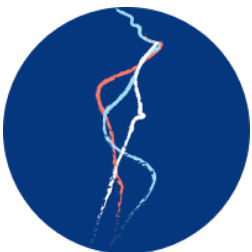


# FINEST BAY AREA TUNNEL EMPLOYMENT ESTIMATE

Estimate for Tallinn Tunnel Employment Impact

5.7.2019



# Tunnel Project Timelines

- Project design, permits and planning 2017-2019
- Construction start 2019-2020
- Tunnel operational 24.12.2024



# Financials

**Tunnel project estimate total cost 15B€**

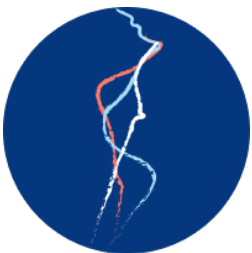
**Design 750M€**

**Construction 12,5B€**

**Project management 1B€**

**Management 750M€**

# Tunnel project impact on GDP



# Summary: The Finest Bay Area

- Three main passenger channels are identified: 52 million passengers per annum by 2040
  - From ferries 22 million passengers
  - Passengers between Helsinki-Vantaa and Tallin airports: 11 million
  - New commuters: 19 million
  
- Total cumulative economic effects during 2021 -2050 (without any multipliers) will be 225 billion euros and 47 billion euros in Finland and Estonia, respectively. The Finest Bay Area will contribute to the economy of Finland and Estonia via five main channels:

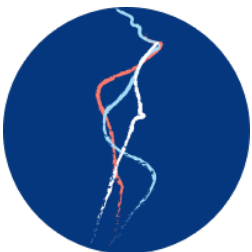
Share from total cumulative economic effects, %		
	Finland	Estonia
Tunnel building	5	6
House & office building	25	30
Consumption of new residents	18	19
Increase of estate value	6	4
Agglomeration**	47	41

## The economic effects of the tunnel investments 2021 - 2025

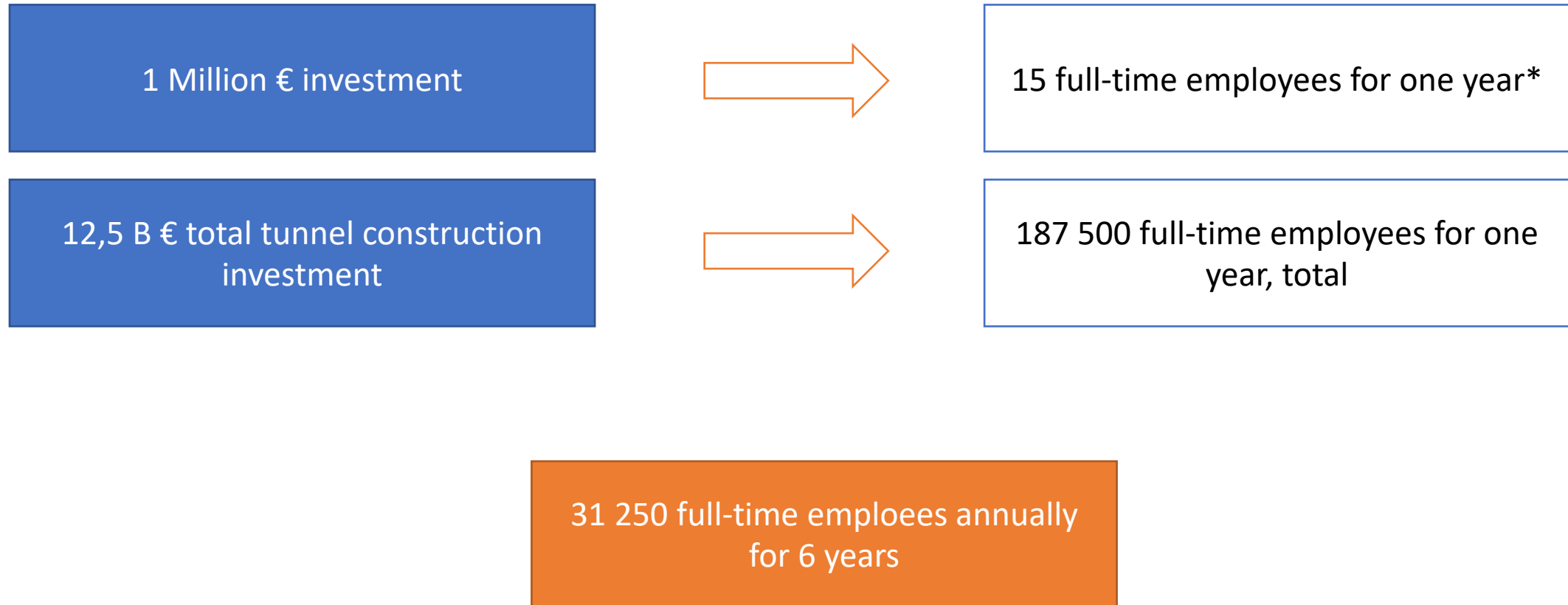
- GDP in Finland and Estonia was 224 billion euros and 23,6 billion euros, respectively, in 2017.
- Total tunnel investment 15 billion euros; per annum 3,0 billion during 2021 -2025.
- The share of Helsinki region is assumed to be 80 % and of Tallinn region 20 %.
  - => Without any multiplier effects, contribution to the GDP of Finland will be about 1,1 % (2,4 billion euros) per annum during 2021 – 2025
  - = > Without any multiplier effects, contribution to the GDP of Estonia will be about 2,5 % (600 million euros) per annum during 2021 – 2025
- Multiplier effects of the construction project is about 1,8 according to the input-output –tables (Statistics Finland).
  - = > 15 billion investment contributes the total effects about 27 billion euros

# Tunnel project impact on employment

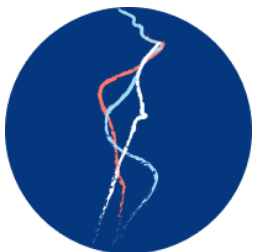
\*Confederation of Finnish Construction Industries RT



# Construction sector employment impact estimate, total

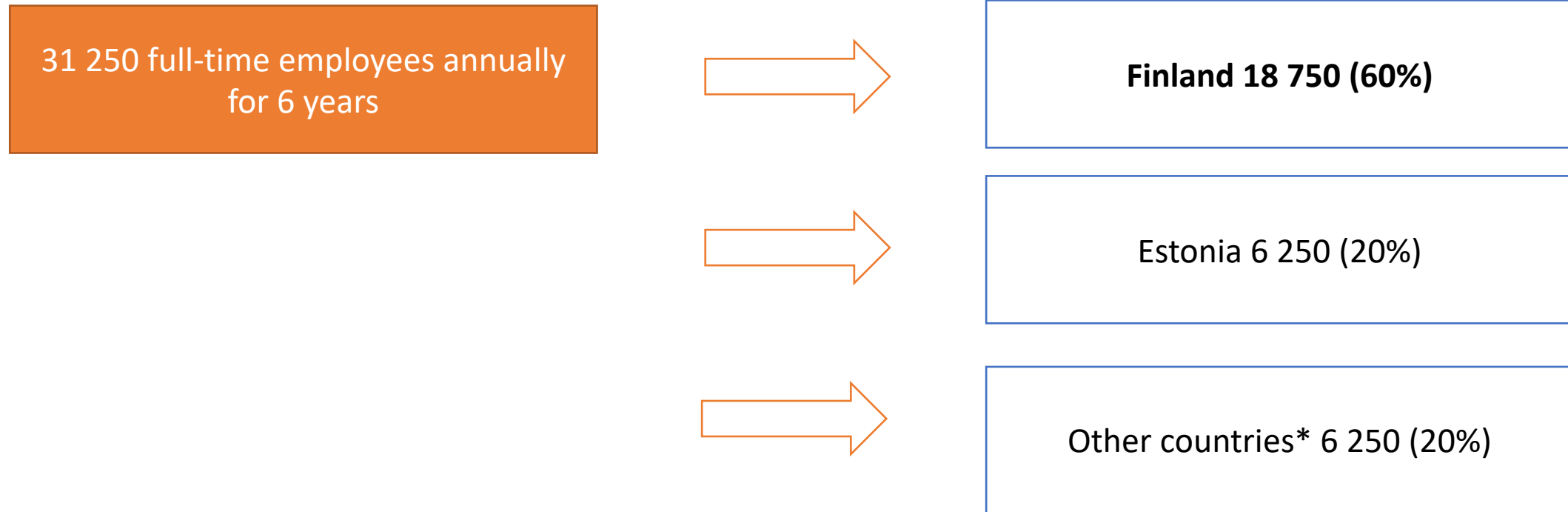


\* Source: Confederation of Finnish Construction Industries RT. Includes direct and indirect FTEs

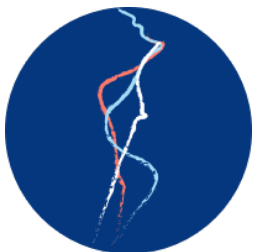




# Construction sector employment impact estimate, segments

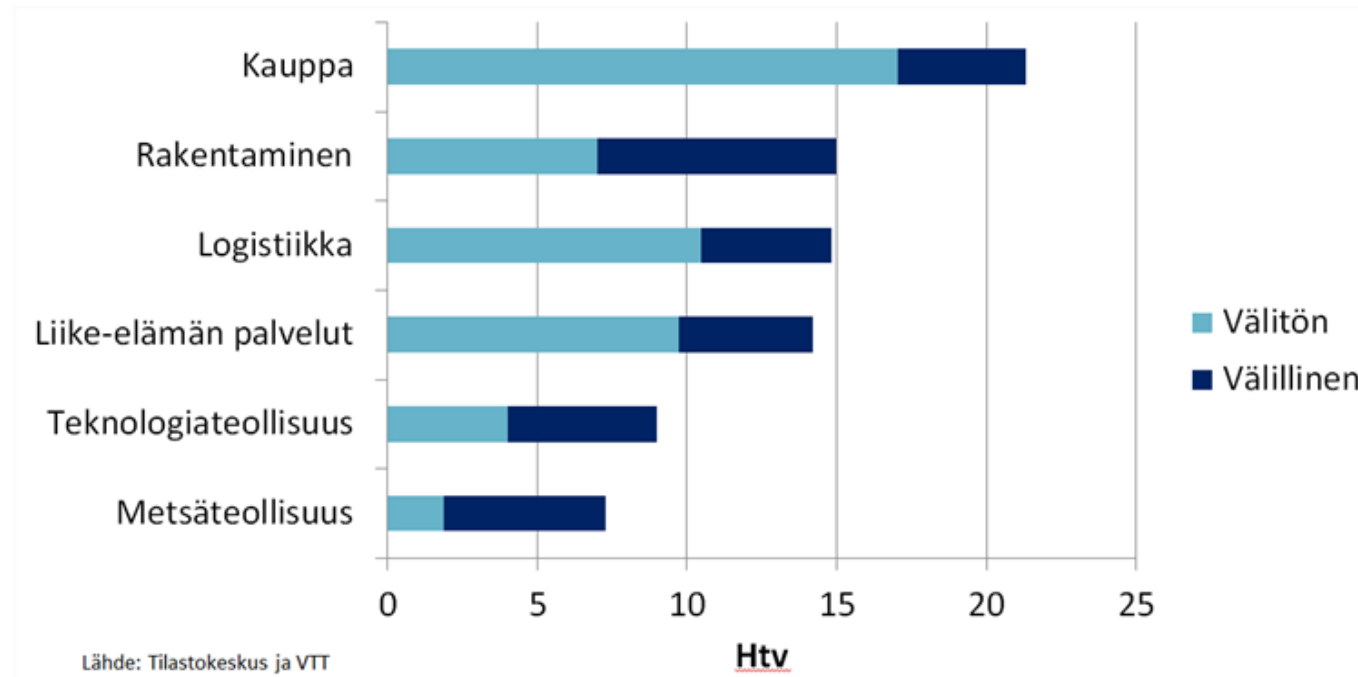


\* Source: according to Confederation of Finnish Construction Industries RT more than 20% of construction sector employees are of other nationalities in Finland



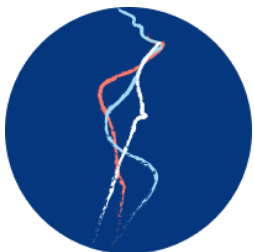
# Appendix: Confederation of Finnish Construction Industries RT employment impact estimates

## Miljoonan euron sijoitus työllistää



Rakennusteollisuus

23.4.2019



# Benchmarks

Channel tunnel (50km):

Construction employment peaked in 1990 when 8 300 people were directly and 1827 indirectly employment totalling approximately 10 000 annual employees.

(Source: <https://pdfs.semanticscholar.org/65a4/fe056ce744ed528a0d2ab99c7198273a2686.pdf>)

Öresund bridge and island (16km):

Construction employment totalled 14 000 annual FTEs over the course of the project.

Total construction time was 4 years. Thus annual employment impact was 3 500 in average.

(Source: [https://www.miljomagasinet.se/artiklar/bro1\\_25.htm](https://www.miljomagasinet.se/artiklar/bro1_25.htm))

Helsinki – Espoo underground extension (Ruoholahti – Matinkylä):

Number of inducted construction workers for Ruoholahti – Matinkylä project was 20 454.

Total planning and construction time was 6 years.

(Source: <https://www.lansimetro.fi/kustannukset/>)

