

# Regional Plans of Infrastructure and Water Resource Management to 2021 (PRIGRH)

Current challenges to reach the Development of Integrated Regional  
Planning of Infrastructure



Ministerio de  
Obras P ublicas



## I. Table of contents

- Overview of Chile
- Overview of Public Works Ministry (MOP)
- Regional Plans of Infrastructure and Water Resource Management
- Our Challenges





## Overview of Chile



# Chilean Political System

Our System is a Republican Democracy



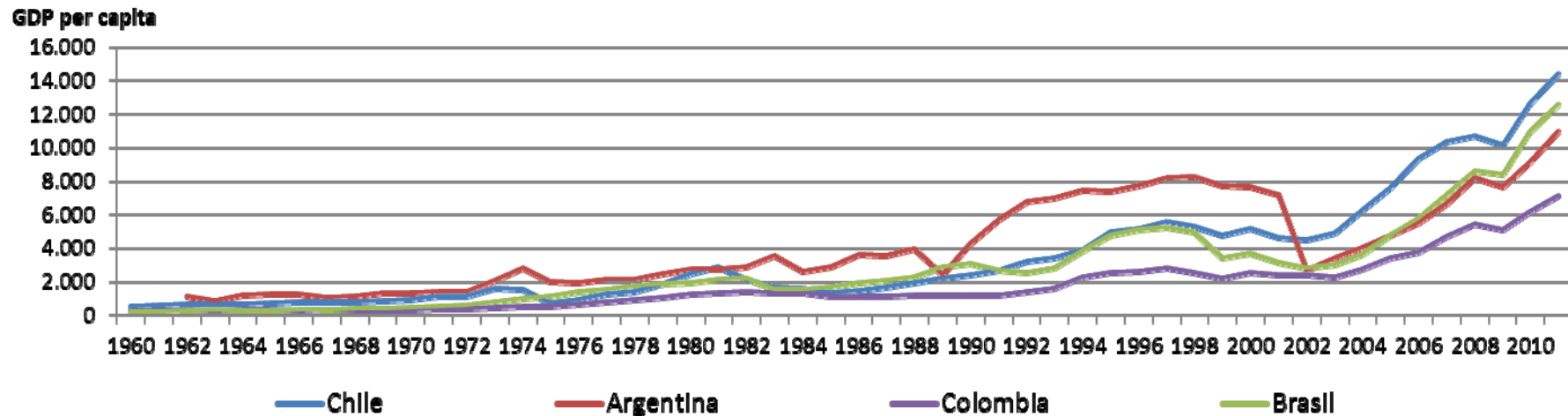
Administrative Political Division	Governance	Political Representation
Unitary State	President	Elected every four years, without reappointment
15 Regions	Intendente (Governor)	Appointed by the President
54 Provinces	Gobernador (Head of the Province)	Appointed by the President
346 Communes	Mayor	Elected every four years, with reelection

Characteristics of Chile
✓ Estimated Population (2012) 17.402.630
✓ Urban Population 87%
✓ Rural Population 13%
✓ Density 23/km <sup>2</sup>
✓ GDP (PPP) per capita 19.474 (FMI 2013)

# Economic and Social Indicators: Chile in South America



**Growth GDP Per Capita of Argentina, Brazil, Chile and Colombia 1960-2011 (Current \$ USD)**





Source: World Bank Data infrastructure

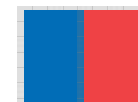
Country	2013 Human Development Index (HDI)		State
	ranking	Inequality-adjusted	
Argentina	0,811 (45)	0,653	Federal
Brasil	0,730 (85)	0,531	Federal
Chile	0,819 (40)	0,664	Unitary
Colombia	0,719 (91)	0,519	Unitary
LAC	0,741	0,550	

Source: 2013 Human Development Report

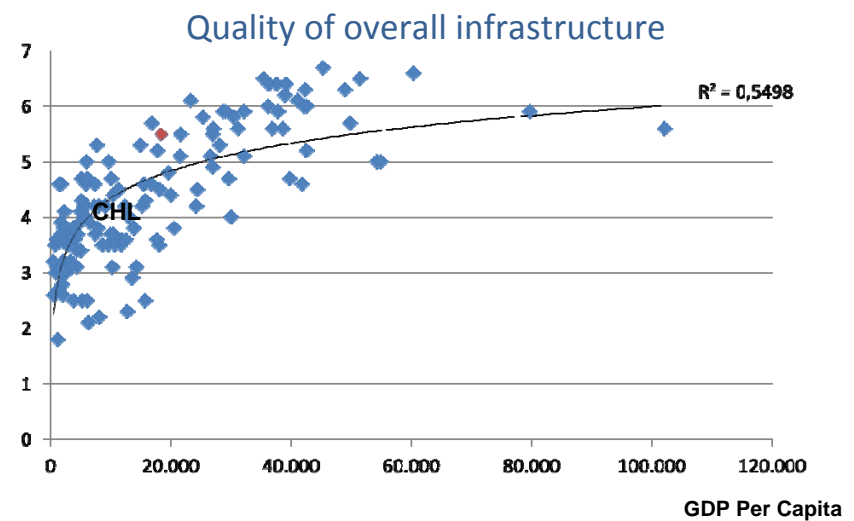
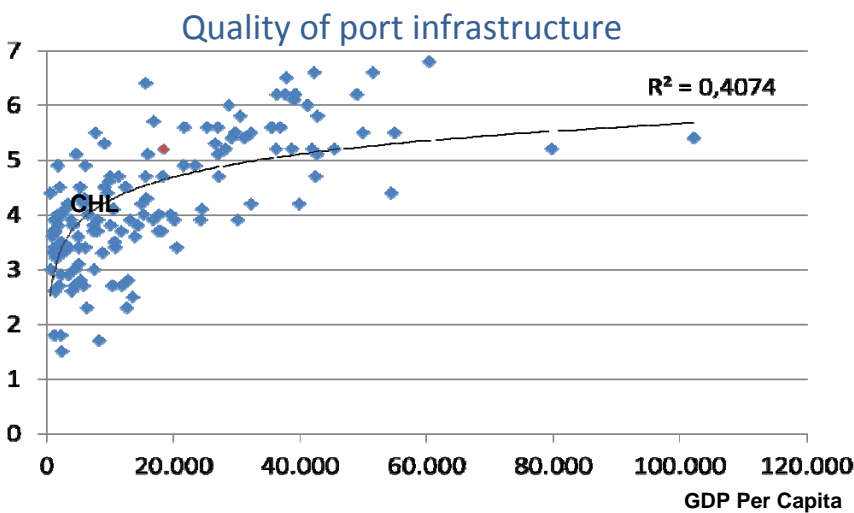
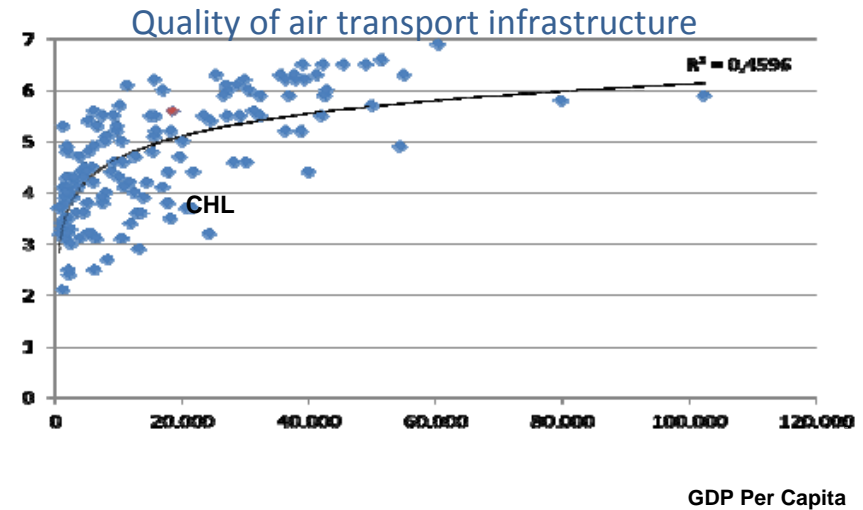
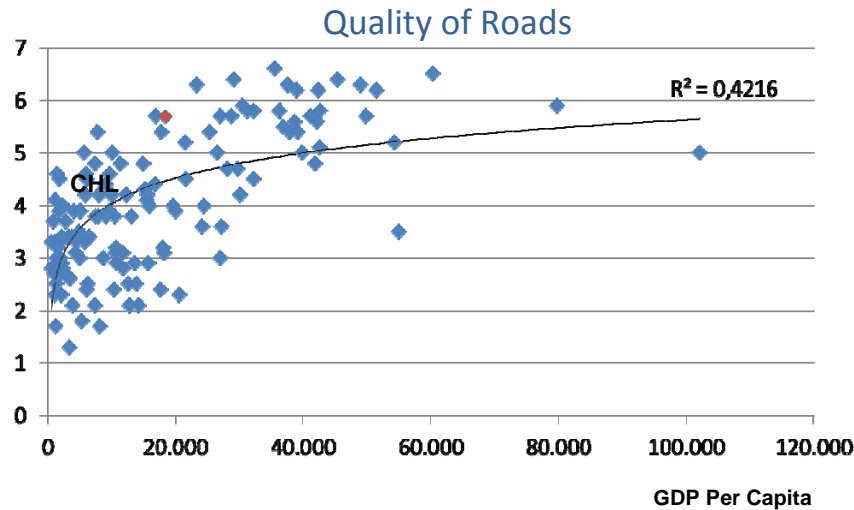
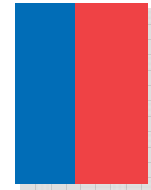
# Overview of Urban Growth in Chile 2002-2011



Name of Functional urban area	Class type	Population		Annual Growth Rate 2002-2012
		2002	2012	
Santiago	Large metropolitan areas	5.914.360	6.530.935	1,04%
Valparaíso	Metropolitan areas	855.199	975.378	1,41%
Concepción	Metropolitan areas	840.758	896.834	0,67%
<b>Population Metropolitan Areas</b>		<b>7.610.317</b>	<b>8.403.147</b>	 <b>1,04%</b>
Coquimbo-La Serena	Medium-size urban areas	335.211	423.702	2,64%
Temuco	Medium-size urban areas	359.105	400.306	1,15%
Antofagasta	Medium-size urban areas	289.477	346.126	1,96%
Rancagua	Medium-size urban areas	297.214	340.972	1,47%
Talca	Medium-size urban areas	218.491	238.664	0,92%
Puerto Montt	Medium-size urban areas	174.038	228.118	3,11%
Chillán	Medium-size urban areas	193.386	214.808	1,11%
Arica	Medium-size urban areas	184.914	210.920	1,41%
<b>Population Medium-size urban areas</b>		<b>2.051.836</b>	<b>2.403.616</b>	 <b>1,71%</b>
<b>Metropolitan and Medium-size urban areas</b>		<b>9.662.153</b>	<b>10.806.763</b>	<b>1,05%</b>

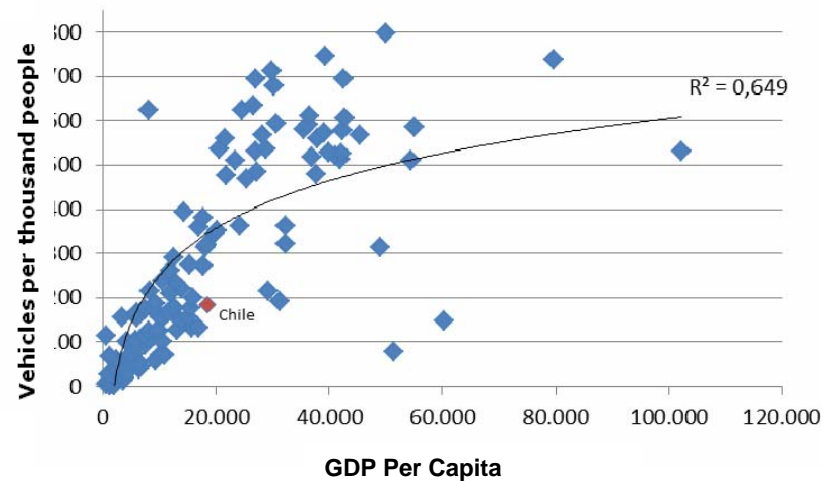
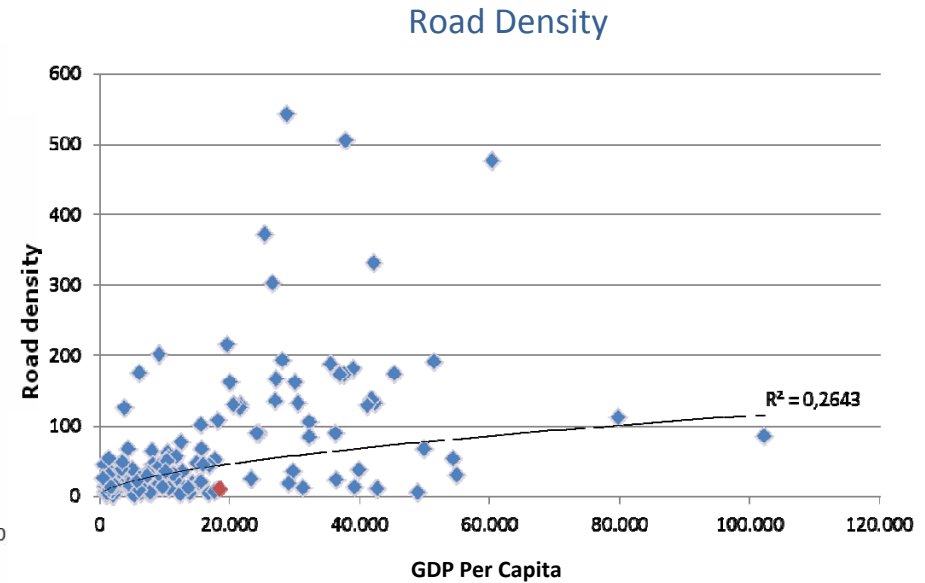
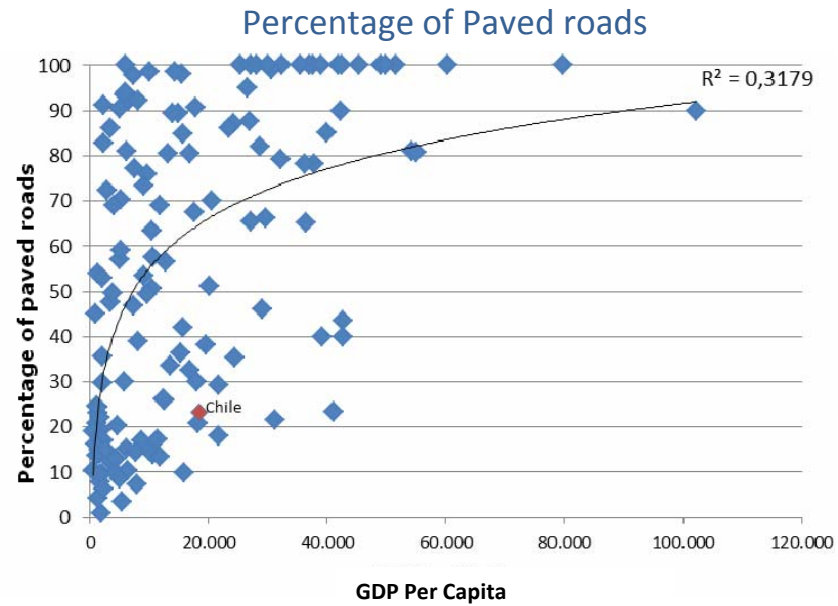


# Measuring Competitiveness: Quality of Infrastructure in Chile



Source: The Global Competitiveness Report 2011–2012 World Economic Forum (WEF) and GDP per capita at nominal values 2012 International Monetary Fund (IMF)

# International Infrastructure Indicators and GDP Per Capita



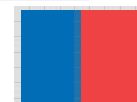
Source: World Bank Data Infrastructure Indicator 2010 GDP per capita at nominal values 2012 International Monetary Fund (IMF)



## Central/regional Planning Instruments



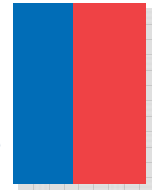
	Public Policy			
National Level	National Regional Development Policy (in progress)	National Rural Development Policy (in progress)	National Urban Development Policy (stage of approval by the President)	Other sectoral policies (e. g. transport)
Regional Level	-Regional Development Strategy - Regional Plan for Land-Use Planning		- Regional Plan for Urban Development - Inter-municipal Regulating Plan (normative)	- Regional Plans of Infrastructure and Water Resource Management - Special Plans
Local Level	Municipal Development Plans (Pladeco)		- Municipal Regulating Plan (normative) - Urban Boundary (normative)	



## Overview of Public Works Ministry



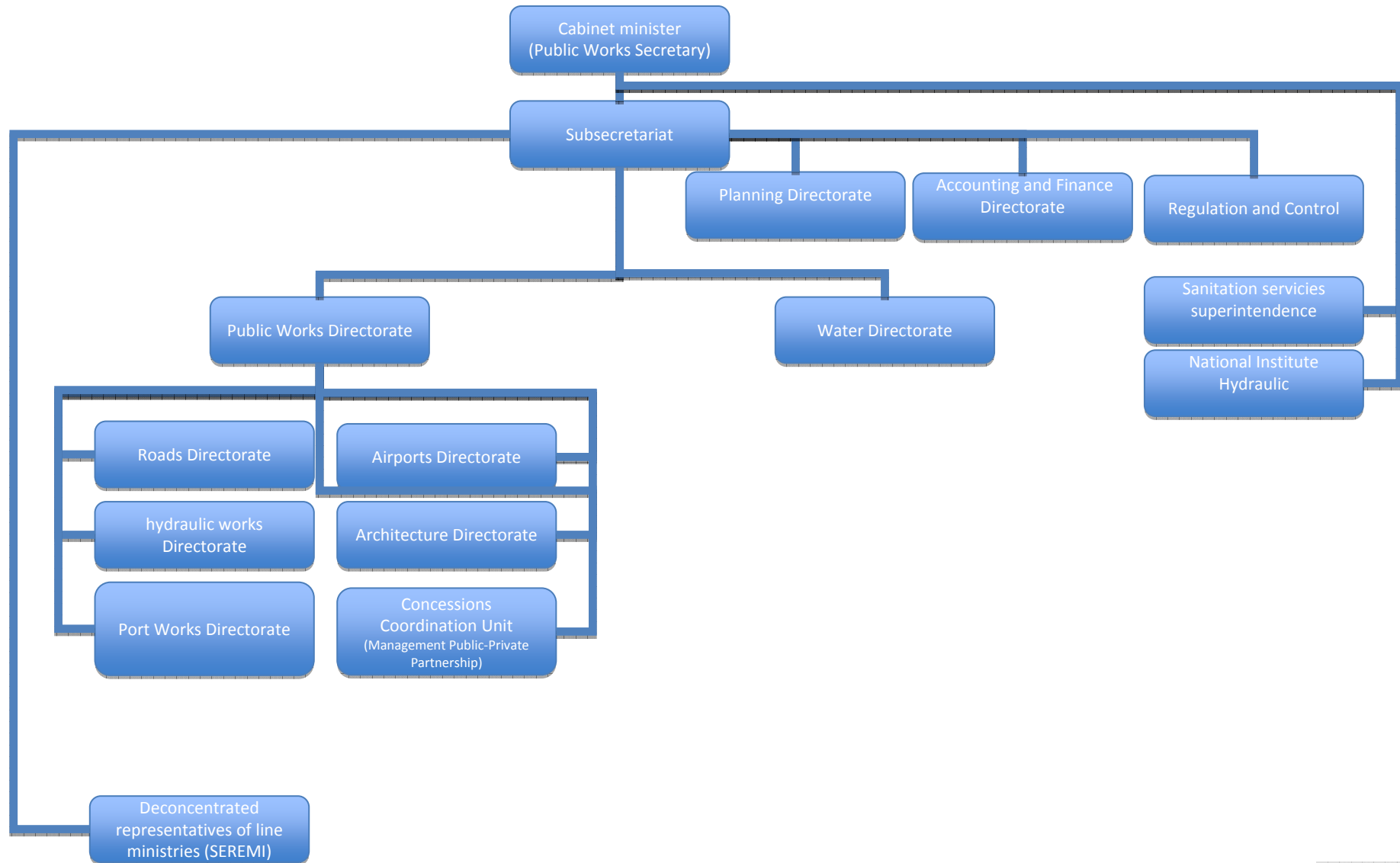
## Main Functions of Ministry of Public Works



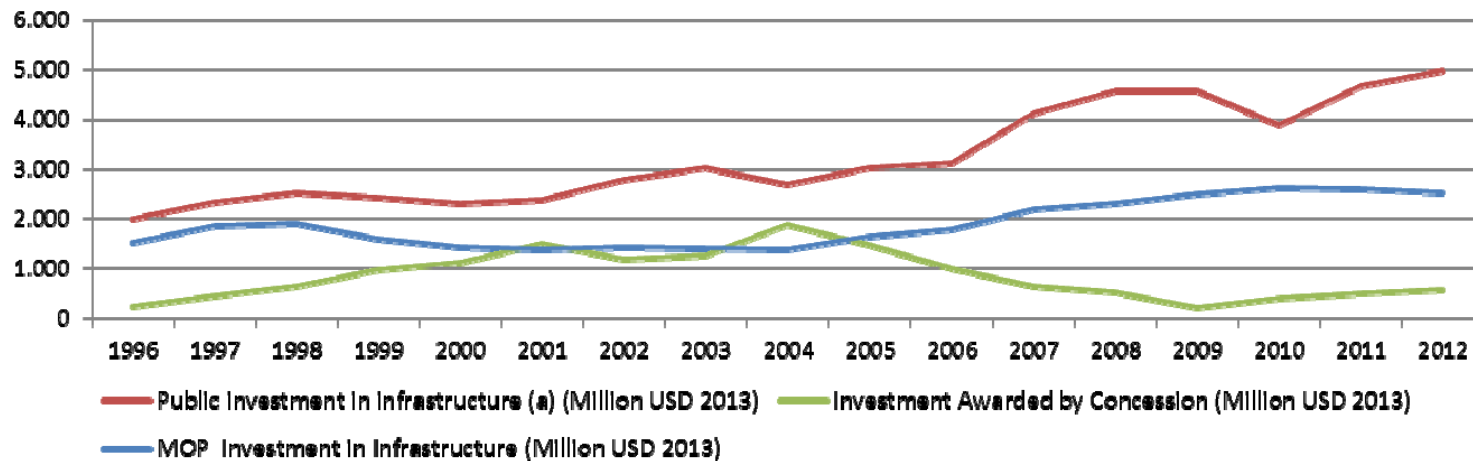
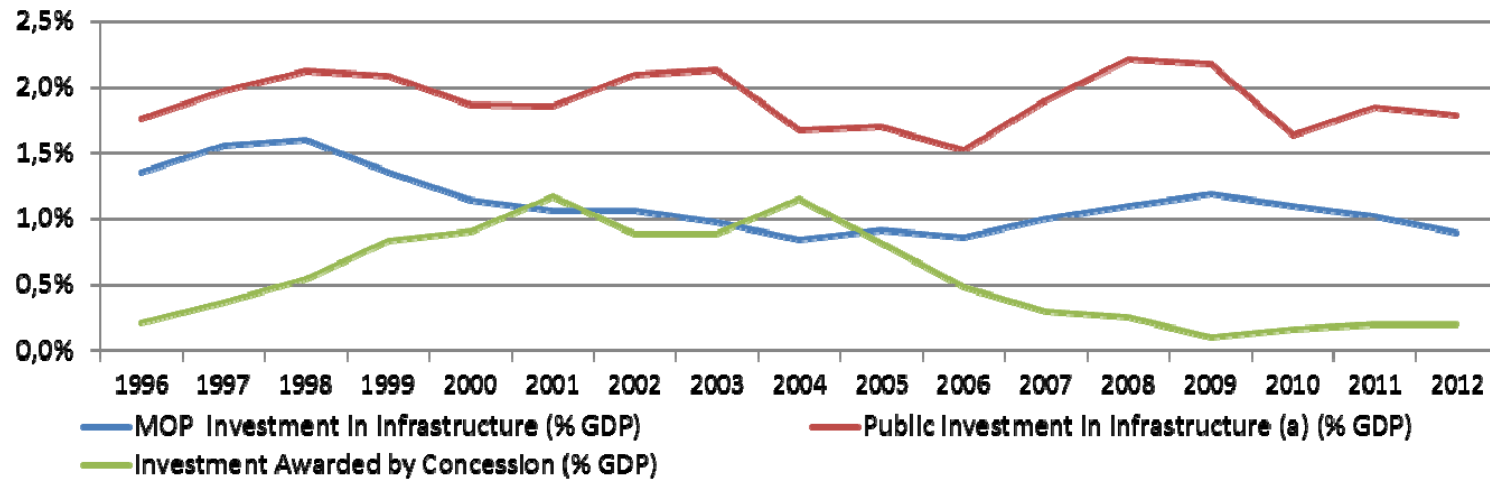
- ✓ Is in charge of planning, designing, building and maintaining of infrastructure services: **connectivity of ground transportation, sea and air; development of waterworks, rural drinking water and public buildings.**
- ✓ Management the private financing of infrastructure through **Concessions System.**
- ✓ Management and administration of **water resources** and the granting of property rights for water use



# Public Works Ministry Organization



# The Investment in the Ministry of Public Works (MOP)



a) Include MOP Investment Infrastructure, urban development (paved urban roads), public education, public health infrastructure, ministry of justice (courts), sport institute, regional development fund and urbanization.

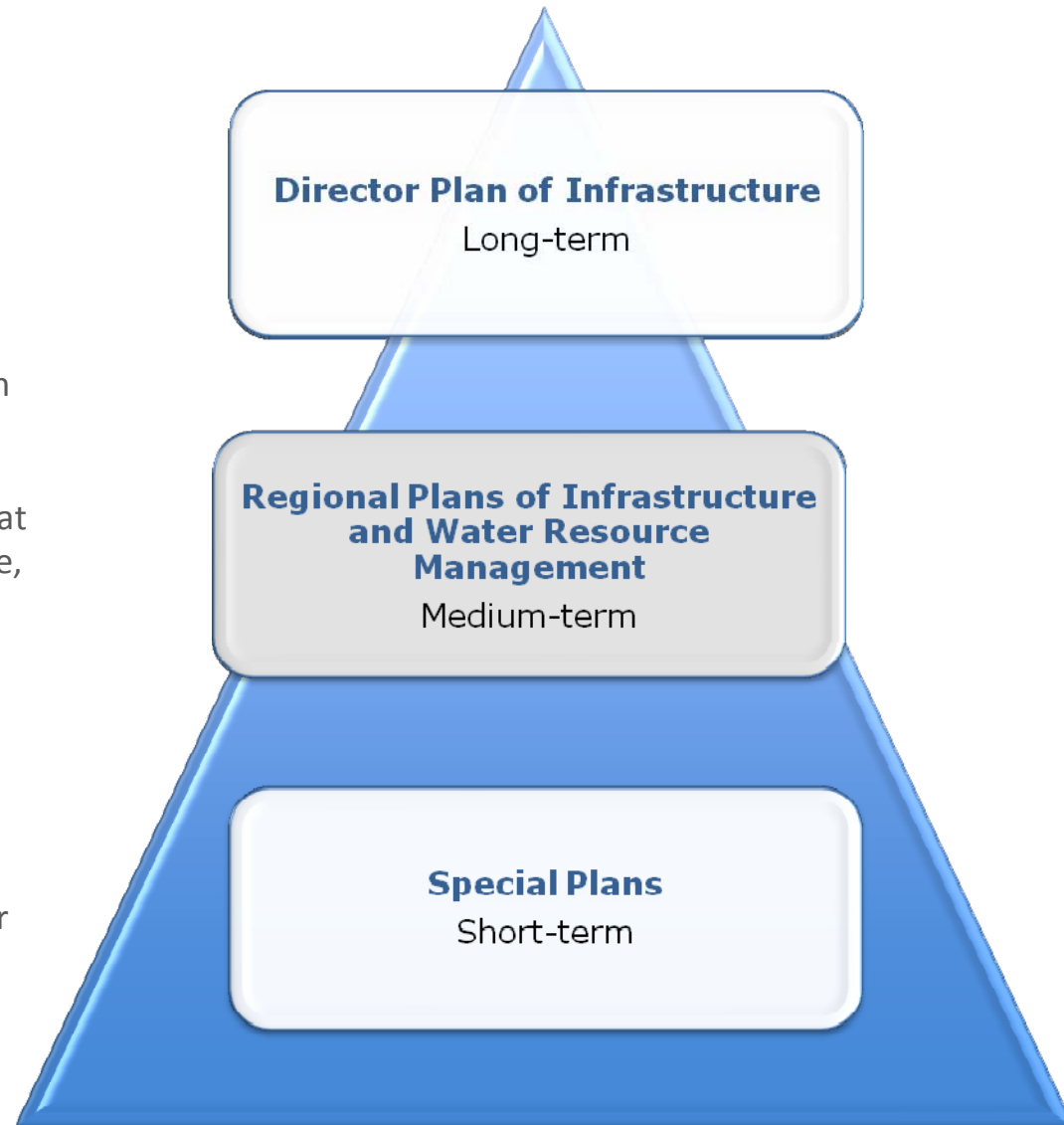
# Planning Instruments of Public Works Ministry



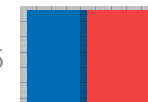
Strategic plan with a long-term perspective of at least 20 years. The territory being analyzed is national.

Medium-term planning instrument, with an estimated duration of 9 years. It is framed by a long-term vision of the country and contains defined actions that follow the Director Plan of Infrastructure, adjusted to the necessities of region in question.

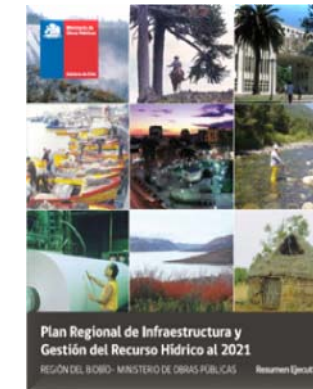
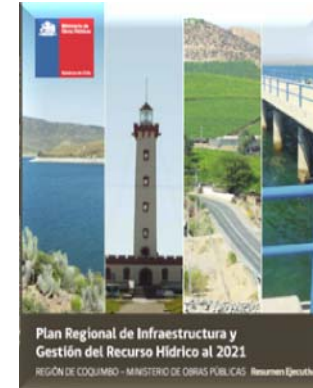
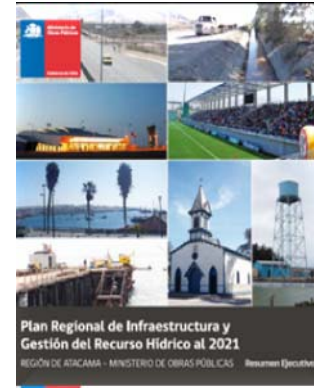
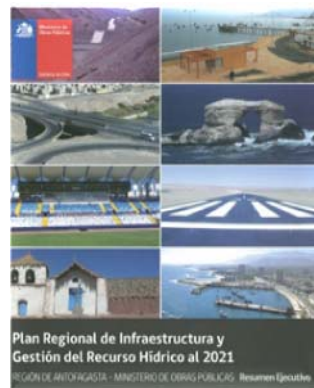
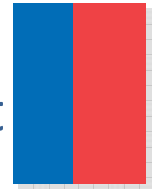
Plans designed to achieve a specific objective. They may be sectoral and/or territorial. Their objective is to provide needed services of infrastructure and/or management of water resources in a specific area



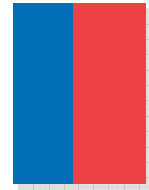
## Regional Plans of Infrastructure and Water Resource Management (PRIGRH)



# 15 Regional Plans of Infrastructure & Water Resource Management

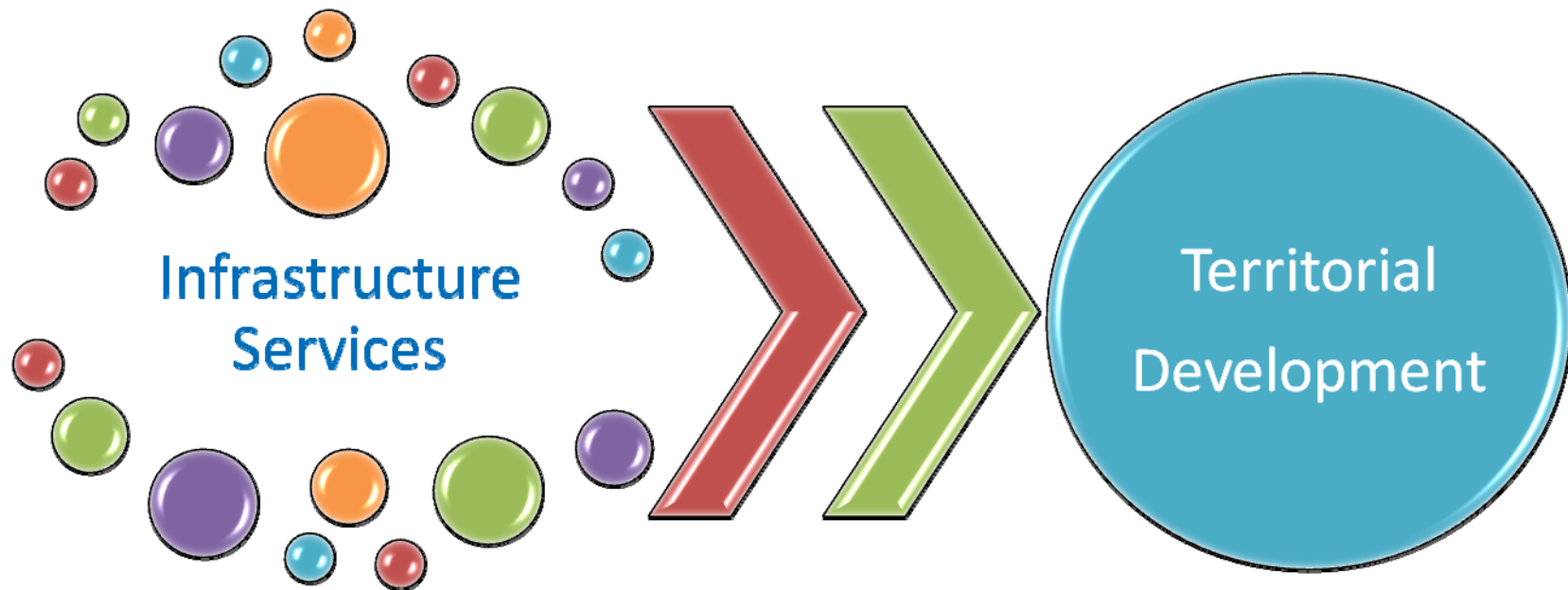




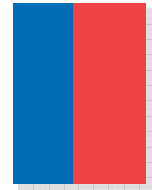


## Main features: Institutional coordination

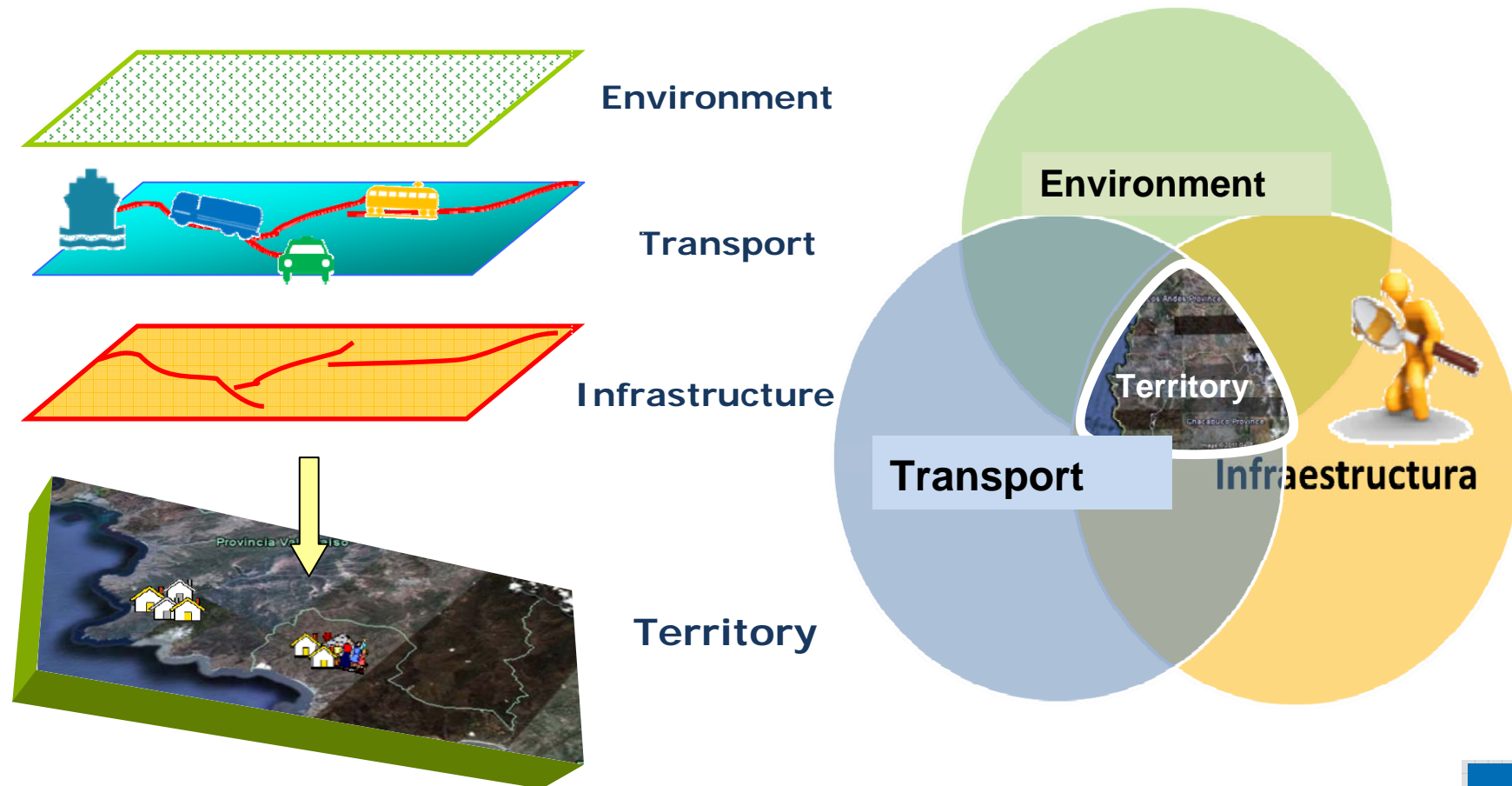
- ✓ The first achievement was to obtain institutional coordination, and that each MOP directorate was aligned with the territorial development



# Main features : Territorial and Systemic Approach



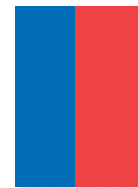
- ✓ The second achievement was to improve our planning process by the incorporation to the development of infrastructure of an approach territorial and systemic



## Main features: Objectives and Planning Process



- ✓ The investments for each regional plan goes from **2012** to **2021**.
- ✓ The cost of the 15 regional plans totaling **46 billion dollars** of which requires **37 billion dollars from the Ministry of Public Works** and nine billion dollars from other sources of financing
- ✓ These plans took in count the **potential and challenges** of each region .
- ✓ The planning process was **led and coordinated by regional level**, and it is approved at national one.
- ✓ They have considered the **Strategy of Regional Development** and are input for future Regional Plan for Land-Use Planning.
- ✓ It have participated **stakeholder public and private** of region (including the Intendente, the regional government, mayors and community).
- ✓ As part of, its commitment to sustainability and natural resources was implemented **Strategic Environmental Assessment (SEA)** in a pilot regional plan.



## Main features: Citizen participation in Regional Workshops

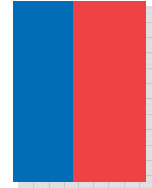
- ✓ In workshops participated over than **2.400 persons** who represented public and private institutions



## Our Challenges



# Current challenges in Integrated Regional Planning of Infrastructure



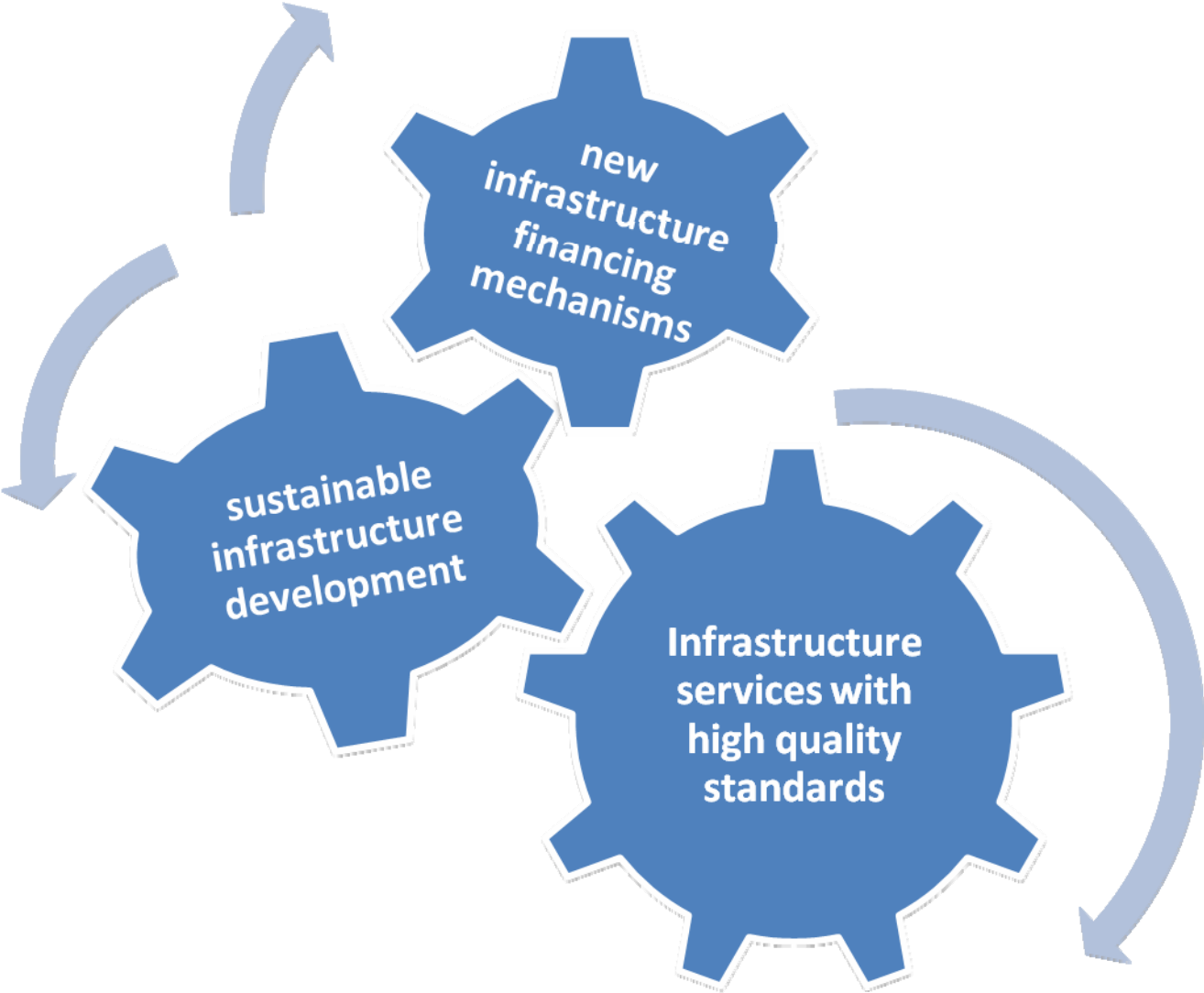
## Strategic Planning

- Build a **strategic vision** for territorial developments who incorporate infrastructure
- Ensure comprehensive **strategic plans for infrastructure and land use** matters at all levels of government.
- Boost the role of **regional governments** (GORE) in the **planning process**.
- Generate advanced **human capital** in integrated regional planning.
- Strengthen our capacity to **implement, management and monitoring** our PRIGRH
- Evaluate the economic, social, and environmental **impact in territory**.

## Financing

- Generate **new** infrastructure **financing mechanism**.
- Establish **mechanisms** who can facilitate **sub-national investment**.
- Link sub-national infrastructure planning to the **central-level budget**, to **facilities regional plans** of long-term.
- Give sub-national governments a **more important role** in shaping **their development process**.

# Challenges of Regional Plans of Infrastructure and Water Resource Management: **Sustainable Development**



# Thank you



**Ministerio de  
Obras Pùblicas**

Vivien Villagran  
National Director of Planning  
Ministry of Public Works

[www.dirplan.cl](http://www.dirplan.cl)



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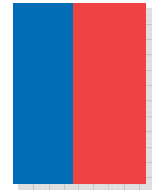
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# Annex



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Obras Pùblicas**

## Characteristics of Urban Growth in Chile 2011-2020

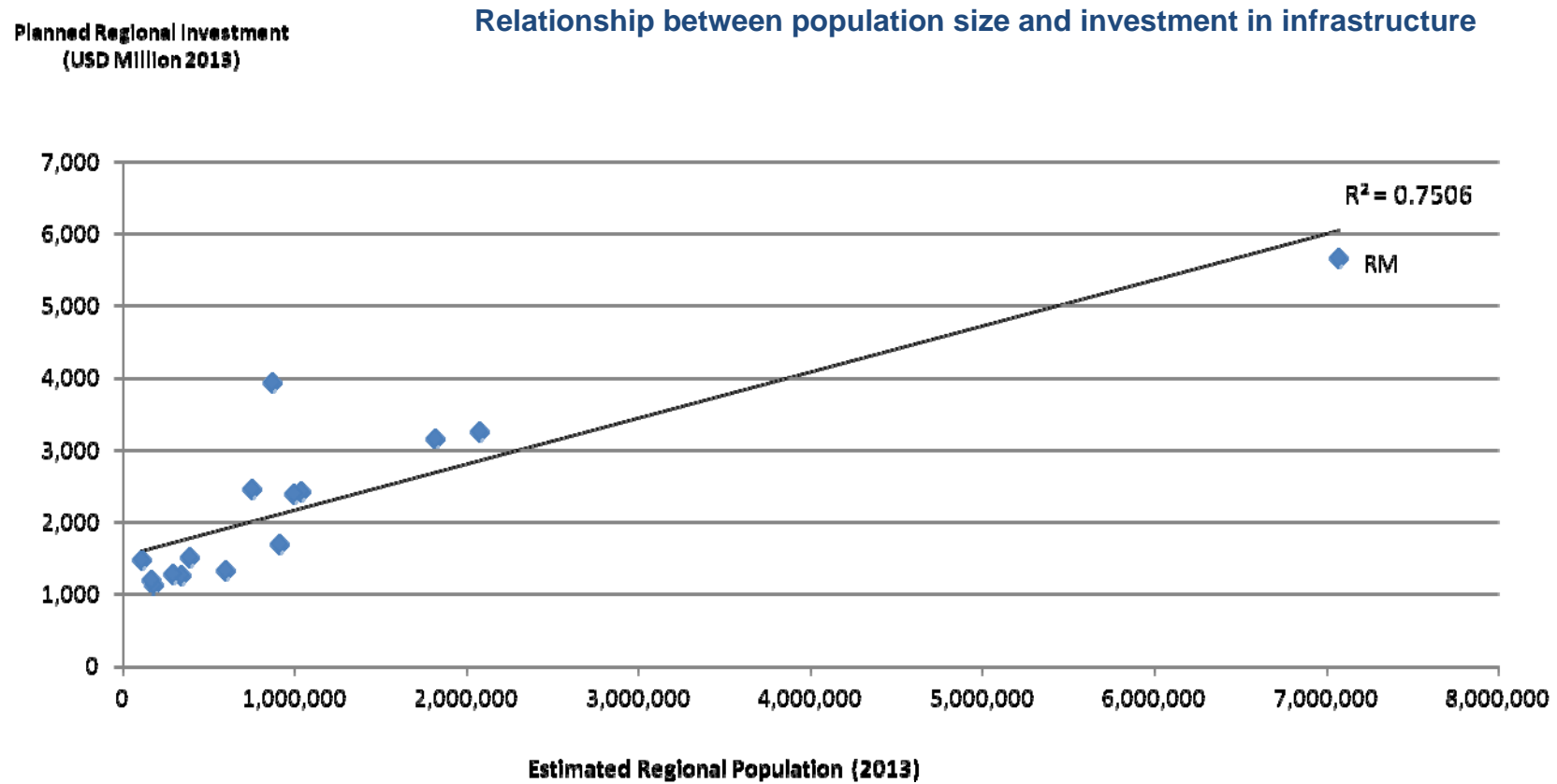


- ✓ Chile's **12 major** cities contain **62%** of the country's total population.
- ✓ The **three largest** metropolitan areas account the **46%** of Chile's population.
- ✓ **42%** of the country's population lives in the **central macro-zone**.
- ✓ The **urban population** should remain stable at **87%** of total population.
- ✓ Growth forecasts indicate that the **largest and smallest** urban areas will grow **more slowly** than the national average.
- ✓ **Medium-sized cities**, those with a population of 250.000 to 450.000 inhabitants, will see the **strongest growth**.





# Challenges : Reduce the Infrastructure Gap in Investment

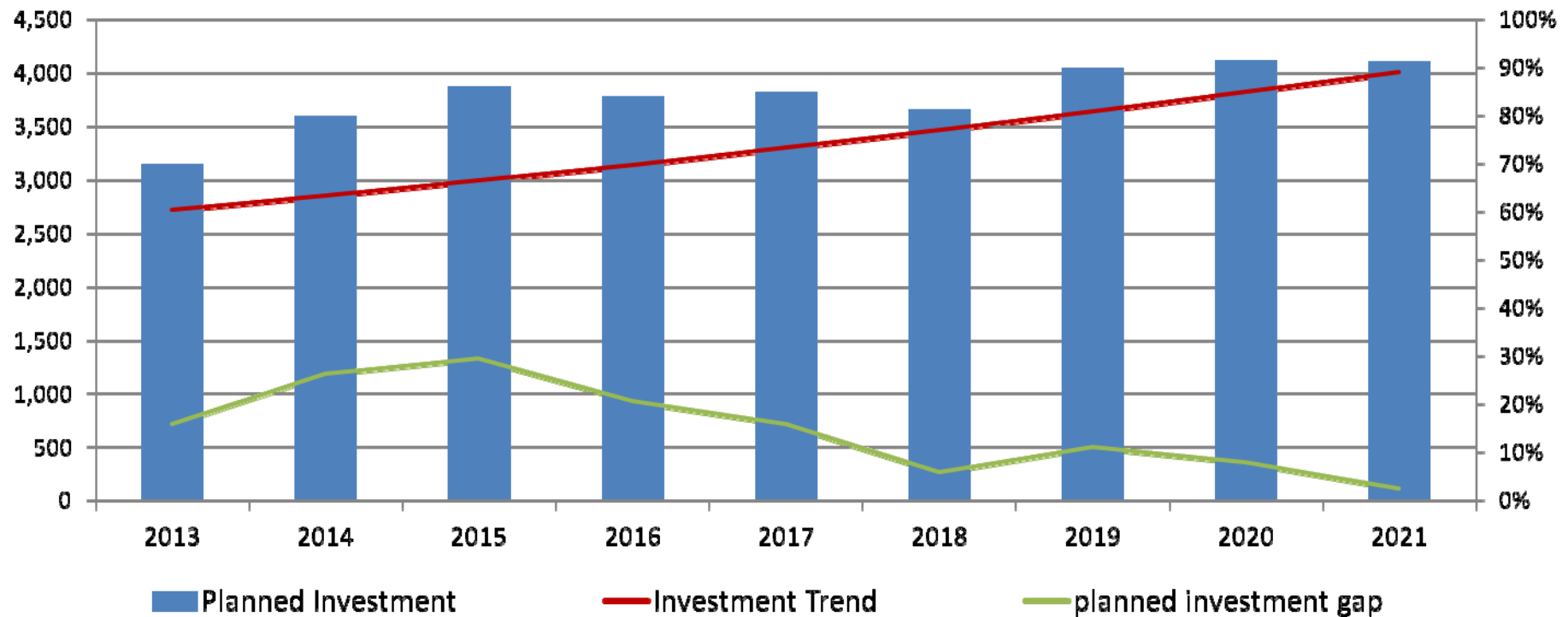


PRIGRH could reduce the infrastructure gap, but these will not be able to reverse some unsustainable trends, for instance, the concentration of population in metropolitan areas

# Challenges: Increase the Infrastructure Investment



Infrastructure investment plans and budget estimate historical



Expectations of citizenship in the developing of infrastructure projects are higher than real MOP budget. Then, we have to generate new resources to finance infrastructure or increase public-private partnership (PPP)

# Main features: Participation



- ✓ The third achievement was to obtain a citizen representation and a private sector participation :
  - Citizen participation
    - We did several regional workshop in the formulation stage of the plan
    - They established infrastructure requirements
    - They prioritized and rank the projects
  - Agreements with other institutions
    - We are working together in the Regional Plan for Land-Use Planning
    - We have established investment agreements with other institutions (Planning Contract)
  - Public-private Agreements
    - Participation of private sector in regional workshop
    - We are working to increase public-private partnerships

**EL AUSTRAL**  
EL DIARIO DE LA ARAUCANÍA

PORTADA FOTOS VIDEOS REGION TV CLUB ECONOMICOS GIGAS  
LECTORES

Últim está en: Portada Economía  
Viernes 14 de agosto de 2009

### Planifican infraestructura para próximos 10 años

Participaron autoridades comunales y regionales.

Como la región ya no puede desarrollarse sin una visión a largo plazo, se está realizando una serie de talleres para evaluar cómo será la infraestructura en 2020.

Ayer en el Hotel Nicolás autoridades regionales y comunales participaron en el segundo taller en relación a este tema. El asesor de Obras Públicas Alfredo Valdepeñas indicó que la idea es generar una agenda público-privada que permita dar soporte a una estrategia regional y un plan de provisión de servicios de infraestructura con un sentido estratégico de desarrollo país.

Guillermo Vázquez, alcalde de Lonquimay, destacó que se está trabajando con una mirada a largo plazo: "Resulta positivo ya que nos permite estar en sintonía con el proyecto de desarrollo que queremos para nuestra comuna".

Los resultados de este segundo taller, servirán de base del "Libro Blanco de Infraestructura 2020" el que será editado por el Ministerio de Obras Públicas el cual incluirá los desafíos que enfrentará el país en el decenio 2010-2020.

La Dirección de Obras Portuarias, del Ministerio de Obras Públicas y Empresa Portuaria Valparaíso tienen el agrado de invitar al

## SEMINARIO-TALLER:

### Integración Estratégica de Puertos y Ciudades Chile al 2020

Una mirada al desarrollo de infraestructura portuaria y costera para la próxima década.

Lugar : Museo Naval y Marítimo de Valparaíso, Pasaje 21 de Mayo N°45, Cerro Artillería, Playa Ancha, Valparaíso

Fecha : 12 y 13 de noviembre 2009

Inscripciones : [www.epv.cl/seminario](http://www.epv.cl/seminario)

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AUSPICIAR: SERNATUR, SERNATUR, SERNATUR, SERNATUR, SERNATUR

PRODUCEN: SERNATUR, SERNATUR, SERNATUR, SERNATUR, SERNATUR