





PIARC Webinar COVID-19 and roads 10 and 11 June 2020

Welcome!

From the very beginning,
Please do not use microphone nor camera.









Introduction to the seminar

Miguel Caso Flórez

Technical Director of PIARC

#PIARCCOVID19

June 2020

Participation in the seminar.

Your camera and microphone must remain off.

You can ask questions in the chat room. At the end of all presentations, Veronica Arias will check the chat and ask questions to the speakers.

A limited number of questions can be answered.

Close the chat to see the complete presentations.



Participation in the seminar.

This seminar is currently being recorded and will be made public on the PIARC website and on PIARC's YouTube channel.

More seminars will be held in the coming weeks. The next one in Spanish will take place on May 24th (to be confirmed).



Broadcast on the YouTube channel.

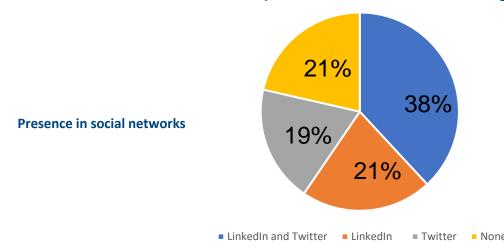


This session at Zoom has a limited audience. The speakers* will answer orally to the questions asked in the chat.

(*) Oscar de Buen and Juan E. Gil Chavarría will answer only on YouTube.



The recording of this video will be posted on YouTube tomorrow, 11 June, and the speakers will answer questions in writing.





Seminar Boundaries

Disclaimer:

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

The ideas and examples presented 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, for policy and practice recommendations. While care has been taken in the preparation of this material, no liability will be accepted for any damages that may be caused.

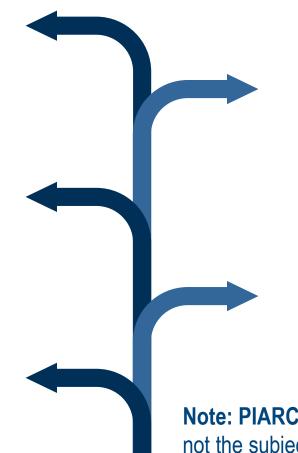


Objectives of the seminar.

Offering short-term answers: the world is in crisis and every day counts.

These are knowledge and practices that are in the process of being confirmed,

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



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 can inspire you.

Note: PIARC also works on the medium and long term, but is not the subject of this seminar. Many changes will occur.

Programme of the seminar.

- 1- Welcome and introduction to the seminar, Ing. Miguel Caso Florez, Technical Director of PIARC.
- 2- Institutional presentation of PIARC, Marina Domingo Monsonís, Communication Officer of PIARC
- 3- COVID-19 and roads: managing the pandemic and supporting the economy, Ing. Oscar de Buen Richkarday, former President of PIARC
- 4- COVID-19 and roads in Colombia: facing the pandemic and boosting the economy, Ing. Juan Esteban Gil Chavarría, Director of INVIAS.
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- 10- Conclusions of the Seminar, Ing. José Manuel Blanco Segarra, Ministry of Transport, Mobility and the Urban Agenda.
- 11- Closing of the seminar, cameras and microphones open to participants.











Institutional Presentation of PIARC

Marina Domingo Monsonís

Head of Communication PIARC

#PIARCCOVID19

June 2020

What is PIARC?

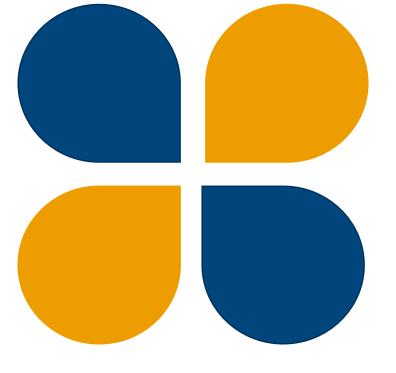
- PIARC is the new name of the World Road Association.
- It was founded in 1909 as a non-profit, non-political association.
- It has 124 member countries, plus regional, collective and individual members.
- It is the first global forum for the exchange of knowledge, policy and practice on roads and road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



PIARC's four key missions

 Be a leading international forum for the analysis and discussion of the full range of road and related transport issues.

Identify, develop and disseminate good practices and facilitate better access to international information.



 Take due and full account in its activities of the needs of developing countries and economies in transition.

 Design, produce and promote effective tools for decisionmaking in road and transport related areas.

The Association mobilizes the experience and knowledge of 1,200 experts from more than 80 countries in 22 technical committees and task forces.



PIARC's COVID-19 website

https://www.piarc.org/es/actualidad-agenda-PIARC/Coronavirus-PIARC-y-COVID-19

- The recordings of the online seminars "COVID-19 and the Roads", 10 in English, 3 in Spanish - 1 more today - and 2 in French).
- The presentations of these seminars.
- A synthesis report on the "COVID-19 and the roads" situation.
- PIARC Technical Reports Related to Pandemic Management









PIARO

Key Questions on COVID-19 and Roads 1/2

To ensure as far as possible the health and safety of employees and road users.

Response to the impacts of transportation.

Relationships and collaboration with customers, users and other interested parties - Border control.

Maintain activity and continuity of service.

Managing the impacts on the economy and supply chains and reviving the economy after the health crisis



Key questions on COVID-19 and routes 2/2

Safety (including cybersecurity).

The extent to which the road sector complies with the rules.

Impact of enforcement (police checks) on road transport

Technological support (ITS, IT applications) for road management during the crisis



Thank you for your attention!



Marina Domingo Monsonís

Head of Communication PIARC



World Road Association (PIARC)
Grande Arche – Paroi Sud – 5°étage
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World Road Association PIARC



www.piarc.org







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Webinar on COVID-19 and Roads

Oscar de Buen Richkarday

Past President of PIARC

#PIARCCOVID19

10 June 2020

Oscar DE BUEN RICHKARDAY



- Civil Engineer from the National Autonomous University of Mexico (UNAM)
- Master of Science in Transportation du Massachusetts Institute of Technology (MIT)
- Undersecretary of Infrastructure of the Ministry of Communications and Transport between 2006 and February 2011.
- President of the World Road Association (PIARC) for 2013-2016.
- Chairman of Ainda Energía & Infraestructura, an investment fund for energy and infrastructure projects
- Member of the Board of Directors of UNAM.

Aspects of the COVID-19 theme and roads covered in this presentation

- Ensuring the health and safety of employees and users
- Maintain activity and continuity of service.
- Management of the impact on road transport.
- Managing the impact on the economy and supply chains and reviving the economy after the health crisis
- Relationships and collaboration with customers and users. Border control.
- Security (including cybersecurity).
- Road sector compliance with standards
- Impact of rule enforcement (police checks) on road transport
- Technological support (ITS, IT applications) for road management during the crisis



The fundamental objectives of contemporary transport

- Providing at all times quality services for the movement of persons and goods
- Contributing to the fight against climate change.
- Supporting efforts to overcome extreme poverty, discrimination and inequality
- Providing mobility opportunities for all citizens an contribute to improving their quality of life.



Main lines of work

- Reducing the carbon footprint of transportation.
- Promoting the substitution of energy sources in the sector.
- Promoting opportunities for shared mobility, especially in cities.
- Improving the quality of service of public transport.
- Promoting multimodal transport integration and rethinking its relationship with land use planning.



Examples of ongoing initiatives

- Connected, adaptable and resilient routes.
- Innovations in the field of batteries for better market penetration of electric and hybrid vehicles
- Shared mobility options based on bikes, motorcycles, cars and others
- Emergence and consolidation of transmission-ondemand options.
- Strengthening public transport and increasing its efficiency



The pandemic and its effects

Immediate actions

Social Confinement

Health distance

No personal contacts

Avoid overcrowding

Steps of the response

- Step 1: Transport's contribution to the fight against the pandemic
- Step 2: Fighting the crisis and transition to a new/other normality
- Step 3: Searching for new models of transport evolution

Questions

- How will this affect transport transformation?
- What new challenges are you facing?
- How can we rethink policies in the sector?

Step 1: Overcoming the Pandemic

- Ensuring the operation of transport for essential activities.
- Protecting the life and health of workers in the sector.
- Facilitating the movement of health personnel and patients.
- Ensuring the functioning of supply chains for food, medicines and everyday products.
- Sizing the supply to match the reduction in demand.



Step 2: Tackling the economic crisis and moving to a new normalcy

- Ensuring continuity of transport services.
- Generating economic activity and jobs, including through road maintenance programs.
- Promoting electronic payment methods and reducing the use of cash
- Identifying new projects through public-private partnerships.
- Monitoring and evaluating the contradictory effects that the new normality will generate



Stage 3: New development models

- Planning, innovating, adapting, collaborating and coordinating to update transport policies.
- Harnessing the legacy of the pandemic to accelerate the fight against climate change in transport
 - Encouraging teleworking.
 - Stimulate local supply chains.
 - Strengthen the resilience of processes.
 - Reduce transport demand.
 - Adopt new forms of territorial organization.



Conclusion

- The pandemic will be defeated.
- Its legacy will be a severe economic crisis and a new global normalcy.
- Transport and roads will help overcome the crisis and shape the new normal.
- This new environment will pose enormous challenges and create unique opportunities for the global road community.



Thank you very much!



Oscar de Buen Richkarday

Past President of PIARC

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Webinar on COVID-19 and Roads

Juan Esteban Gil Chavarría

Director General

National Road Institute - INVIAS

Colombia

10 June 2020

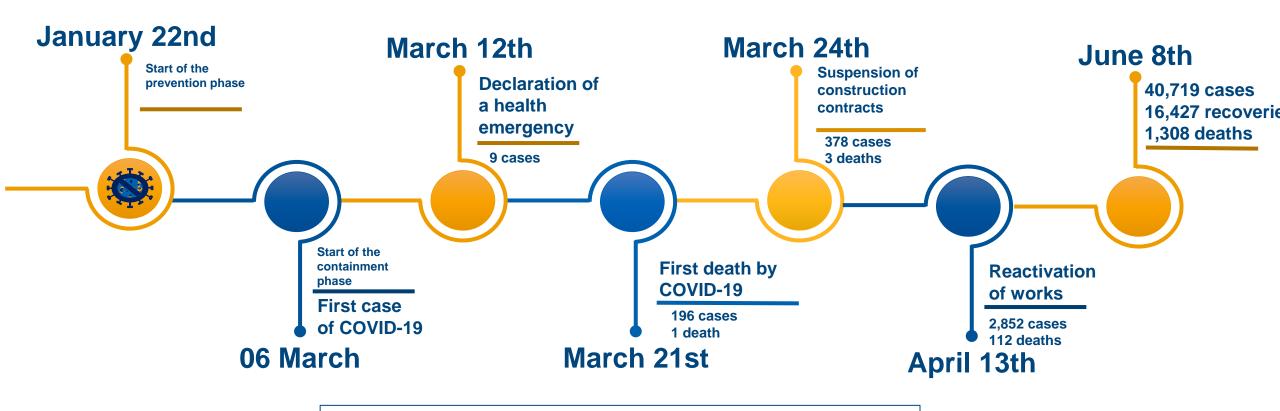
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- 1. Evolution of COVID-19 in Colombia
- 2. Impact of COVID-19 on infrastructure projects
- 3. Measures to deal with the emergency
- 4. Actions for the reactivation of the economy



Pumarejo Bridge - Barranquilla - Colombia

1. EVOLUTION OF COVID-19 IN COLOMBIA



12 March: ban on international passenger ships.

March 17: Closure of all land, sea and river borders in the country.

23 March: entry is limited to international travellers.

Freight transport has been authorized to ensure supply.



2. IMPACT OF COVID-19 ON INFRASTRUCTURE PROJECTS

- Changing contract end dates.
- Increased costs of implementing the protocols.
- Decrease in activity returns
- Labour and Input Shortages
- Contractor claims (increased administration, spare machinery, increased input and labour costs)

3. MEASURES TO DEAL WITH THE EMERGENCY

- Suspension of toll collection (March 24 to May 31).
- Protocol on Biosafety for Infrastructure Projects (Res. 679)
- Recognition of costs associated with the implementation of the Biosafety Protocol
- Special specifications and maximum reference price.
- Definition of contractual mechanisms to resolve contractor claims and partial reactivation of projects.
- Contract monitoring systems with technology.
- Teleworking.





4. ACTIONS FOR THE RECOVERY OF THE ECONOMY

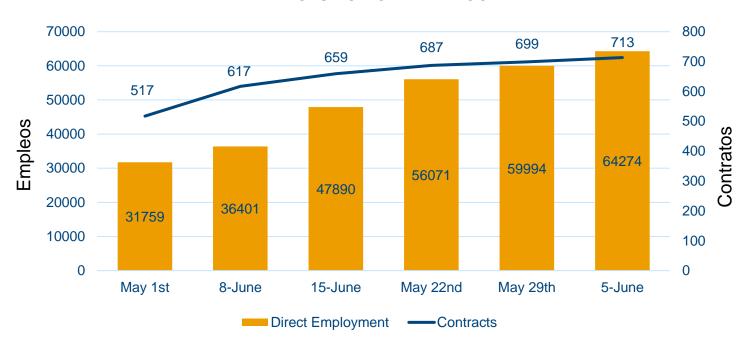
- Provide for the gradual and safe reactivation of the structures.
- Public works programmes for the recovery of the economy.
- Implementation of intelligent lane systems.
- Job creation.



Tunnel of the line - Colombia

4.1 PLAN FOR THE GRADUAL AND SAFE RESUMPTION OF WORK

WEEKLY EVOLUTION OF THE RECOVERY



	Estimate to be reactivated	Overview reactivated		To be reactivated	
Contracts	896	713	79,60%	183	20,40%
Direct Employment	99.988	64.274	64,30%	35.714	35,70%

4.2 PUBLIC WORKS PROGRAMMES FOR ECONOMIC RECOVERY

1. Projects to be carried out during the presidential term of office

39,570 jobs
11.4 million people will benefit from it.
28 road sections to be completed
Investment \$2.23 billion (US\$637 million)

2. Projects in Vision 2030

66,123 jobs
13.1 million people will benefit
22 stretches of road that are about to begin
Investment \$9.32 billion (US\$2,663 million)

□ 50 road projects - 2,026 km to be implemented
Road investment \$11.5 billion (US\$3.3 billion)
24.5 million people will benefit from it.
□ 105,693 jobs to be created
☐ 198.521 million per month to be paid into the economy
Decrease in annual operating costs by \$530 million



4.3 OTHER STRUCTURED PUBLIC WORKS PROGRAMMES FOR ECONOMIC RECOVERY

2. Maintenance of the nonconcessional national road network

3,035 km 25,650 jobs Investment \$2 billion (US\$571 million)

4. Integrated bridge management

350 bridges 13,130 jobs Investment \$700 billion (US\$200 million)

1. Rural Colombia

40,000 km of maintenance 5,000 km improvement 70,000 jobs Investment \$2.47 billion (US\$706 million)

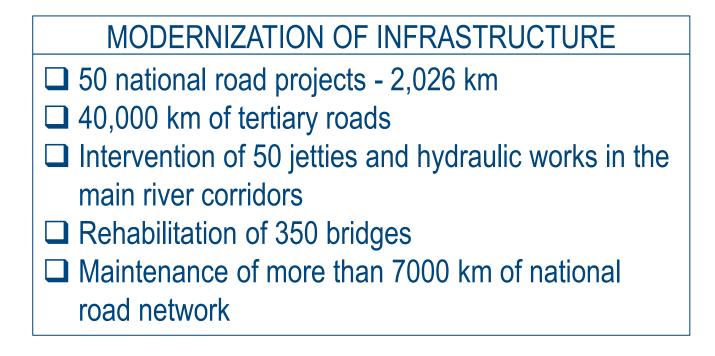
3. Long live Colombia Vías Verdes

150 km 2,471 jobs Investment \$200,000 million (US\$57 million)

5. Fluvial Colombia

50 river sources 1,920 jobs Investment \$200 billion (US\$57 million)

4.4 BENEFITS OF PUBLIC WORKS PROGRAMS FOR ECONOMIC RECOVERY



UPTURN

17.1 billion COPs (US\$4,885 million)

More than one million jobs 285,000 direct + 750,000 indirect

THANK YOU

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Measures taken by the Government of the Dominican Republic to combat Covid 19

Euclides Sánchez Almánzar, MSc.

Ministry of Public Works and Communications of the Dominican Republic

#PIARCCOVID19

April 2020

Euclides Sánchez Almánzar, MSc.

- Vice-Minister of Roads of the Ministry of Public Works of the Dominican Republic
- Master of Science in Construction Management.
- Assistant member representing the Dominican Republic in DIRCAIBEA (Council of Latin American Road Directors).
- Member of the Technical and Advisory Committee of the Mobility and Transport Fund (FIMOVIT)



Measures taken by the Ministry of Public Works and Communications (MOPC)



Decrees issued by the government to prevent the strong contagion of citizens:

 President Danilo Medina has appointed a high-level commission to coordinate the government's actions in implementing the protocols for the protection and prevention of the population.

- Article 161-20 establishes a national curfew from 5:00 a.m. to 7:00 p.m.



Curfew Exceptions

- Under the curfew, only vehicles carrying medical supplies, food and fuel are allowed to transit.
- As a contribution, these vehicles are exempt from paying public tolls.



The measures taken by the MOPC are divided into three main areas:

1st Axis	2nd axis	3rd axis
 Conditioning of spaces to cope with possible infections 	National Sanitation and Disinfection Program	 Provide antibacterial gel at toll booths and continue roadside assistance program

1. Fitting out spaces to accommodate suspects and patients at Covid 19.

As isolation of people suspected of carrying the virus is possible, we have set up several apartment complexes with more than 1,500 beds to prevent the spread.







2. Hygiene and disinfection program for public spaces

Hygiene

This program was carried out with the collaboration of concrete mixers and private construction companies who provided trucks, equipment and operators for the mixer, while the Ministry provided personnel, coronavirus safety equipment, cleaning equipment and logistics.

2. Hygiene and disinfection program for public spaces

Disinfection











3. The delivery of antibacterial gel to toll booths and the continuation of our roadside protection and assistance program.

Distribution of antibacterial gel



Roadside assistance



Measures taken by the Ministry of Public Works and Communications

To protect the health of our employees in the MOPC facilities and premises, we have taken the following measures:

- Staff suffering from health complications and people over 60 years of age will have to stay at home.
- We have placed an ozone tunnel to disinfect personnel entering the department.
- Arrangement of staff at the entrance and exit doors, taking the temperature of all those entering the department.
- Provision of surgical masks, gloves, antibacterial gel and goggles to all personnel.
- Arrangement of part-time work and shift work to avoid the accumulation of employees per department.

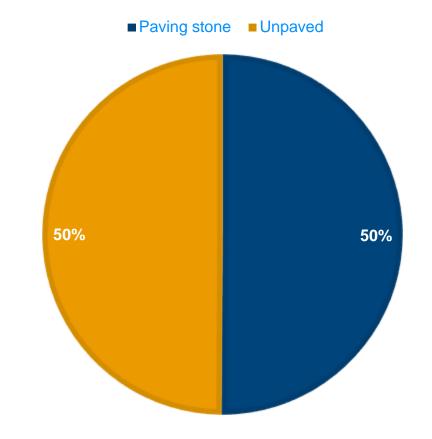
Investment in roads after COVID-19



Road network of the Dominican Republic

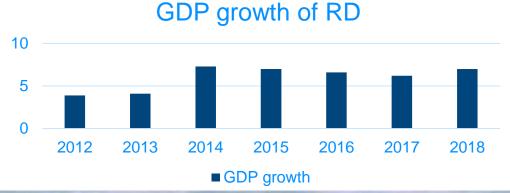
- The Dominican Republic has an area of 48,442 km2, with a road density of 0.41 km/km2.
- 19,705 km of roads in service, placing the country 40th out of 141 countries according to the Global Competitiveness Report 2019 in terms of road network quality.
- According to the World Economic Forum, the Dominican Republic ranks fifth among Latin American countries with the best road infrastructure.
- The Dominican Republic ranks first in the region in terms of transport infrastructure, according to the World Economic Forum's Global Competitiveness Report 2019-2020.

ROAD NETWORK OF THE DOMINICAN REPUBLIC



GDP growth and road investment

- From 2012 to 2018, the country has invested RD 82 billion (\$1.6 billion) in the construction of road infrastructure (bridges, highways, country roads, among others).
- New bypasses to reduce time and resources
- Reduction of the travel time to Santo Domingo from the country's tourist centres.
- It represents 330,000 direct jobs





Key points for the future

- The Dominican Republic is on the eve of elections to be held on 5 July.
- The proposals of the presidential candidates for a way out of the crisis have as a protagonist, investment in the construction sector both in housing and roads.
- P3s will play a more important role in the coming years.
- Alliance with international organizations such as the IDB.

Thank you.



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WEBNAR: COVID19 AND THE ECUADORIAN ROADS

EFFECTS OF THE COVID 19 PANDEMIC AND STRATEGIES FOR THE REACTIVATION OF THE CONSTRUCTION SECTOR AND ROAD INFRASTRUCTURE IN ECUADOR

Ricardo Paula López

Vice-Minister of Transport Infrastructure - Republic of Ecuador

#PIARCCOVID19

10 June 2020

Ricardo Octavio PAULA LOPÉZ

Civil Engineer, graduate of the Pontifical Catholic University of Ecuador. Professional with extensive experience in the construction and road industry at the national level. Originally from the Sultan of the Andes, he has held important positions such as

Undersecretary of Transport Infrastructure of the Ministry of Transport and Public Works; and currently

Deputy Minister for Transport Infrastructure, Ministry of Transport and Public Works.









TRANSPORTE Y OBRAS PÚBLICAS

• It is working to reactivate the construction and maintenance of the road infrastructure, establishing biosafety protocols that allow the gradual incorporation of the New Normal, in order to give continuity to the work for the benefit of the community.



Presentation Index

- Relevant aspects
- Effects of the COVID-19 Pandemic
- Measures taken during confinement
- Guidelines for the reactivation of the construction sector and road infrastructure.



Relevant aspects:

- Analysis of the effects of the COVID 19 pandemic in the road and transport sector in Ecuador
- Beware of ailments during a health emergency.
- Inter-institutional support for emergency care.
- Implementation and control of biosecurity measures in offices, roads, ports, airports and borders.
- Strategies for the reactivation of road infrastructure maintenance and construction work.
- Analysis of the actions implemented for the reactivation of the road infrastructure intervention sector
- Managing the impact on the economy and supply chains and reviving the economy after the health crisis
- Ensuring safe and efficient mobility through the National Highway System.



EFFECTS PRODUCED BY COVID-19 IN ECUADOR - ROADS

Executive Decree No. 1017 of 16 March 2020 declared a state of emergency due to a public calamity throughout the national territory, causing:

- Cessation of routine and periodic maintenance activities and reduction of emergent maintenance.
- Slower economic development of the construction industry.

 Acceleration of damage to road infrastructure due to the decline in adequate and appropriate care



EFFECTS PRODUCED BY COVID-19 IN ECUADOR - ROADS

 Decreased sources of employment due to the paralysis of the sector.

 Temporary suspension of work due to the prevention measures implemented.

 Decrease in technical-administrative activities due to the prevention measures implemented.

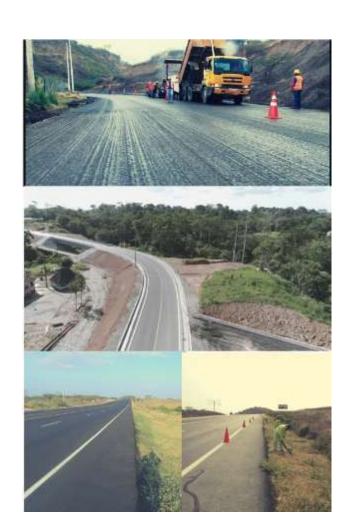






INFRASTRUCTURE LOSSES

- Routine maintenance with micro-enterprises:
 1,719,879.23
- Periodic maintenance (priority projects at national level): 60,623,000.00
- Attention to emergencies in the RVE, 733 road emergencies taken care of for a value of 1'143'773.25 dollars
- Suspended contracts in progress: \$161.9 million



MEASURES TAKEN DURING CONTAINMENT

KEY ACTIONS



6 LOGISTICS CORRIDORS HAVE BEEN ESTABLISHED TO ENSURE AN ADEQUATE SUPPLY OF FOOD, MEDICINES AND ESSENTIAL PRODUCTS.



The necessary efforts have been made to keep the national road network operational, handling more than 733 cases during the health emergency, i.e. SINCE 16 March 2020, MORE THAN 733 AFFECTIONS have been recorded.



Carry out routine maintenance of the national road network to ensure the safety and comfort of users during their travels.



LOGISTICS CORRIDORS

In order to facilitate mobility in Ecuador during the health emergency, **six logistics corridors** were established to maintain the supply chain of food, medicines and essential products in the country, thereby strengthening transport logistics at the national level.



BEWARE OF TRAFFIC EMERGENCIES:

The uninterrupted work of the Ministry of Transport and Public Works, at the national level, made it possible to deal with all emergencies on the national road network, respecting the biosecurity protocols established for field staff.



SUPPORT FOR DECENTRALISED SELF-GOVERNMENTS:

The MTOP collaborated with the provincial GAD of Guayas in the development of an alternative road and the supply of a delta-type bridge to be built in the Colimes area.



INTERINSTITUTIONAL WORK:

The Department of Transportation and Public Works is providing logistical support to the province of Guayas to mitigate the effects of COVID 19.



INTER-INSTITUTIONAL WORK - DAMAGE TO O.C.P. PIPES AND REGRESSIVE EROSION OF THE COCA RIVER

Risk produced by the regressive erosion of the Coca River, on the existing road infrastructure and on the oil pipeline, a situation that led to immediate actions for the definition and execution of a variant of the road in order to maintain safe communication between the provinces of Napo and Sucumbíos.



DISINFECTION OF M.T.O.P. FACILITIES AND EQUIPMENT

As a preventive measure against possible infections, the MTOP proceeded to disinfect installations and machinery, thus preserving the health of the human talent that lends its contingent in the health emergency.



DISINFECTION OF TRANSPORT UNITS AND DELIVERY OF PROTECTION KITS:

Within the framework of the national government, this State portfolio has provided prevention and biosecurity kits and has set up permanent disinfection units for users and transport units.



MTOP, compliance with and monitoring of compliance with biosafety protocols.







Guidelines for the reactivation of the construction and road infrastructure sector

 Initiate road maintenance activities according to their different modalities, taking into account the management plans and regulations applicable to the COVID-19 pandemic in Ecuador.

 Promote continuous disinfection, in collaboration with trade bodies, respecting the biosecurity standards applicable to the health crisis, in order to minimise the risk of contagion.

 Plan, organize and verify compliance with environmental management plans and regulations applicable to the COVID-19 pandemic in each of the construction and maintenance projects carried out by the institution.

EXTERNALLY FUNDED PROJECTS.

The MTOP continued to work on contracting and work execution processes, detailing the following projects:

PROJECT	PROVINCE	CREDIT	AMOUNT	ACTIVATION
VIA QUININDÉ- LAS GOLONDRINAS	EMERALDS	EXIMBANK	34.1 MM	15 JUNE 2020
VIA GOLONDRINAS - SAGUANGAL	IMBABURA	EXIMBANK	48.9 MM	17 JUNE 2020
MANTA AIRPORT	MANABÍ	EXIMBANK	21'31 MM	18 JUNE 2020
ACCESS TO MOUNT SINAI HOSPITAL	GUIDES	CBD	9.5 MM	25 JUNE 2020
SIDE PASSAGE OF THE GUARANDA	BOLIVAR	CBD	42'5MM	23 JUNE 2020
4 BRIDGES	CHINCHILLA BLACKBERRY	CBD	6'02 MM	26 JUNE 2020
		TOTAL	162.33 MM	

Opening and rectification of the road Saguangal - Las Golondrinas



Province: Imbabura - Esmeraldas

Initial amount: \$48,894,544.15 excluding VAT

Contract amount: \$48,894,544.15 excluding VAT

• **Length:** 64.20 km

Contract Date: June 25, 2019

Builder of the work: CONSORCIO CCECC

Site manager: MTOP-SUBSECRETARIA ZONAL 1

 Reconstruction of the road of the section:
 Carchi-La Bonita-El Palmar- Provincial border of Puente Aguarico, State Network



Province: Sucumbíos

Contractual amount: 8,928,571.43 excluding VAT

• Length: 160,00 Km

Contract start date: August 27, 2019

Builder of the work: HERDOIZA - CRESPO

• Site manager : CONSORCIO EL PALMAR

Controlled amount: \$860,663.93 excluding VAT

 Adaptability for the rehabilitation and reconstruction of infrastructure affected by the earthquake of 16 April 2016 at Eloy Alfaro International Airport in the city of Manta





Province: Manabí

Initial amount: \$20,783,361.98 excluding VAT

Contract amount: \$21,314,451.75 excluding VAT

Contract date: November 30, 2017

Constructor of the work: CONSORCIO CRBC-CEIEC

Site manager: AEROMANTA ASSOCIATION

 Repair of the access road to Bahía De Caráquez, Cantón Sucre, Province of Manabí





Province: Manabí

Initial amount: \$20,497,109.66 excluding VAT

Contract amount: \$25,204,005.49 excl. VAT

Length: 6.68 km

Contract Date: September 12, 2016

Manufacturer: CHINA GEZHOUBA GROUP COMPANY LIMITED

• Site inspector: ESPE - INNOVATIVA - PE

 Expansion and rehabilitation of four lanes of Anillo Vial de Santo Domingo





Province: Santo Domingo de los Tsáchilas

Initial amount: \$17,641,157.06 excluding VAT

Contract amount: \$17,641,157.06 excluding VAT

Length: 16.50 km

Contract Date: April 17, 2019

Builder of the work: CONSTRUCTORA NACIONAL S.A.

Site Supervisor: CONSORCIO CONSULTEC

 Construction of the 13.29 km long Guaranda side passage in Bolivar province.





Province: Bolívar

Initial amount: \$42,485,362.48 excluding VAT

Contract amount: \$42,485,362.48 excluding VAT

• **Length:** 13.29 km

Contract date: 05 December 2019

Builder of the work: CRCC-14TH BUREAU GROUP CO. LTD

Site manager: MTOP

Construction of four bridges: Quebrada - Rehabilitation of the access road to Mount Honda, Palanda, Agua Dulce, Palanuma and road construction in the Vilcabamba -Bellavista section.

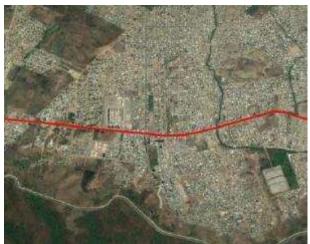


Province: Zamora Chinchipe

Contract amount: \$6.02 million excluding VAT approximately

Source: Credit Development Bank of China (CDB)

Sinai Hospital



Province: Guayas

Amount of the contract: about 9.5 MM

Source: Credit Development Bank of China (CDB)

Contribution to GAD Guayaquil

Length: 4.50 km

7 MAINTENANCE LANES PER RESULT COVERING 1,136.27 KM:

PROJECT	LONG Kms.	AMOUNT
MAINTENANCE BY RESULTS FOR THE E-15 ROAD: CALDERÓN Y - BORBÓN Y - LAS PEÑAS Y - PALESTINA - REDONDEL DEL AEROPUERTO - PASO LATERAL DE TACHINA - SAN MATEO (E-20 TIE)	141.70	19,179,235.47
MAINTENANCE BY RESULTS OF THE E35 ROAD: RIOBAMBA - BALBANERA - ALAUSÍ - GUASUNTOS - CHUNCHI - RÍO ANGAS (PROVINCIAL LIMIT CHIMBORAZO / CAÑAR).	150.42	29,391,787.46
MAINTENANCE BY ROAD RESULTS: E386: PEDERNALES - COJIMIES, E-38: PASO LATERAL DEL CARMEN: EL CARMEN - FLAVIO ALFARO -CHONE - E15: TOSAGUA - ROCAFUERTE - T DE BUENOS AIRES.	218.48	32,645,451.85
MAINTENANCE BY RESULTS OF THE E45 ROAD: "Y" DE BAEZA - REVENTADOR - NUEVA LOJA (LAGO AGRIO).	160.35	20,620,037.03
MAINTENANCE BY RESULTS OF THE ROAD E45: E40: ZHUD - BIBLIÁN, E35 ZHUD-ANGAS, E40 ZHUD - COCHANCAY - EL TRIUNFO, E58 TRONCAL - PUERTO INCA.	192.79	28,010,109.89
MAINTENANCE BY ROAD RESULTS: "Y" DE BAEZA - TENA; NARUPA - HUATARACO".	165.63	29,961,115.53
MAINTENANCE BY ROAD RESULTS: E487: CUMANDA - PALLATANGA - BALBANERA	106.90	28,949,422.75
TOTAL:	1,136.27	188,757,159.98

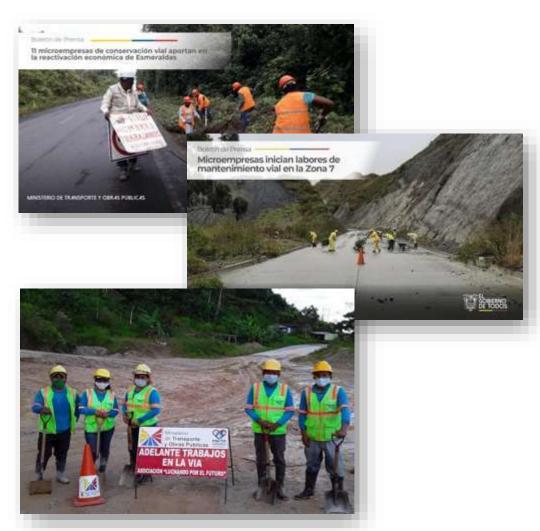


REACTIVATION OF ROUTINE MAINTENANCE ON THE STATE ROAD

NETWORK:

 On the basis of cantonal traffic lights and the biosafety measures implemented by this Ministry, routine maintenance activities are carried out on several sections of the national road network.

Generating about 1900 direct jobs.



REACTIVATION OF REGULAR MAINTENANCE OF THE NATIONAL HIGHWAY SYSTEM:

 This portfolio also works to carry out periodic maintenance of the State's road network, in order to rectify or correct defects or damage in the various elements of the road, caused by different impact factors.



Thank you for your attention!



Ricardo Paula Lopéz

Deputy Minister for Transport Infrastructure

rpaula@mtop.gob.ec

World Road Association (PIARC)
Grande Arche – Paroi Sud – 5°étage
92055 – La Défense Cedex – France















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- 11- Closing of the seminar, cameras and microphones open to participants.











#PIARCCOVID19

10 June 2020

The challenges of mobility in the city of Madrid. Covid crisis 19

Susana Magro

Deputy Director of Mobility Planning

DG for Planning and Infrastructure for Mobility

A.G. Environment and mobility

Madrid City Hall

Susana Magro Andrade



- Deputy Director of Mobility Planning, Madrid City Council. DG Planning and Infrastructures for Mobility. Environment and Mobility Area
- Director General for Environmental Quality and Climate Change of the Government of Andalusia. 2019
- Commissioner for Climate Change of the Community of Madrid. 2018
- Director General of the Spanish Office for Climate Change of the Ministry of Agriculture, Food and Environment of the Spanish Government. 2011-2015.
- Civil Engineer, Polytechnic University of Madrid.
- Civil servant of the State Civil Engineering Corps.

1. EFFECT OF THE HEALTH CRISIS ON MOBILITY. WHAT HAS HAPPENED?

1.1 REDUCTION

In Madrid, there are 10,000 trips per day and we reached 1.3,000 trips during the COVID crisis (85-90% reduction in trips).

1.2. MODAL SPLIT

- The use of public transport is reduced to 22%.
- Increases private vehicle traffic to 44%.
- Prevention of health risks in public transport, absence of traffic inviting the use of a private vehicle

1.3. CHANGE OF PEAK TIME

- Rush hour (8:00-9:00) during the COVID crisis has disappeared.
- She's recovering slowly, but she's not as intense again.

2.1. REDUCING THE NEED FOR MOBILITY

- Less commercial activity (20% reduction): out of the 10 million daily trips, we would have 8 million trips left)

2.2. TRANSFER FROM PUBLIC TO PRIVATE TRANSPORT

- The use of public transport is reduced: we estimate a transfer to the private vehicle of 10-12%.
- The transfer to a private vehicle will not be more important for several reasons:
 - There are 3.5 million cars in Madrid.
 - 58% of MMT users do not have a driver's licence.

2. EFFECT OF THE HEALTH CRISIS ON MOBILITY. WHAT WILL HAPPEN?

2.3. LOWER OCCUPANCY OF THE PRIVATE VEHICLE

- The vehicle occupancy rate in Madrid is 1.34%.
- The highest occupancy rate is on the A6 by BUS VAO: need for more BUS VAO at the accesses to Madrid

2.4. SHIFT TO OTHER MODES OF TRANSPORT

- 87% of trips are < 5 km
- Moving to other modes of transportation: cycling, walking, carpooling.

2.5. THE HYGIENE - HEALTH VARIABLE IS INTEGRATED INTO DECISION-MAKING

- The choice of mode of transport no longer takes into account time and cost, but also the health situation.



FIVE AXES OF THE PLAN:

- 1. IMPROVING PUBLIC TRANSPORT
- 2. INTERMODALITY
- 3. MICROMOBILITY
- 4. SUSTAINABILITY
- 5. URBAN DISTRIBUTION OF GOODS DUM

AXIS 1: IMPROVING PUBLIC TRANSPORT

- COVID packaging: Capacity restriction 50%.
- <u>Involvement:</u> expansion of the fleet and frequencies of MPEs (difficulty)
- <u>Example of actions:</u> 45 km of new bus lanes have been put in place.
 - more commercial speed
 - the result is an increase of 32,000 places available in

MMT



AXIS 2: INTERMODALITY

- Need: abandoning the dichotomy between public and private transport
- <u>Involvement</u>: developing exchanges between ALL modes of transport
- Example of actions : Disincentives for intermodal parking
 - Incorporate a HUB for DUM
 - Access to car sharing
 - Access to BikeSharing



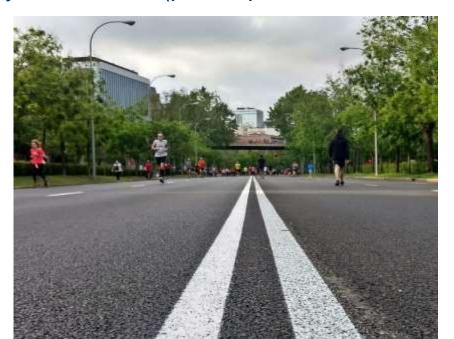


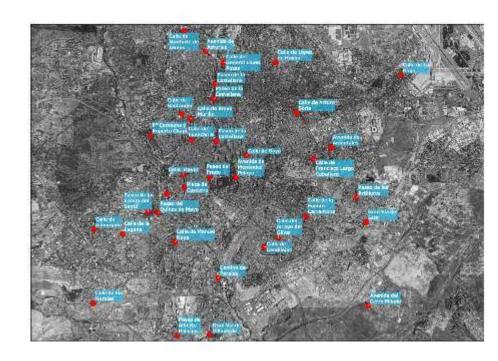
AXIS 3: MICROMOBILITY

- <u>Need</u>: Greater social distance in mobility, transfer to micro-mobility modes
- Example of actions :
- a) 36 pedestrian sections: 28.9 km and 331,278 m²

b) 4,800 electric bicycles for hire (public-private

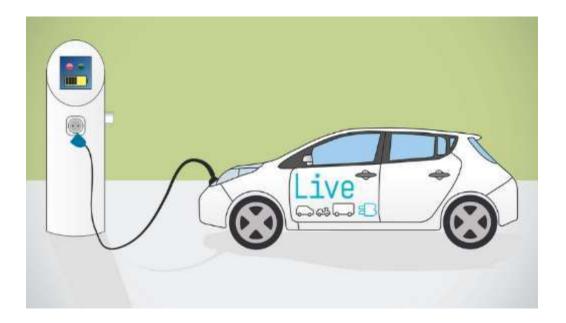
partnership)





AXIS 4: SUSTAINABILITY

- <u>Need:</u> less pollutant emissions (NO2, particulate matter) and less CO2 emissions
- Example of actions :
- a) Stimulating electric mobility: subsidy schemes for the purchase of zero and eco-friendly vehicles
- b) Installation plan for electrical recharging points



AXIS 5: URBAN DISTRIBUTION OF GOODS (DUM)

- Need: Assuming that the city of Madrid accounts for between 15 and 20% of the traffic.
- Implication: Online commerce in Madrid doubled during the COVID crisis.
- Example of actions: Intelligent loading and unloading project













THANK YOU FOR YOUR ATTENTION

Susana Magro

The challenges of mobility in the city of Madrid. Covid crisis 19

10 June 2020

#PIARCCOVID19

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COVID-19 and roads in Chile

Jaime Campos Canessa

Head of the Road Safety Department - Road Directorate

#PIARCCOVID19

May 25, 2020

Jaime Campos Canessa

- Head of the Road Safety Department (DV)
- Civil Engineer (University of Chile)
- International Master in Traffic, Transport and Road Safety (EADIC)
- Road Safety Officer (UNOPS)
- Road Safety Auditor (RSA)
- Road Safety Auditor (IVIA and ITM)
- Corresponding member of PIARC since 2016
- 12 years of professional experience



Presentation Index

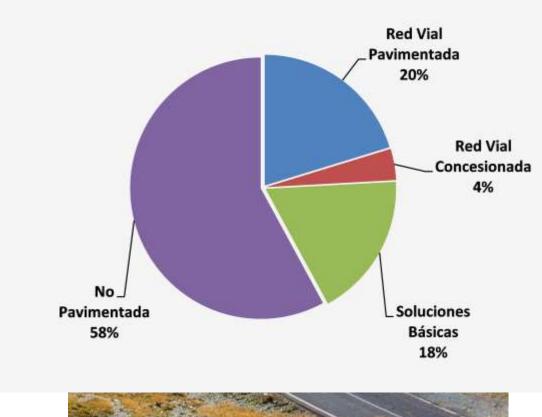
- Traffic data in Chile
- Context of road safety in Chile
- Developments during COVID-19
- Current Road Operations
- How road management works
- Conclusions



Roads in Chile

- 85,709 km under the responsibility of the Ministry of Public Works
- 17,372 km of paved road network (20%)
- 3,309 km of road network under concession (4%)
- 15,382 km of basic solutions (18%)
- 49,646 km unpaved (58%)





Road safety context in Chile

- Between 9 and 10 deaths per 100,000 inhabitants
 Motorized users (light 42%, heavy 6%)
 Vulnerable users (pedestrians 36%, motorcyclists 9%, cyclists 6%, other 1%)
- Number of traffic accidents84% Urban16% Rural
- Deaths in traffic accidents38% Urban62% Rural
- Collisions, crashes, rollovers, violent impacts

Chile

Population: 17 909 754 | Income group: High | Gross national income per capita: US\$ 13 530



Leed agency	National Traffic Safety Commission (CDM-SET	
Funded in national budget		
National road safety strategy		Ye
Funding to implement strate	egy	Partially funde
Fatality reduction target		3100037500000
SAFER ROADS AN	MOBILITY	
Audits or star rating require	d for new road	
infrastructure		
Design standards for the sa cyclists	Partie	
Inspections / star rating of existing roads		- A
Investments to apprade high risk locations		
Polities & investment in urb	ban public transport	Ye
SAFER VEHICLES		
Total registered vehicles for I	2014	4 960 94
Cars and 4-wheeled light yehicles		4 366 11
Motorized 2- and 3-wheelers		175 01
Heavy trucks		298 34
Buses		121 44
Other		
Vehicle standards applied (III	NECE W9.29)	
Frantal impact standard		
Electronic stability control		
Pedestrian protection		
Motorcycle anti-lack brakin	g system	. 8
POST-CRASH CAR		
National emergency care as	xess number	National, single number
Trauma registry		Nations
Formal certification for prehospital providers		
National assessment of em-	ergency care systems	
DATA		
Reported road traffic fatalities (2014)		1 675° (78% M, 22% F
WHO estimated road traffic fatalities (2016)		2.24
WHO estimated rate per 100	1000 population (2016)	12

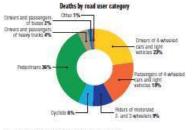
SAFER ROAD USERS	
Rational speed limit law	13
Max urban speed limit	60 km/
Max rural speed limit	100 km
Max motorway speed limit	120 km
Lucal authorities can modify limits	1
Enforcement	01234@4789
Predominant type of enforcement	Mans
Rational drink-driving law	1
BAC limit - general population	± 0.03 g
BAC limit - young or novice drivers	± 0.03 g
Random breath testing carried out	1
Testing carried out in case of fatal crash	All drivers test
Enforcement	812345@789
% read traffic deaths involving alcohol.	129
Rational matercycle belinet law	
Applies to drivers and passengers	1
Helmet fastening required	,
Relinet standard referred to and/or specified	(1
Children passengers on mutorcycles	Not restrict
Enforcement	012345479 (D)
Helmet wearing rate	99% Orivers 1, 98% Passenger
National seat-belt law	number control of the country
Applies to front and rear seat occupants	
Enforcement	D12345@789
Seat-belt wearing rate	59% Front seats*, 14% Rear seat
National child restraint law	
Children seated in front seat	Prohibited under 12 y
Child restraint required	Up to Byrs/135 o
Child restraint standard referred to and or spec	fied Y
Enforcement	0123@56789
% children using child restraints	735
Rational law or mobile phone use while driving	
Ban on hand-held mobile phone use	1
Ban on hands-free mobile phone use	

- * Can be recruised up to an expectable from order partial consensations.

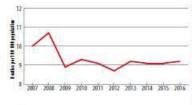
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Source 7014, Integrated Scarssical System of the Chillian Police (SEC2):



South Inoquant Summical System of the Orlinan Police (SACS)

14

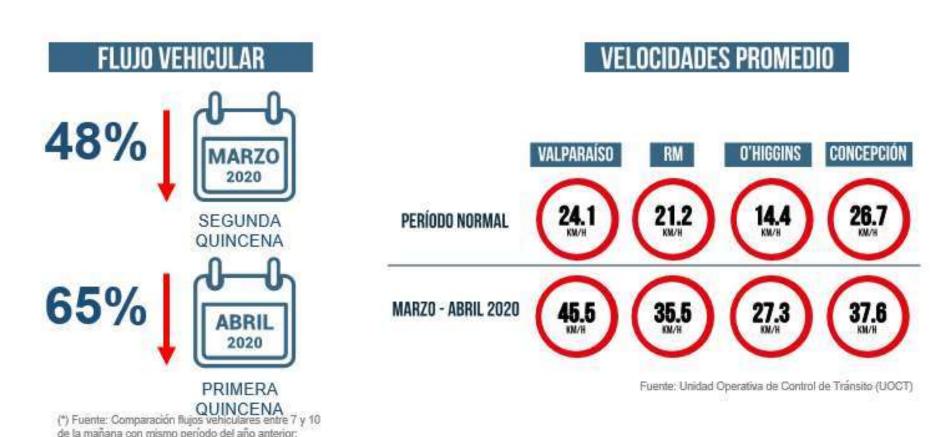
Developments during COVID-19



Evolution during COVID-19 (urban areas)

Región Metropolitana (UOCT)

Menor circulación vehicular y mayores velocidades promedio



Accident trends in the period January - April

```
Fatalities: 2018 (346)
2019 (372)
2020 (366)
```

Year 2020: Collisions (36%), Accidents (23%), Car crashes (21%), Overturns (19%)

Developments during COVID-19

- Low environmental and noise pollution
- Avoid public transport (use of road markers)
- Increase in freight transport
- Using new means of transport
 - Private vehicle
 - Bicycle
 - Walk

Iniciativa surgió a petición de la sociedad civil:

Gobierno considerará a la bicicleta como artículo esencial durante la pandemia

Los últimos días ha babido un auge en su uso, sobre todo entre reportidores. Se busca, además, que los talleres y tiendas de repuestos estén disponibles durante la contingencia.

CONTRACTOR OF

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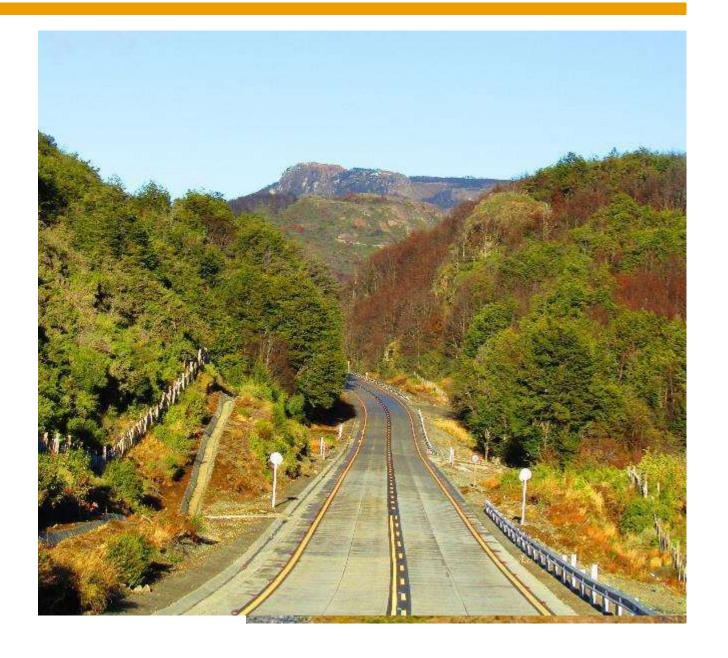
Developments during COVID-19

You'd expect something like this...



Current Road Operations

- Weak inspection of the Carabineros de Chile : Excessive operating speed Ignore traffic signs
- Excessive use of roads during long weekends
- Poor emergency response to traffic accidents



Current Road Operations



Gran congestión vehicular para cruzar cordón sanitario de la Región Metropolitana

Por Meganoticias + 20 de Mayo de 2020



Separation River to place 2020 CS 28 RV.

Atochamiento en salida sur de Santiago marca inicio de cordón sanitario en RM y Gran Concepción por fin de semana largo

Según reportes desde la zona de Paine, las detenciones se acumulaban por cerca de 8 kilómetros, lo que se explica no sólo por el flujo vehicular, sino por los controles carreteros que está realizando Carabinecos.







Current Road Operations

- Sanitary cordon: stations of the health authority, the armed forces and the police, which ensure that no one enters or leaves an area. The only way to pass through one of them is to obtain a permit for a funeral or medical treatment in another city.
- Health customs: stations of the health authority, the armed forces and the police, where temperature controls are carried out, where travellers do not have to be quarantined and where the health passport is checked.

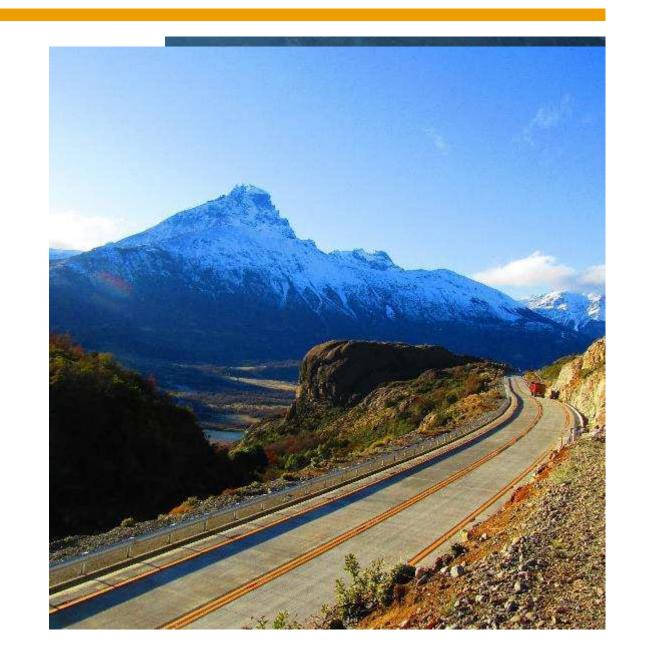


Functioning of the Road Directorate



The operation of the Road management

- Teleworking
- Digital signature (mop.febos.cl)
- Digital files (*TransferMop*)
- Organisation of professional tasks (mop.gov.cl tasks)
- Virtual meetings (Webex, Meet, Zoom)
- Webinar





Conclusions

 Changes in urban and interurban transportation modes (increased use of motorcycles and bicycles)

 Large-scale international (virtual) events allow the sharing of best practices and experiences in road safety (school zones, level crossings, basic roads, etc.). Better enforcement will promote better road safety practices (road casualties).

 Increase rest areas and provide dedicated lanes for freight drivers.

Economic reactivation through roads.

Thank you for your attention!



Jaime Campos Canessa

Head of the Road Safety Department

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World Road
Association PIARC



Association PIARC

www.piarc.org







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Questions and Answers

Oscar de Buen Richkarday, former President of PIARC (YouTube only)

MEX

Juan Esteban Gil Chavarría,
Director of INVIAS (only on
YouTube)

COL

Euclides R. Sánchez Almánzar, Deputy Minister of Roads.

DOM

Ricardo Paula, Vice-Minister of Transport Infrastructure

ECU

Susana Magro Andrade, Deputy Director General for Mobility and Transport Planning of Madrid.

ESP

Jaime Campos Canessa, Head of Road Safety, Ministry of Public Works.

CHL

José Manuel Blanco Segarra, Miguel Caso Flórez, PIARC-COVID Working Group19

PIARC



Moderated by Ing. Veronica Arias Espejel,

PIARC Technical Advisor

- 1- Welcome and introduction to the seminar, Ing. Miguel Caso Florez, Technical Director of PIARC.
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- 3- COVID-19 and roads: managing the pandemic and supporting the economy, Ing. Oscar de Buen Richkarday, former President of PIARC
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Provisional Conclusions PIARC COVID-19 & Roads Seminar

(4th Online Seminar in Spanish)

José Manuel Blanco Segarra

PIARC TC 1.1 Spanish-speaking Secretary

#PIARCCOVID19

10-11th June 2020

José Manuel BLANCO SEGARRA





Chair of the "Financing and Performance" National Committee (currently in formation)



(ATC Technical Road Association)

- Dean in Extremadura Region of the National Official
 Association of Ms. Engineers in Roads, Canals and Ports
- Chair of the National Committee "Road Materials" (2000-2012)
- Head of the State Roads Directorate in Extremadura (2006-2019)
- Chair of PIARC TC A.1 Performance of Transport Administrations (2016-2019)
- Current PIARC TC 1.1 "Performance of Transport Administrations"
 - **Spanish-speaking Secretary**
- Member of PIARC COVID-19 Response Team







EMERGING ISSUES SO FAR

On this PIARC page whose link is indicated here, is available, among other information, the recent Note 2, of 18 May 2020, on Key Lessons from Latest PIARC Webinars held (until 30 April), as well as the videos and presentations (all translated into English, French and Spanish) of the online seminars held so far:

https://www.piarc.org/en/News-Agenda-PIARC/News/2020-06-05,COVID-19-Key-Lessons-for-the-Road-and-Transport-Community-from-the-latest-PIARC-Webinars-june-2020.htm

I will try here to frame the main conclusions of what has been exposed today, in the four big categories of emergent questions stated in the mentioned Note 2 (Note 1 was dated April 21, 2020 and soon we will publish a Note 3).

These four main categories are:

- I General impacts and approaches
- II Road network operation, freight and logistics
- III Construction works
- IV Economic impacts and future resilience planning

> I GENERAL IMPACTS AND APPROACHES

Oscar de Buen (Mexico): immediate measures along the lines of what in Note 2 we call "avoid the 3 Cs" —Closed Spaces, Crowded Places, and Close Contacts Settings): confinement + healthy distance, no personal contacts and avoidance of crowding.

Road and transport are essential to address pandemic and maintain the integrity of supply chains. Protection to the health of workers in the sector is a priority. Teleworking.

And the questions are also along the lines of How will it affect the transformation of transport? What new challenges will we have to face?

Juan Esteban Gil (INVIAS, Colombia): successive phases of prevention, contention and emergency. Closing of borders. Teleworking and protocols.

> I GENERAL IMPACTS AND APPROACHES

Euclides Sánchez (MOPC, Dominican Republic): High level presidential commission for coordination and protocols for the protection and prevention of the population. Curfew.

Protection of citizens in general through 3 axes: places for accommodating possible infected individuals; hygiene and disinfection of public spaces with the support of the private sector by providing vehicles and drivers; delivery of kits at toll booths and road assistance.

Protection of own personnel: stay at home for those over 60 years old or with health complications. Ozone tunnel at the access to the Ministry. Body temperature measurement. Delivery of preventive protection equipment to all personnel. **Reorganisation through part-time work and shift changes to avoid staff overcrowding.**

> I GENERAL IMPACTS AND APPROACHES

Ricardo Paula López (MIT, Ecuador): Status of emergency due to "public calamity" (16 March). Almost total paralysis of activities. Careful disinfection measures of machinery and installations, of transport units and delivery of prevention kits to users.

Susana Magro (Municipality of Madrid City, Spain): Huge impact of COVID-19 on travel in Madrid (from 10 million per day to 1.3 million per day).

Perception (feeling) of health risk in public transport. Time and cost are now joined by health issues. In the modal distribution, public transport is reduced, remaining at 22% while the private vehicle grows at 44%.

The rush hours from 8 AM to 9 AM disappeared although it is recovering with less intensity. On-line commerce has doubled (so, more delivery traffic).

> I GENERAL IMPACTS AND APPROACHES

Jaime Campos (DV, MOP, Chile): 86,000 km of MOP roads (20% paved, 4% concessioned, 18% with "basic solutions" and 58% unpaved) Sanitary cordons, sanitary posts (body temperature control, sanitary passport verification).

The decrease in vehicle flow (48% in March and 65% in April) has led to higher average speed, but less environmental and noise pollution.

More freight transport and more use of (transfer to) private vehicle, bicycle and walking

Teleworking in the DV (Dirección de Vialidad / Road Directorate) (digital signature, digital archives, virtual meetings, online seminars...).

> II ROAD NETWORK OPERATION, FREIGHT AND LOGISTICS

Oscar de Buen (Mexico): Road and transport must provide permanent quality services for the mobility of people and goods, even in critical situations such as the present one, and in an environmentally friendly way. They must offer different options thinking of everyone and of the quality of life. During the pandemic the aim is: to ensure the mobility and transport of people, goods and essential services, and to react to the reduction in demand.

Juan Esteban Gil (INVIAS, Colombia): keeping the freight transport going to ensure the supplying. **Suspension of toll collection** (from 24/03 to 31/05).

Euclides Sánchez (MOPC, Dominican Republic): during curfew, only vehicles transporting medical supplies, foodstuffs and fuel are allowed to transit. Such vehicles are exempt from the payment of public tolls.

> II ROAD NETWORK OPERATION, FREIGHT AND LOGISTICS

Ricardo Paula López (MIT, Ecuador): Establishment of 6 logistic corridors for essential products (1 136 km) Attention to 733 emergency affectations in the state road network and with compliance of the biosafety protocols. Toll had been kept, with adoption of biosafety protocols and compliance control.

Support to sub-national governments (decentralized autonomous governments) by acting on roads, bridges, and containment of erosions that put the stability of infrastructures at risk.

Jaime Campos (DV, MOP, Chile): Fatal accident rate before the pandemic: 9-10 deaths per 100 000 inhabitants (38% in urban and 62% in rural) of which the vulnerable are: 6% cyclists, 9% motorcyclists and 36% pedestrians.

> II ROAD NETWORK OPERATION, FREIGHT AND LOGISTICS

The higher speed, despite the lower flow, has brought the total number of deaths in the first quarter of 2020 (366) nearly equal to that of 2019 (372) and higher than 2018 (346), with a predominance of collisions and crashes.

There is a need to raise awareness among motorized users to avoid excessive road use on long weekends.

> III CONSTRUCTION WORK

Oscar de Buen (Mexico): road maintenance programmes are a good mechanism to generate economic activity and employment. And PPPs are a good way to launch new projects.

Juan Esteban Gil (INVIAS, Colombia): public works as a generator of employment. The suspension of work contracts has been temporary (from 24/03 to 13/03). Biosafety Protocol. Problems arising from manpower and input shortages, lower productivity, change in completion dates. Higher costs claimed by contractors and definition of contractual mechanisms to resolve claims as well as particular specifications and maximum reference prices.

It has already reactivated 80% of contracts (713) and 65% of direct jobs (64,274).

Euclides Sánchez (MOPC, Dominican Republic): The road sector is essential for the economy (330 000 direct jobs) and tourism. The current infrastructure (almost 20 000 km) is recognised as good, thanks to sustained investment, which needs to be continued to make it more efficient.

> III CONSTRUCTION WORK

Ricardo Paula López (MIT, Ecuador): reactivation of the construction and maintenance of road infrastructure through planned and controlled Biosafety Protocols, following the cessation of routine and periodic maintenance and the reduction of emergency maintenance.

The cost of the suspensions of contracts in execution has been great for the companies and for the Administration itself.

> IV ECONOMIC IMPACTS AND FUTURE RESILIENCE PLANNING

Oscar de Buen (Mexico): Once the pandemic is over, we will have to face the economic crisis, move on to a "new normality", and design new models of development, organization and work.

Roads and transport are good instruments to fight poverty, discrimination and inequality. Now it is time to redesign policies for the sector, monitor and evaluate the contradictory effects of the "new normality".

Let's reduce the carbon footprint. Increasingly improve electric vehicles.

Let's promote the **multimodal integration** of transport and rethink its relationship with territorial planning. Let us improve the **quality and efficiency of the collective public transport service.** Let us promote, especially in urban areas, the **shared mobility** of cars, motorcycles, bicycles, etc., as well as "transport on demand" (ridehailing).

Juan Esteban Gil (INVIAS, Colombia): Programs of (Safe) public works to reactivate the **economy.** Intelligent roads. Vision 2030 (US \$2,663 million, 2,026 km of national roads and 105,000 jobs) with a focus now on 28 sections (US \$637 million in 28 sections and 40,000 jobs).

> IV ECONOMIC IMPACTS AND FUTURE RESILIENCE PLANNING

In addition, structured packages of public works programmes: integrated management of bridges (rehabilitation of 350 of them), maintenance of the non-concessional network, greenways, fluvial ways, and rural Colombia (40,000 km of tertiary roads). The total is US \$4,885 million, creating 285,000 direct jobs and 750,000 indirect jobs (more than 1 million in the whole).

Euclides Sánchez (MOPC, Dominican Republic): the political spectrum agrees that investment in roads, construction and housing will play a leading role in overcoming the crisis. Greater role of PPPs and alliance with international organizations (as IDB). It is necessary to continue along the lines of 2012-2018 in which US\$ 1.6 billion has been invested in road infrastructure.

Ricardo Paula López (MIT, Ecuador): Since 15 June, works with external funding are being successively reactivated. And routine maintenance on the state network is being resumed, generating 1,900 direct jobs.

> IV ECONOMIC IMPACTS AND FUTURE RESILIENCE PLANNING

Susana Magro (Municipality of Madrid City, España): We anticipate a 20% reduction in activity so we will not return to 10 million trips per day but to around 8 million.

Modal distribution: it is estimated that 10-12% will move (transfer) from public transport to private vehicles (and it will not be greater since there are already 3.5 million vehicles and 58% of public transport users do not have a driving licence).

Fostering higher occupancy rate of private vehicles (e.g. more bus & high occupancy vehicle lanes at Madrid access routes). 85% of journeys are short (< 5 km) so let's encourage walking, cycling and car sharing.

Mobility Plan 4S of the city of Madrid and its 5 Axes: Best public transport (50% capacity, more frequency, places, speed and lanes). Intermodality (e.g. dissuasive car parks with access to car&bike sharing and a hub for the Urban Distribution of Goods, UDG). Micromobility: pedestrianisation of sections, 4,800 electric bicycles (CPP). Sustainability: promotion of electric mobility (subsidies for the purchase of "zero" and "eco" vehicles, recharging points). Care for UDG: It represents 15-20% of Madrid traffic. Intelligent "loading and unloading" project.

> IV ECONOMIC IMPACTS AND FUTURE RESILIENCE PLANNING

Jaime Campos (DV, MOP, Chile): The use of ITS (Automated Violation Processing Centre) should be developed and the exchange of experiences through virtual international meetings should be encouraged.

Take account of vulnerable users.

Increase the number of Rest Areas.

Continue to make progress in the effective use of teleworking.

We foresee changes in urban and interurban transport. Increase of bicycles and motorcycles.

Reactivate the economy through roads sector.

- Initial reactions are similar in most countries.
- It is evidenced that road and transport are essential for societies and their economies. And it will help overcome the COVID-19 crisis for which we have a great responsibility. Let us now think about the post-COVID-19 phase.
- The transport of goods must be maintained and facilitated. And its distribution in urban areas must be reorganized with the right care.
- There will be consequences and novelties that are starting to be perceived and must be addressed and managed. Fear of risk in public transport. Especially in urban areas.
- A country's economy is not only defined by its productivity but also by its resilience in the face of adversity. The road and transport sector is and will be resilient.
- Let's stay active and continue and improve effective practices such as teleworking, the promotion of new technologies, shared, active modes, respect for the environment, sustainability and attention to vulnerable users.

Thank you for your attention!



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PIARC Webinar COVID-19 and roads 10 and 11 June 2020



Thank you very much. Thank you very much.

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