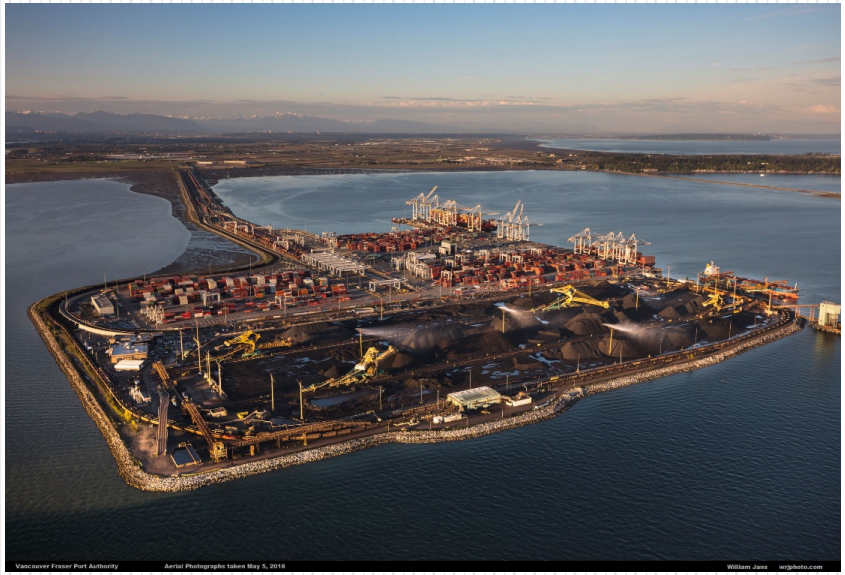
CILT NZ Northern Section

Webinar

A Port on the Manukau
- The present situation



23 November 2021

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The need for a larger/ new port

- 12 months ago – We reported:
  - Two studies conclude Manukau is the preferred future UNI port- Port Future Study & Sapere Report
- We now have the prospect of
  - Larger ships
  - Relay of transhipment cargoes through UNI ports
- Existing ports are 50 years old
  - Not designed to accommodate the larger ships
  - Many channels and berth pockets too shallow, channel bends too tight
  - Larger beam means larger outreach of cranes – can mean too high loads on wharf structures
- Auckland and Tauranga will NOT have the long term required capacity
  - Auckland appears to be at capacity now, even after automation complete
  - Tauranga is seeking to extend wharf by a much needed one berth and associated stack area

Add in the demand presented by increased coastal shipping/ transhipping

- Transhipped cargo needs to be handled twice at hub
- Also occupies stack slots while waiting onward ship
- Auckland and Tauranga presently handle abt 130,000 teu pa of transhipps
- Imports and exports for/ from regions outside the Upper North Island totalled about 775,000 teu in 2020
- The potential additional transhipps are therefore up to 645,000 teu pa, resulting in twice that, 1.3 million teu pa additional handlings, a 10-fold increase in transhipps
- Auckland and Tauranga presently handle 1.8 million teu pa between them (2020)
- Their unplanned potential increase is thus anything up to 70% of total throughput
- Even if its only half this, it represents an increase of more than a third

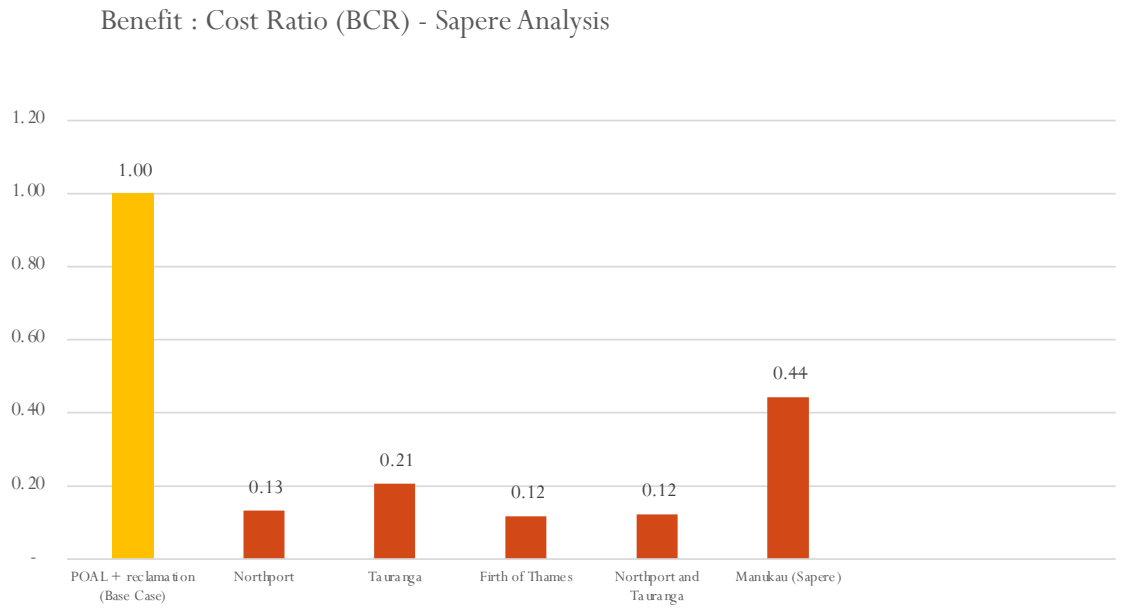
- **The two ports would not be able to cope**

How long have Auckland & Tauranga got?

- The two ports are virtually at capacity now
- A berth extension and added stack area at Tauranga might add 400,000 teu pa capacity – enough for 10 years?
- But what then?
- A multi-berth increase is needed
- The Port Future Study and Sapere concluded that neither Auckland nor Tauranga have much in the way of long-term expansion capability
- **Conclusion: a new port is required**
- **They also concluded that the best choice is a new port on the Manukau**

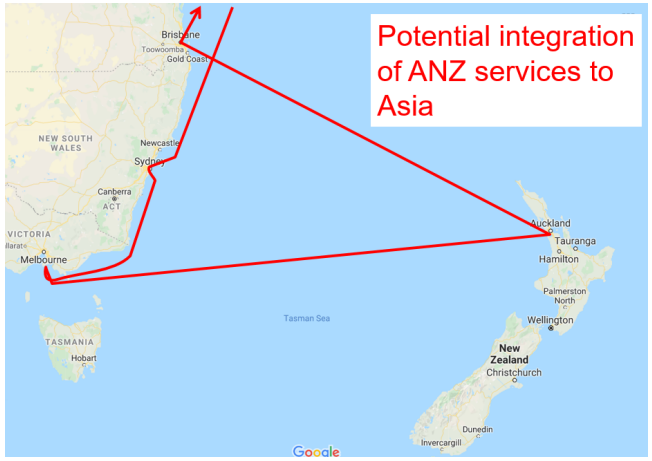
Review of Sapere Report

- Economics massively favours Manukau over other existing or greenfield options
- Even then, the analysis omitted some significant advantages

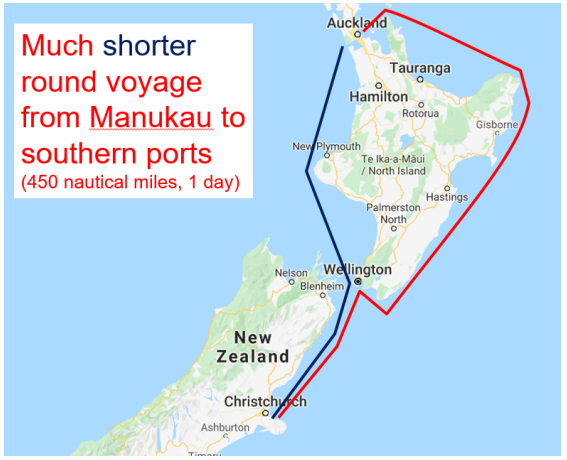


Review of Sapere Report

- Shorter Shipping routes



200 nm shorter



450 nm shorter

- Fuel savings and GHG emission reduction
- **Overall saving: NZ$142m pa → PV NZ$666m**

Review of Sapere Report

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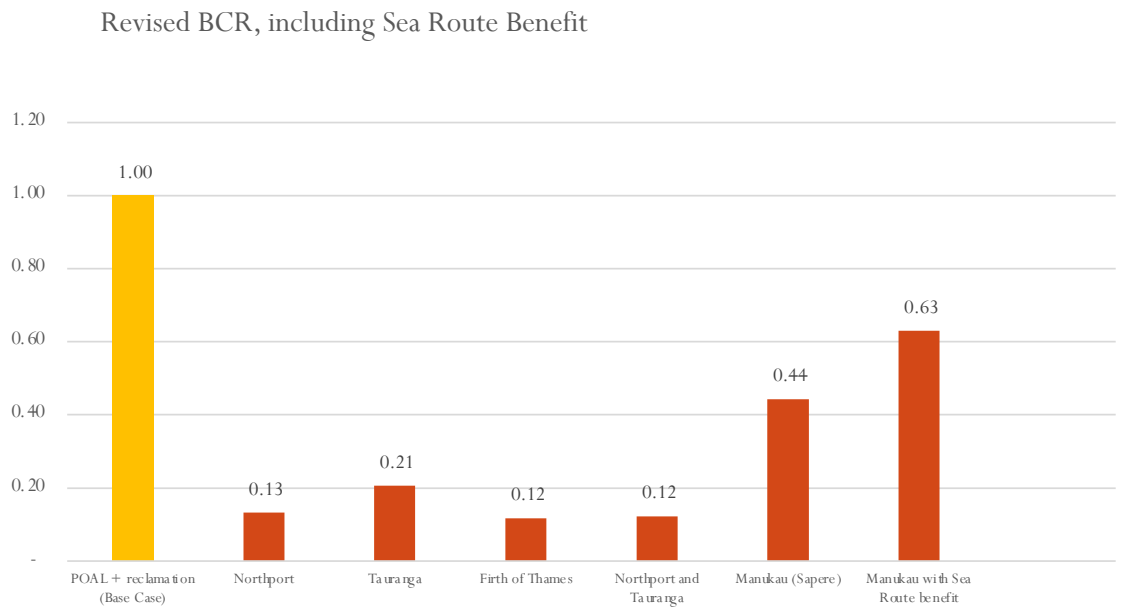
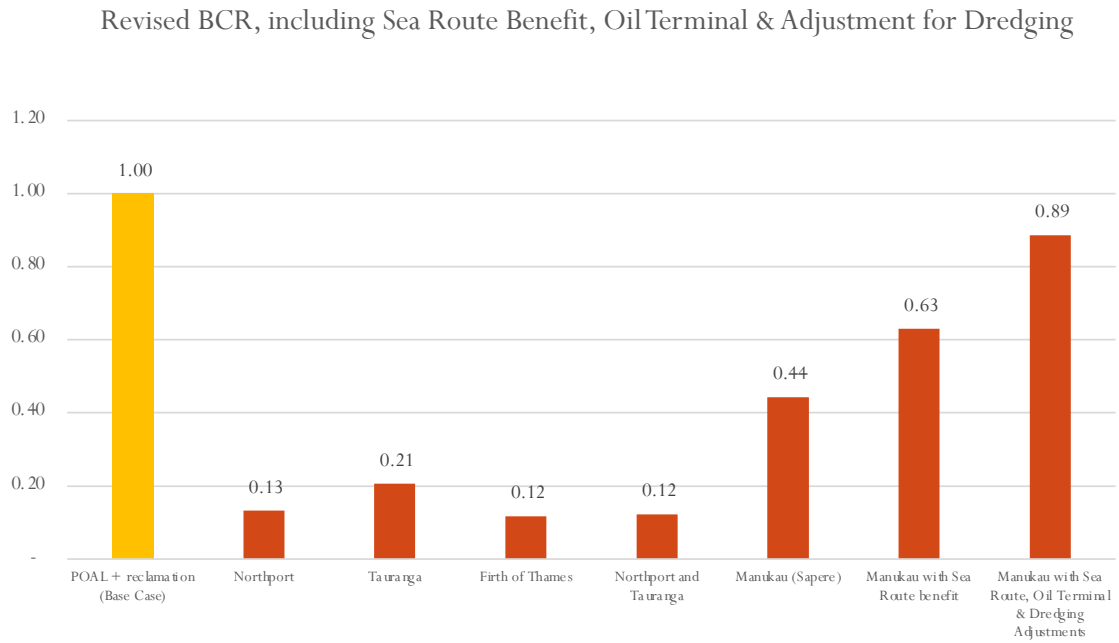
  - Shorter Shipping Routes
    - PV NZ$666 million
    - Reduced GHG emissions



Review of Sapere Report

- Economics massively favours Manukau over other existing or greenfield options
- Even then, the analysis omitted some significant advantages
  - Shorter Shipping Routes
    - PV $666 million
    - Reduced GHG emissions
  - Change of port for cargoes
    - steel and coal direct to/from steel mill
    - fuel imports through Manukau, reducing costs and improving resilience
    - PV $250 million plus
  - Overstated dredging costs
    - $60/m3 instead of $15/m3
    - PV $650 million



Overwhelmingly in favour of Manukau

Only a new port will work

We can conclude that:

- 10 years to consent, plan and build a new port (Ref: Sapere)
- Auckland & Tauranga on borrowed time
- Might eke out 10 years
- Backstop is relaying from Australian ports
- But for resilience, can't rely on Aust ports: no influence over port development or industrial relations

- **Need to start now on a new port**

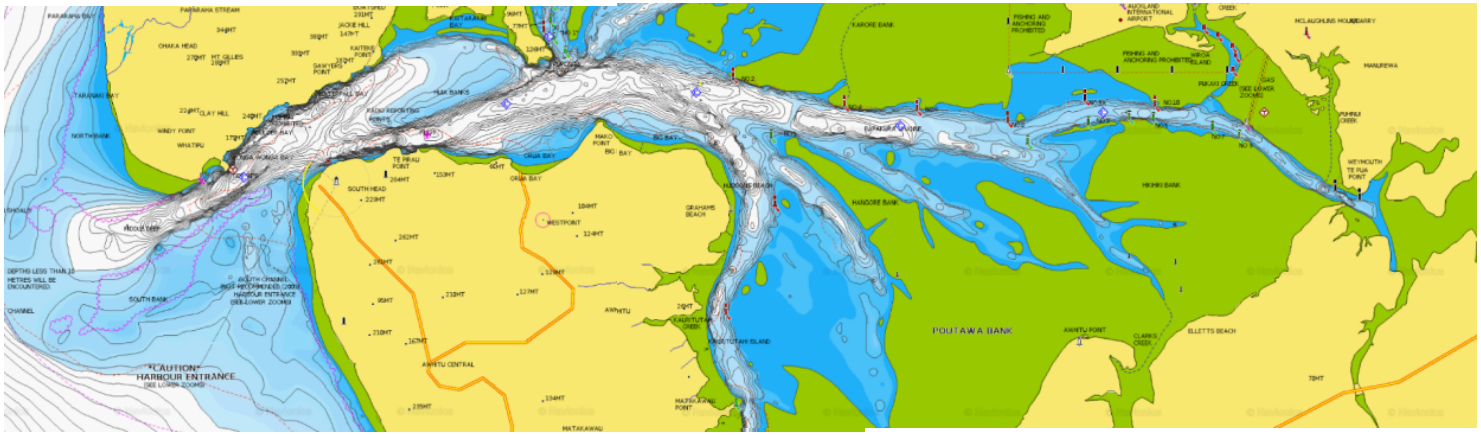
What is Standing in the Way?

- The Economics stands up
- Engineering & operational issues are satisfied
  - Manukau channels are wide, straight and deep

Charts of Manukau, Waitemata and Tauranga

To same scale, showing channels. Depths greater than 12m are shown in white

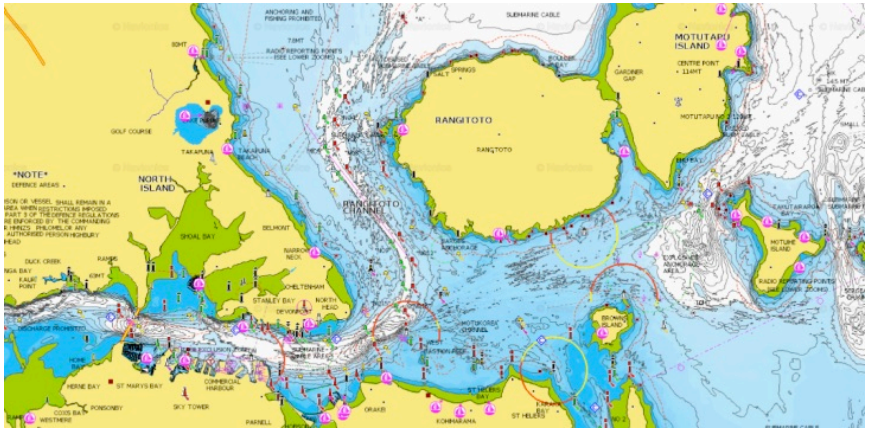
Manukau



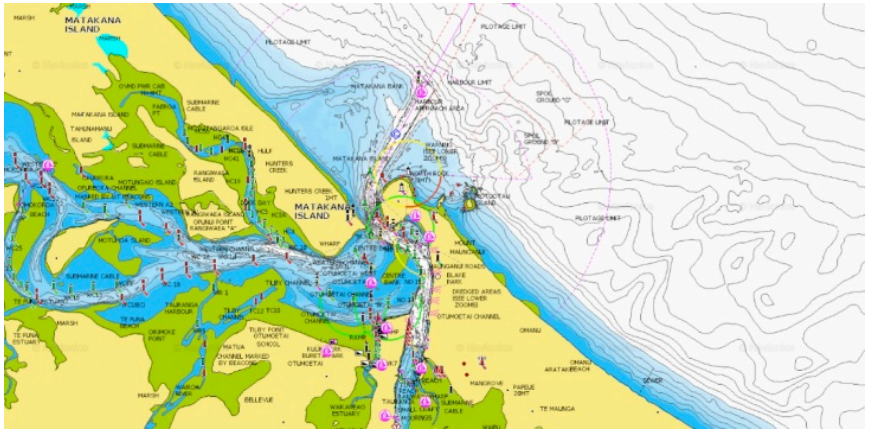
Manukau channels

- Wide
- Straight
- Deep

Waitemata



Tauranga



What is Standing in the Way?

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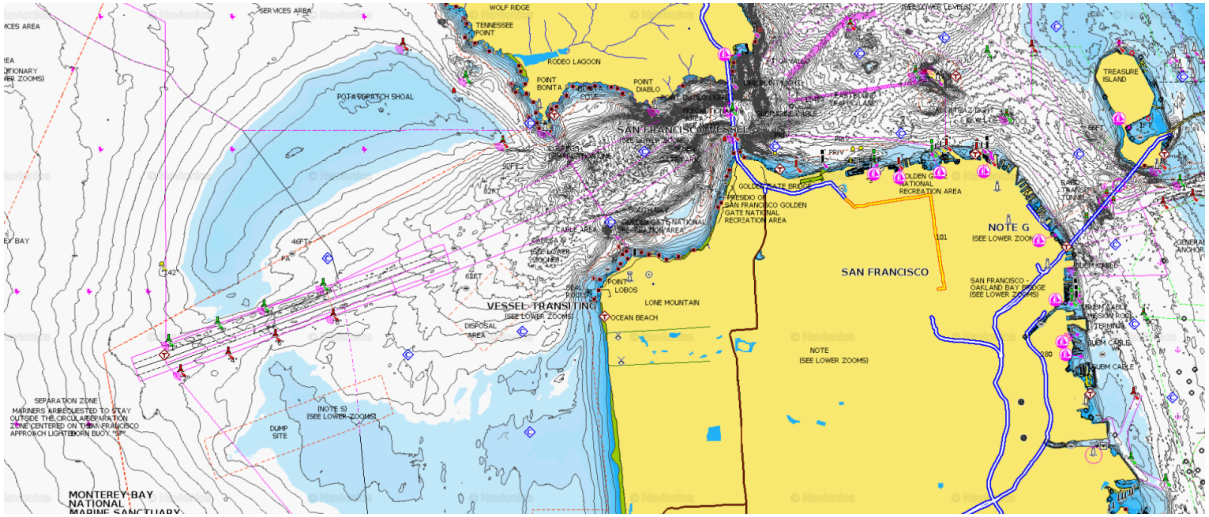
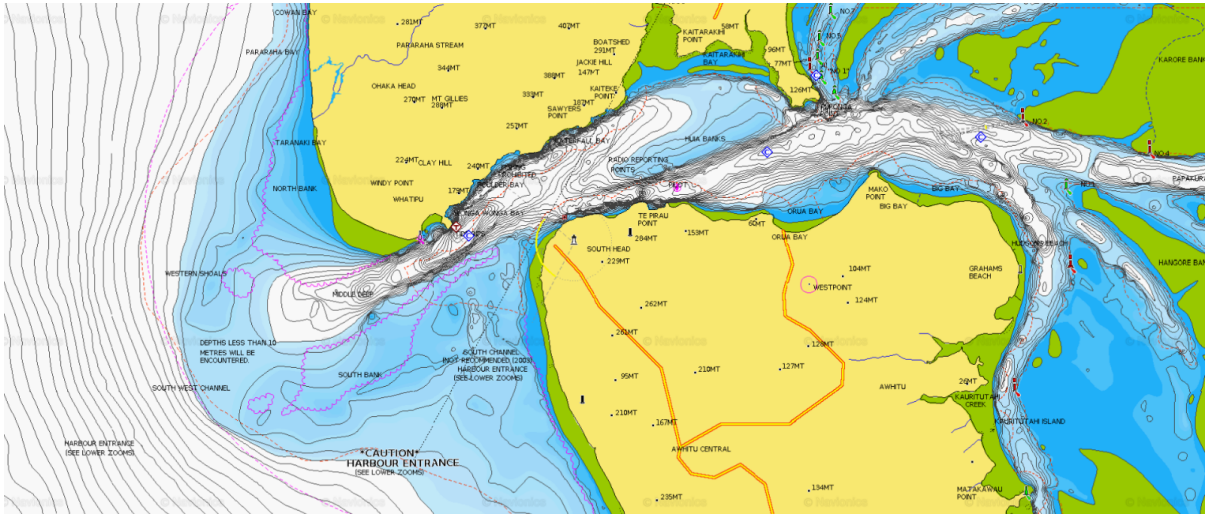
- Engineering & operational issues are satisfied
  - Manukau channels are wide, straight and deep
  - Sapere & eCoast modelling show that Bar sedimentation is manageable
    - Comparable with many other sites, e.g. San Francisco, Port Chalmers

San Francisco Harbour entrance



Manukau Harbour entrance



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  - Sapere & E-Coast modelling show that Bar sedimentation is manageable
    - Comparable with many other sites, e.g. San Francisco, Port Chalmers
  - A Bar channel is attainable and safe
    - Wave action in a channel is much less than on a bar
    - No problem for large ships; smaller ships will find it easier
  - Several suitable sites for location within harbour
- Hinterland connections to road and rail networks are excellent
- No Social issues of significance
  - No 'fatal flaw' from Maori perspective, and Maori would look to secure commercial opportunities

- The outstanding issue is the Environment. Sapere and Mitchell Daysh concluded that any greenfield port is likely to present considerable consenting challenges