

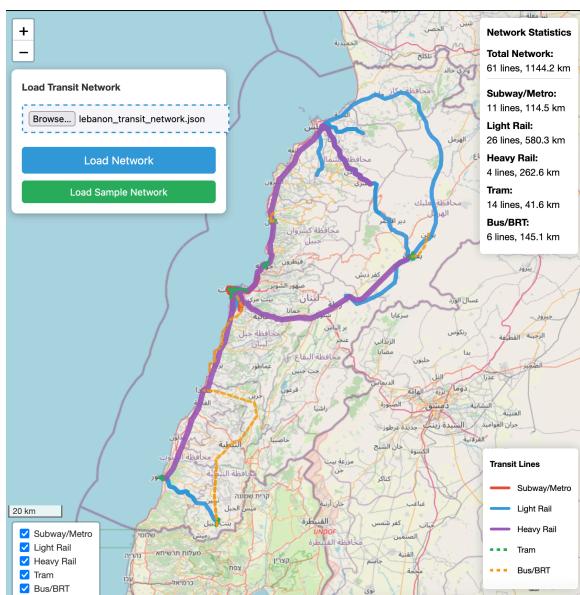


Randish - TrainTackle

Let's get straight into this.

	Lebanon	Singapore
Number of Vehicles	2 million	1 million
Cars per capita	one car for every 2–3 people. 300 per 1,000	172 vehicles per 1,000 people
CO2 emissions	5.6 MT 27% emissions	15–16%
NO2	51.8 Kilotons 62% em	27KT
PM (Particulate Meter)	3-4x higher than rec (20-30 micrograms)	12 micrograms

Let's Add some Public Transport networks in Lebanon!



	Lebanon	Singapore
Number of Vehicles	1.1 million	1 million
Cars per cap.	172 vehicles per 1000 people	172 vehicles per 1,000 people
CO2 emissions	3.1Mt MT 19% emissions	15–16%
NO2	28 Kilotons 30% em	27 KT
PM (Particulate Meter)	11-13 micrograms	12 micrograms

And you can also estimate the cost of this network, time it takes to build, and the total ridership and best timetables using our own in-house open-source software*

*: only estimates! doesn't build a perfect network and its mostly speculative, the map shown is after a million trial and errors and fine tuning, we try not to use any kind of AI in this program to reduce emissions from device so we need to revert back to dijkstra's algorithm and some reseverizations.

Overall Cost

1. Cedars Coastal Express (Tripoli – Beirut – Saida – Tyre)

a. Inter-city Heavy Rail

- i. 25 kV AC double-track, 200 km h
- ii. Electrified
- iii. Railyards in Tripoli & Saida

b. \$6 Billion

- c. Ballast & slab track mix, concrete viaducts at river mouths, ETCS L3, Velaro-style EMUs

2. Phoenicia Base-Tunnel (Beirut – Zahlé – Baalbek)

a. Heavy Rail

- i. 25 kV, 24 km twin bore, 160 km h
- ii. Electrified

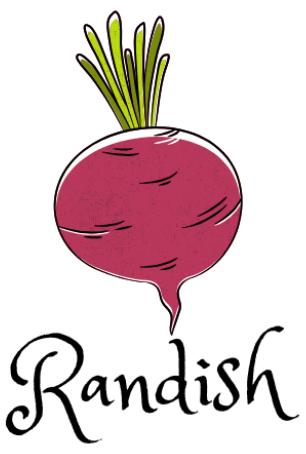
- iii. Railyards in Rayak & Zahle
- b. 1.9 Billion
- c. Two 10 m Ø TBMs, sprayed-concrete/segment lining, mountain rescue adits
- 3. Metro M1 Coastal
 - a. Subway/Metro
 - i. 750 V DC third-rail, deep-bore
 - ii. Hazmieh Yard
 - b. \$5 billion
 - c. 9 m Ø TBMs, PSDs, ATO GoA 4
- 4. Metro M2 East-West
 - a. Subway
 - i. Mix cut-&-cover / bore
 - ii. Hazmieh yard
 - b. \$6 billion
- 5. Metro - Ring
 - a. Metro
 - i. bore
 - ii. Hazmieh Yard
 - b. \$10 Billion
- 6. **Beirut Heritage Tram Loop**
 - a. Tram
 - i. Street-running, 750 V DC
 - ii. Port workshops
 - iii. \$500 million

Total: 30.5 Billion = Lebanon's GDP

Jobs Created:

7000 jobs created

Github: https://github.com/Randish-soft/Train_Scheduler



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