

Key Recommendations on Roads & Road Transport

5th 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