

CAPEX FOR URBAN TRANSPORT INFRA STRUCTURE

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Infra structure is more than transport

- ▣ A popular belief- infra is primarily transport
- ▣ further means mostly highways & metros
- ▣ Ignore-slums & housing health care, education, open spaces, sanitation & water etc
- ▣ Distorted emphasis started with motorization
- ▣ As trucking shifted from rail to road and people shifted from trains/buses to cars in 90s



urban transport gets biggest share in investment pie

- ▣ A car needs 7 times road space than buses.
- ▣ A truck requires 6 times fuel compared to rail.
- ▣ Even in America , share of rail has much higher share of trucking
- ▣ Mobility needs increase at a faster rate than economic growth



no evaluation of efficiency or cost:benefits in infra investment

- ▣ During last 20 yrs , built an extensive network of highways- it continues for another decade!
- ▣ next 10 years , there will be one lakh cr+ investment in metro rail network in 12 lines.
- ▣ But there are a no. of doubtful cases of mono rail project in Mumbai cost of which escalated from Rs. 1800 cr to Rs. 3000 cr , period extended from



Mono rail in Mumbai

- ▣ Cost escalated frm Rs. 1800 cr to 3000 cr+
- ▣ Time escalated from 3 yrs to 8 yrs
- ▣ Ridership declined from original 3 lakhs/day to 3000/day (hope it can go up to 50,000 after costly addition of rolling stock is made.



Costly but V low use Metros

- ▣ Metros in cities like Cochin, Jaipur, Lucknow and Nagpur have cost several thousand cr each but ridership is well under 50,000/day
- ▣ Union govt in a belated and unimplemented policy in 2017 insisted that unless the peak hr ridership In peak direction is at least 30,000 no metro project be considered.
- ▣ Above cities don't meet this criterion by a mile.



“Alternatives analysis” missing

- ▣ Govt stipulates that “alternatives” analysis –a must before finalizing a mega project.
- ▣ Mumbai Nagpur Kolkata dedicated rail freight corridor , if built speedily, can avoid need for this highway project. will carry 80%+ long distance freight (at 1/6th fuel consumption (can shift to electricity too) and use of more buses on existing network , can obviate need for hi carbon motorization !



Cost:benefit – some examples

- ▣ Coastal rd in mumbai -10 km , Rs14000 cr cost
ridership 120,000 cars or 2 lakh motorists /day
- ▣ Underground metro III – 23km , 16 lak users
/day cost – Rs. 30000 cr
- ▣ B R T S – on western express highway (not
considered !) Rs. 100 cr . 3 lakh Ridership/day
- ▣ Benefits in energy & time saving, emissions
and climate change are **more valuable & extra**



Some glaring examples from Mumbai

- ▣ There Is a metro line on top of 8 lane e way
- ▣ It consumes 2 lanes for columns of metro
- ▣ Instead , if used these lanes for bus priority, we could get min 75% volumes because this wide expressway suffers huge traffic jams every evening and now other parts of day and bus priority can be an immediate and immensely useful alternative.





P.T. ridership & investments Mumbai metro

ridership in lakhs/day	2005	2018	2028*
Total Bus System	42	33	48
suburban rlys	58	78	80
metro 1		4	6
metro 3			14
metro 2&4-9			42
metro 10-12			40
total metro			103
public transport ridership	100	115.2	230
% growth in mum metro region		1	10



Growth in public transport ridership - Delhi and Mumbai (in laks)

item	2005	2018	2028*
delhi metro rail	na	25	32
delhi metro area bus system	na	36	40
delhi public transport ridership/day-laks		61	72
mumbai metro area population (lakhs)	177	186	208
delhi metro area population (lakhs)	157	166	186
public tran trips (per capita/ day) Mumbai	0.66	0.62	1.15
“ Delhi		0.37	



Investments in Mumbai Transport projects

item	2005-17	2018-2028
bus system	300	1000
suburban rail	5000	30000
metro 1	4200	
U/G metro		30000
mono rail	2000	1000
metro I phase		69000
metro II phase		33000
sea link & others	3000	
coastal rd		24000
flyovers & other	4000	4000
trans harbor		22000
gtr total	18500	214000

Investments in other infra sectors

- ▣ Mumbai is the richest Municipality in India
- ▣ It has quite high funds availability
- ▣ But invests Rs. 3000 cr/pa for health sector
- ▣ footpaths , it spends less than Rs. 100 cr/pa
- ▣ It earns premium of Rs. 4000 cr from redevelopment but v little to spend on dilapidated housing

