TRENES PARA CHILE 2050

Chile’s National Railway Policy

Fabián Figueroa – May 2026

Assessment: Where do we stand today?

Structural gap in the development of the rail system (historical abandonment).

Chile ranks **42nd** in the global **competitiveness** ranking and **48th** in the **infrastructure** pillar.

Of total **infrastructure investment**, only **4%** is allocated **to rail** (OECD countries: 20%).

Imbalance: Very low modal share of rail and high dependence on road transport.

The **institutional framework** for planning, implementing and supervise railway projects is **fragmented** and **lacks a long-term vision**.

Outdated legal framework: General Railways Law (1931).

Diagnosis: SWOT

Freight Rail

Strengths:
- Capacity to **transport large volumes**.
- High energy efficiency.
- Reduction in road congestion and emissions.
- Connectivity with ports and industrial areas.

Opportunities:
- Increased demand for sustainable transport.
- Revival of railway lines.
- Development of international corridors.
- **Private investment in integrated logistics.**

Weaknesses:
- **Limited and deteriorating infrastructure**.
- Low modal share.
- **Lack of intermodal coordination.**
- Dependence on specific products.

Threats:
- **Low availability of infrastructure.**
- High competition from road transport.
- **Regulatory constraints and excessive bureaucracy.**
- **Weather events and natural disasters.**
- Lack of tax incentives or subsidies.

Passenger Rail

Strengths:
- Capacity to **transport large numbers of passengers**.
- High energy efficiency.
- **Independence from traffic congestion**
- Safe transport.
- Experience and acceptance.
- Long-term nature of projects (**state projects**).

Opportunities:
- Increased demand for sustainable transport.
- **Development of new inter-city corridors**.
- Trains at the cutting edge of technology.
- **Greater integration (physical and fare-based).**
- Private co-financing (north).

Weaknesses:
- Limited territorial coverage.
- Limited infrastructure.
- **Supply shortfall and weak modal integration**.
- Institutional and regulatory fragmentation.
- **Slow and complex investment processes.**
- Reliance on public subsidies.

Threats:
- High competition from road transport.
- **Public investment and excessive bureaucracy.**
- **Weather events and natural disasters.**
- **Territorial and social conflicts.**
- Preference for the car.

A small but successful railway in Chile

- Santiago Metro, at the **cutting edge of technology**: Largest expansion in its history.
  - *Annual journeys: 640 million journeys (2024), approaching pre-pandemic passenger numbers.*
- The **underestimated** Biotrén: Rapid post-pandemic recovery.
  - *Passengers carried: From 1.6 million (2015) to 9.0 million (2022) passengers, and rising.*
- The **overloaded** Santiago-Nos line: Overloaded just two weeks after opening
  - *Design capacity: 74,000 passengers/day (actual) vs 50,000 passengers/day (estimated) in 2018.*
- The **first of its kind**, the Puerto-Limache line: Key reference for the design
  - *Passengers carried: From 20.0 million (2013) to 23.0 million (2025) passengers, and rising.*
- The **enduring** Alameda-Chillán line: The continent's leading long-distance train
  - *Highest growth (72%) between 2024 and 2025, rising from 145,000 to 249,632 passengers carried (first half of the year).*
  - *High user satisfaction (96%).*

A limited but successful railway in Chile

- **Freight railway:** 63% in the north and 37% in the south-central region (excluding the Codelco El Teniente railway).
  - **EFE Arica:** Load test for the transport of steel coils to Bolivia.
  - **FCAB** moved around 7.1 million tonnes in 2024. First H2 locomotive.
  - **FERRONOR** was awarded the Escondida project: +1.6 million tonnes.
  - **Extreme case: Codelco El Teniente Railway** moves 141,000 tonnes of ore daily. Electric trains with ATO.
  - **FEPASA** was awarded the MAPA project: +2.3 million tonnes. Contract with CMPC for the transport of cellulose, plywood and caustic soda. Pilot project in 2025 for salmon transport.
  - **TRANSAP** was awarded a 12-year contract with CMPC for the transport of logs.
  - Container transport via the San Antonio route saw a significant increase (SITRANS +50%).

Vision for the future: Chile in 2050

- **Demographic transition: We are moving towards an ageing, more urban population with higher incomes.**
  - **Demand** is growing **for housing, urban services and accessible, high-capacity transport**.
  - **High-income economy** (GDP per capita US$42,000 by 2030): Increased consumption, mobility and expansion of trade.
  - **An increasingly urbanised territory** (currently over 88%) with a strong concentration in the Metropolitan Region.
  - **Waste logistics (critical)**: Chile could exceed 25–30 million tonnes per year (currently 20 million). Target: Achieve 75% recycling by 2040.
- **Chile plans to consolidate its role as an leading exporter in mining, agribusiness, aquaculture and clean energy (green hydrogen).**
  - **Mining:** Investments of US$104.5 billion by 2034.
  - **Agri-industry in continuous expansion:** 2.8 million tonnes to the United States alone in 2024.
  - **Salmon industry:** With 990,000 tonnes per year, Chile is the world's second-largest producer.
  - **Green hydrogen:** Projections to export 2–3.5 million tonnes annually by 2050.
  - **Tourism** (3–4% of national GDP) as **a key sector**, driving interregional mobility.

Increased urban, suburban, regional and inter-city passenger mobility.

Increased demand for logistics and large-scale freight transport.

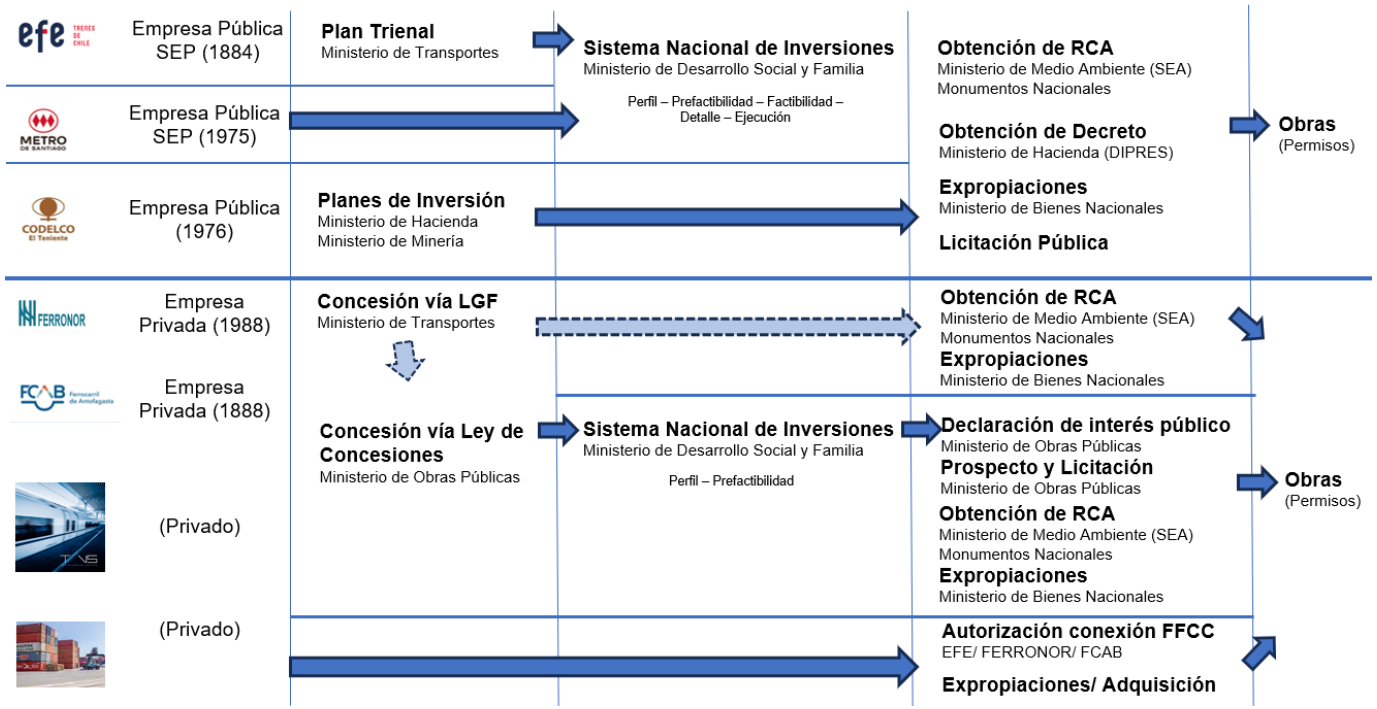
Requires efficient multimodal systems.

Requires high-capacity, safe and sustainable mobility solutions (rail).

Challenges for a modern railway by 2050

Institutional and planning challenges:

- Lack of **coordination between government agencies** and a lack of **a comprehensive long-term vision**.
- **Assessments** are carried out at project level rather than from a network perspective.
- **Social assessment methodologies** (defined by the State itself) tend to underestimate the benefits of the railway.
- Comprehensive **demand studies** required and supervised by SECTRA.
- Understanding the different **service levels** and their interface with **urban and regional planning** is key.
- The path projects follow **is not always the same** depending on their origin:

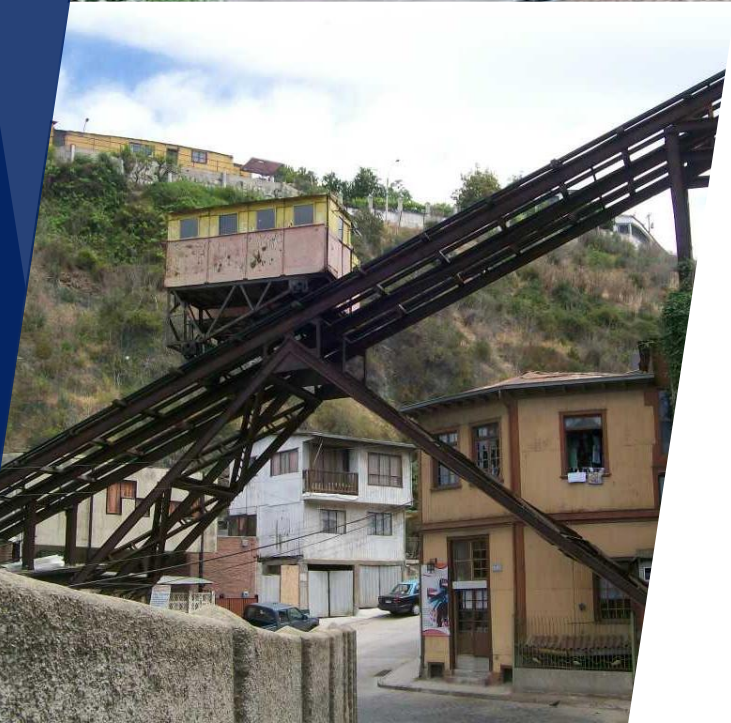


Ministerio de Transportes y Telecomunicaciones — Gobierno de Chile
Ministerio de Desarrollo Social y Familia — Gobierno de Chile
Ministerio del Medio Ambiente — Gobierno de Chile
CMN CONSEJO DE MONUMENTOS NACIONALES DE CHILE
COORDINADOR ELÉCTRICO NACIONAL
Ministerio de Obras Públicas — Gobierno de Chile
Ministerio de Hacienda — Gobierno de Chile
Ministerio Secretaría General de Gobierno — Gobierno de Chile
Ministerio de Bienes Nacionales — Gobierno de Chile
Sistema de Empresas – SEP, Ministerio de Economía, Fomento y Turismo — Gobierno de Chile

Looking to the future: Challenges for a modern railway by 2050

Freight trains:

- **Infrastructure:** Key to ensuring railway operations and, with that, the transport of heavy and dangerous goods.
- **Coverage:** Many production centres are located far from the railway lines and there is no attempt to connect them.
- **Regulation:** Certain decisions have led to restrictions on the movement of freight trains at specific times (in mixed traffic lines).
- **Modal competition:** Today the biggest beneficiary is road freight transport.
- **"Join to Rail":** Many companies across various industries are unfamiliar with railway.
- **Infrastructure resilience and continuity:** In the face of high-impact weather events, branch lines (north) have been suspended.
- **Combined transport logistics:** This helps to reduce logistics costs.
- **Transport of dangerous goods:** Less exposure to urban environments and a reduction in systemic risk.
- **Logistics and the circular economy:** Mass transport of materials.



A vision for the future: Challenges for a modern railway by 2050

Urban trains:

- **The Metro as a success story and benchmark:** A true “national project”, capable of transcending different governments and political cycles.

  → However: In some regions (Concepción) there are difficulties regarding funding, political prioritisation and institutional definition.

- **The tram paradox:** There is great interest in developing this type of more economical and flexible solution.

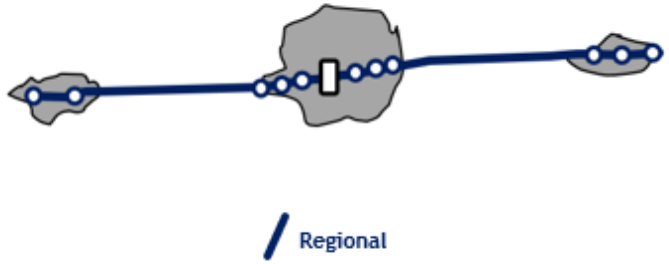
  → However: They have been systematically discarded or replaced by alternative projects (electric bus corridors).

- **The forgotten funiculars (funicular railways):** They have suffered prolonged abandonment because they are “mistakenly” perceived as mere tourist attractions, when in fact they are also an integral part of the city’s public transport solution.

Challenges for a modern railway by 2050

Commuter and regional trains

- **Conceptual errors in suburban rail: Metro? MERVAL, METROTREN and BIOTREN?**
- **Solutions that were undersized from the outset (current lines)**
- **Separation from and independence of the road network**
- **Lack of credibility despite success:**
  - In June 2022, a **public consultation** on mobility was held in Concepción.
  - **Result:** Citizens favour the development of a Metro and the extension of the Biotrén to new districts such as Lota, Penco and Tomé.
  - Biobío Regional Government: Is **aware of the needs of all** those living in the region.
  - Central Government (October 2022): Announces investment in electric bus corridors **running parallel to the Biotrén.**
- **Public-private partnership opportunity in the north**
- **Connections to airports and bus terminals.**
- **Urban and regional connectivity:** These enable the consolidation of internal connectivity within bigger conurbations, the provision of express services within the ‘urban sprawl’ and also ensure connectivity between different localities creating urban-systems.



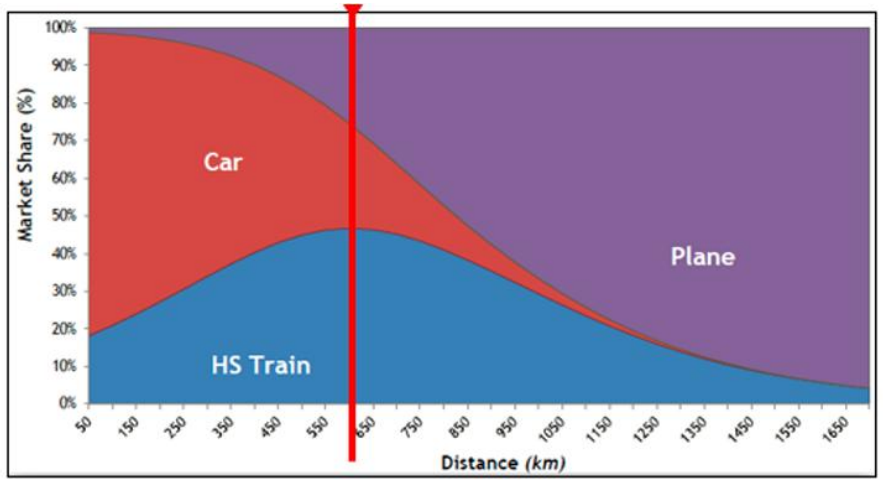
A vision for the future: Challenges for a modern railway by 2050

Intercity trains:

- **Train to Concepción** (suspended since 2007)
  - Results of the 2014–2016 pre-feasibility study: **Social IRR of 16.5%.**
  - In 2026 (ten years later), SECTRA announced the development of **the same** pre-feasibility **study**.
- **Train to Valparaíso** (suspended since 1992)
  - **Initial favourable results** in the pre-feasibility study (2016)
  - Two new **private initiatives** for a high-speed rail project in 2018 (LGF)
  - Declared to be in the public interest in 2019 and a mandate from EFE to MOP is established.
  - In 2023, the Government decides to use the existing route and launches a tender for a comprehensive study **(not yet awarded).**
- **Train to Temuco** (opened in 2003 and suspended since 2009)
- **Antofagasta-Calama train** (Announced by the President of the CChC in 2024)
- **Loss of major central railway stations**
- **A new standard: breaking the 200 km/h barrier?**

Vision for the future: High-speed rail by 2050?

- High-speed rail is positioned as a competitive alternative to air travel and car travel, particularly for medium-long journeys of around 600 kilometres (with journey times of between 1.5 and 4 hours).

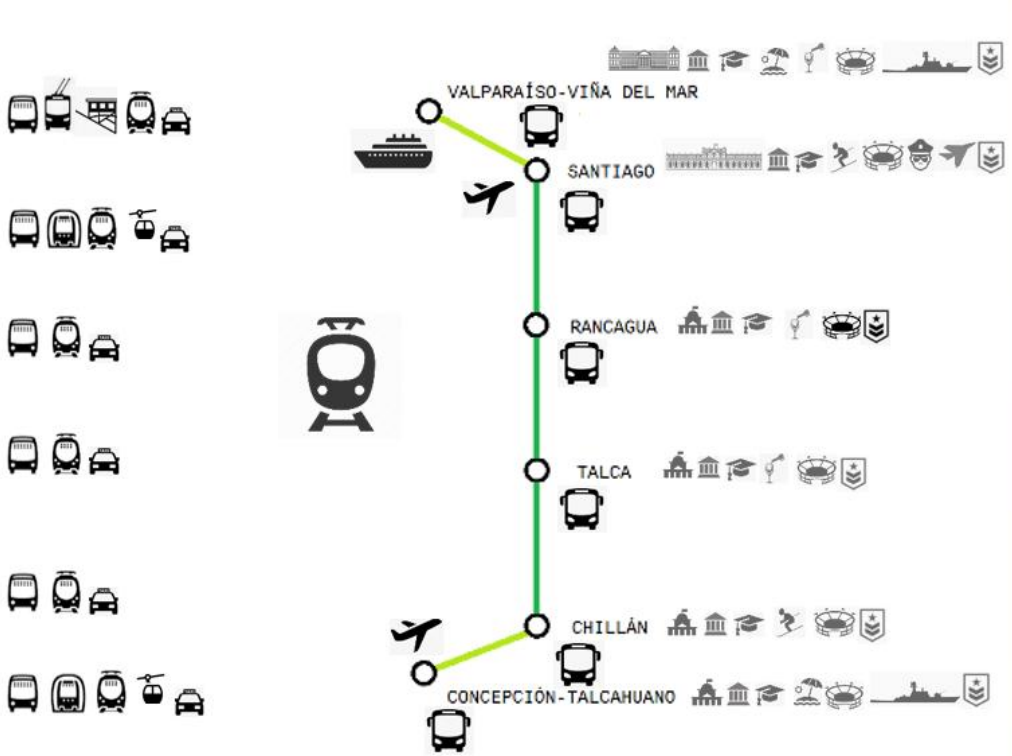


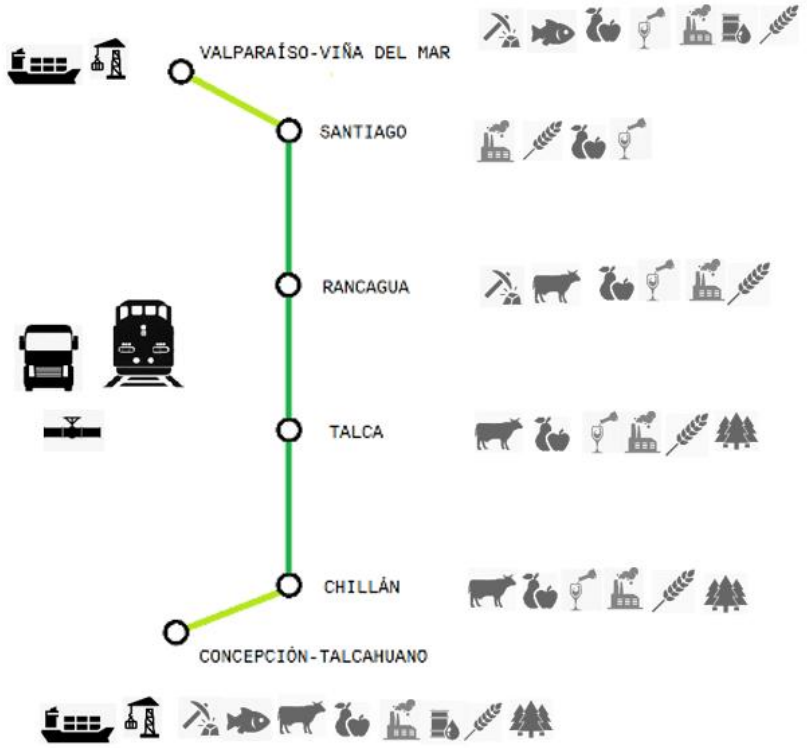
Opportunity:
- Valparaíso–Santiago–Concepción corridor (600 km).
- 75% of the population is concentrated here.
- Accounts for 65% of national GDP.

In 1940: The first **"Flecha del Sur"** trains reached speeds of up to 130 km/h, enabling a journey from Santiago to Temuco in 9 hours (today 13 hours) and to Osorno in 13 hours.

- **Key benefits:**
  - Significant reduction in journey times
  - Boost to economic growth and employment
  - Territorial integration and regional development
  - Lower environmental impact (much lower than that of cars and aeroplanes).
  - Strengthens connectivity, tourism and national competitiveness.
- Its implementation requires **a long-term vision**, sustained investment and institutional adaptation.

Looking to the future: High-speed rail by 2050?

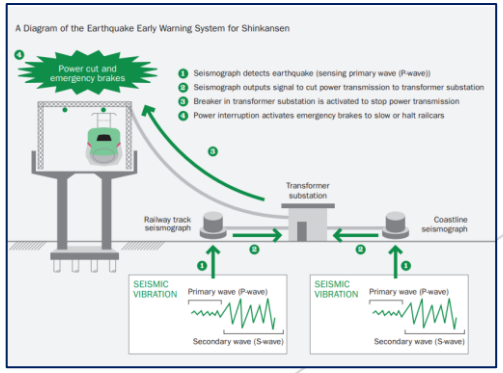




Resilient Rail

- Railways in times of war/crisis
- Railways in disaster emergencies
- Resilient system (Japanese experience)

In 2011, the Tohoku Shinkansen line, which was severely affected by a magnitude 9.0 (Richter) earthquake, was restored **in just 49 days.**



Why does Chile need a National Railway Policy?

TRENES PARA CHILE 2050

The National Railway Policy sets out the **Chilean state's strategic direction** for the **long-term development of the railway** (up to 2050).

Its purpose is:

- To correct structural imbalances.
- To restore, develop and consolidate the national railway system as critical infrastructure.
- To promote sustainable, integrated and resilient mobility and logistics that contribute to economic development (where the railway is key).
- To improve territorial cohesion, the country's competitiveness and the well-being of the population.

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Vision

By 2050, *Chile will have* ***a railway system with high standards of service and reliability****,* ***integrated into public transport and the national logistics network****, setting the standard in Latin America for its efficiency, sustainability, innovation, safety and resilience.*

Mission

To guide, coordinate and promote the development of *the* ***national railway system*** *through* ***long-term strategic planning, effective governance and a modern institutional framework****, thereby bringing together public and private stakeholders with the aim of strengthening public transport, logistics, territorial development and human capital, contributing to Chile's sustainable development.*

Values: Fundamental convictions or ideas that guide the State's actions.

- **Public service and a people-centred approach.**
- **Sustainability and environmental responsibility.**
- **Balanced territorial development and national integration.**
- **Efficiency, transparency and the prudent use of public resources.**
- **Innovation, competitiveness and integrated logistics.**
- **Human capital, professionalisation and railway culture.**
- **Resilience, safety and support for national emergencies.**

Principles: Criteria guiding decision-making and policy implementation

- **Strategic** – "The strategic role of the railway"
- **Public** – "Public interest and a people-centred approach"
- **Integrated** – "Multimodal and territorial integration"
- **Sustainable** – "Environmental sustainability and energy efficiency"
- **Enduring** – "Long-term planning and continuity of projects through differents governments periods"
- **Efficient** – "Efficiency in the use of public resources"
- **Resilient** – "Resilience and security of critical infrastructure"
- **Innovative** – "Development of national capabilities"

Guidelines

Objectives

To implement a **new framework for state governance in the railway and transport sectors in Chile**, based on:

- The implementation of a modern institutional framework.
- An updated and coherent legal framework.
- Integrated planning procedures and instruments

… which entails:

- **Implementing regulatory changes** within a **maximum period of 3 years**
- **Implementing new comprehensive plans** within a **maximum period of 5 years**

The **new framework** will enable effective coordination between public and private stakeholders and facilitate the realisation of the **national rail vision for 2050.**

Governance and institutional coordination (conceptual)

1. New Ministry of Mobility, Critical Infrastructure and Territory.

- Planning, regulation, assessment, authorisation and coordination of critical infrastructure and national mobility.
- It brings together strategic planning, social and environmental assessment; the setting of standards, certifications and authorisations; and territorial and sectoral coordination.

2. Railway governance and key roles for the railways:

1. **National Railway Authority.**
2. **Transport Associations.**
3. **National Committee for Strategic Corridors.**
4. **Railway Companies (public and private):** PSO contracts and publication of timetables (itineraries).

3. Railway planning, evaluation and investment model.

1. **National Railway Infrastructure Plan** (25-year horizon and five-yearly review).
2. **Integrated investment evaluation:** Projects, portfolios, corridors and plans.
3. **Demand studies and forecasts:** The new ministry assumes **exclusive responsibility**.

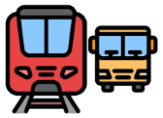
4. Monitoring, evaluation and adjustment of policy.

- **National Railway Monitoring System:** Periodic evaluations, adjustments and updates based on indicators.

5. Catalogue of instruments

- **Instruments:** Strategic planning; investment and financing; regulatory and normative; management and coordination; **productive development and human capital**.

Objectives: National rail vision for 2050



Passenger rail by 2050 (urban – suburban – regional)

- **A modal split of 16% for urban rail** (tram, metro and/or funicular) and **16% for suburban rail** in public transport in **regional capitals with more than 400,000 inhabitants.**

  Antofagasta, La Serena-Coquimbo, Valparaíso, Concepción and Temuco: 16% is the global average in both cases.

  Also desirable for cities with 200,000–400,000 inhabitants: Arica, Iquique, Calama, Rancagua, Talca, Chillán, Los Ángeles and Puerto Montt.

  There may be other smaller cities thanks to other facilities (provided they already have railways).

- **A modal share of over 16% and close to 30%** for **rail (urban and suburban combined)** in **Greater Santiago**.

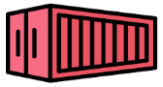
  This is still lower than in cities with high rail multimodality such as Berlin (35%), Prague (40%) and Paris (45%).

Passenger rail by 2050 (intercity)

- A 600 km **high-standard corridor** between Valparaíso, Santiago, Rancagua, Talca, Chillán and Concepción.
- Study and implement **high-speed rail by 2050** to achieve **a modal share** of at least **30%.**

  Similar to the US Northeast Corridor (Boston–Washington, ~600 km), though still lower than European examples (50% on the Berlin–Munich line, ~580 km; over 60% on the Milan–Rome line (~570 km); over 60% on the Paris–Marseille line (~750 km); over 75% on the Madrid–Barcelona line (~620 km)) and far behind Asian examples (over 70% on the Seoul–Busan line (~325 km); over 80% on the Tokyo–Osaka line (~515 km).

Objectives: National rail vision for 2050



Freight rail by 2050

- **50% of gross freight tonne-kilometres** (tonne/km) should be transported **by high-efficiency modes (ship and rail).** *Figures for Japan (~49%), the United States (~50%) and Europe (~75%, mainly due to coastal shipping).*
- **A minimum modal split of 30%** of total net freight transported (tonnes) in **state-owned ports.** *Also desirable in private ports.*
- Develop **combined transport** by increasing its share of total land transport. *The United States, Japan, India and Europe currently stand at around 3–10%.*
- Establish legal mechanisms to ensure that **cost savings are passed on to users**.
- From Chile, promote **international multimodal rail corridors**, at least two by 2050. *Subject to the agreements and multilateral financing mechanisms that enable their implementation.*

- Actively support a 30% **reduction in accident rates** by 2030.

- Contribute to **reducing transport energy demand** by 25% by 2035.

Bearing in mind that transport is responsible for 23% of global CO2 emissions.

Realising the **national rail vision for 2050** involves increasing investment in infrastructure to levels exceeding 4% of GDP (6.5% is desirable). Of this, invest between 4% and 16% (or more) in railways. In terms of GDP, this means moving from 0.06% to 0.10% and even 0.40% of GDP (OECD figures).

Interfaces

National Transport Policy (2013): The National Railway Policy fits directly within this framework as a structuring mode of the transport system, acting as one of its main operational instruments.

National Urban Development Policy (2013): Railways act as an instrument for spatial planning and sustainable urban development.

National Sustainable Mobility Strategy (2023): The National Railway Policy is one of the main instruments for implementing this strategy.

National Logistics and Ports Policy (under development): Railways act as a critical component of the national logistics system and as a structural pillar of the logistics and ports policy.

National Electromobility Strategy (2021): Rail represents the most established and efficient form of large-scale electromobility.

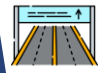
Energy Policy 2050 (2022): Rail is a strategic user of the clean energy system, reinforcing transport electrification and energy efficiency.

Sectoral Plan for Climate Change Mitigation and Adaptation – Transport (2024): Rail is one of the main instruments for mitigation and adaptation in the transport sector, thanks to reduced emissions and greater resilience.

National Road Safety Strategy (2021): Railway development helps to improve the safety of the transport system as a whole by reducing accidents and making a greater contribution to systemic safety and road safety culture.

Infrastructure Policy Council (CPI) – Strategic Document 2026–2030 (2026): The CPI's strategic document is one of the documents most closely aligned conceptually with railway policy.

CAMPORT – "99 Proposals for Maritime and Port Competitiveness" (2025): The CAMPORT document implicitly calls for a competitive railway system, although it does not always mention this as a central focus.



Corporation of Public Infrastructure Concessionaires (COPSA) – 5 COPSA Proposals (2025): A link is established regarding the exploration of financing and investment models, such as rail concessions and PPPs.

National Strategy for Critical Minerals (2026): Mining is one of the main business cases for freight rail.

Chile's National Forest and Climate Change Strategy (2025): Forestry logistics is another of the main business cases for the freight railway.

- **Initial concept** for a restructuring of the State in the railway sector, to initiate a **high-level discussion**.

“An initial document on the table”

TRENES PARA CHILE 2050

- A **new framework** to enable the effective coordination of public and private stakeholders and facilitate the realisation of the **national railway vision for 2050.**

“Let’s dream together of Chile’s railways in 2050”

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