

## **Ministry of Transport: Aide Memoire**

To: Hon Phil Twyford

From: Amelia East, Project Director, Auckland Light Rail Project

Date: 9 March 2020

Subject: Auckland Light Rail Update

OC Number: OC200220

## Purpose of this aide memoire

1. This memorandum provides an overview of risk in rail projects and the risk transfer positions achieved in the two proposals from NZ Infra and NZTA by the Ministry of Transport (the Ministry) in relation to the Auckland Light Rail project (the Project).

## Risk in Rail Projects

- Generally light rail and metro projects are considered to be at the riskier end of
  infrastructure delivery because of their technical complexity and the large number of
  components that need to be integrated (including track and stations, rolling stock,
  systems and operations, integration with transport networks, and integration with
  urban development).
- 3. When designing a delivery model for a rail project, the key is to first identify all the risks in planning, delivering and operating the project, and then to determine which risks the private sector can manage more efficiently than the public sector. If the private sector can manage or price a risk more efficiently than the public sector, this should represent the best value for money to transfer. For example, the private sector can generally manage technical integration risk efficiently. Change in law, for example, is a risk that the Crown is better placed to manage.
- 4. The key risks in light rail and metro projects include (but are not limited to);
  - Delivery and commissioning risk: The risk that a fit for purpose rail system is
    delivered on-time and within budget. In light rail and metro this includes, critically, the
    risk that the various components of the system are successfully commissioned (for
    example, that the vehicles and signalling are compatible with the track and civils
    works).
  - Ground condition and utilities risk: The risk that construction costs are higher than
    forecast due discoveries after construction begins, for example complex geotechnical
    elements of the land or additional utilities that need to be moved.

- Operational risk: The risk associated with the ongoing performance of the system.
   This includes the risk that the operator can deliver a successful service using systems, technology and vehicles that may have been designed and built by other parties.
- Maintenance and asset lifecycle risk: The risk that maintenance and asset lifecycle costs exceed budget.
- Ridership and value capture risk: The risk that fewer passengers use the system or value capture revenues are lower than original forecasts.
- Urban development risk: The risk that the associated property development around
  the stations to unlock the full benefits of the system are not delivered or do not meet
  local market demands.
- Financing risk: The availability and cost of finance.





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