https://www.theguardian.com/technology/2018/may/29/maglev-magnetic-levitation-domestic-travel

MAGLEV TRAINS taken from the Guardian on 29 May 2018 Dave Hall @daveha11

"It is lightning quick, clean, green – and expensive. But shouldn't we think again about magnetic levitation?"

MONEY:

"If you're going to build maglev you must do so from scratch. Most governments simply won't take that hit, especially if standard rail infrastructure is already in place. Shanghai's comparatively small maglev cost £840m for 30.6 Kms (£27 m per Km) to build, while Japan's will be around £58bn. The US Federal Railroad Administration has balked at the up to \$100m (£70m) per mile or £113 m per Km it estimates it would cost to build."

"Incheon's maglev may have cost $\pounds 25m$ per Km, but they boast that's <u>a third of the cost of regular rail</u>, and "while the cost of supplying electricity to a maglev line is 30% greater than for a regular light rail, it costs 60% to 70% less to operate the train.

"Likewise, the Japanese Linimo line (Wikipedia has "The construction cost came to roughly \$65 million per km without rolling stock") may have cost around £70m per Km to build, but is proving to be low-maintenance, reliable and quiet compared with traditional transit systems (and ideal for cities, with its zero emissions). In the UK, it was estimated in 2006 that the cost of a maglev track would only have been half that of the Channel tunnel rail link.

"We should watch Asia with interest. If nothing else, they are showing that if there's a political will, there's a maglev railway."

Maglev trains are cheaper than Midland Metro trams!

Snow Hill to Grand Central **1.2** *Kms for £68 million*, plus £40 m for 19 trams to replace trams only 17 years old. Yet, Fol request said each tram delivered in 2015 was £2.52 m each! £128 m extension in total, B'ham Mail said. Snow Hill station bypassed completely!

Hagley Road ext: 2.2 Km or 1.2 miles in 'Rail Professional' magazine.

£60 m for the extension plus £90 m for five new stops passing some of the city's landmark public buildings. Therefore, **£68 million/Km**. 'Midlands Today', 1 September 2017 Giles Latcham reported £46,000/metre or, £46m/Km.

Borders Railway rebuilding (not needed for the Black Country Railway) was £7 m per Km when opened in 2015.

Wednesbury Brierley Hill extension: 11.5 Km for £343 m of mixed road and mainline railway running = £30 m per Km plus cost overruns.

Borders Railway rebuilding (not needed for the Black Country Railway) was £7 m per Km when opened in September 2015.

Round Oak to Bescot 12 Kms

Wednesbury to Walsall 5 Kms - £300 m for the tram train extension = £60 m/Km or £60,000 per metre. Or, should it be put as:

Stourbridge to Walsall tram train: £300 m for 20 Kms = £15 m/Km. But, this is after the fleet of trams bought at £2.52 m each and then more tens of millions for the tram trains (still trams but slow speed, frequent stopping on railway lines with trains).

Borders Railway rebuilding (not needed for the Black Country Railway) was £7 m per Km when opened in 2015.

RAILWAY

Walsall to Wolverhampton Railway second reopening on existing line: 11 Kms for £48 m = £4 m/Km. Midlands Railway Hub: £500 million. But what is it?!

There is a paradox, here. Travelling by train has doubled in popularity since the mid 90s and is still rising. Yet, passengers and car users are all very relaxed about the 106 Kms of freight only or mothballed, double track, urban railway lines. Sometimes, literally alongside them or, below them in tunnels or, above them on bridges without a single passenger train, as they sit in traffic jams or crawl along in the lowest gears!

The local councillors on the ground decide on transport priorities. Their perverse priorities are: first roads, then trams, with buses and trains way down the pecking order.

Tim Weller 3 June 2018