **Incentives to MAVs, disincentives to overloaded vehicles**
  - **Move towards closed system of tolling**
  - **ETC**

# Financing Strategies

- Budgetary support including CRF – Increase levy on fuel, move towards *ad valorem* charge
- User charge principle: Toll financing
- State level road funds (especially for maintenance and VGF)
- Share out of royalties from mines, market committee fee
- Land value capture with checks and balances
- Additional taxes on personalised vehicles
- Central funds for maintenance from Finance Commission

**Thank You**