

Dear All

I was in the US for three days last week. While in the US I saw these huge trucks and the rapid speed of cars on the toads. This made me wonder about the various modes of transportation and what determines the same. Obviously income determines it, infrastructure determines it, government funding or running a sector determines it, prices determine it, size of the country determines it. Here is my learning and analysis:

	USA	China	India	UK	Russia	Japan
Population Mln	330	1402	1380	67	144	125
No of cars mln	290	297	40	32	45	62
No of airports	Public 5200, private 14,702	>250	153 in use, 400 not operational	40	116	130
No of air passengers mln	250	660	168	154	116	130
No of Train passengers mln	260	4000	8000	182	900	25

1. US and UK seem close to maximizing all three modes of transportation – Road, Train and Air.
2. High speed railway networks started in Japan in 1964, then went to Paris in 1981 and have moved to China recently. In China 138 routes where high speed trains (defines as more than 200 kms/hour speed) were introduced, air traffic on these routes fell by 27 % in the first few years. So people prefer a fast train vs waiting at an airport and going through delays. Also, most train stations are in the middle of town unlike airports which can be far away from the city. People add up the expenditure and value they derive from each mode.
3. For a country of its size, the investment in transportation is low for Russia.
4. Infrastructure plays a critical role in development of transportation. America airports infrastructure is a great example. US has more airports than most countries added up. There are a total of 41,000 airports in the world and US has nearly half of them.
5. From a sustainability point of view, the train is the most environmentally friendly. With EVs , cars might get there over a period of time. If there is a long flight, then aircraft becomes better.
6. In terms of safety, the aircraft is the safety mode of transport. On a billion passengers kilometers basis, Air travel has 0.07 deaths, trains have 0.43 , cars have 7.3 and motorcycles have 213 deaths.
7. Privatization helps in service levels as well as safety and newer business models to drive business.
8. I personally see that China numbers for car, air travel and train travel will change significantly this decade, China will be the innovation country for all three in this decade.
9. Except the US, air travel in most countries started as a government initiative and over time got privatized, the same with railways, it is following a similar path with India being the latest to privatize it.

10. In developing countries like India, personal transportation is defined by motorcycles and scooters and not cars. India sells close to 2 million 2 wheelers a month right now!!

Feedback welcome

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