

# **TRANSPORT FORUM**

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**Affordable Low Cost Solutions to Meet  
the Needs of the Poor**

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# What is the problem with rural infrastructure ?

- Rural infrastructure performance is invariably poor
- There is no market to supply and maintain infrastructure, (Governments become involved)
- There are confusions over responsibilities
- Different authorities are involved and planning is inconsistent
- Financial and management resources are scarce and inadequate
- Too often infrequent, over designed, investment is accompanied by totally inadequate maintenance



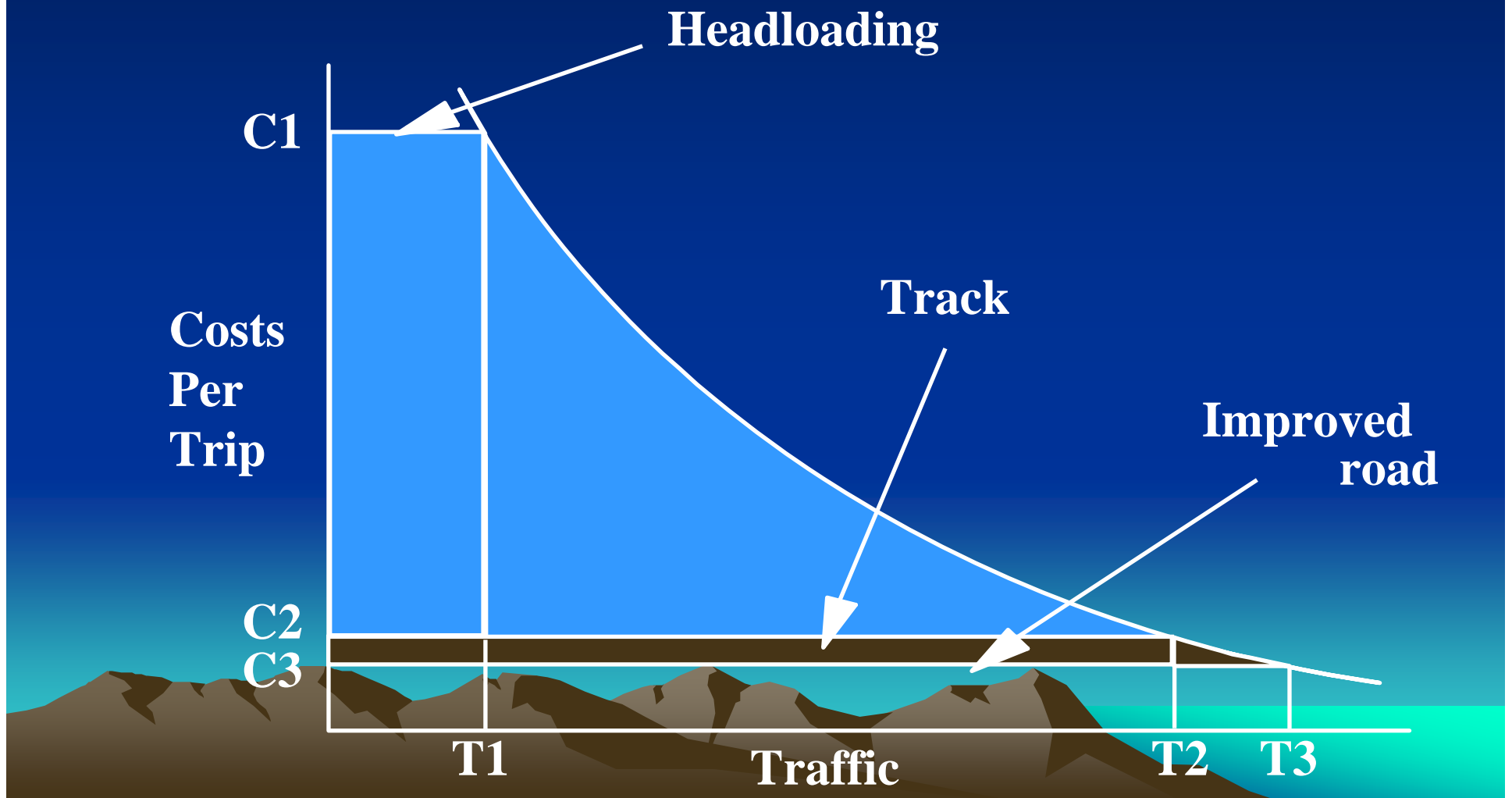




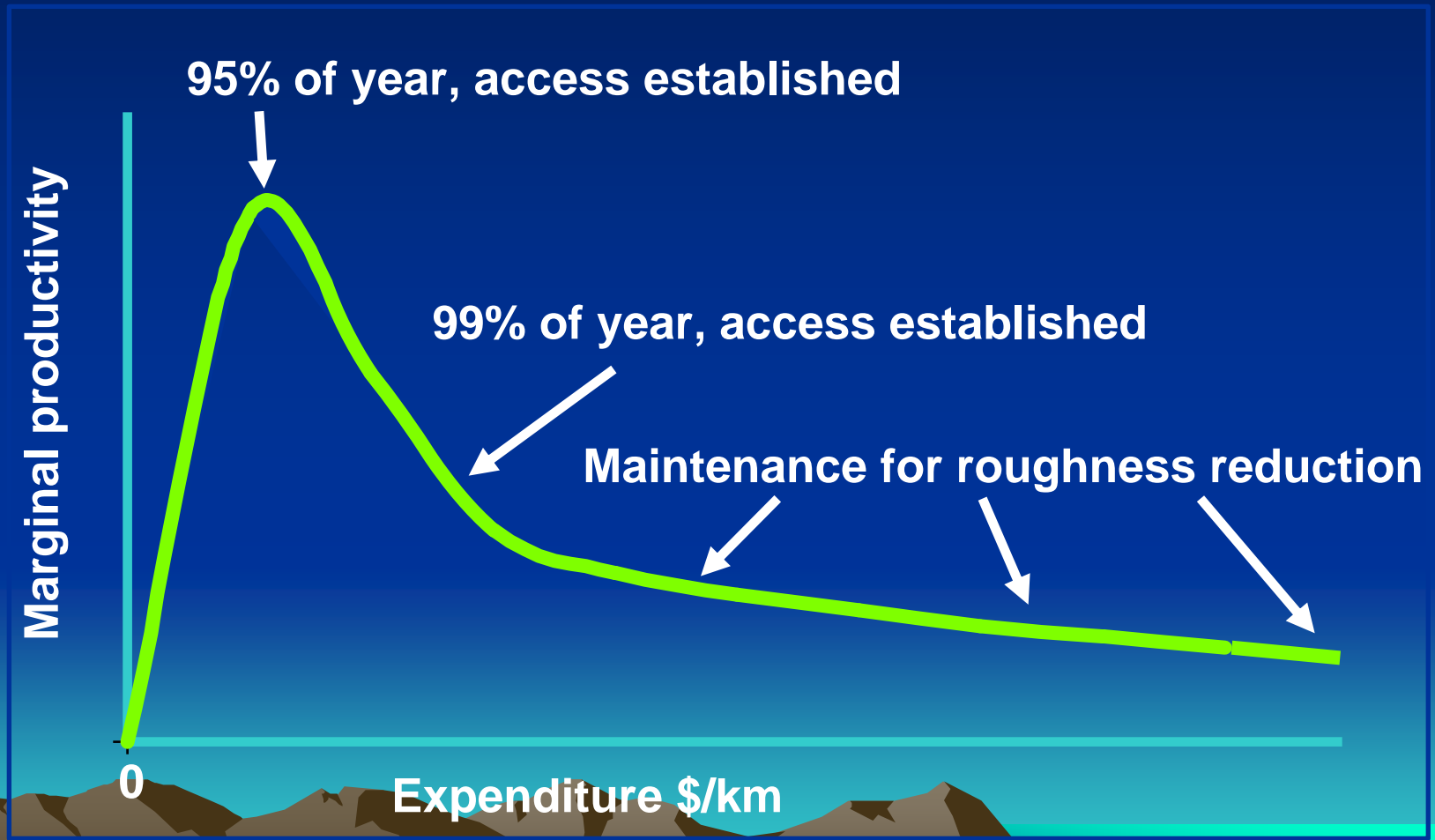
# The reality !



# Illustration of economic benefits



# The marginal productivity of construction and maintenance expenditure



# What design should we have ?

- There are increasing returns to works expenditure up to the point that all season access is reached.
  - Beyond this diminishing return set in.
- For a given range of demand it make little sense to continue to increase expenditure on some roads (to improve the riding surface) when other roads are impassable.
- A Low Cost ‘Spot Improvement Approach’ will inevitable give higher returns than other solutions – and if spread widely – far more people can benefit from improved access for the same amount of money.



# What are the pressures on TTLs & Road engineers ? And how does this influence design?

- Spend the money !
- Keep the project 'manageable'
- Supervise construction and keep detailed accounts
- Politicians deal in dreams



Do we need it ?



## Healthcare Expenditure per head per year \$ (2003)

