



PIARC Online Seminar

COVID-19 and roads

30 September 2020



Welcome!

Please turn off your microphones and cameras





Introduction to the Seminar

Miguel Caso Flórez

Technical Director of PIARC

#PIARCCOVID19

30 September 2020

Participation in the seminar.



Your camera and microphone must remain off.



You can ask questions using the chat. At the end of all presentations, Verónica Arias will check the chat and share the questions with the speakers.



Only a limited number of questions can be answered.



Close the chat to see the full presentations.

Participation in the seminar.

This Seminar is being recorded and will be available on PIARC's website and the PIARC YouTube channel.



Further seminars will be held during the upcoming weeks. The next English seminar will be held on October 14th.

Limits of the seminar

Disclaimer:

Since speed is of the essence, it should be noted that the knowledge and practices shared here may not have been officially approved by the official authorities in each country.

The ideas and examples shared here are for illustrative purposes only. They do not necessarily represent official policy. The ideas presented will be evaluated in more detail and used, in due course, as recommendations on policy and practice. While this material has been carefully prepared, no liability will be assumed for any damage it may cause.

Objectives of this seminar.

Providing answers in the short term: the world is enduring a crisis and every day counts.

This knowledge and practice are in the process of being confirmed,

A good idea can save lives, increase the capacity of the economy and/or reduce the disruption of services.



To urgently share knowledge and practices among PIARC member countries to provide support as soon as possible.

What works in one country may not work in another, but it may serve as inspiration.

Note: PIARC is also working on the medium and long term, but that is not the subject of this seminar. Many changes will come to stay.

- Explore the reality of the road sector in the **aftermath of the pandemic**

- **Investment in roads**



Seminar programme

- 1- **Welcome and introduction to the Seminar**, Miguel Caso Florez, PIARC Technical Director
- 2- **Institutional presentation of PIARC**, Marina Domingo Monsonís, PIARC Communication Manager (5 minutes)
- 3- **COVID-19 and roads in Latin America** Bianca Bianchi Alves, World Bank Transport Specialist for Latin America (15 minutes)
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- 9- **Closing of the Seminar**, cameras and microphones open to participants.

Duration: 2 hours





Institutional presentation of PIARC

Marina Domingo Monsonís
PIARC Communications Manager

#PIARCCOVID19

30th September 2020

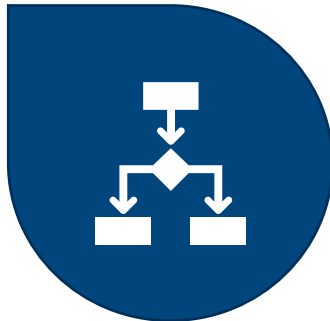
What is PIARC?

- **PIARC** is the new name of the **World Road Association**
- It was **founded in 1909** as a non-profit, non-political association
- It has 124 member countries as well as regional, group and individual members.
- It is the first global forum for the exchange of knowledge, policies and best practices on roads and road transport.



PIARC's four key missions

- To be a **leading international forum for the analysis and discussion of** the whole spectrum of road and transport related issues.
- To identify, develop and disseminate **good practices** and **facilitate better access to international information.**



- To take due and full account in its activities of the needs of **countries with developing economies and economies in transition.**
- To design, produce and promote **efficient decision-making tools** in roads and transport-related matters.

The Association mobilises the experience and knowledge of 1,200 experts from more than 80 countries in 22 Technical Committees and Task Forces.

PIARC COVID-19 website

<https://www.piarc.org/en/News-Agenda-PIARC/Coronavirus-PIARC-and-Covid-19>



- Recordings of the "COVID-19 and roads" Online Seminars 25 seminars, 5 in Spanish (6th with today's).
- Presentations of these seminars.
- 2 summary reports on the "COVID-19 and roads" situation.
- PIARC Technical Reports related to the management of the pandemic.



Communicate about this seminar

#PIARCCOVID19



Subscribe to PIARC's newsletter
<https://www.piarc.org/es/usuario.htm>



@PIARC_Roads



PIARC - World Road Association



World Road Association PIARC

Thank you for your attention!



Marina Domingo Monsonís

Communications Manager

PIARC

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Grande Arche – Paroi Sud – 5^e étage
92055 – La Défense Cedex – France



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Duration: 2 hours





COVID-19 and *country* roads:

World Bank for Latin America

Bianca Bianchi Alves

Senior Transport Specialist, World Bank

#PIARCCOVID19

30 September 2020

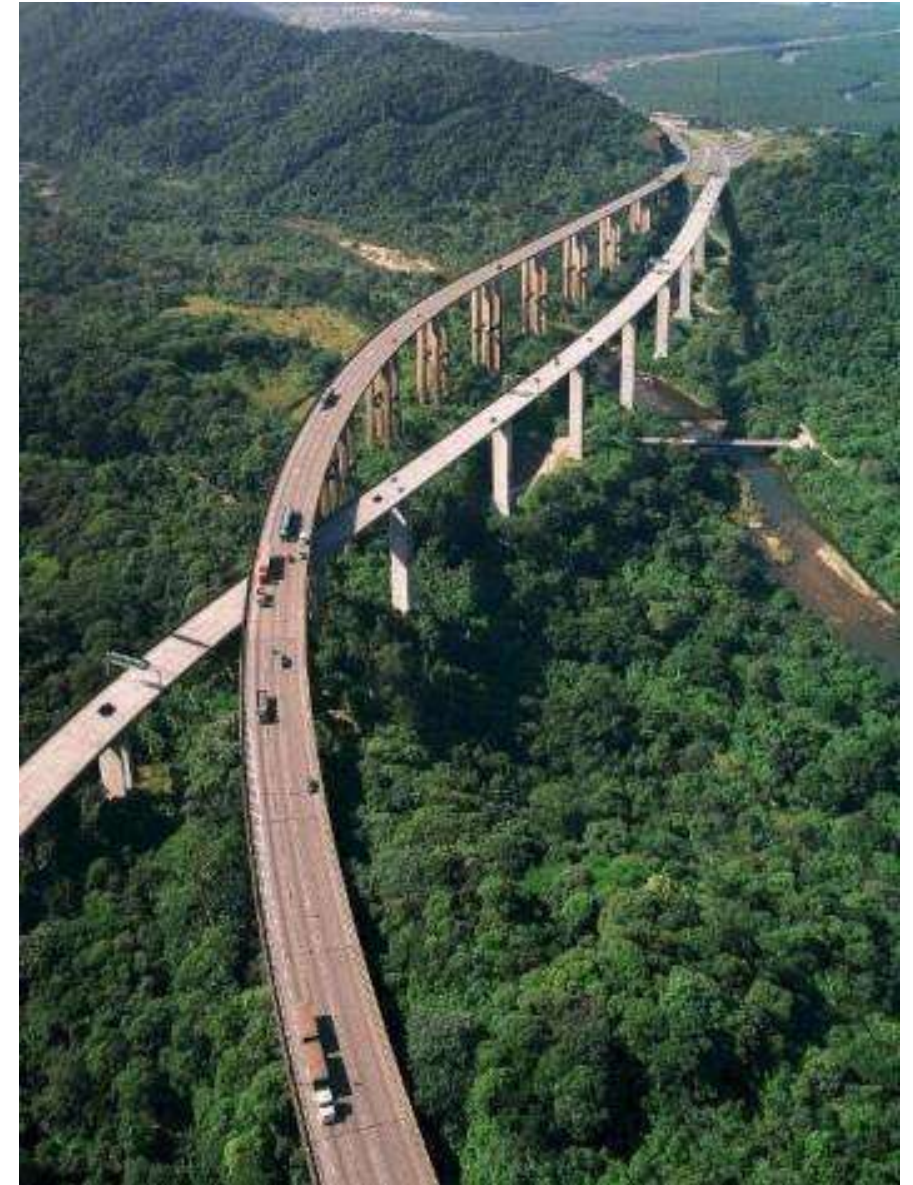
Bianca BIANCHI ALVES

- World Bank Senior Urban Transport Specialist
- Civil Engineer, PhD in Transport Engineering by the Polytechnic School of the University of São Paulo
- Studies: travel behaviour, reliability and shaping demand for transport
- 20 years of experience working on the planning and implementation of large-scale transportation projects, metro-rail and road systems and Bus Rapid Transit systems in Latin America and the United States



Index of the presentation

- COVID19 impact in Latin America
- Infrastructure Gap
- Economic revival
- Projects we finance



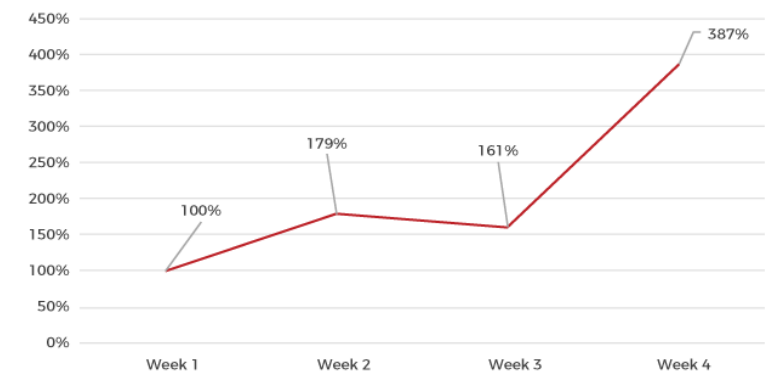
Covid-19 impacts in Latin America

- Economic activity decreases by 7.2% in 2020
- Most affected region in terms of exports
- Millions re-entering poverty (women)
- Between 15 and 48 months for recovery
- More agricultural countries, less pronounced effects
- Evolution of e-commerce
- Regionalisation effects



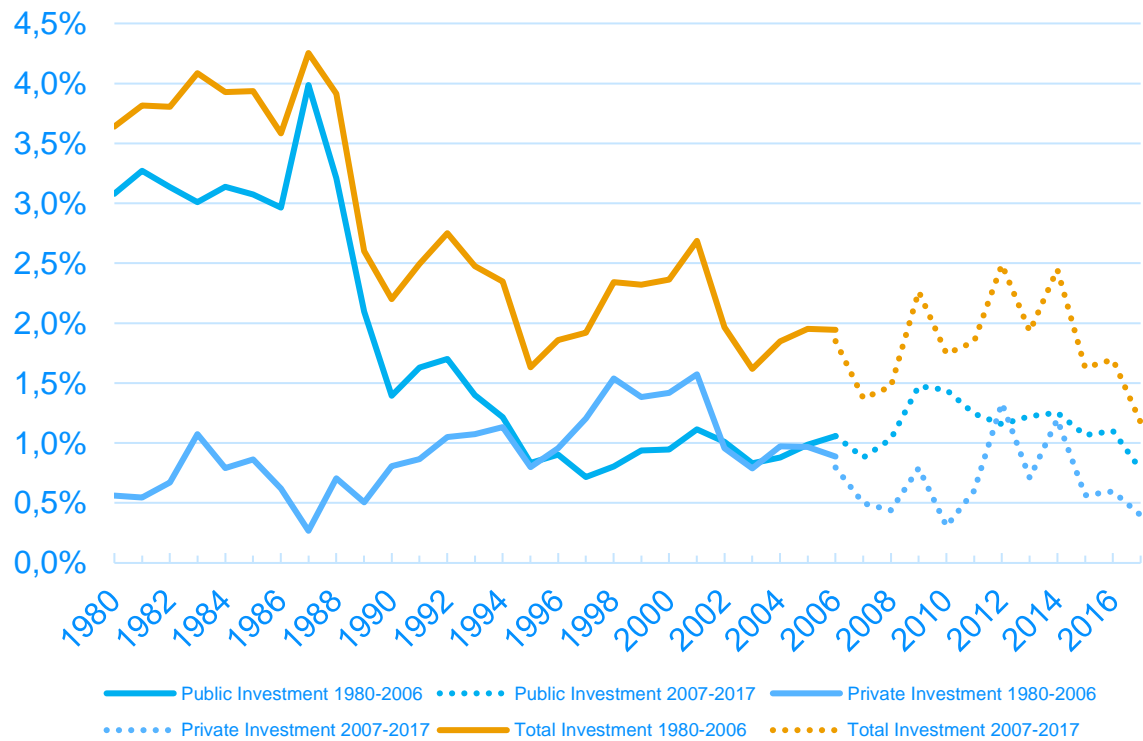
Copyright: Rodolfo Roca

E-commerce Growth in Latin America
March 15-April 15

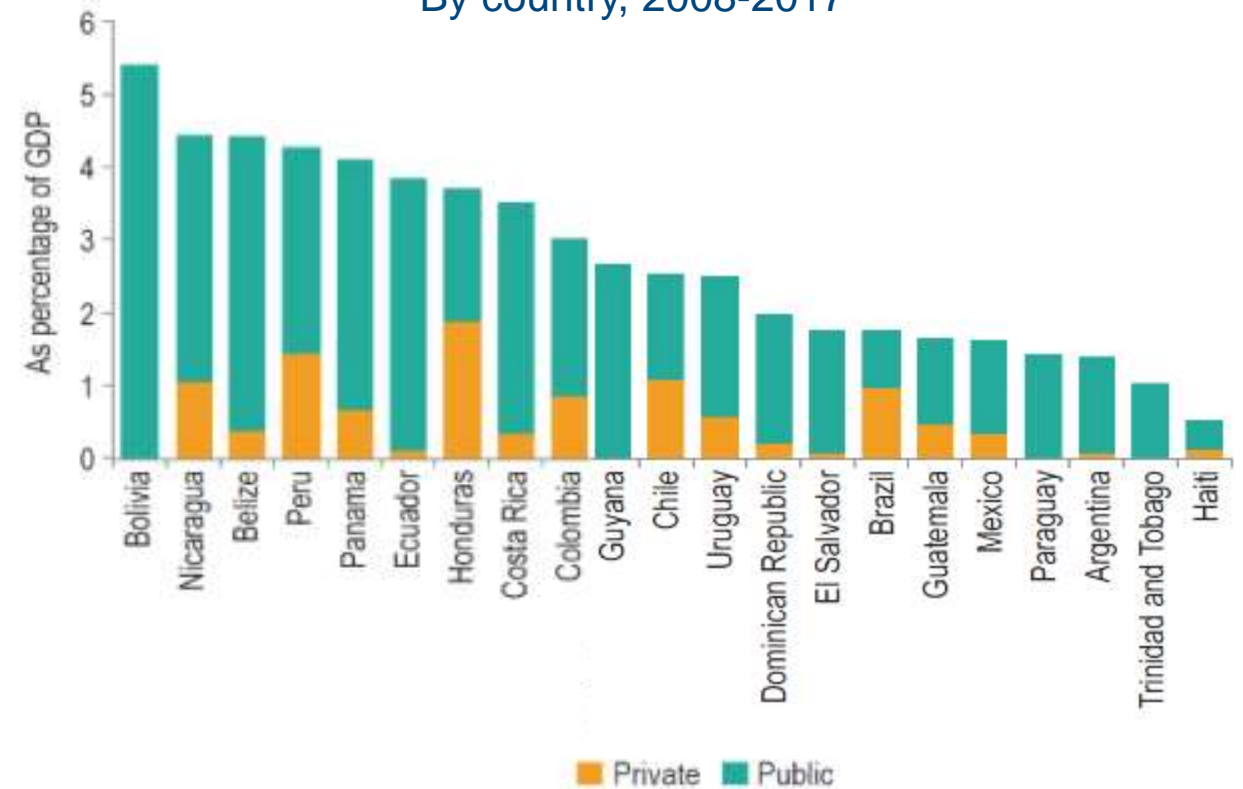


Infrastructure Gap

Infrastructure Investment (as % of GDP)
ARG, BRA, CHL, COL, MEX, & PER, GDP-weighted



Average investment in infrastructure
By country, 2008-2017

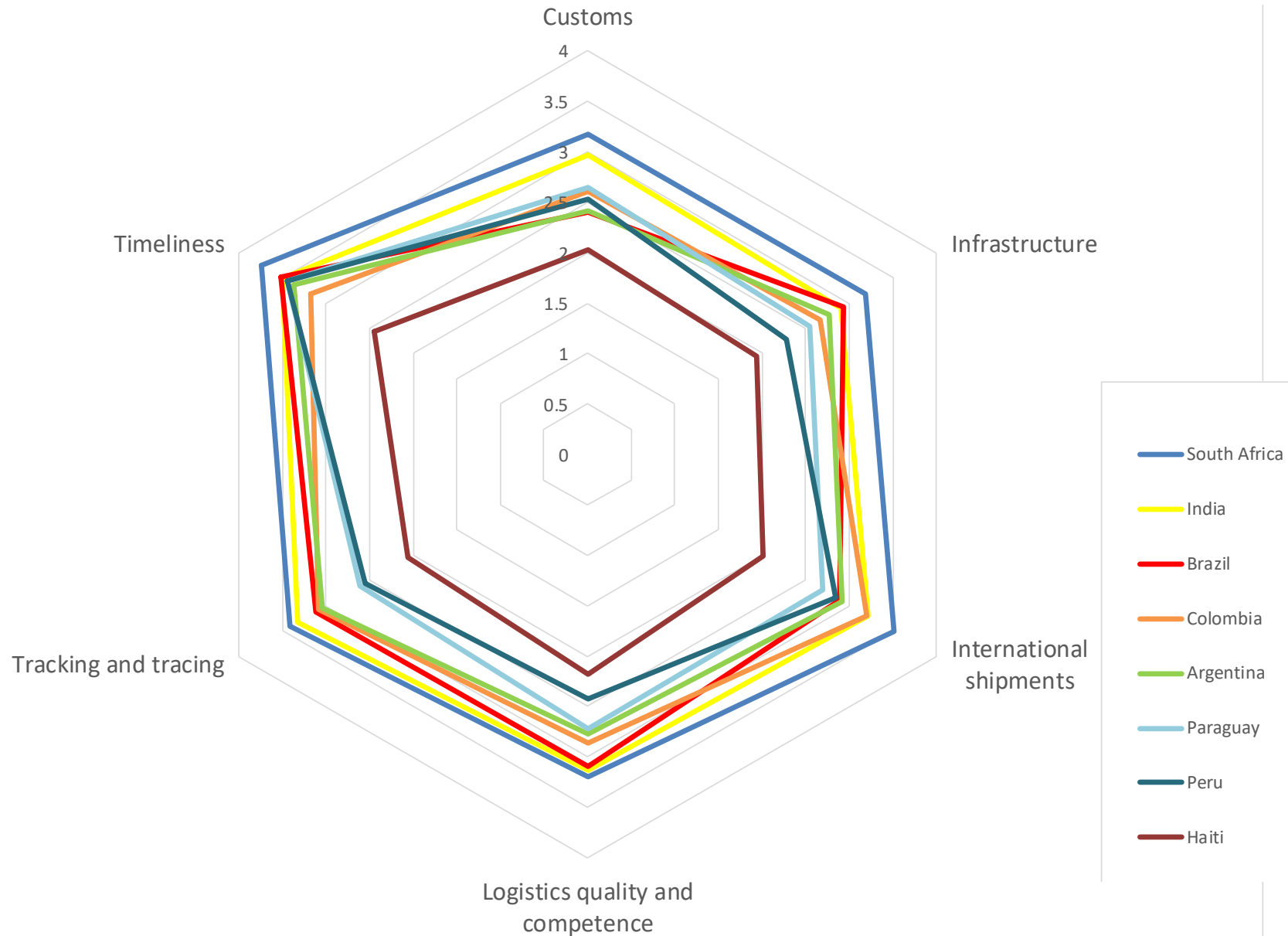


Source: Own elaboration based on data from Calderon and Servén (2010) for 1980-2006, INFRALATAM for public sector data 2007-2017, and PPI Database for private sector for 2007-2017 (with the exception of Chile, which is not reported in the PPI database). Includes telecommunications, water, energy, and transport (roads and railways only from 1980-2006).

Source: Data from INFRALATAM for Public Investment. Data from PPI for private Investment. Note: Public investment data for all countries range from 2008-17, with the exceptions for Dominican Republic, 2009-17, Ecuador, 2008-16, El Salvador, 2008-15, and Haiti, 2012-16.

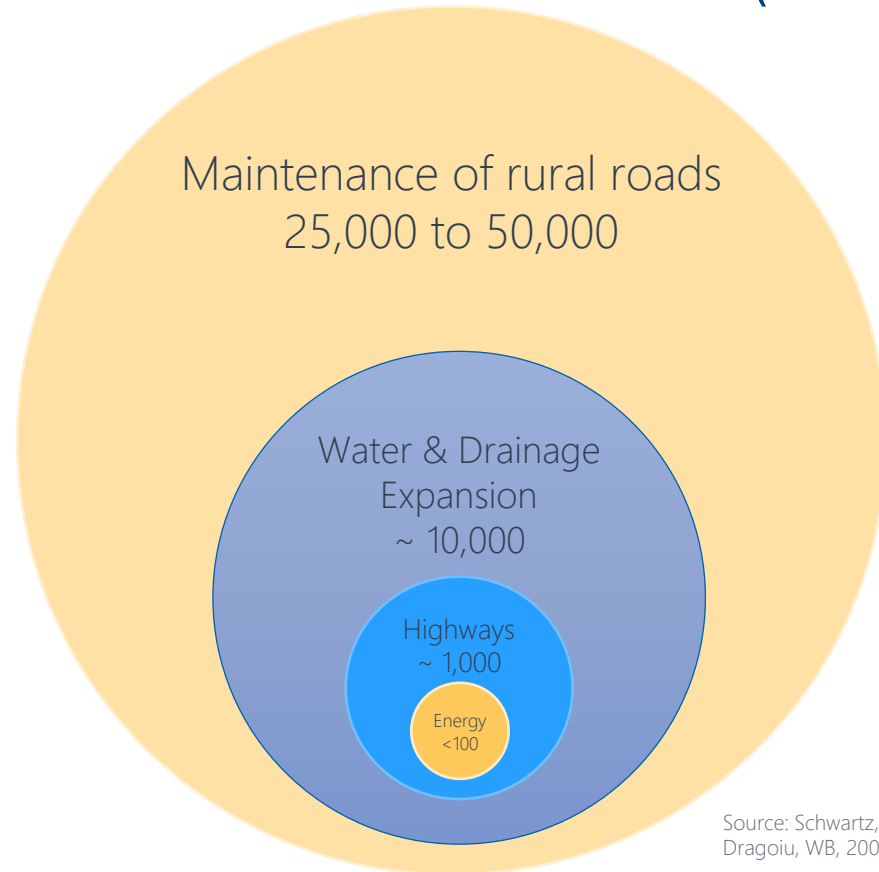
Infrastructure Gap

- Logistics performance index worse than its "peers"
- Affecting all elements: infrastructure, customs, tracking



Economic revival for the future

- Jobs for US\$100 million investment (short term)

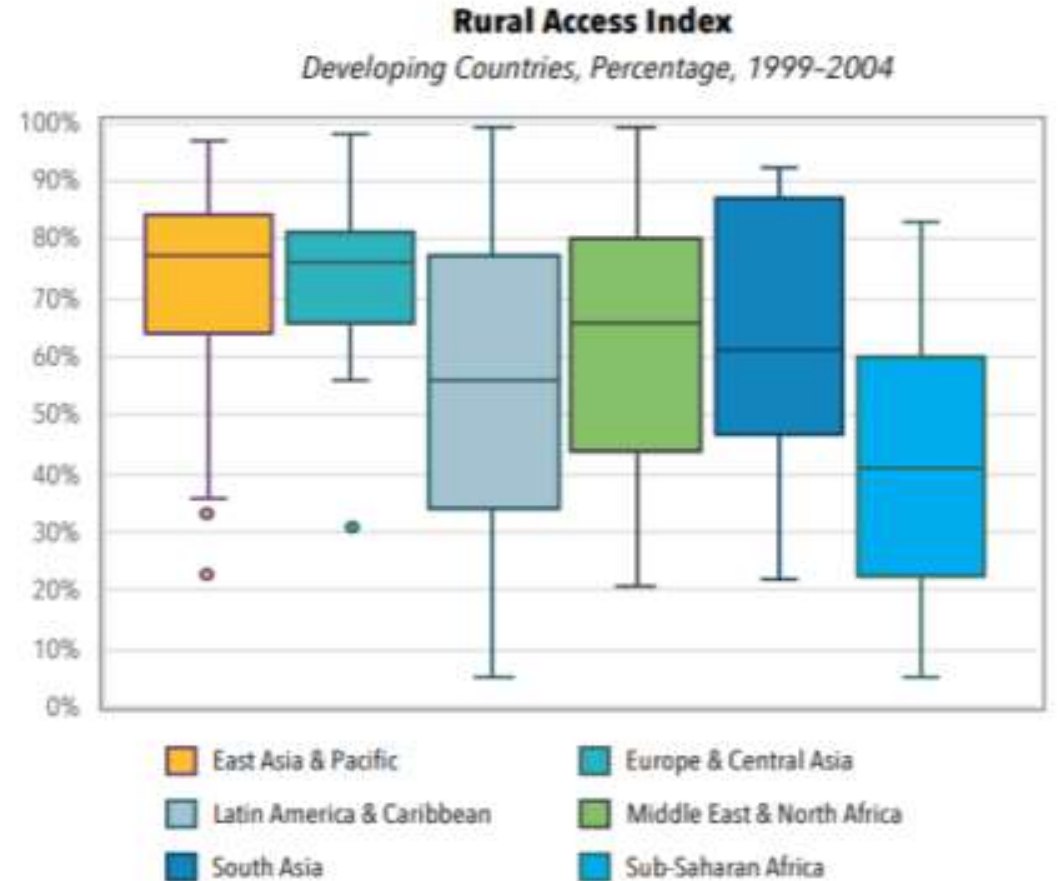


Source: Schwartz, Andres, Dragoiu, WB, 2009



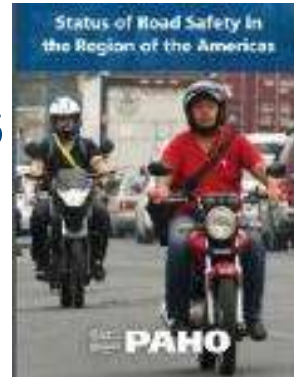
Projects we finance: Accessibility

- Wider gaps in rural access between countries
- Rural Access Index (Haiti and Nicaragua) below Sub-Saharan Africa
- Less than 50% of Peru and Bolivia's rural population is living all year long within 2 km of a road.

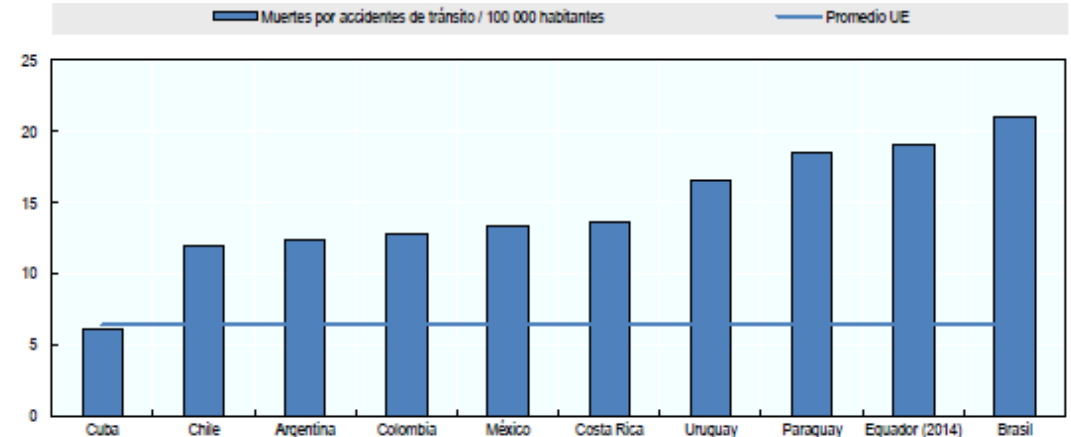


Projects we finance: Road Safety

- LAC still has very high mortality rates
- Second cause of death for young men
- Motorbikes exceed pedestrians
- We are working on awareness, regulation, design



Mortality Rate (2013)



<https://www.itf-oecd.org/benchmarking-seguridad-vial-am%25C3%25A9rica-latina>

Country	Deaths per 100,000 inhabitants (2015)	% of Pedestrians and Cyclists	Cost of Traffic Injuries (%) of GDP
Argentina	13.6	28%	2.9%
Brazil	23.4	24%	3.3%
Colombia	16.8	31%	3.1%
Mexico	12.3	50%	3.5%
Paraguay	20.7	31%	3.9%

Projects we finance: Socially and environmentally sustainable

- Climate change pushes millions of people into extreme poverty every year, we want "green" projects
- Social inclusion, with a territorial development approach
- Seeking chain productivity and support sustainable economic activities
- Digitisation and innovation
- Resilient: planning and design supported by up-to-date climate data, with redundancies



References

[WB 2020 Global Economic Prospects](#)

[UN 2020, The effects of the coronavirus disease \(COVID-19\) pandemic on international trade and logistics Special Report No 6](#)

[The WB Logistics Performance Index](#)

[McKinsey & Company Global freight flows after COVID-19: What's next?](#)

[Schwartz, Andres, Dragoiu, WB, 2009, Crisis in Latin America, Infrastructure Investment, Employment and the Expectations of Stimulus](#)

[BUILDING SAFE ROADS IN LATIN AMERICA AND THE CARIBBEAN, 2006](#)

[Pan American Health Organization \(2019\) Status of Road Safety in the Region of the Americas](#)



Thank you for your attention!
Please post your questions in the chat



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COVID-19 and roads in *Spain*: *Investment in roads, ends and means*

Javier Herrero Lizano

General Director of Roads of MITMA and PIARC First Delegate
of Spain

#PIARCCOVID19

30 September 2020

Javier Herrero Lizano



- General Director of Roads at the Ministry of Transport, Mobility and Urban Agenda
- Honorary President of the PIARC Spanish National Committee, the Spanish Technical Road Association (ATC)
- Member of the Council of Road Directors of Iberia and Latin America (DIRCAIBEA)
- Member of the Conference of European Directors of Roads (CEDR)



Presentation Index

- Initial situation
- Budgetary Investment
- Investment through Public-Private Partnerships
- Extraordinary investment: Investment and Reform Plan
- Conclusions



Initial situation

Health Crisis

- Over **740,000 cases**
 - Over **31,000 deaths**
- } confirmed in Spain since the origin of the pandemic

Economic Crisis

- **Deceleration or partial halting of economic activity**
- **GDP decreases by 17.8%** during the second quarter of the year compared with 2019
- **15.8% unemployment rate** (1.5 points higher than the same period in 2019) and **Temporary Employment Regulation Schemes (ERTEs)**

Initial situation



National Road Network

Total length: 26,405 km

- **Motorways and highways: 11,535 km**
- **Multi-lane roads: 485 km**
- **Conventional roads: 14,385 km**

Budgetary Investment

- **Investment on Roads in 2019: €1,717 million**
 - **New Construction: €767.3 M**
 - **Conservation: €949.7 M**
- **Construction** works have continued throughout 2020, except for a time period shorter than two weeks
 - 68 works, worth of €3,301.5 M
 - 4 new motorway sections in service - 38.6 km, €304.9 M
- **Conservation** actions have been maintained at all times in order to facilitate safe mobility
 - 160 Integral Conservation Contracts,
 - 10 First Generation motorway concession contracts
 - 85 rehabilitation actions, €273.5 M
- Actions have been put out to **tender**
 - 7 actions for the amount of €174.6 million.



Investment through Public-Private Partnerships

Road Investment Plan (PIC)

- ~ **5 billion euros** Investment
 - Completing the Trans-European Network
 - Increasing capacity and functionality in peri-urban environments
 - Upgrading older, first-generation motorways
- **25-year** concession period
- Payment by **Availability** but modified by **Indicators**
Indicators of demand, road conditions and quality of service
- **Balanced risk** taking



Extraordinary investment

European Recovery Fund

"Next Generation EU"

- **Three Pillars:**
 - Supporting Member States to recover
 - Kick-starting the economy and helping private investment
 - Learning the lessons from the crisis
- **750,000 million** allocated mainly to:
 - **Recovery and Resilience Facility: €560,000 million**
 - **React-EU Programme: €55,000 million**
 - **Support Ecological Transition: €55,000 million**
- **Multi-annual Framework: 2021-2027**



Extraordinary investment

Recovery and Resilience Facility

- It is the main instrument of the Recovery Fund and is based on the **European Green Deal** and **Competitive Sustainability**
 - Digital Transition
 - Ecological Transition
 - Students and workers training
- **Funding: €560,000 million**
 - €310,000 million in grants
 - €250,000 million in loans
- Formulated from **Recovery and Resilience Plans** of Member States



Extraordinary investment

Investment and Reform Plan for Economic Recovery in Spain

Plan to promote the modernisation, digitisation, security and sustainability of transport infrastructures.

- **Objectives:**

- Ensuring safety
- Modernising and digitising infrastructure
- Increasing sustainability and energy efficiency

- **Promoting the modernisation, digitisation, safety and sustainability of the National Road Network (RCE)**

- Estimated investment of over **€1.7 billion euros**

Extraordinary investment

Promoting the modernisation, digitisation, safety and sustainability of the National Road Network (RCE)

- Improvement of **road safety** and **modernisation of the RCE**
- **Sustainability** and **energy efficiency in the RCE**
- **Digitisation of the RCE**
- Promotion of **electric vehicles** through recharging points and **alternative fuels** in RCE service areas
- Improving **security** for **vulnerable users** in the RCE
- Implementation of **Intelligent Transport Systems** on **BUS-HOV lanes**

Extraordinary investment

Promoting the modernisation, digitisation, safety and sustainability of the National Road Network (RCE)

- Improvement of **road safety** and **modernisation of the RCE**
 - Adaptation of tunnels to European regulations.
 - Emergency plan on pavements to reduce greenhouse gas emissions, promote the use of recycled materials and circular economy.
 - Protection of fauna from their incursion into the road.

Estimated investment of over €950 million

Extraordinary investment

Promoting the modernisation, digitisation, safety and sustainability of the National Road Network (RCE)

- **Sustainability and energy efficiency in the RCE**
 - Development of noise action plans.
 - Reduction of energy consumption in tunnels and outdoors.
 - Actions against network congestions to improve circulation and reduce CO₂ levels.

Estimated investment of over €625 million

Extraordinary investment

Promoting the modernisation, digitisation, safety and sustainability of the National Road Network (RCE)

- **Digitisation of the RCE**

- RCE inventory.
- Monitoring of road elements.
- Phased implementation of the BIM methodology in DGC.

Estimated investment of over €30 million euros

Extraordinary investment

Promoting the modernisation, digitisation, safety and sustainability of the National Road Network (RCE)

- Promotion of **electric vehicles** through recharging points and **alternative fuels** in RCE service areas
 - Recharging points and alternative fuels in service areas, electro-lines.

Estimated investment of over €130 million

- Actions to improve the **security of vulnerable users** in the RCE
 - Pedestrians and cyclists.

Estimated investment of €2 million

Extraordinary investment

Promoting the modernisation, digitisation, safety and sustainability of the National Road Network (RCE)

- Implementation of **Intelligent Transport Systems** on **BUS-HOV** lanes
 - Implementation of innovative methods of BUS-HOV lanes on the main ways of large cities

Estimated investment of more than €12 million

Conclusions

- Roads are an **essential infrastructure** as the Covid-19 pandemic proved.
- Investment in roads is always necessary to provide **service to users in safe conditions** and to **maintain and optimise the heritage value of the network**.
- Investment in roads is also **a means of reviving the economy**:
 - It **generates employment during its construction and maintenance**
 - and it **generates activity by enabling communication**.

Thank you for your attention!
Please post your questions in the chat



Javier Herrero Lizano

**General Director of Roads
and First Delegate of Spain**

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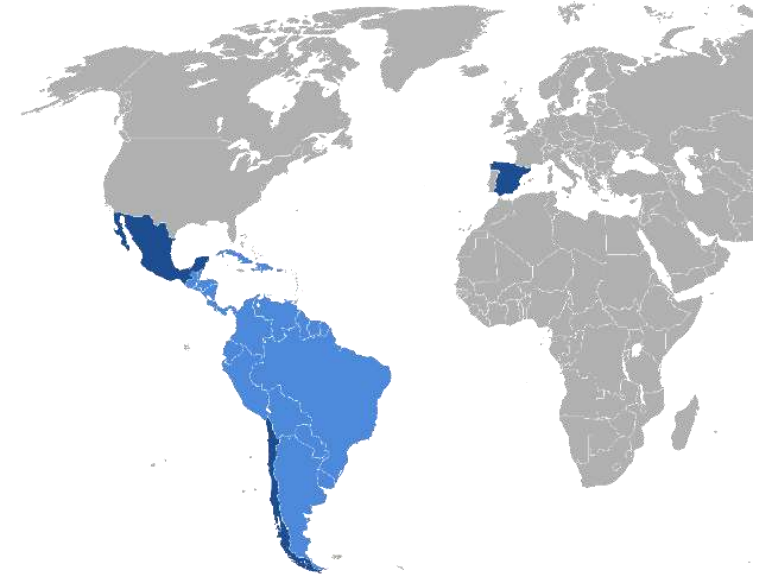
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PIARC COVID-19 SEMINAR and THE ROADS IN CHILE

Step by step Chile is recovering

Jaime RETAMAL PINTO

Director of Roads - Chile

Email: jaime.retamal@mop.gov.cl

Santiago de Chile

30th September 2020



Jaime RETAMAL PINTO

National Road Director - Chile

- Civil Engineer. Pontificia Universidad Católica de Chile. (PUC)
- Master's Degree in Engineering Sciences at the PUC. Chile.
- He has also served as:
 - Assistant Professor Dept. Engineering and Construction Management. PUC.
 - Head of Standards and Control Department. Vice-Minister of Transport. Ministry of Transport of Chile. MTT.
 - General Manager of the Scientific and Technological Research Department of the Pontificia Universidad Católica de Chile. DICTUC-PUC
 - Coordinator of Concessions of the Ministry of Public Works of Chile. MOP
 - Director of the School of Engineering of the DUOC-UC



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3. How will roads be after the Pandemic in Chile?
4. Contribution of Roads to Chile's economic recovery.
5. Growth projections for Chile for 2021 and Road Investment.
6. Conclusions



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MISSION, VISION and STRATEGIC OBJECTIVES

Chilean Road Directorate

Mission 2020 - 2022

To provide road infrastructure services to citizens - which provides security to people, harmonizing the development of the territory and offering a sustainable connectivity - through the completion of studies, projection, construction, improvement, repair and conservation of a portfolio of projects with a social approach throughout its life cycle.

Vision 2025:

To provide the country with a safe road infrastructure with a social approach, through the continuous improvement of quality and sustainability standards, providing an integrated and resilient road network.

Related Strategic Objectives:

- 1.- To improve the connectivity of the national territory by reducing the unpaved road network
2. - Maintain paved roads in adequate conditions for traffic and road transit



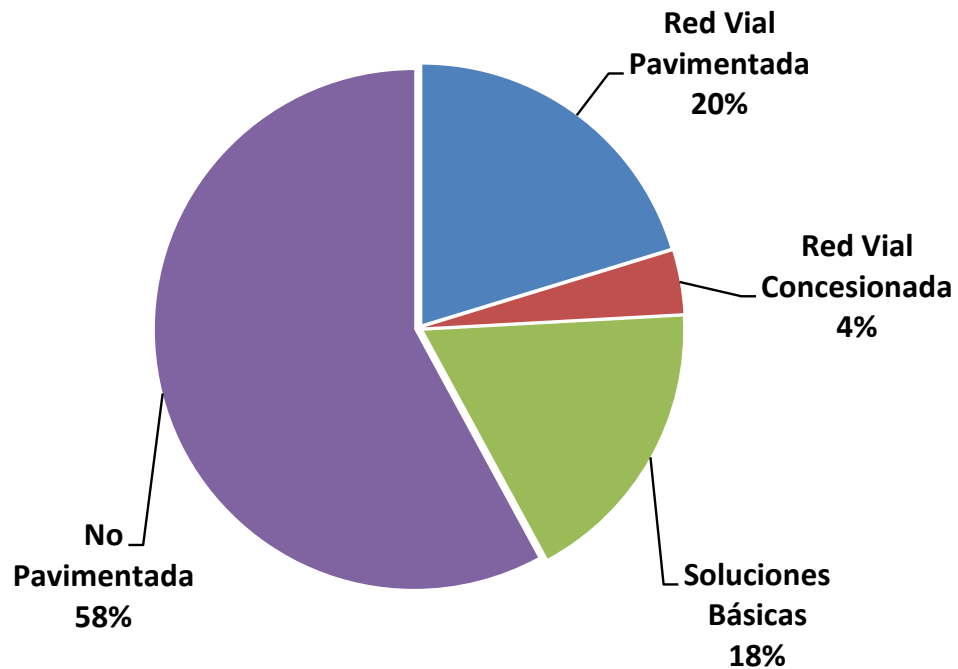
Role of the Road Directorate

The Road Directorate plays a fundamental role in national development in the medium and long term. This is why it has a specific relevance in the creation of the ministerial budget of the MOP (Ministry of Public Works) in Chile.

The Investment Budget Reports of the MOP of Chile in recent years show that the **Road Directorate** maintains a **budget that exceeds 60% of the total budget of the Ministry.**



The Chilean Road Network

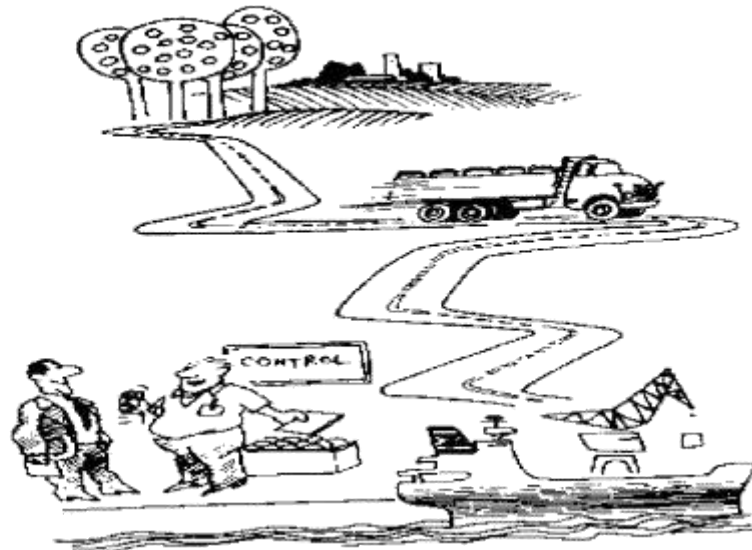


Road Length National Road Network	Km Year 2018
Paved Road Network	17.372
Concessionary Road Network	3.309
Basic Solutions	15.382
Unpaved	49.646
TOTAL	85.709

Role of the Road Directorate

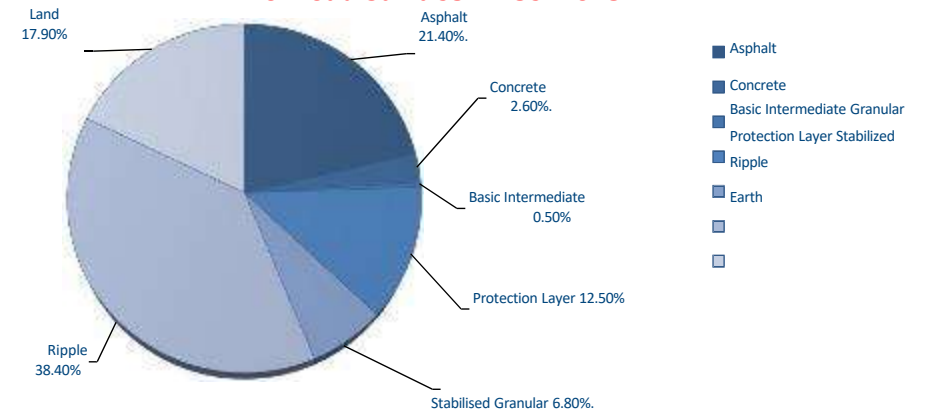
Strategy

...our main objective is:
to increase the paved and basic solutions
network, decreasing the unpaved network....
Maintaining and increasing Chile's road heritage



COMPETITIVIDAD INTERNACIONAL
EXPORTACIÓN DE FRUTAS
Caminos, Cepal-GTZ, 1994.

Distribution of the National Road Network according to the type of road surface - Dec. 2019



Total Network: 85.926,365 km.

Chilean Road Network

Chile, a country of disasters

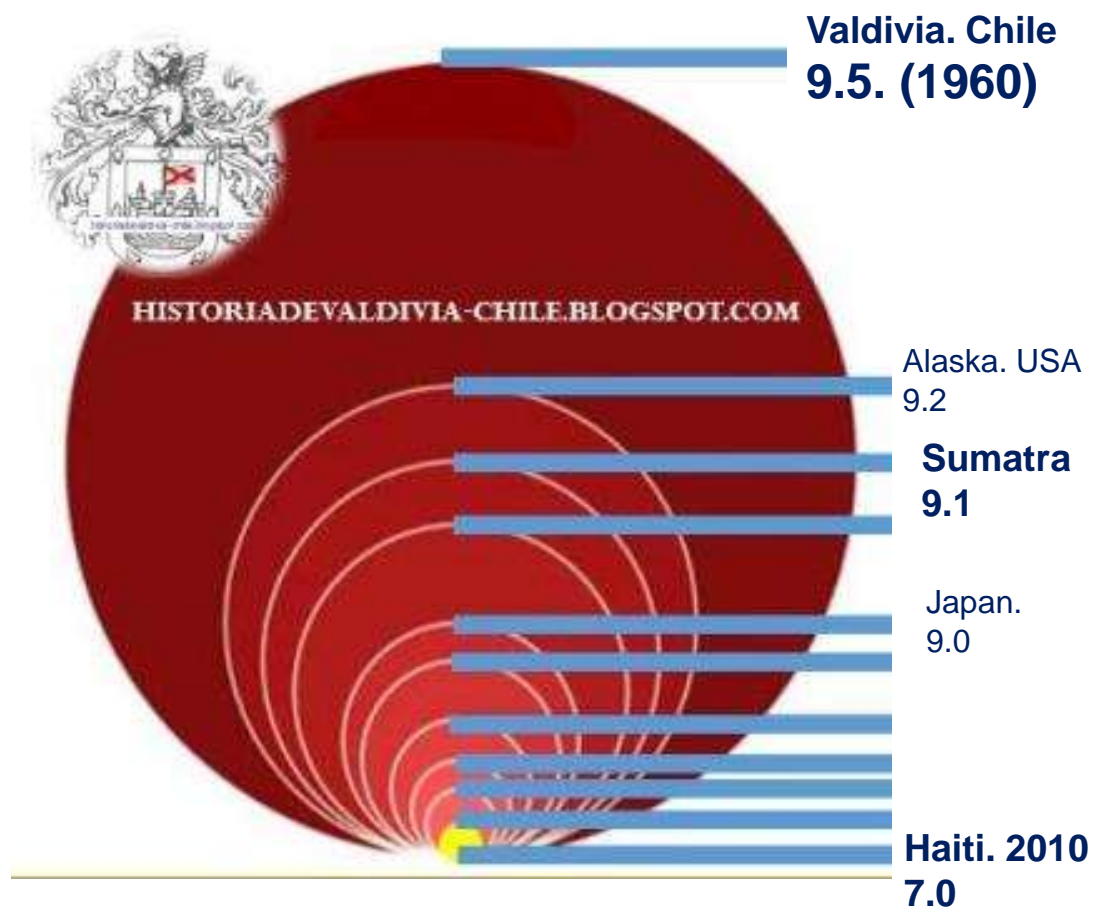
Chile is one of the most seismically active countries in the world. In this territory constantly occur **earthquakes, tsunamis, floods, droughts, forest fires, landslides, tidal waves, sea storms** and a recent phenomena known as "**red tide**".

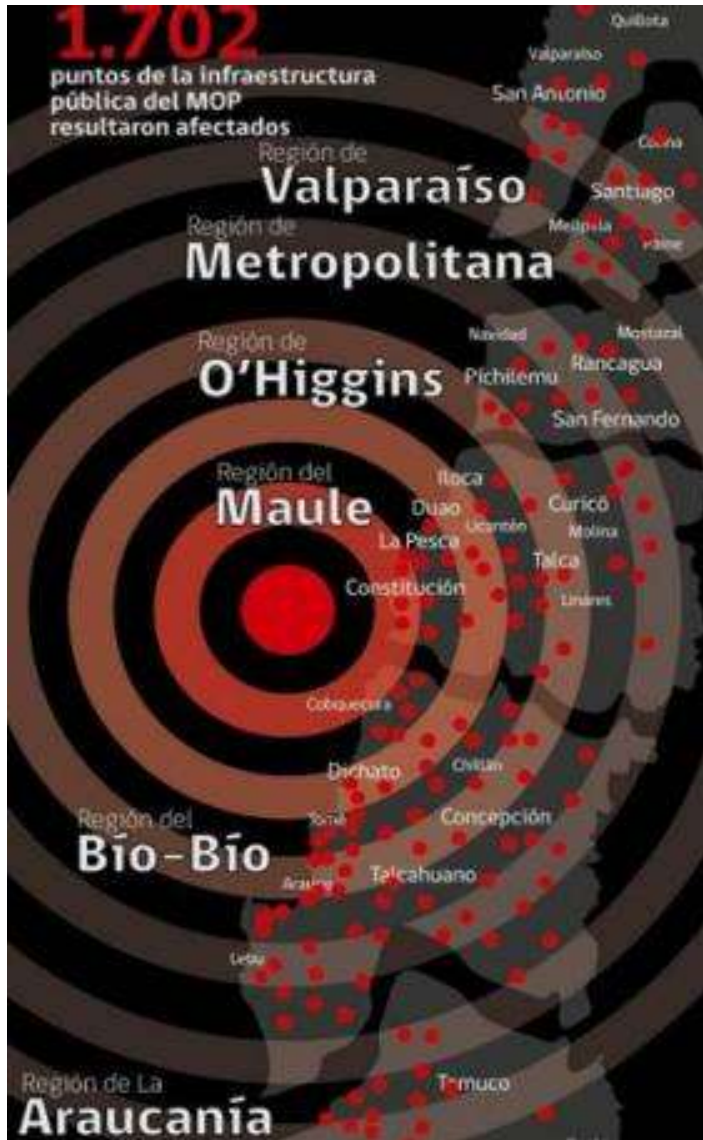


IN MAJOR EARTHQUAKES CHILE IS IN THE TOP TEN

N O.	COUNTRY	MAGNITUDE	DATE AND TIME GMT	LOCATION
1	Valdivia. Chile	9,5	22 May 1960, 15:11	Valdivia
2	Alaska. USA	9,2	28 March 1964, 03:36	Anchorage
3	Sumatra. Indonesia	9,1	16 December 2004	In front of Northern Sumatra
4	Tohoku. Japan	9,0	11 March 2011, 14:45	Honshu Coast
5	Kamchatka. Russia	9,0	November 4, 1952, 4:58pm	Kamchatka Peninsula
6	Indonesia (Dutch East Indies)	8,9	25 November 1833, 20:00	At sea, south of the island of Sumatra, 175 km south of Padang
7	Bio Bio. Chile	8,8	February 27th, 2010, 03:34	Cauquenes
8	Illapel. Chile	8,8	August 15, 1880, 09:23	Illapel

Terremotos Históricos comparación Energía liberada [Richter]





SOUTH CENTRAL AREA EARTHQUAKE (27F - 2010)

- On Saturday, 27th February 2010, at 03:34:17, Chile was hit by an earthquake that reached a magnitude of 8.8 MW. The epicentre was located at sea in front of the towns of Curanipe and Cobquecura, about 150 kilometres northwest of Concepción and 63 kilometres southwest of Cauquenes, and 47.4 kilometres deep under the earth's crust. It lasted about 2 minutes 45 seconds.
- It affected more than 630 kilometres of the national territory.
- 12,800,000 inhabitants in the affected area, equivalent to 75% of the national population



MAREMOTO

EARTHQUAKE

**EARTHQUAKE/TSUNAMI
CHILE
SOUTH CENTRAL AREA
27 February 2010**

DISASTERS IN RECENT YEARS



Pisagua: Earthquake 8.2 and Tsunami:

- **Regions of Tarapacá and Arica-Parinacota declared disaster areas**
- 6 deceased
- 1,200 USD MM\$
- 900,000 people evacuated due to tsunami warning
- 42 emergency DV 2.58 USD MM
- 17 DV rehabilitations 41.28 USD MM

1 April 2014



Villarrica Volcano Eruption Araucania Region

- More than 5,000 people evacuated

3 March 2015



Calbuco Volcano Eruption

- Province of Llanquihue and Osorno, declared disaster areas.
- **Los Lagos Region**
- 6,600 evacuees
- 4 communes with agricultural emergency
- 50 USD MM\$ economic losses
- 16 USD MM\$ Rehabilitation of roads and bridges (DV)

April 30, 2015

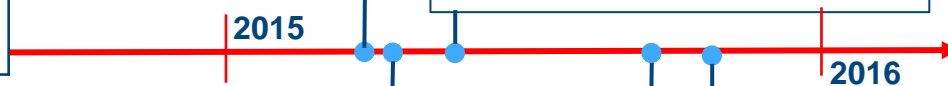


Swells in the Valparaíso Region: 8 August 2015

Order of Magnitude

Budget
Road Management for
2016 :

1,476 USD MM\$



12 April 2014

Great Fire Valparaíso:

- Valparaíso and Viña del Mar Communes declared disaster areas
- 15 deceased
- 10,292 affected and 2,975 damaged houses



23-25 March 2015

Floods in Atacama:

- **Atacama region declared a disaster area**
- 31 deceased
- 16 missing
- 246 re-housed
- 1,200 km affected
- 500 USD MM\$ in reconstruction



9 August 2015

Flood in Tocopilla :

- **Region of Antofagasta declared a disaster area**
- 3 deceased
- 800 evacuees



16 September 2015 Coquimbo Earthquake 8.4 and Tsunami

- **Coquimbo Region declared a Disaster Zone**
- 15 deceased
- 43 re-housed
- 27,772 Victims
- 2,485 homes destroyed
- 45 USD MM\$ only in the Emergency





Mapocho overflow:

- Metropolitan Region
- 4,000 people affected
- 450 commercial premises affected
- 270 premises damaged.

• 17 April 2016



Simultaneous Forest Fires:

- From the Valparaíso Region to the Lakes Region (7)
- Declared Disaster Areas
- 11 deaths
- 420,000 ha burned
- 7,471 people affected
- 1640 houses destroyed
- 890 USD MM\$ estimated loss
- 364 USD MM\$ expenditure on emergency and reconstruction
- 20 January to 9 February 2017



Tidal waves in the Valparaiso Region:

25 June 2017
13 July 2017
10 August 2017

2016

2017

2018

25 Dec 2016
Earthquake 7.6° in Chiloé

- Province of Chiloé
- **Los Lagos Region**
- No casualties
- 8,700 people evacuated
- 7.7 USD MM\$ in the MOP Emergency only.
- 4.8 USD MM\$ in Emergency DV



13 May 2017
Rio Salado overflow:

- Chañaral
- **Atacama Region**



Order of Magnitude

Budget Road Management for 2017 :

1,550 USD MM\$

DISASTERS IN RECENT YEARS

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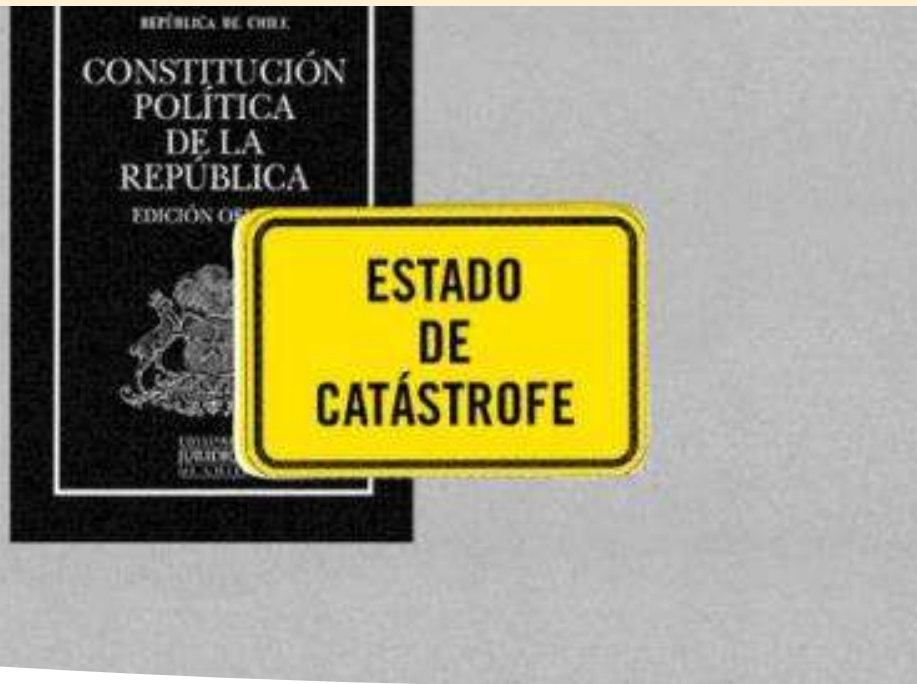
1. Introduction

2. Current Situation of the Roads in Chile, situation of CHILE during the COVID pandemic.

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The WHO declared on 30/01/2020 an "International Public Health Emergency" and on 11/03/2020 a global pandemic of COVID-19.



Declaration of a State of Constitutional Emergency in Chile (State of Disaster)

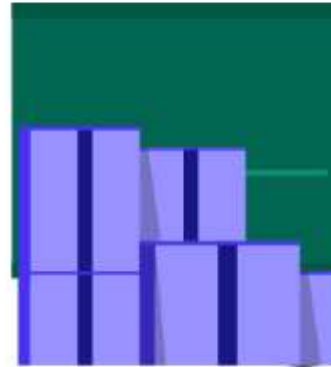
• On 19/03/2020, the Government of Chile declared a State of Constitutional Emergency throughout the national territory for 90 days due to the public health crisis caused by the COVID-19 pandemic.

ESTADO DE EXCEPCIÓN NACIONAL DE CATÁSTROFE POR 90 DÍAS:

- ✓ Más seguridad para nuestros hospitales y sitios de atención de salud.
- ✓ Protección de la cadena logística y traslado de insumos médicos.
- ✓ Cuidado y traslado de pacientes y personal médico, y evacuación de personas.
- ✓ Resguardo del cumplimiento de las cuarentenas y medidas de aislamiento social.
- ✓ Garantías a la cadena de producción y distribución para asegurar el abastecimiento
- ✓ Protección de fronteras.

#CuidémonosEntreTodos

INSTITUTO
CORONA



#PlanCorona

- It affects all people, roads and means of transport.
- Meetings and mobility are restricted.
- Closed borders with neighbouring countries (only open for freight transport).
- Citizens are asked to collaborate.
- Health responsibilities are concentrated in the Ministry of Health.
- Specific areas quarantined.



State of Disaster in Chile

General Measures

- Ministers are empowered, without the need for an administrative procedure, to issue interpretative orders and instructions of all kinds, in their respective fields of activity, in order to ensure the provision of services for the protection of persons, goods and places.
- The carabineros and military forces carry out the necessary checks on persons, goods, vehicles, premises and establishments.
- Regional and provincial levels will function as normal to keep daily operations always within the framework of orders from the national authority related to the care of people in risk areas and pregnant women.



Measures of the Road Directorate - CHILE

- **Funciones prioritarias:** disponibles y conectadas en todo momento, a través de dispositivos móviles y correo electrónico. Además de la gestión de alto nivel (y sus unidades de apoyo), las relacionadas con la seguridad, la tecnología de la información, las comunicaciones y el mantenimiento de edificios.
- **Trabajo no presencial:** para todos aquellos empleados públicos cuyas funciones lo permitan (gran parte del personal del NC y Nivel Regional).
- **Permanecer en casa:** aquellos empleados en riesgo (mayores de 65 años, mujeres embarazadas y problemas de salud) cuyas funciones no son prioritarias.
- **Presencia en el trabajo:** el mínimo necesario y siempre que lo permitan las recomendaciones sanitarias y los medios de protección disponibles.



Medidas para el personal en terreno

- **Los inspectores fiscales** contratos de obras, mantenimiento y autopistas concesionadas estarán permanentemente disponibles, conectados a través de dispositivos móviles y correo electrónico, y harán las visitas que consideren necesarias, tratando de limitarlas (y siempre siguiendo las recomendaciones de salud) y comunicarán de inmediato cualquier incidente relevante.
- **Permiso Provisorio** para quienes necesiten justificar sus movimientos en caso de control por parte de la Policía.

Medidas para obras y mantenimiento de caminos

- **La vigilancia, el mantenimiento (operaciones) y la conservación ordinaria también continúan,** es un servicio esencial. Se ha recordado a las empresas con tales contratos o concesiones su obligación de proporcionarlas de manera permanente.
- **Prioridad:** atención primaria a accidentes e incidentes, comunicaciones, control de túneles, mantenimiento invernal.
- **Medidas cautelares reforzadas:**
 - Reducir los equipos humanos.
 - Medidas preventivas extremas y desinfección de elementos compartidos al principio y al final de cada turno.
 - Evitar la aglomeración.
- **Medidas para Gestión de contratos**

Decisions and Instructions by COVID19 effect in MOP of Chile



- The **Comptroller General's Office** has confirmed in its decisions that in the face of a pandemic such as the one affecting the country, which constitutes a situation of fortuitous event, it is the responsibility of the state administration bodies to adopt extraordinary management measures in order to protect the life and health of its servants, avoiding their unnecessary exposure to possible contagion; to safeguard the continuity of public service and to ensure the general welfare of the population.
- **Likewise, on the occasion of the emergency situation, the state agencies are empowered to review the conditions for the provision of permanent services** contracted with suppliers including, among others, changes in the modality in which the services are provided, modification of the hours in which the work must be performed and suspension or reduction of the frequency with which the personnel must attend the respective facilities. This criterion is generally applicable to the contracting of public works, observing the requirements governing the particular situation in question, as provided for in the laws and regulations that are applicable, as well as in the corresponding bidding rules, as the case may be. (Opinion CGR E20117N20).
- The **MOP's General Directorate for Public Works (DGOP)** has also issued instructions regarding Works and Consultancy Contracts on the occasion of the COVID-19 pandemic in that the purpose of the contract is to provide **companies or consultants with facilities to carry out the replacements required by the contract and to provide flexibility in meeting deadlines** (ORD DGOP N°222 of 18 March 2020).
- Also (**ORD. DGOP 239 of 27 March 2020**), it has been considered that the declaration of a state of catastrophe has led the Health Authority to establish various measures to isolate geographical areas and that various groups of residents have also established cordons at access points to localities that prevent the transit of construction personnel, machinery, supplies and other essential items for the normal development of the activities of the works under MOP contracts. Although this is an exceptional situation, it does mean that interference is the responsibility of the Contractor.

In response to these situations, the following has been instructed:

a. Avoiding the stoppage of the contract. To this end, the Tax Inspector must try to find solutions to the various difficulties that may arise (see Order DGOP 222, of 18 March 2020) and at the same time demand that the Contractor make every effort to address the concerns of its workers, always safeguarding health protection conditions (instructions from the DGOP Risk Prevention Department, on measures to prevent contagion by COVID-19).

b. Exceptional cases. In those exceptional cases in which a Company has formally requested the suspension of the Contract, and declares in writing that it is aware that if the MOP accepts all or part of its request, the works must be rescheduled and the favourable decision of the MOP will not entitle it to any compensation in accordance with the provisions of Article 161 of the RCOP. The Fiscal Inspector must verify that the request is duly founded according to the situation of the work.

Applications for Rescheduling Associated to Covid-19

REGION	Accepted	In process	Rejected	TOTAL
Arica and Parinacota	2			2
Antofagasta	6			6
Atacama	5			5
Coquimbo	5			5
Valparaíso			1	1
Metropolitana	4	1		5
Libertador General Bernardo O'Higgins	7			7
Maule	2	3		5
Ñuble	2			2
Biobio	9			9
Araucania	9	1		10
Los Ríos	1			1
Los Lagos	3	1	1	5
Aysén	2			2
Magallanes and Chilean Antarctica	6	4		10
Interregional	3	1		4
TOTAL	66	11	2	79

TOTAL CONTRACTS WEEK 25-09-2020: 988

Percentage = 66 Rescheduling of 988 total contracts

6.68% of rescheduling requests accepted due to Covid-19.



ACTIONS DURING THE COVID 19 PANDEMIC

ROAD DIRECTION CHILE

- Sanitisation of machinery, offices and work areas.
- Provision of individual protection equipment and talks to all officials



CURRENT SITUATION OF COVID 19 IN CHILE

Current containment measures
(OECD):

Non-pharmacological
containment measures

Information and communication

- Information for public and medical staff, and hygiene advice for travellers.

Reducing the risk of transmission

- Confinement
- Use of mask mandatory for symptomatic people
- Contact identification and tracking

3. Intensification of social distancing

- Home quarantine for symptomatic individuals
- School shut-down
- Measures to reduce adult interaction
- Use of mask mandatory in public places.

4. Decrease the time period between the first symptoms and isolation

- Public campaign to promote self-diagnosis
- Temperature scanning in public places

5. Disinfection measures

- Hand washing
- Domestic disinfection of potentially contaminated surfaces
- Widespread environmental disinfection
- Air disinfection

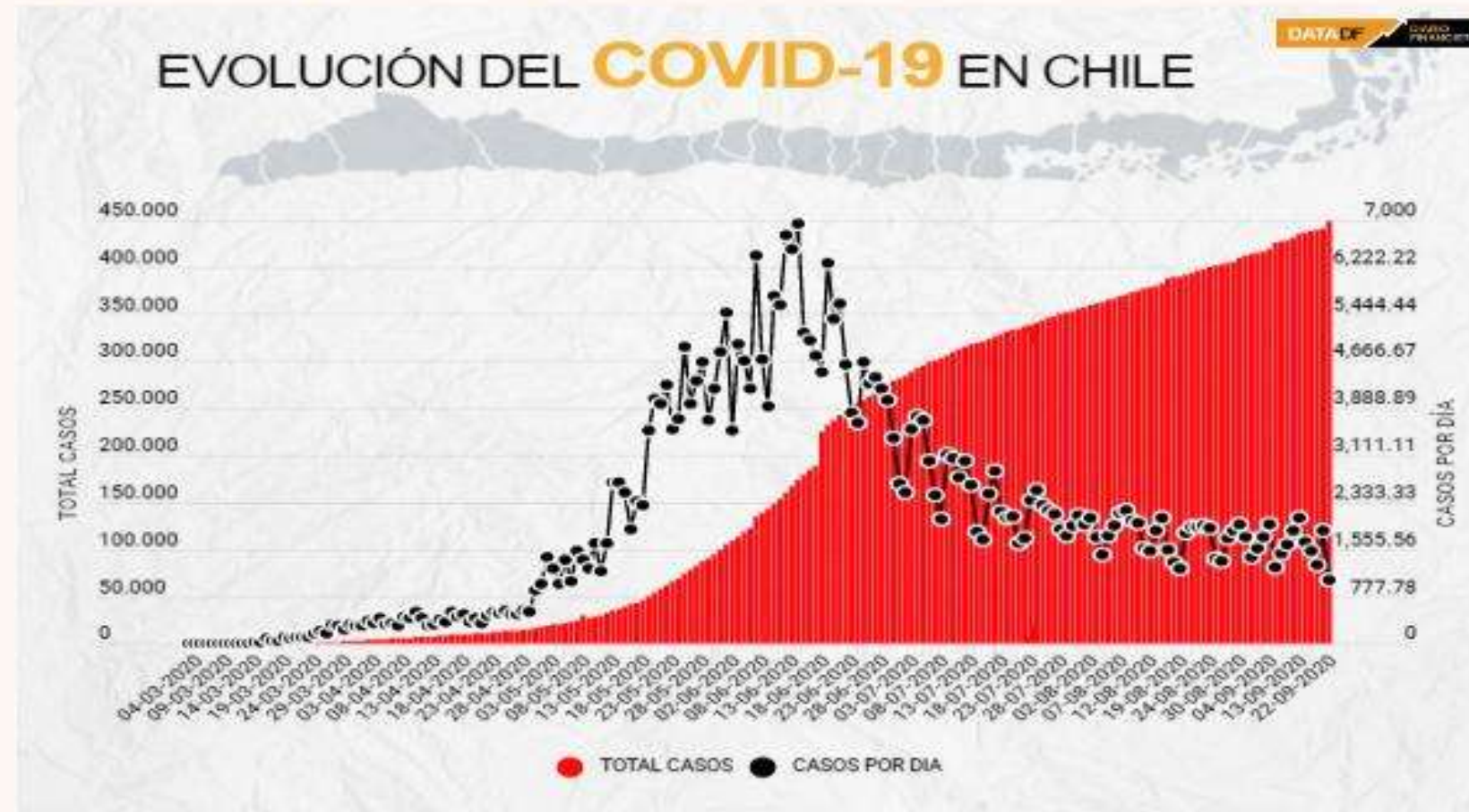
6. Travel restrictions

- Recommended postponement of non-essential travel; cordon sanitaire; detection of symptoms
- Self-report if travellers in affected areas present any symptoms
- Temperature monitoring for incoming and outgoing travellers

Quarantines and targeted health barriers

22 de septiembre

AVANCE DEL COVID-19 EN CHILE



448.523
CASOS CONFIRMADOS

1.054
NUEVOS CASOS

23
NUEVAS MUERTES

Fuente: Ministerio de Salud

CURRENT SITUATION OF COVID 19 IN CHILE

22 de septiembre

Personas contagiadas, activas y recuperadas



Personas fallecidas



Fuente: Ministerio de Salud, según cifras del DDB.

Información actualizada hasta las 21 horas del día anterior.



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OUR CHALLENGE

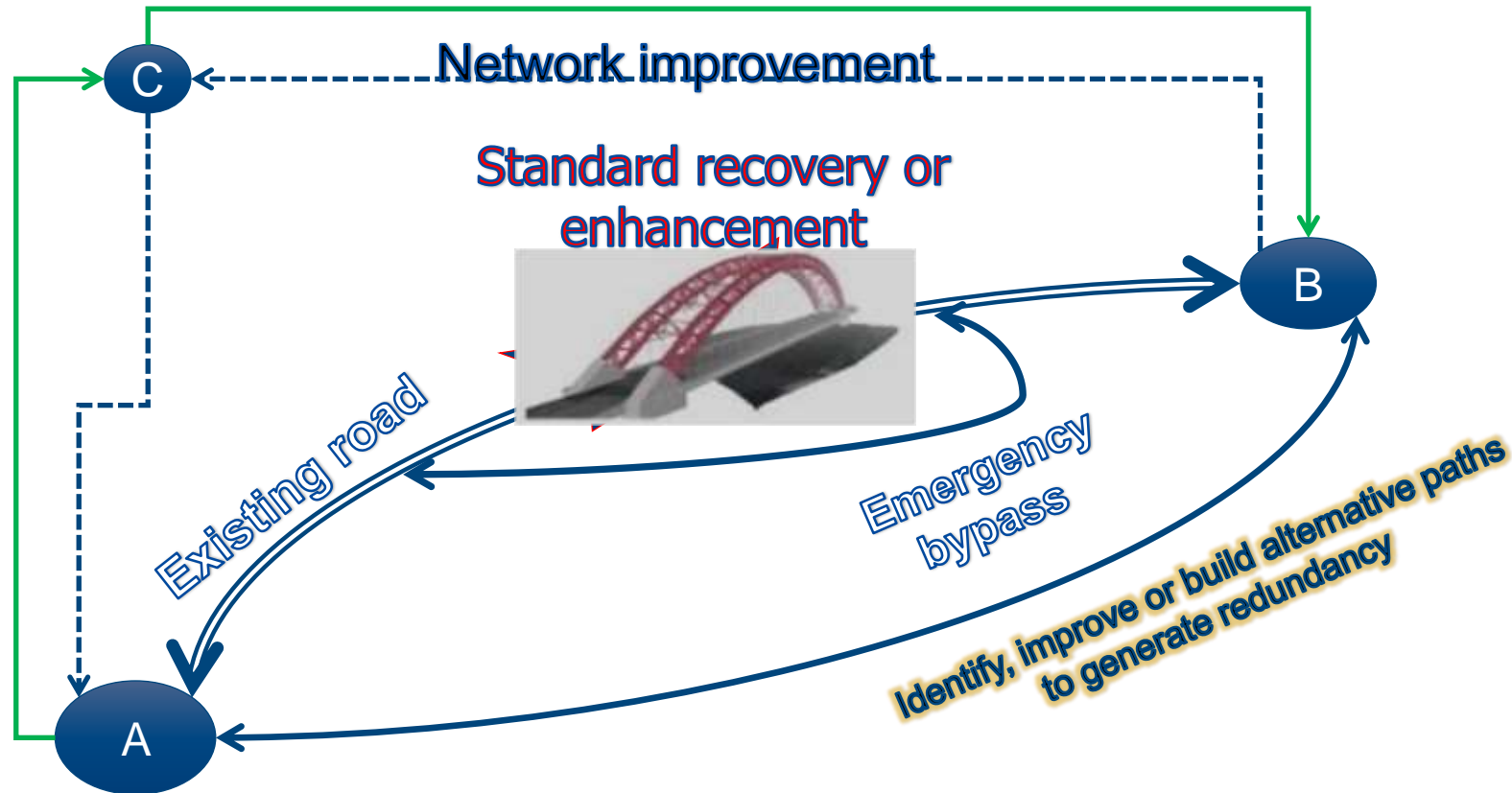


Implementing and Maintaining a Resilient Road Network

How will roads be after the Pandemic in Chile?

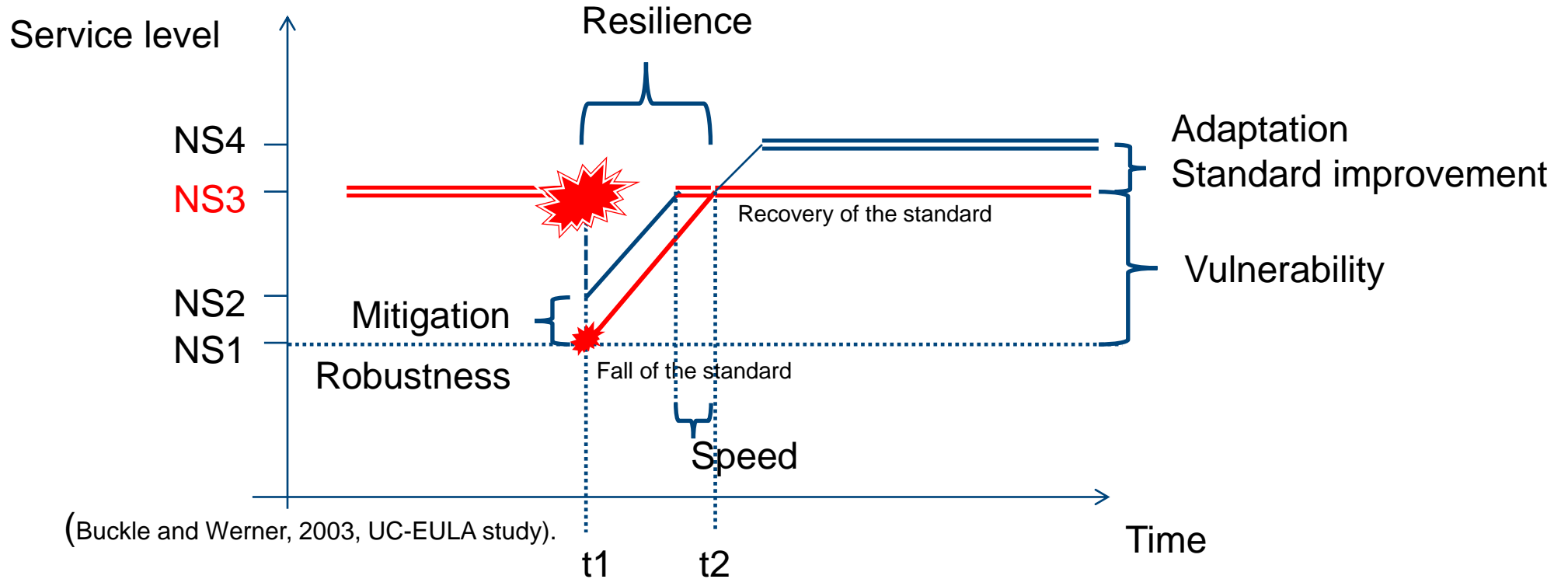
Implementing and Maintaining a Resilient Road Network

For Chile, the challenges in pandemic and post-pandemic are the same, the goals are maintained and



Challenges in the short, medium and long term

CHALLENGES IN THE SHORT, MEDIUM AND LONG TERM CONCEPTUAL MODEL



Challenges

- Levels of service by type of road ?
- Time to replace the NS?
- Tolerable Vulnerability?
- Level of service for emergency?

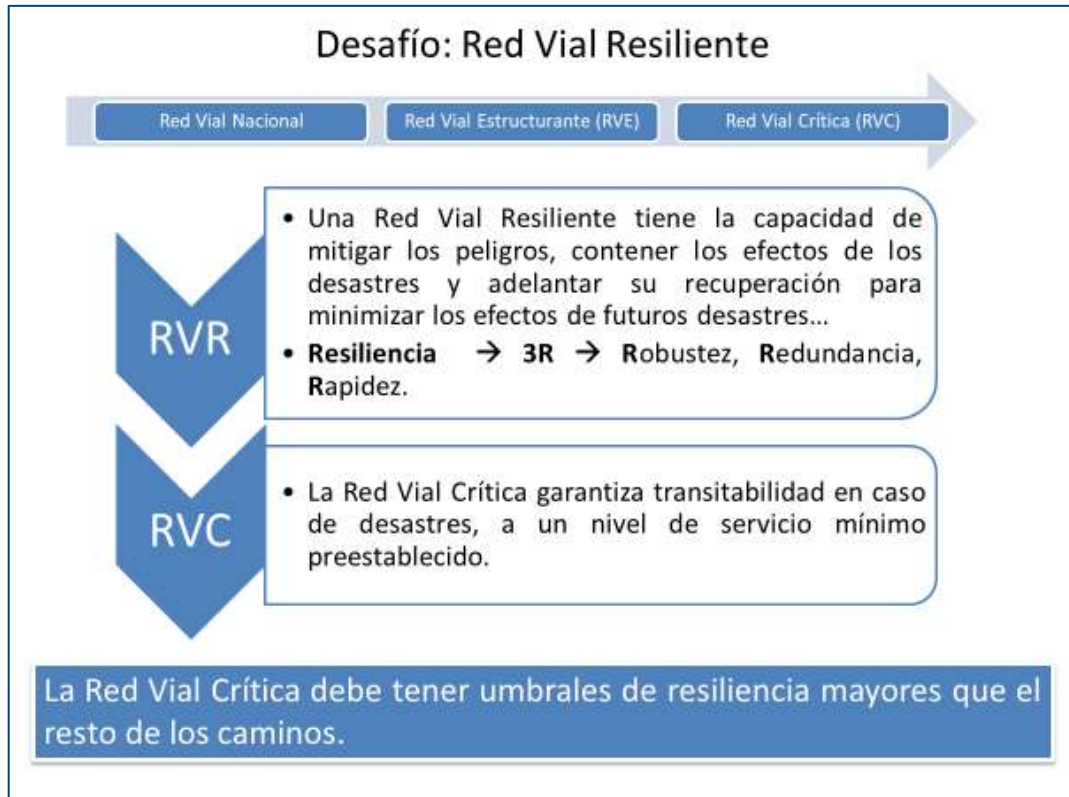
Structural Road Network - Connectivity - Critical Road Network



- The road connectivity of a territory allows its social and economic development and performance.
- It is essential to identify certain routes and paths that must remain operational in the face of any situation that could significantly alter their operation and level of service.
- This is the case of the **Structural Road Network**, from which the Critical Road Network was born and which must consider the vision of Resilience in the Network.

OUR CHALLENGE - Implementing and Maintaining a Resilient Road Network

The Resilience of a path can be measured or characterized by (3R + S):



❖ **Robustness or resilience:** the ability to withstand the forces of disaster without significant degradation or loss of performance, i.e. the ability not to collapse completely in the face of failure, but to retain a minimum necessary level of performance (León Gay, 2016; 80).

❖ **Redundancy:** if degradation or loss of functionality occurs, there are interchangeable elements or units, which allow functional requirements to be met.

❖ **Speed:**

- ✓ Speed of **response (rehabilitation):** ability to ensure even a minimum level of system service in the event of disasters on a temporary or short-term basis.
- ✓ Speed of **recovery (rebuilding):** ability to restore the functionality of the system in a timely manner, to the initial service level. This can happen in the medium or long term.

❖ **Resourcefulness or Resources:** capacity to diagnose and prioritize problems and implement solutions for the identification and mobilization of material, monetary, information, technological and human resources. It has to do with how we plan to face emergencies, as well as propose solutions at the moment of failure, therefore, we are talking about an efficient system because we are focusing on the optimization of resources... of projects and of the network.

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- 2.
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Contribution of Roads to Chile's economic recovery.

“Step by Step Chile is Recovering” Plan

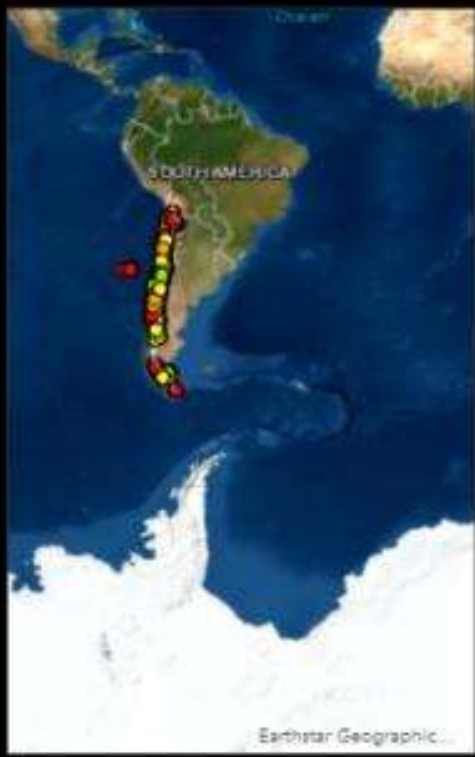
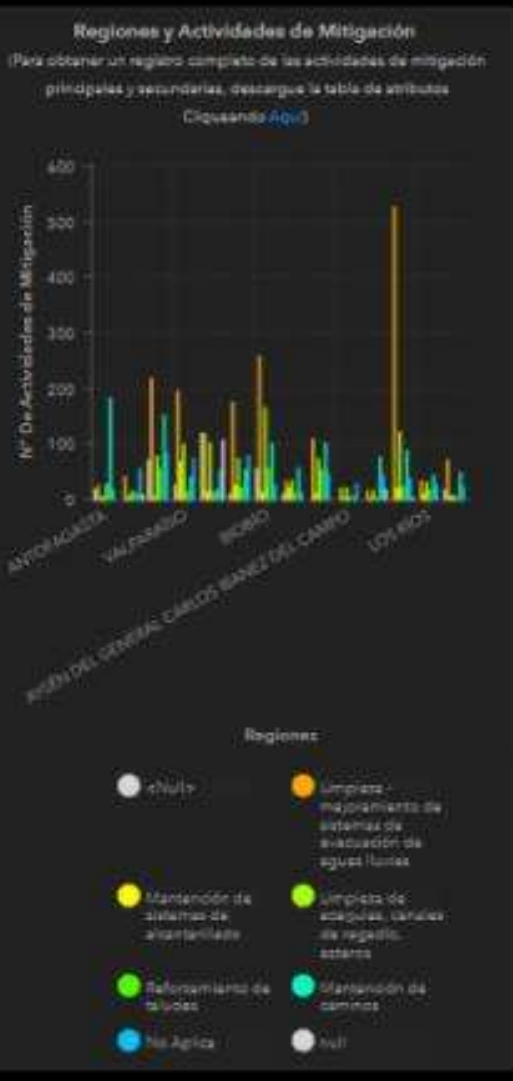
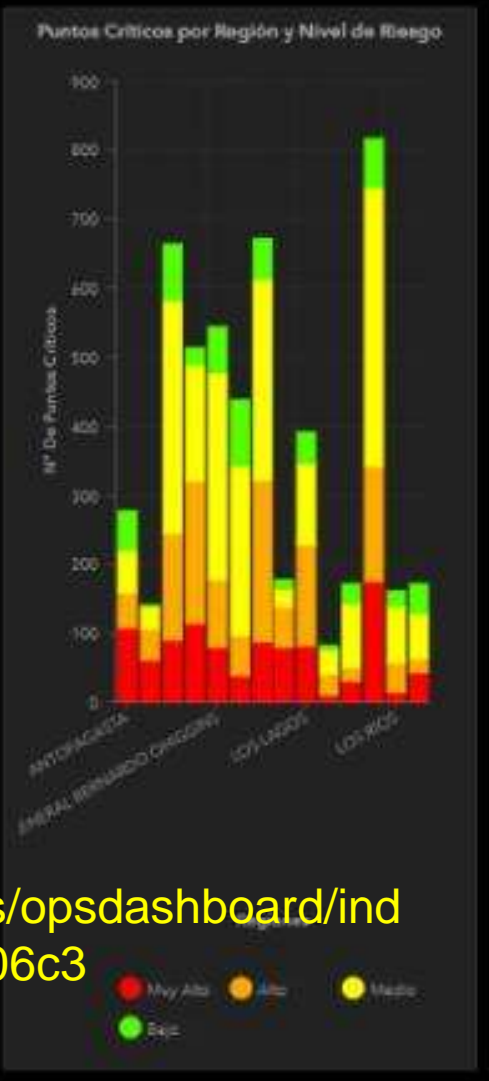
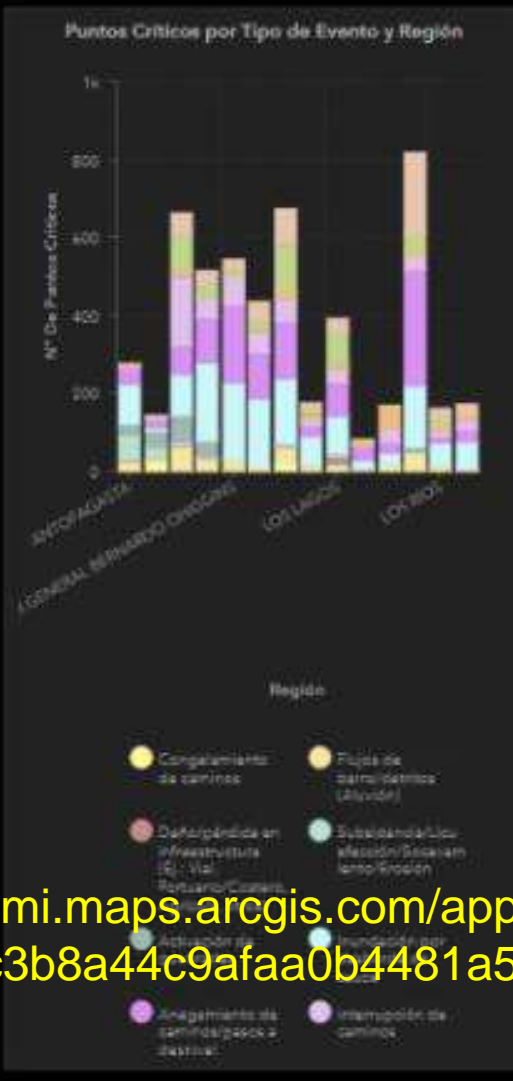
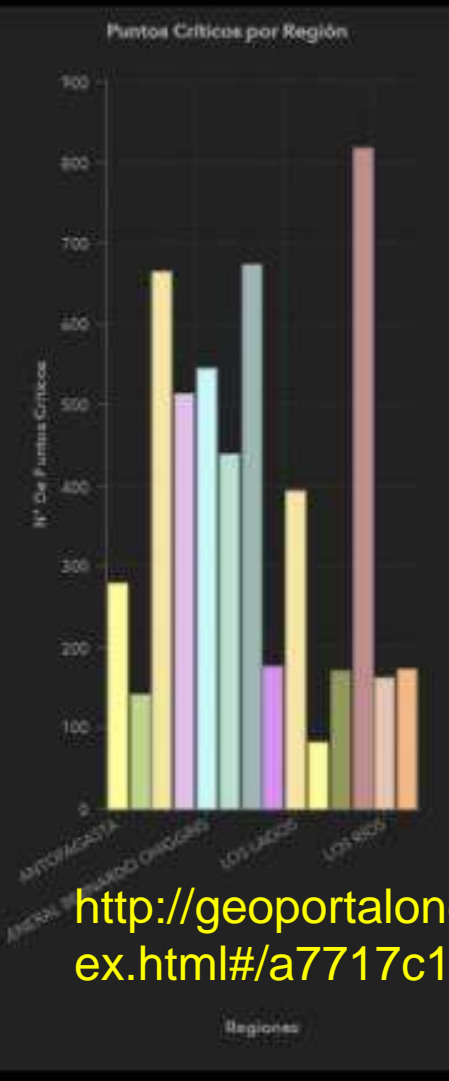
MOP and other Chilean Ministries publish massive calls for tenders for works:

- The first massive call for tenders for works under the "Step by Step Chile is Recovering" Plan was made on the 20th August and published 150 bids for over US\$188 million in works by the MOP, Minvu, Minagri and MTT.
- "The second step of this Step-by-Step Plan was published on the 10th September 2020, with 165 new calls for works, consultancy and services in all regions of the country to build new roads, water systems, parks, etc., so that we can begin to get the economy moving and create jobs," Minister Alfredo Moreno said. With a total investment of US\$396 million

Total: US\$ 584 million

Roads Joint work with ONEMI-Ministry of the Interior - Winter 2020 Plan

Puntos Críticos Programa Invierno



<http://geoportalonemi.maps.arcgis.com/apps/opsdashboard/index.html#/a7717c1c3b8a44c9afaa0b4481a506c3>

Roads Joint work with ONEMI-Ministry of the Interior - Winter 2020 Plan

Puntos Críticos Programa Invierno 2020.xls

Abrir con Hojas de cálculo de G...

Región	Provincia	Cantón	Ciudad	Descripción de la Ubicación	Medio de Ruta	Acciones de Mitigación 1	Acciones de Mitigación 2	Responsabilidad del Punto Crítico	Si la solución es LOCAL, COMUNITARIA O MUNICIPAL	Si la solución es SECTORIAL O NACIONAL	Responsables de la Respuesta (Riesgo y Acción)	X	Coloreado
JM	JM	JM	JM	JM	JM	JM	JM	JM	JM	JM	JM	JM	JM

Acciones de Mitigación 1		Acciones de Mitigación 2		La solución del Punto Crítico corresponde al nivel	Si la respuesta anterior es SECTORIAL cual
--------------------------	--	--------------------------	--	--	--

Reforzamiento de taludes	Limpieza de acequias, canales de riego, esteros	Sectorial	Dirección de Obras Hidráulicas - MOP
Reforzamiento de taludes	Limpieza de acequias, canales de riego, esteros	Sectorial	Dirección de Obras Hidráulicas - MOP
Mantenimiento de caminos	Reforzamiento de taludes	Sectorial	Dirección de Vialidad - MOP
Mantenimiento de caminos	Reforzamiento de taludes	Sectorial	Dirección de Vialidad - MOP
Mantenimiento de caminos	Reforzamiento de taludes	Sectorial	Dirección de Vialidad - MOP
Limpieza - mejoramiento de sistemas de evacuación de aguas lluvias	Mantenimiento de caminos	Sectorial	Dirección de Vialidad - MOP
Mantenimiento de caminos	Limpieza - mejoramiento de sistemas de evacuación de aguas lluvias	Comunal	
Reforzamiento de taludes	Limpieza de acequias, canales de riego, esteros	Sectorial	Dirección de Obras Hidráulicas - MOP
Mantenimiento de caminos	Reforzamiento de taludes	Sectorial	Dirección de Vialidad - MOP
Reforzamiento de taludes	Limpieza de acequias, canales de riego, esteros	Sectorial	Dirección de Obras Hidráulicas - MOP
Reforzamiento de taludes	<Null>	Sectorial	Dirección de Obras Hidráulicas - MOP
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Mantenimiento de caminos	Reforzamiento de taludes	Sectorial	Dirección de Vialidad - MOP
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Economic policy responses of the Government of Chile

Timing, size and potential effectiveness of policy responses

- The economic policy reacted quickly to the emergency. The first measures were taken within two weeks of the first case of Covid-19
- Priorities:
 - Maintaining household incomes
 - Reducing business cash gaps and financing the rest
 - Reducing the cost of market adjustment
- Solutions in three areas:
 - Conventional tax policy
 - Credit support
 - Financial markets
- Stronger coordination between government, central bank and regulators
- Several measures continue to progress to the implementation phase
- Ongoing work to address remaining challenges

Tax measures



- 1. Protecting employment and work-related income:**
 - Labour Income Protection Act. **US\$2 billion**
 - Draft Act on Protection of Employment.
- 2. Cash flow support to the production system:**
 - Tax measures **US\$5.94 billion**
 - Total payment of invoices from State suppliers **US\$1.09 billion**
- 3. Supporting family income:**
 - Income support voucher
 - Creation of a solidarity fund to mitigate social emergencies caused by a fall in sales of micro-commerce
 - Economic support for the payment of electricity and water bills and access to internet, an aid for the 40% most vulnerable households **US\$230 million**
- 4. Fund for social support** **US\$2 billion**
- 5. Strengthening health budget (2% constitutional)** **US\$1.4 billion**

Resources involved: US\$12.57 billion

Contribution of the Roads to Chile's economic recovery.

	ITEM	Amount in Chilean pesos	Amount in million US\$
1)	Budgetary implementation in 2019	1.109.801.387	1.389

	2020 Budget Act	1.148.358.839	1.437
2)	Total expected budget 2020	1.185.550.911	1.483

3)	2021 Draft Budgetary Act (includes Recovery Plan fund)		1.949 *
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()* : estimated values.

The figures are expressed in thousands of dollars of year 2020, and consider only Investment Initiatives

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6. Conclusions

Conclusions

CHILE STAYS ALERT

- Although expected by many, the global recession turned out to be more intense and caused by a phenomenon that few anticipated: **the COVID-19 pandemic.**
- **Surprising, intense, global and very uncertain** economic crisis.
- **We have learnt from earlier crises.**
- There is a difficult situation ahead, **full of uncertainties**, accompanied by a loss in growth capacity.
- Chile is working in a **coordinated** manner among the different **authorities, to decide on and pass policies of reactivation and growth.**

Conclusions

CHILE STAYS ALERT

New Protocols for the new normality



As CHILE is a country exposed to multiple threats of natural origin as well as to disasters provoked by human action that can take place anytime.

The Chilean government has incorporated among its recommendations "**what to do before, during and after an emergency situation**", information on the security measures that the population should follow in the face of the "**new normality**" generated by the current Covid-19 pandemic.

In order to continue promoting a culture of prevention and self-care in the face of an emergency.

"Evacuation"

If, as a result of an emergency, you have to evacuate the place where you are, please always remember to wear a mask and maintain, if possible, a minimum distance of one metre from other evacuees, and to carry your emergency kit with you.

Conclusions

UPDATE OF EMERGENCY RECOMMENDATIONS IN CHILE BY COVID 19

Instructions and recommendations



Conclusion: New updated COVID19 documents



EMERGENCIAS IN CHILE



PIARC COVID-19 SEMINAR and THE ROADS IN CHILE

Step by Step Chile is Recovering

Jaime RETAMAL PINTO

Road Director - Chile

Email: jaime.retamal@mop.gov.cl

Santiago de Chile

30 September 2020



Practical information for panelists - Programme

- 1- **Welcome and introduction to the Seminar**, Miguel Caso Florez, PIARC Technical Director
- 2- **Institutional presentation of PIARC**, Marina Domingo Monsonís, PIARC Communication Manager (5 minutes)
- 3- **COVID-19 and roads in Latin America** Bianca Bianchi Alves, World Bank Transport Specialist for Latin America (15 minutes)
- 4- **COVID-19 and roads in Spain - The investment in roads, end and means**, Javier Herrero, General Director of Roads in Spain and First Delegate of PIARC (15 minutes)
- 5- **COVID-19 and roads in Chile: Step by step, Chile is recovering**, Jaime Retamal, Director of the Chilean Roads Directorate and First Delegate of PIARC (15 minutes).
- 6- **COVID-19 and roads in Mexico**, Cedric Iván Escalante Sauri, Vice-Minister of Infrastructure of Mexico and Member of the Executive Committee of PIARC (15 minutes).
- 7- **Q&A session**, moderated by Veronica Arias Espejel, PIARC Technical Advisor (30 minutes)
- 8- **Conclusions of the Seminar**, José Manuel Blanco Segarra, DGC Spain, PIARC COVID-19 Response Team (5 minutes).
- 9- **Closing of the Seminar**, cameras and microphones open to participants.

Duration: 2 hours





COVID-19 and roads in Mexico

Cedric Ivan Escalante Sauri

Vice-Minister of Infrastructure

Ministry of Communications and Transport

Mexico City September 30th, 2020

The Global Competitiveness Report

Pillar 2: Infrastructure

Source: World Economic Forum <https://www.weforum.org/>

2019

Mexico ranks 48th out of 141, with a score of 64.9 (out of a possible 100). It is the second most competitive country in Latin America, behind Chile (place 33).

Rank 48 The Global Competitiveness Index 4.0 Singapore

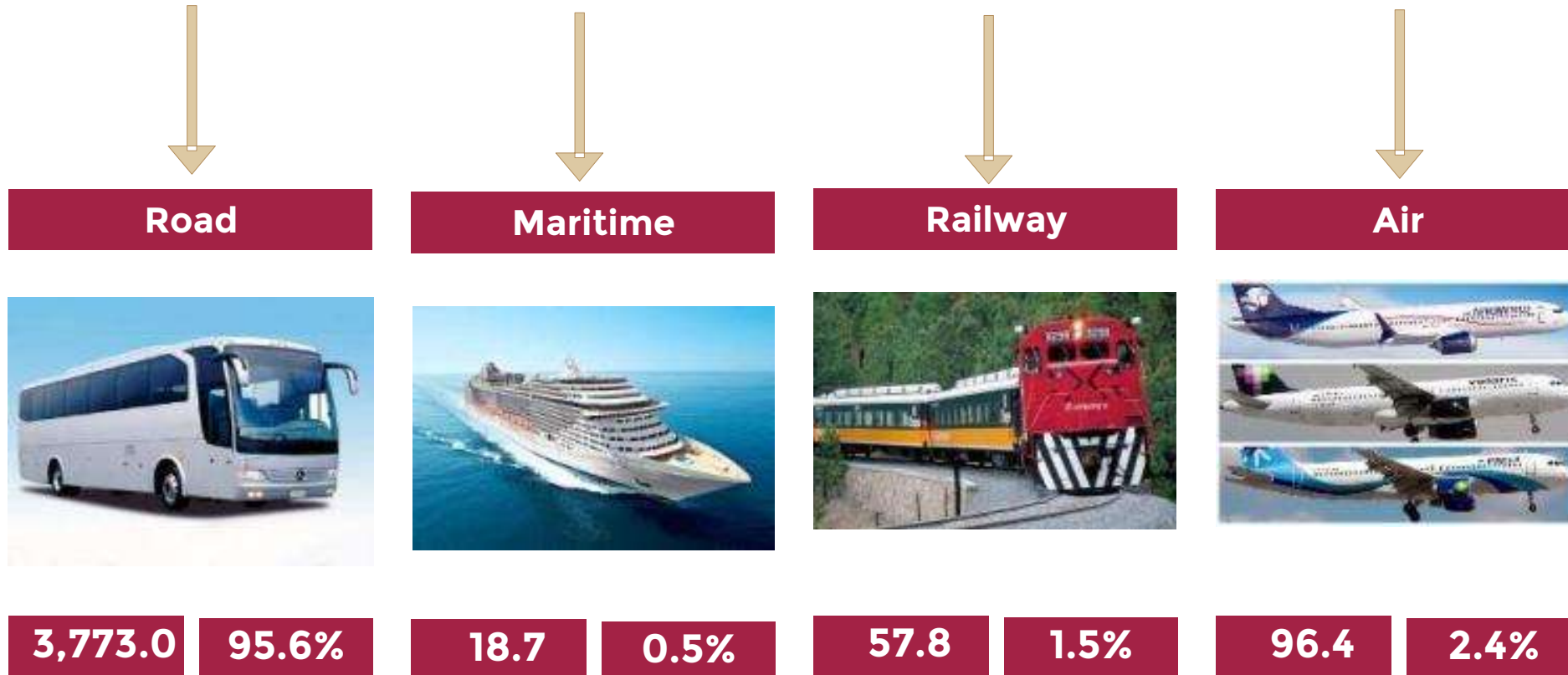
Rank 54 Pillar 2: Infrastructure Singapore

Component	Mexico's Rank	Leading country
Transport Infrastructure	51	Singapore
Roads	34	Singapore
2.01 Road Connectivity Index	22	Multiple (3)
2.02 Road Quality	49	Singapore
Railways	69	Japan
Air Transport	25	Japan
Maritime Transport	38	Singapore

Transport logistics distribution

PASSENGERS TRANSPORTED, 2019

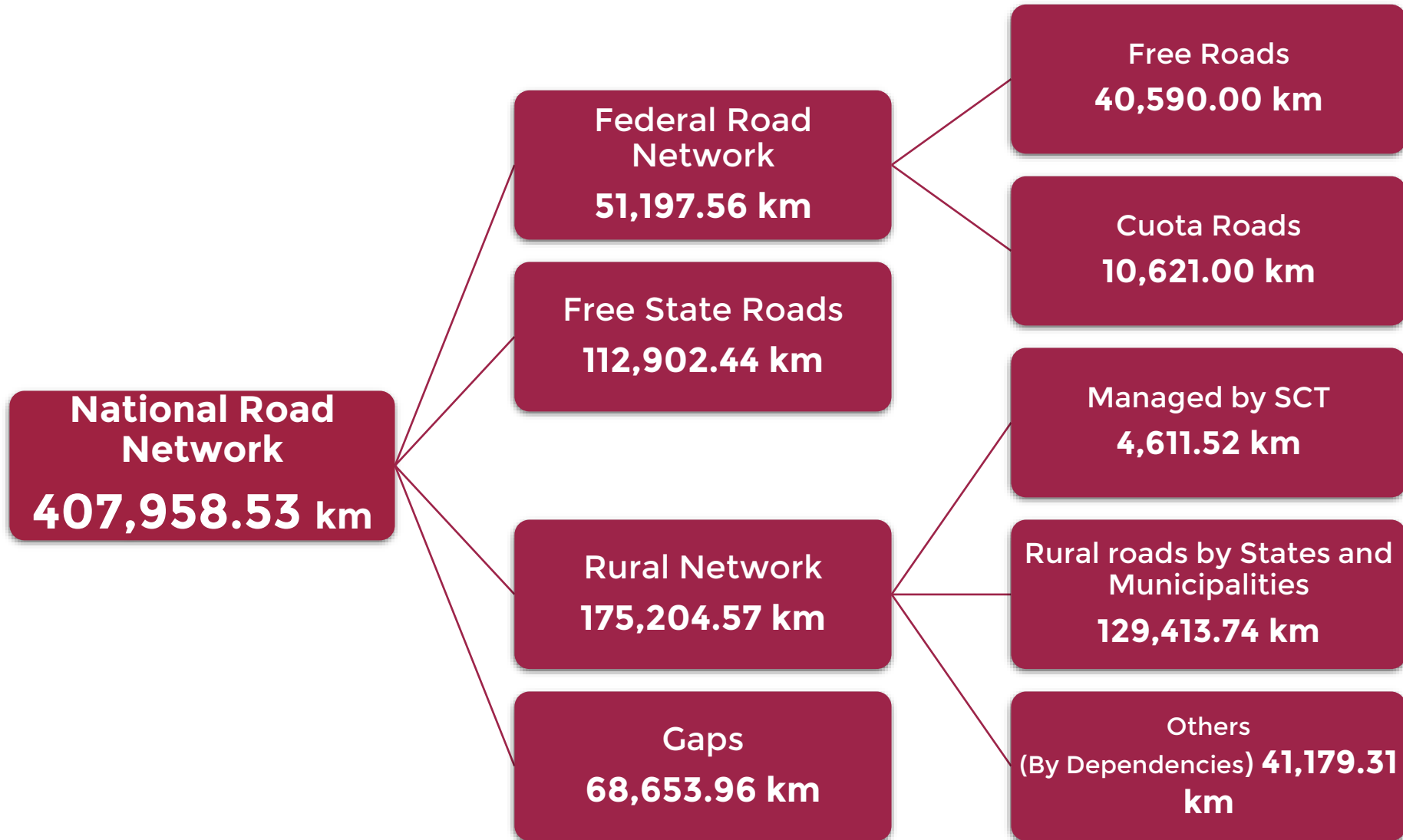
3,945.9 MILLION PEOPLE



Transport logistics distribution



Length of the National Road Network



Published on 8 April 2020 in the DOF

DIARIO OFICIAL

Miércoles 8 de abril de 2020

SECRETARIA DE COMUNICACIONES Y TRANSPORTES

ACUERDO por el que se precisan las actividades esenciales competencia de la Secretaría de Comunicaciones y Transportes, en el marco de atención de la emergencia sanitaria generada por el virus SARS-CoV2.

ACUERDO POR EL QUE SE PRECISAN LAS ACTIVIDADES ESENCIALES COMPETENCIA DE LA SECRETARÍA DE COMUNICACIONES Y TRANSPORTES, EN EL MARCO DE ATENCIÓN DE LA EMERGENCIA SANITARIA GENERADA POR EL VIRUS SARS-CoV2

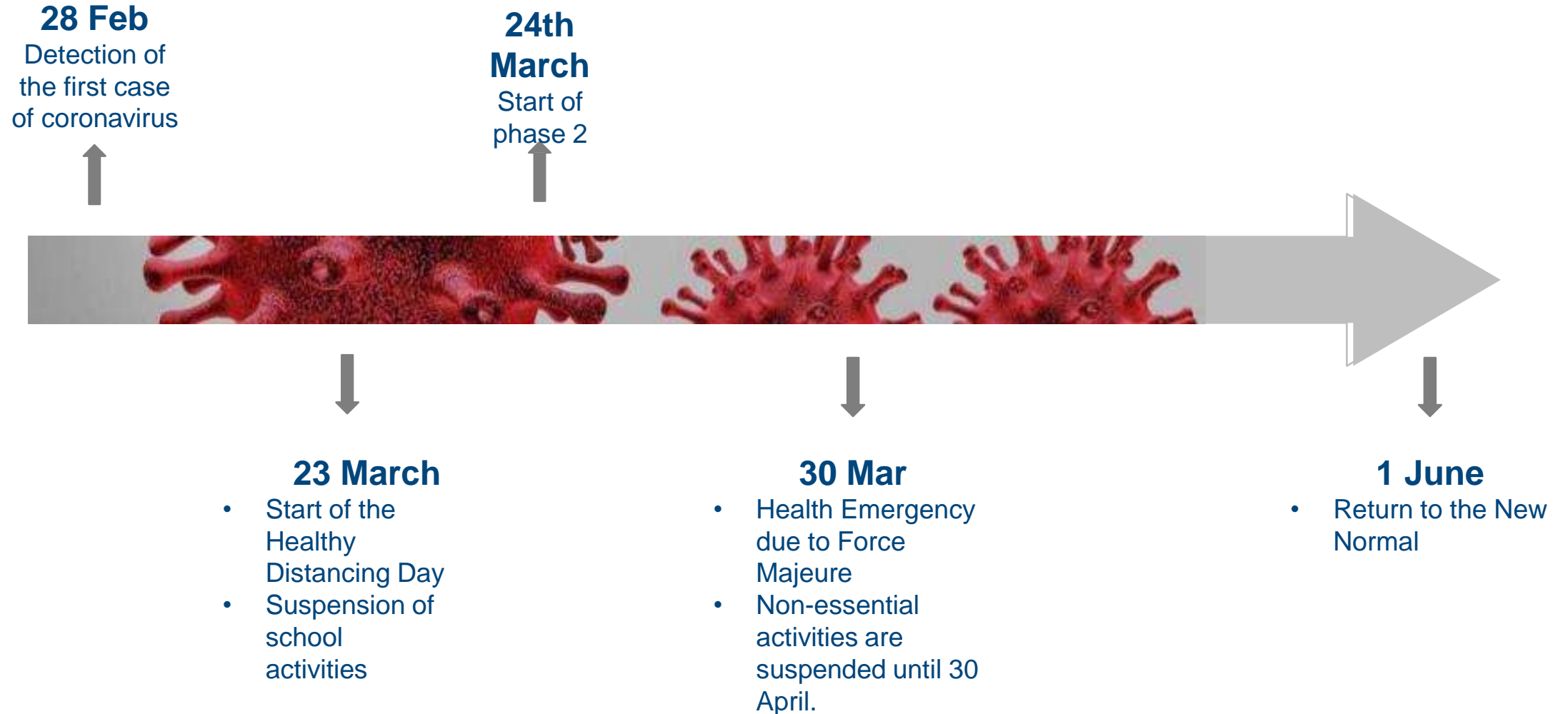
ARTÍCULO ÚNICO. Las **actividades esenciales** referidas en el Acuerdo de Emergencia Sanitaria que corresponden al ámbito de competencia de la Secretaría de Comunicaciones y Transportes, son las siguientes:

A. En materia de Infraestructura:

- (i) La conservación de las carreteras federales libres de peaje;
- (ii) El Programa de Conservación y Rehabilitación de Caminos Rurales y Alimentadores, y
- (iii) La operación de la Red de Autopistas de Cuota, las libres de peaje, así como todos aquellos caminos y puentes entregados a los gobiernos de las entidades federativas y municipios para su operación, mantenimiento, conservación y vigilancia.



Evolution of the COVID-19 Pandemic in Mexico



Reference links on the evolution of the Covid-19 Pandemic in Mexico

28 Feb

Detection of the first case of coronavirus

- <https://www.jornada.com.mx/ultimas/politica/2020/02/28/se-confirma-primer-caso-de-coronavirus-en-mexico-2562.html>
- https://elpais.com/sociedad/2020/02/28/actualidad/1582897294_203408.html
- <https://www.eluniversal.com.mx/nacion/sociedad/coronavirus-en-mexico-confirman-primer-caso>

23 March

Start of the Healthy Distancing Day

Suspension of school activities

- https://www.gob.mx/cms/uploads/attachment/file/541687/Jornada_Nacional_de_Sana_Distancia.pdf
- <https://www.jornada.com.mx/ultimas/politica/2020/03/23/comienza-la-jornada-nacional-de-sana-distancia-1056.html>

<https://www.gob.mx/sep/es/articulos/comunicado-conjunto-no-3-presentan-salud-y-sep-medidas-de-prevencion-para-el-sector-educativo-nacional-por-covid-19?idiom=es>

24th March

Start of phase 2

- <https://lopezobrador.org.mx/2020/03/24/anuncia-gobierno-federal-inicio-de-fase-2-de-la-epidemia-de-covid-19/>
- <https://www.gob.mx/salud/prensa/095-inicia-fase-2-por-coronavirus-covid-19>
- <https://www.jornada.com.mx/ultimas/politica/2020/03/24/entra-mexico-en-fase-2-de-la-pandemia-975.html>

30 Mar

Health Emergency due to Force Majeure

Non-essential activities are suspended until 30 April.

https://www.dof.gob.mx/nota_detalle.php?codigo=5590745&fecha=30/03/2020

<https://www.gob.mx/salud/prensa/consejo-de-salubridad-general-declara-emergencia-sanitaria-nacional-a-epidemia-por-coronavirus-covid-19-239301>

1 June

Return to the New Normal

<https://www.gob.mx/covid19medidaseconomicas/acciones-y-programas/nueva-normalidad-244196>

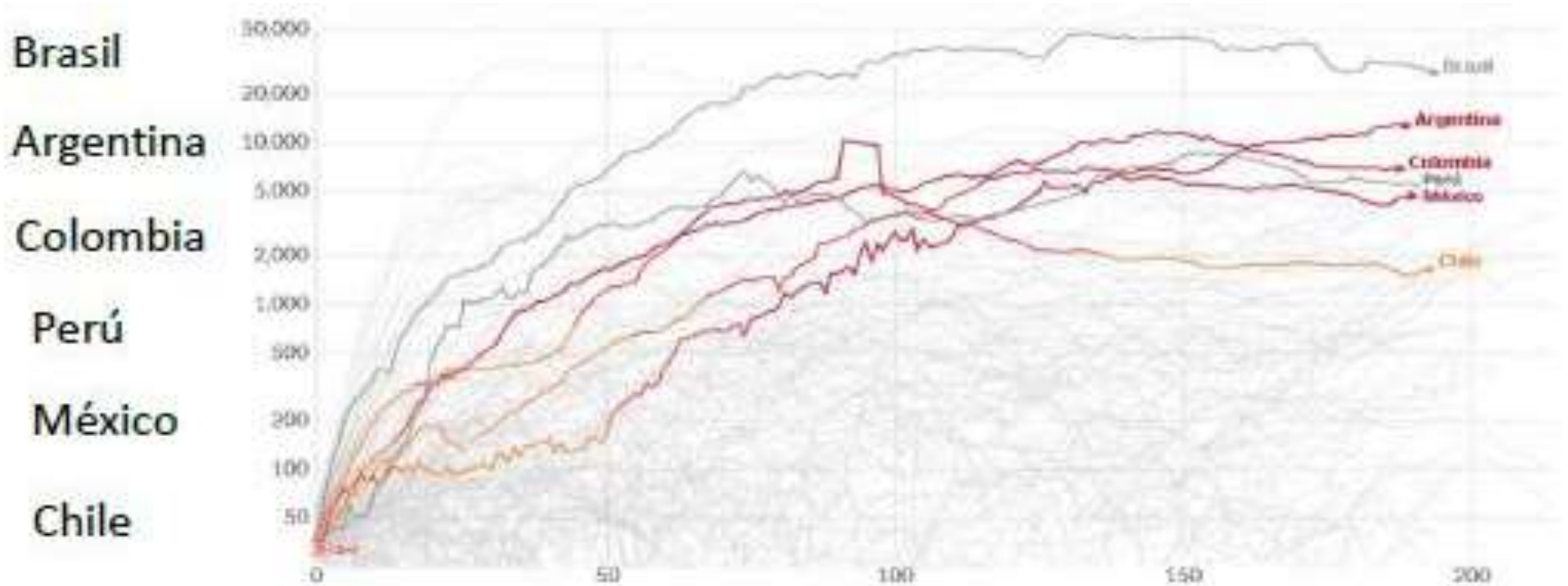
<https://politica.expansion.mx/cdmx/2020/05/30/estas-son-las-medidas-por-covid-19-a-partir-del-1-de-junio-en-la-cdmx>

The world in figures

250 TERRITORIOS	CONFIRMADOS	DEFUNCIONES	RECUPERADOS
 Estados Unidos	7.229.559	208.335	3.870.955
 India	5.903.932	93.379	4.849.584
 Brasil	4.748.327	142.161	4.084.182
 Rusia	1.159.573	20.385	945.920
 Colombia	818.203	25.641	722.536
 Perú	808.714	32.324	670.989
 España	748.266	31.411	Sin datos
 México	733.717	76.603	527.278
 Argentina	711.312	15.749	565.922
 Sudáfrica	671.669	16.586	604.478

https://en.wikipedia.org/wiki/Template:COVID-19_pandemic_data

Confirmed daily trends in Latin America



Preventive measures for field staff in federal road maintenance works

The following measures are aimed at ensuring the effectiveness of the health instructions contemplated in the COVID-19 contingency, by means of a basic and uniform model of organisation, information and prevention that helps to generate a higher level of safety for workers and their environment.

CONTRACTOR MEASURES



Ensure that staff members wash their hands when entering the work site, during their working day, every time they use the toilets and at the end of their activities.

Guarantee the supply of water, soap and antibacterial gel.



Take the staff's temperature with digital thermometers before the end of their working day.



Do not allow any staff member with the following symptoms to leave the field and send home immediately: fever higher than 38°, headaches, cough, difficulty breathing or joint pain.



Organize workers' activities so a healthy distance of 1.5 m is respected

WORKER MEASURES



Avoid going to work if you have any of the following symptoms

- Fever higher than 38°.
- Headaches
- Cough
- Breathing with difficulty
- Joint pain

If you experience any of these symptoms during your working day, please report to your superior.

Preventive measures for field staff in federal road maintenance works



Avoid campsites and dormitories in the construction area. If necessary, maintain a healthy distance of 1.5 m.

Restrict external visits to the site.



Implement cleaning and sanitation measures for work vehicles.



Each work crew must be provided with a thermometer and masks for those who show symptoms of contagion, and the worker must be taken home immediately for initial protection. There must also be enough water for the constant hydration of the workers.



The supervision work must be carried out in a vehicle occupied by 2 people maximum.



When working in the study and project office healthy distance must be respected and the area must be ventilated.



Avoid road congestion in the work area.

MEASURES BY THE WORKER



Do not shake hands and do not hug other people.



Staff members over the age of 65 must remain at home.



After your working day is over, return and stay home.



Take care of your family.



Let's all take care!

HELP TO STOP THE CORONAVIRUS SPREAD

HANDS Wash frequently

ELBOW Cough on it

FACE Don't touch it

KEEP your minimum distance of 1.5m

AVOID crowded places

Health measures at work sites



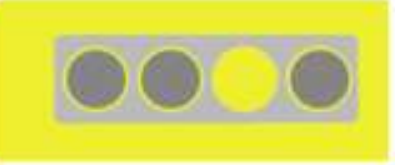

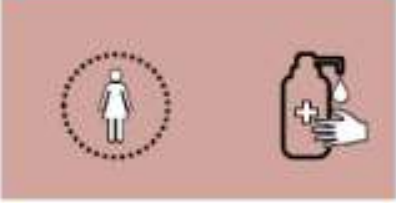





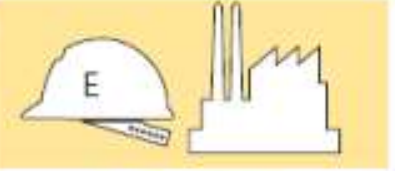
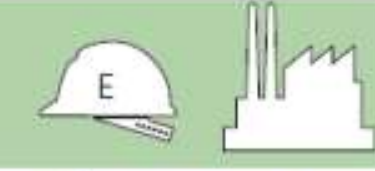









Latitude 16.7972
Length -96.997684
Elevation: 2426.9 m
Accuracy: 3.0 m
Note: high 4+730

Health measures at work sites



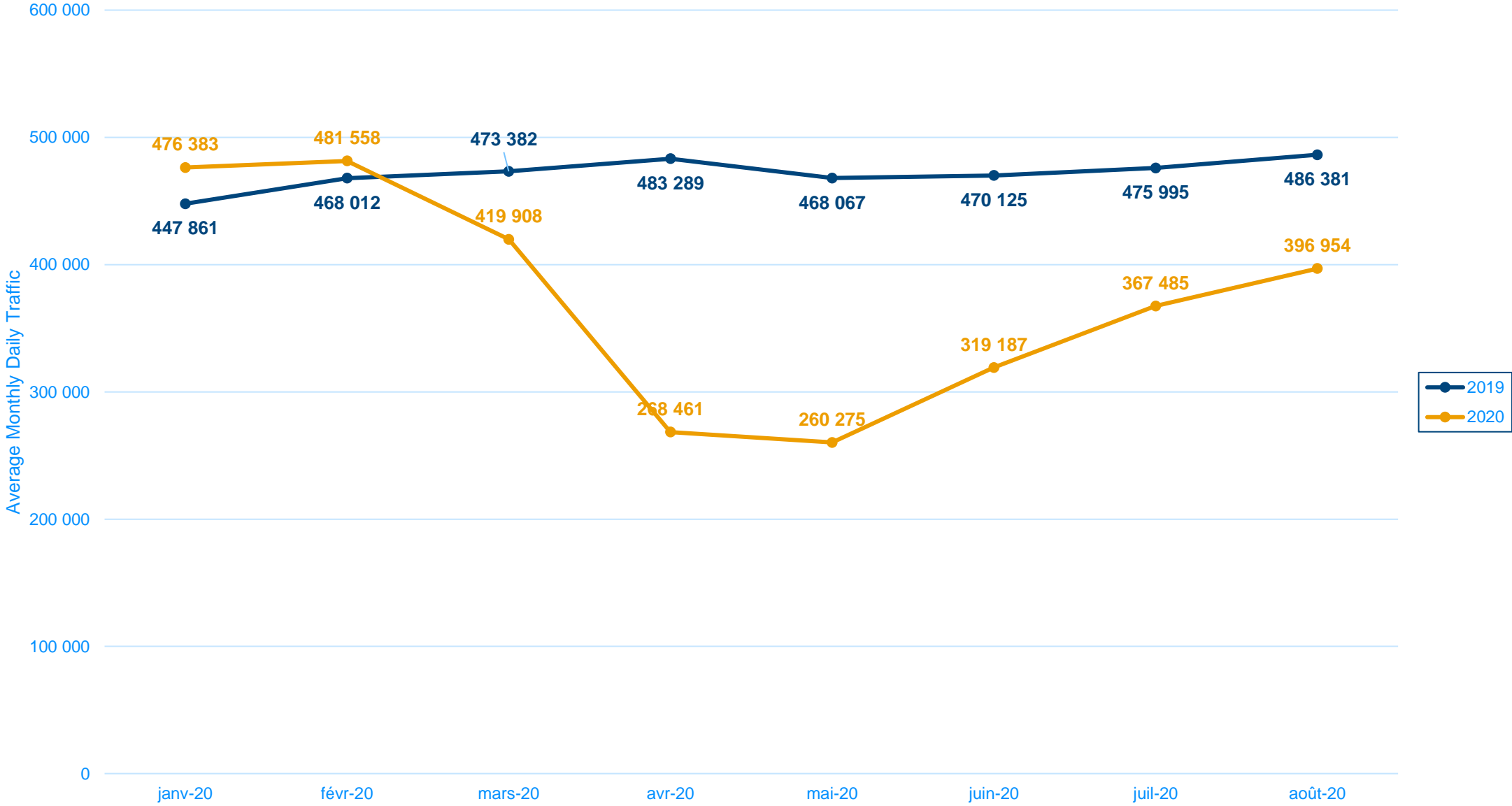
Epidemiological traffic light

ACTIVIDADES				
Medidas de salud pública y del trabajo				
Laborales Esenciales No Esenciales				
Espacio Público Abierto Cerrado				
Personas vulnerables				
Escolares				

Highways with the highest average daily traffic

Period	Mexico - Pachuca	Mexico - La Marquesa	Chamapa - Lechería	Mexico - Querétaro	Mexico - Puebla	Guadalajara - Zapotlanejo	Peñón - Texcoco	Puebla - Acatzingo	Mendoza - Córdoba	Mexico - Cuernavaca	TOTAL
Jan-19	74,396	56,837	54,866	55,633	43,660	38,752	31,419	34,218	31,182	26,898	447,861
Feb-19	79,872	64,204	59,277	57,748	43,695	39,666	33,849	33,110	29,418	27,174	468,012
Tue-19	81,526	65,588	60,056	59,547	44,362	39,629	34,118	33,414	29,922	25,220	473,382
Apr-19	81,916	64,505	56,189	61,449	44,822	43,296	35,790	36,407	32,124	26,791	483,289
May 19	80,288	65,233	59,352	56,450	44,496	41,473	34,120	33,893	29,464	23,298	468,067
Jun-19	81,783	65,684	59,048	52,534	44,621	41,150	34,662	32,951	29,408	28,283	470,125
Jul-19	79,515	63,888	59,200	58,969	45,816	42,314	34,801	34,327	30,612	26,553	475,995
Aug-19	82,156	63,721	60,019	59,750	46,715	43,913	35,219	34,335	31,274	29,278	486,381
Jan-20	88,002	60,546	55,150	57,047	45,635	44,038	33,913	34,561	31,326	26,165	476,383
Feb-20	90,069	61,766	57,693	56,830	45,450	42,840	34,793	32,783	31,209	28,125	481,558
Tue-20	81,176	47,446	46,749	51,513	40,138	37,089	30,741	30,431	29,364	25,261	419,908
Apr-20	51,988	21,333	26,941	36,006	26,927	25,233	19,172	22,510	22,738	15,613	268,461
May-20	50,525	21,440	21,830	35,128	25,749	27,748	18,701	22,312	22,558	14,284	260,275
Jun-20	60,342	28,590	34,075	42,680	29,105	33,064	23,446	25,498	24,481	17,906	319,187
Jul-20	65,615	36,346	41,014	46,806	36,319	36,512	27,818	28,159	26,019	22,877	367,485
Aug-20	74,122	41,303	44,610	49,575	39,097	37,411	30,008	29,416	26,784	24,629	396,954

Highways with the highest daily traffic in average TOTALS



Operation of Cuota Motorways (Toll) in response to the COVID-19 contingency

- The SCT* issues "Health and safety measures to be observed during health emergencies":
 - Minimum workloads for routine maintenance, operation and maintenance of toll roads under concession.
 - Maintenance or rehabilitation work may only be carried out where there is an imminent risk to the integrity of the infrastructure under concession.
 - Apply health and safety measures issued by the Ministry of Health; in particular to staff working in toll booths.
 - Due to the decrease in traffic it is recommended to maintain only the necessary toll lanes and to maintain waiting lines under a 200m length.

*SCT: Coordination of Institutional Projects and Programmes, General Directorate of Road Development, Subsecretariat of Infrastructure, Secretariat of Communications and Transport.

Operation of toll-free roads in the face of the COVID-19 contingency

- The SCT* is suspending all construction and modernization of federal roads, construction and modernization of rural and feeding roads:
 - Only routine maintenance and conservation and reconstruction activities of rural roads are maintained, in order to keep the road in safe conditions that allow the safe movement of people and goods.
 - Tenders and bids for public works continue virtually, and the execution periods of the existing are rescheduled in order to consider those days declared as non-working due to the Health Emergency.

*SCT: Directorate-General for Roads, Directorate-General for Road Maintenance

Unemployment in Mexico and the cost of Covid-19

Unemployment in Mexico falls to 5.2% in August as 608,000 people return to work:

Mexico's unemployment rate fell to 5.2% in August as 608,000 people joined the economically active population (PEA), making a total of 2.8 million unemployed. The unemployment rate was lower than the 5.4% rate recorded in July 2020, but higher than the 3.7% rate of August last year, as disclosed by the National Survey of Employment and Occupation (ENOE) of Inegi.

<https://www.informador.mx/economia/Desempleo-en-Mexico-baja-a-5.2-en-agosto-al-reincorporar-608-mil-personas-20200928-0035.html>

Covid-19 costs 60 billion pesos: The authorities have spent 59.199 million pesos to tend to the coronavirus health emergency, an average of 9.866 million per month. The federal government is responsible for the largest amount - 35 billion. The largest investment was made in March, when large quantities of medical supplies and materials were purchased.

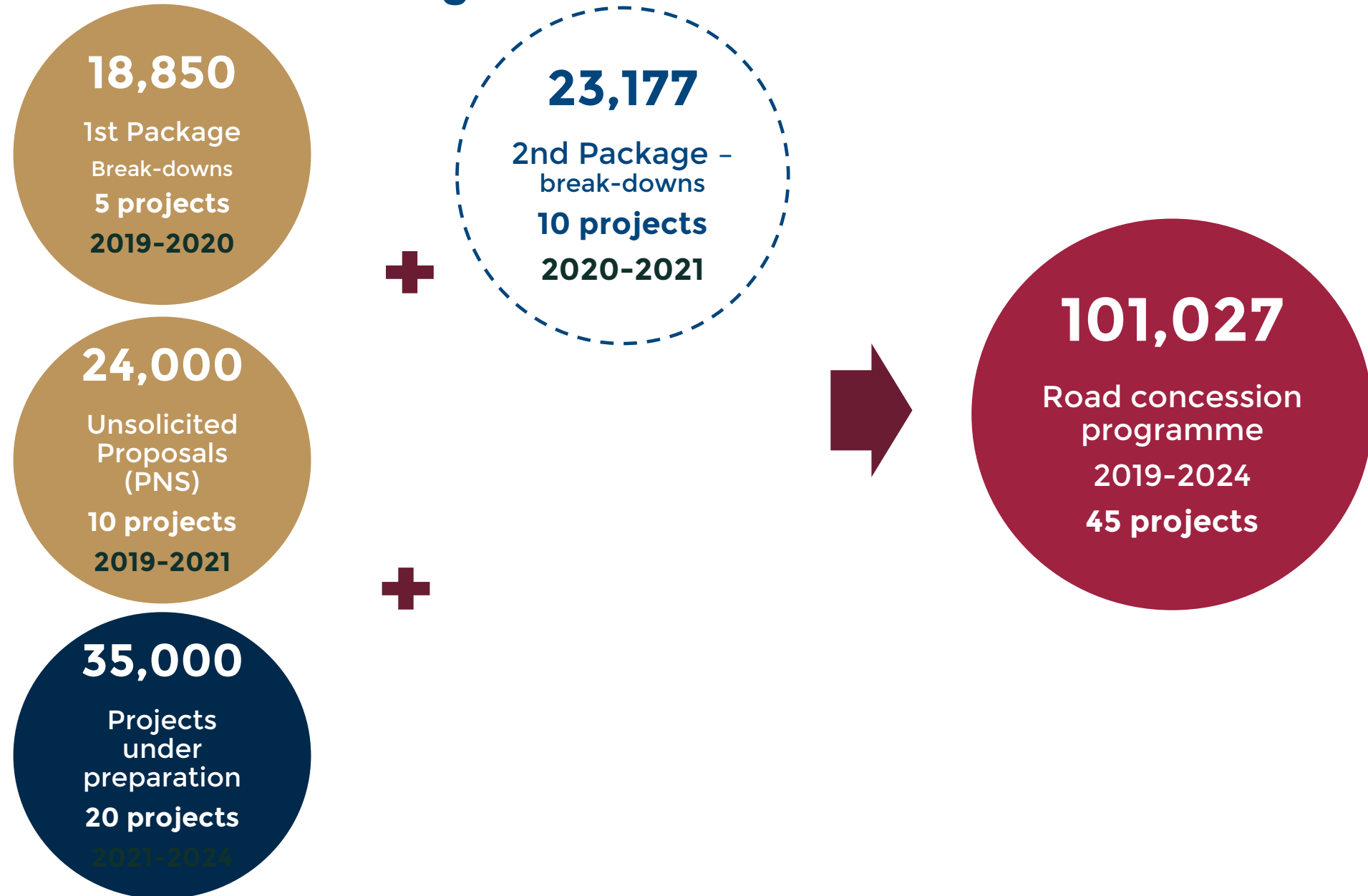
<https://www.imagenradio.com.mx/covid-19-cuesta-mexico-60-mil-mdp>

■ Planned measures that are here to stay

- **Encourage** users of toll roads to pay with TAG to reduce cash handling.
- **The Home Office** demonstrates that in many cases it is not necessary to physically attend offices thanks to the communications technology
- **Continue to comply with** healthy distancing measures, among others.
- **Alternate the presence of** staff per area and follow the technical protocol for offices developed by the Ministry of Health.



Road Concessions Programme 2019-2024



Thank you for your attention!



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- 9- **Closing of the Seminar**, cameras and microphones open to participants.

Duration: 2 hours



Questions and Answers

Bianca Bianchi, Transport Specialist for Latin America - World Bank

WB

Cedric Escalante, Vice-President of Infrastructure - Ministry of Communications and Transport

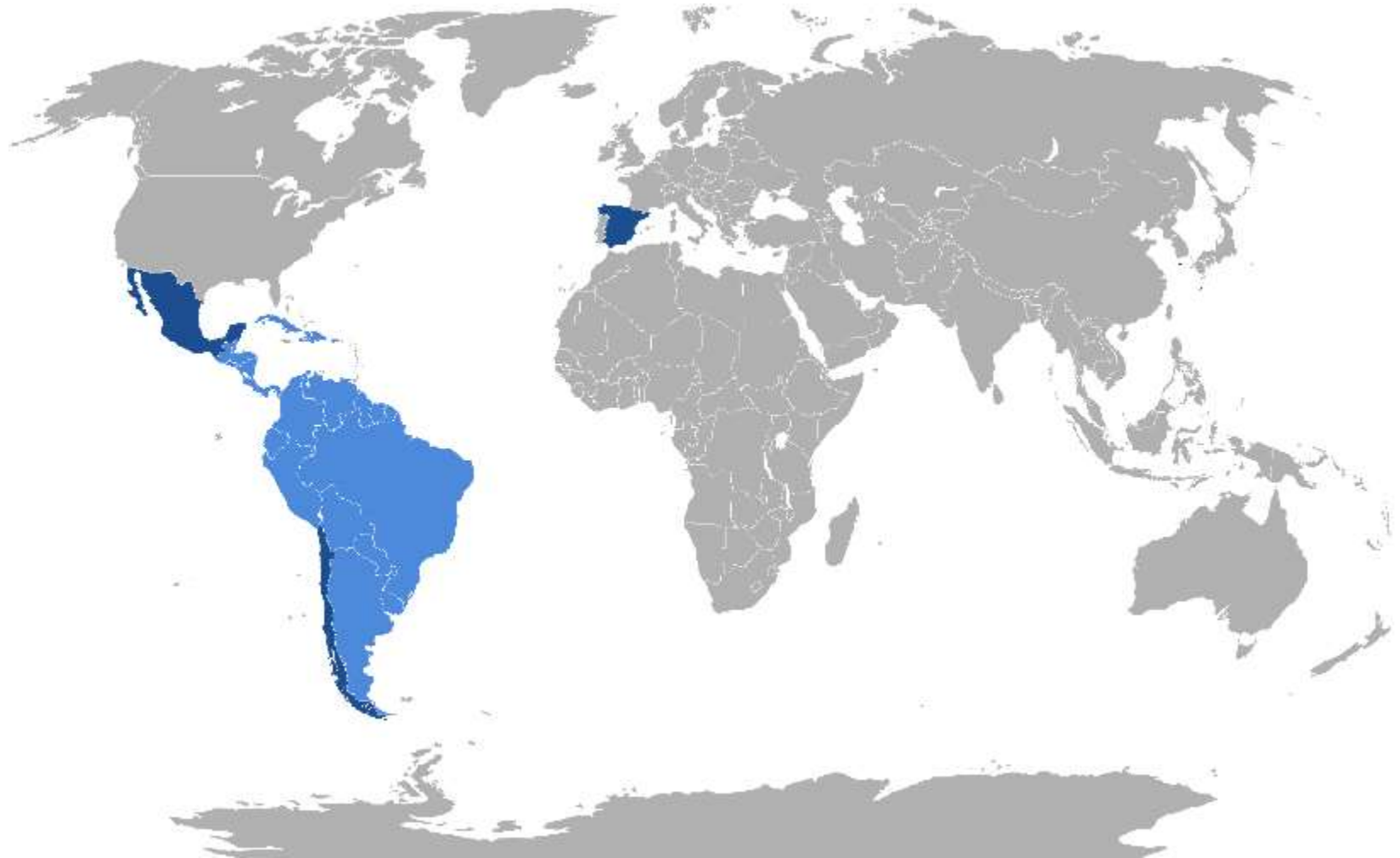
MEX

Javier Herrero, General Director of Roads - Ministry of Transport, Mobility and Urban Agenda.

ESP

Ing. Jaime Retamal, Director of Roads - Ministry of Public Works

CHL



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Conclusions

PIARC COVID-19 and Roads Seminar (6th Online Seminar in Spanish)

José Manuel Blanco Segarra

Spanish-speaking Secretary of PIARC TC 1.1

and member of the PIARC Response Team to COVID-19

#PIARCCOVID19

30 September 2020

José Manuel BLANCO SEGARRA



- Chair of the National Committee TC 1.1 Performance of Transport Administrations



(ATC Technical Road Association)



- Dean of the Extremadura Region of the Association of Civil Engineers
- Chair of the national committee "Road Materials" (2000-2012)
- Chief engineer of the Public Road Network in Extremadura (2006-2019)
- Chair of the TC A.1 Operation of Transport Administrations (2016-2019)
- Current PIARC TC 1.1 Spanish Language Secretary**
"Performance of Transport Administrations"
- Member of the PIARC Response Team to COVID-19**



FINAL PRE-CONCLUSIONS

- ❑ THE HEALTH, ECONOMIC AND SOCIAL IMPORTANCE OF ROAD NETWORKS AND ROAD TRANSPORT IS CONFIRMED
- ❑ IT IS CONFIRMED THAT ROAD AUTHORITIES HAVE BEEN ABLE TO REACT IN A COORDINATED AND RAPID MANNER, GUARANTEEING PEOPLE'S HEALTH AND MAINTAINING THE ESSENTIAL AND CRITICAL SERVICE: MOBILITY
- ❑ COVID-19 POST-CRISIS RECOVERY: AN OPPORTUNITY FOR RE-PRIORITISATION, INNOVATION, NEW TECHNOLOGIES, DIGITISATION, NEW GOALS (SUSTAINABILITY, RESILIENCE, DECARBONISATION), RETHINKING LOGISTICS, MOBILITY, AND IMPROVED SECURITY FOR ALL
- ❑ INVESTING IN ROADS HAS RESULTED IN A RAPID AND WIDESPREAD POSITIVE EFFECT ON ECONOMY AND SOCIETY. THE CHALLENGE LIES IN OBTAINING THE NECESSARY FUNDING. THERE ARE MECHANISMS FOR THIS

CONCLUSIONS

- **An increasingly clearer picture of the major health, labour and economic repercussions (impacts) of COVID-19**, globally, in each country, population, and economic sector. To be taken into account in order to better design our (new) future.
- **As the pandemic spreads and evolves, the focus has broadened to include economic recovery - not leaving public health behind.** Those are changes that will remain, "the new normal", new technologies, new targets...
- **In Latin America**, economic activity has contracted by 7.2%, exports are suffering, the negative impact on women, agriculture-oriented countries are suffering less, and e-commerce is developing. **The economic impact is even higher in Spain, which has been greatly affected by the decline in international tourism.**
- **In the face of a world scenario of economic constraints, roads and road transport must make use of their proven economic and social effectiveness.**

CONCLUSIONS

- **Today's dilemma:** it is known since before the pandemic that there is a large gap between actual investment in infrastructure and actual needs. Road networks have demonstrated their essential, critical, connectivity and "capillary" role during the pandemic. Now the difficulties in securing funding seem greater (competition with other sectors) especially Budgetwise.
- **The direct and indirect social effects of road investment** are large, rapid, effective and spread to large sections of the population and various sectors of the economy, encouraging dynamism and modernisation.
- **International bodies such as the World Bank** are instruments for attracting funds to finance infrastructures and improve and adapt this to new needs and growing demands of all kinds: resilient, sustainable, "green", inclusive, public-value, road-safety, innovative, digital demands...

CONCLUSIONS

- **The road heritage is one of the largest in the country.** Its adequate conservation and optimization is a priority and has a great and varied positive economic and social effect - notably the reduction of unemployment in the case of rural road maintenance: 25,000 – 50,000 jobs for every 100 million USD according to the World Bank.
- **The countries around us have continued to carry out Conservation (and even accelerated it), to maintain passability (mobility)** even in the worst circumstances, adopting extreme prevention measures for staff, and flexibility in organisational performance and the distribution of tasks.
- **Actions under construction of new buildings or major improvements: these** have usually been preventively halted during the most acute phase of the pandemic. Rescheduling. Willingness to relaunch.

CONCLUSIONS

- With regard **to new tenders**: rescheduling and promotion of new tenders. Willingness to re-launch and expand, if the necessary funds are obtained, to complete the networks and improve their capacity, functionality, security (level of service and response to society). In some cases, it is necessary to improve the preparation of road actions.
- **The road agencies are among the largest investors in countries.** Their role in economic recovery, reconstruction and re-launching is therefore of great importance and leadership in national Recovery and Resilience Plans.
- An **ever-present factor and challenge**: funding. Budgetary negotiations, World Banks and Multilateral Development Banks, European Recovery Fund, Public-Private Collaboration/Partnership/Alliance: concessions, availability, availability but with certain indicators and balanced risk taking

CONCLUSIONS

- **Road official bodies have been able to react quickly and effectively**, in coordination with many other public entities, regulators, health authorities, professional associations, supply chain, etc. to ensure the health of employees, workers and users, while maintaining the essential service: transporting people and goods by road.
- **Now it is time to look into the future (short, medium and long term)** by drawing lessons from the recent past, and in a coordinated manner.
- **Drafting studies and road projects** must continue in order to have a portfolio for the future and to avoid the collapse of the consultancy sector.
- **Objectives: connectivity and structure, resilience and redundancy, capacity building for rapid response to contingencies, high level of service, "green transition", "digital transition", competitive sustainability.**

CONCLUSIONS

➤ Some consequences that seem permanent (COVID-19 footprint):

Working remotely.

On-site health measures at work places and shift work

Electronic payments methods for transport infrastructure users

Development or deepening of Recovery and Resilience Plans.

Digital Transformation. New technologies. Implementation of SIT (*ITS*) and BIM

Circular economy incentivisation (particularly important for pavements)

Acceleration in the field of energy efficiency. Electric and alternative fuel vehicles.

Decarbonisation.

Special attention to vulnerable users: cyclists, pedestrians. Road safety. Noise.

FINAL COMMENT

- **The pandemic has brought us great uncertainties regarding mobility**, both at a national and international level, and future user behaviour that will have to be observed and managed. Let us draw some lessons.
- Having **proven the health, social and economic importance of road networks and transport**, it is necessary to **continue investing in them**, knowing how to prioritise, plan in the medium and long term, and apply new technologies, staying calm and maintaining a clear vision of social aspects and objectives.
- **There is much to be done to improve connectivity, service levels and to respond to the ever-increasing demands and expectations of society, governments, stakeholders and users.**
- **Let's communicate in a clear, constant, coherent and convincing way.**

Thank you for your attention!

José Manuel Blanco Segarra



Spanish-speaking Secretary of PIARC TC 1.1

Member of the PIARC Response Team to COVID19

[**jtblanco@mitma.es**](mailto:jmblanco@mitma.es)

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PIARC Online Seminar COVID-19 and roads 10 and 11 June 2020

**Thank you very much
for your attention!**

Visit our PIARC & COVID-19 site

<https://www.piarc.org/en/News-Agenda-PIARC/Coronavirus-PIARC-and-Covid-19>