Financial Modeling Case Study

TrainStat LLC

Train Station Investment

1. Project Outline

1.1. Project Background

You have been given 6 days to develop a financial model and estimate the value of TrainStat.

TrainStat is a Special purpose vehicle (SPV) that is set up to acquire a Train station. Your board is contemplating whether it should finance the acquisition and further development of the train station.

TrainStat transaction is to be completed on 31 December 2021. The terminal concession contract is for 20 years without renewal, at the end of the concession contract, TrainStat will be liquidated.

You have been advised that the financial model should be a quarterly 3 statement model from the date of acquisition which should include a valuation based on the present value of shareholders distributions.

1.2. Economic Background

The target train station will witness some increased revenue due to the new Free-Trade Zone and Tourist Centre in the region.

In the short term and medium-term there will be a spike in revenue due to people moving to the region and new companies springing up in the region.

1.3 Time Line

Events	Date	Implications
Planned COD	31 Dec 2021	The project begins revenue generation. Repayment of senior debt financing.
Length of concession	20 years	Duration of revenue and cost forecast.

2. Operating Parameters

2.1. Operating Revenue

There are 2 forms of revenue available to the train station operator:

1. Passenger tax
2. Retail revenues

For the 2 revenue channels, the train station expects to receive a payment within 25 days.

You have the following details relating to the 2 forms of revenues>>

2.1.1. Passenger Revenue:

All trains arriving at the train station will be charged according to the number of passengers on board. From the train station, there are 6 routes used by different train companies. The data has been collated for the routes which include:

    i.   The average number of trains that ply on each route,
   ii.   The average number of arrivals per train on each route,
  iii.   The average train capacity operating on each route,
  iv.   The average train occupancy rate for each route.

The data collated for the routes can be found in the operation revenue sheet on the Model start file.

The average fare per passenger on 31 December 2021 is $6.25 per passenger. The passenger fare will escalate in line with the consumer price index (CPI).

2.1.2. Retail Revenues:

There are several retail and restaurant concessions within the train station. They all pay a percentage of their revenue to the train station operator. The current arrangements are such that on average, 25% of revenue are payable to the train station operator for the use of space and utilities.

Analysis of recent retail data shows that on average customers pay $3.70 per passenger. Retail revenue is expected to increase in line with CPI.

2.2. Operating cost

The train station operator has two long term service contracts in place that cover all of the train stations operations. Which includes Handling contract and O&M contract.

2.2.1. Handling contract:

All handling activities such as loading, unloading and handling of parcels and goods are handled under a long service contract with a railway logistics support company. The contract has a fixed price amount of $4.5m per annum and a variable cost of $550 per arrival.

Both costs are subject to CPI Index.

2.2.1. O&M Contract:

The operations and maintenance of the train station is handled by a single service provider who in turn subcontract to several other service firms. This contract includes cleaning and maintenance of the train station, IT, security etc. The contract has a fixed price amount of $3.3m per annum, before CPI Index.

Both contracts have a 35day payment term.

2.2. Escalation

Your consultant has provided you with an inflation forecast of 7.00% p.a. for the year starting 1 September 2021. The 5-year forecast says inflation will decrease by 1.00% p.a., such that by the year ending 1 Sep 2025 the forecast inflation rate is

3.0% p.a. In addition, their prediction for the CPI value as of 31 December 2021 is 145.0.

Under the terms of the handling contract, negotiated in 2019, the fixed and variable costs will be adjusted in line with CPI from a base reference of 120.0 (the December 2020 value).

Similarly, the O&M contract value is based on an estimate provided back in January 2020 when CPI was 132.0

2.3. Taxation

TrainStat will be permitted to amortize the full $100 million acquisition price for tax purposes. These deductions for tax purposes will be based on an allowance of 5% of the brought forward depreciable basis every three months. Any remaining tax value at the end of TrainStat's forecast operation can be completely written off (for tax) in that terminal period.

Taxes will be paid quarterly each year, at 30% of the taxable income calculated. If taxable income is negative, in any period the tax loss will be carried forward.

You are required to calculate Profit Before Tax (PBT), from which you will be able to calculate the P&L Tax Charge and any deferred tax liability.

2.4. Depreciation

The Non-current assets will be depreciated on a straight-line basis over the next 15 years. Their value is estimated at $100 million. The following are the Additions to fixed asset with 5 years useful life.

Investment / addition date	$ 000s
31 Dec 2023	2,000
31 Dec 2024	1,000
31 Dec 2025	1,500
31 Dec 2026	1,000
31 Dec 2027	500
31 Dec 2028	1,000
31 Dec 2029	1,000

3. Project Finance and Valuation

3.1. Finance

The $100 million acquisition price will be financed with 60% senior debt. The remaining financing requirement which is 40% will be provided in the form of ordinary share capital.

There are currently some options being considered for the repayment profile of the debt and your model should include the ability to easily switch between these options.

The outline term sheet you have received from the bank indicates that an all-in rate of 6.50% p.a. will be payable quarterly.

The loan covenant ratio is 1.3x.

You are required to compute the following ratio:
- Debt service cover ratio
- Current ratio
- Debt to equity
- Debt to EBITDA

3.2. Shareholders Distribution

You are required to summarize the various cash flows leading to Cash Flow Available for Dividends.

This should include a payment to redeem share capital in the last period of operation (i.e., when TrainStat is liquidated).

Dividends should be paid to the extent you have both sufficient cash and sufficient accounting profit.

3.3. Valuation

You are now in a position to advise your manager on the estimated equity value of TrainStat, based on the present value of forecast cashflow distributions to shareholders.

They have asked that you value the company as of 31 December 2021 using an annual discount rate of 25.25% p.a.