

The following options are identified for improving the viability of the project.

1. Alternative tolling mechanism

- Shadow toll
- Annuity payment

2. Financial incentives

- Grants for construction and Operation and Maintenance (O&M)
- Low interest rate loans
- Revenue shortfall loan
- Least Present Value of Return (LPVR) method

3. Guarantees and assurances

- Credit enhancement through government guarantee for repayment of loans

4. Ancillary revenues along project highway

5. Fiscal incentives

Rebates/ exemptions/deferment from Income tax, import duties on equipment, stamp duties, service tax and any other tax as applicable.

The benefits of shadow tolling are:

- Helps operationalise projects where direct toll mechanism is not feasible or is inadequate to make the project viable
- Reduces resistance associated with privatisation
- Revenue liability for the government is spread over the concession period
- The government can draw upon various revenue sources to contribute to the shadow toll fund

The disadvantages of shadow tolling are:

- Requires higher budgetary support from the government
- Government funds used for servicing private debt, which is likely to be more expensive than debt raised by the government. It would be difficult for the government to justify direct toll on certain highways and shadow toll on others (i.e. subsidisation of cost of road usage in selective cases)

1. Alternative tolling mechanism

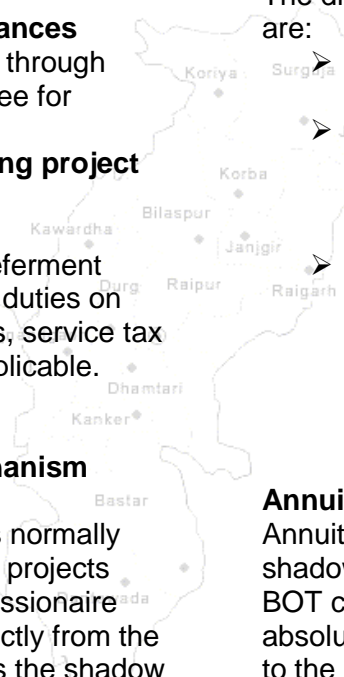
Shadow Toll

The direct toll mechanism is normally followed in most of the BOT projects under which the BOT concessionaire collects the toll charges directly from the user. An alternative to this is the shadow toll mechanism wherein the toll charges are paid directly by the government / project sponsor to the BOT concessionaire according to a pre-determined toll structure. Shadow toll need not necessarily be the only form of remuneration to the concessionaire. The Shadow toll can be paid in addition to the toll being collected from road-users (for example the difference between the toll-charge that provides a normal rate of return and the toll-charge users are willing to pay could constitute the Shadow toll.)

Annuity payment

Annuity payment is a variation of shadow toll wherein the payment to the BOT concessionaire is determined in absolute terms with no direct reference to the number of vehicles using the highway. Under annuity payment scheme the government retains the right to charge toll from users at any stage of the project. In most cases, it also retains all rights relating to property development, advertising along the project site, etc.

The key difference between shadow toll and annuity is bearing of traffic risk. Under shadow toll, traffic risk is borne by the BOT concessionaire while under annuity system, the concessionaire does not bear the traffic risk.



2. Financial incentives

- **Grants:** According to NHAI guidelines, NHAI could provide cash support to the concessionaire. This amount should be utilised for meeting the total project cost and balance, if any, should be used for meeting the O&M cost
- **Low interest rate loans:** The government could provide the concessionaire access to low interest debt, either directly or facilitate the same through funding agencies
- **Revenue Shortfall Loan:** According to NHAI guidelines, if the realisable revenue falls short of the subsistence income level during any accounting year, the concessionaire would be entitled to meet the shortfall (referred to as “Revenue Shortfall”) through a loan at an interest rate equal to SBI PLR. This debt is to be repaid from the net cash flows of the concessionaire and needs to be completely repaid within 2 years prior to completion of the concession period
- **Least Present Value of Return (LPVR):** Under the LPVR method the concessionaire is guaranteed a certain present value of returns. This method is called LPVR as the firm bidding for the least present value of toll revenue is awarded the contract. The duration of the concession period is upto the point the concessionaire achieves the present value bid for. Thus, LPVR method reduces the demand risk borne by the concessionaire by automatically adjusting the concession period to fluctuations in demand (traffic)

3. Guarantees and assurances

- The government may guarantee the loans taken by the concessionaire, thereby improving the credit rating of the concessionaire. This would directly reduce the finance cost. The financial guarantee can be provided by a state/central agency that specifically provides credit enhancement services for development of state/national highways
- The government could provide assurances for developing ancillary infrastructure in and around the project site thereby making the revenue forecasts more realistic. Such guarantee arrangements reduce demand risk and enable the developer obtain project debt at a more attractive rate

4. Ancillary revenues along project highway

- The concessionaire may be given permission for property development along the project highway. The various alternatives for ancillary revenues could be as follows:
 - Transport terminals consisting of garages, service stations, warehouses, rest houses and other relevant infrastructure
 - Restaurants, shops and motels
 - Publicity and advertising space

5. Fiscal incentives

Tax incentives are a very important component of any fiscal package. The various forms of tax incentives could be:

- Tax holiday on Income Tax for the concessionaire company
- Exemption/rebate on customs duty for imported equipment used in construction or operation of project highway
- Exemption of stamp duty applicable to various contracts in the project
- Exemption/rebate/deferment of other taxes such as service tax, works contract tax, etc.

