Our Speakers today

- **Patrick Mallejacq**
  - Secretary General, PIARC

- **Christos Xenophontos**
  - Rhode Island DOT, USA - PIARC TC 1.1 Chair

- **José Manuel Blanco Segarra**
  - Ministerio de Transportes, Movilidad y Agenda Urbana, Spain - TC 1.1 Spanish Speaking Secretary

- **Jonathan Spear**
  - Atkins, UK - TC 1.1 WG 2 Leader

- **Fabio Pasquali**
  - ANAS S.p.A, Italy - TC 1.2 Chair

- **Caroline Evans**
  - National Transport Commission, Australia - TC 1.4 Chair

- **Yukio Adachi**
  - Hanshin Expressway Engineering Co, Japan - TC 1.5 Chair

- **Andrea Simone**
  - University of Bologna, Italy - TC 2.1 Chair

- **Martin Ruesch**
  - Rapp Trans Ltd, Switzerland - TC 2.3 Chair

- **Valentina Galasso**
  - Deloitte Consulting, Italy - TC 2.4 Chair

- **Saverio Palchetti**
  - Consultant, Italy - TF 3.1 Chair
Participation in the webinar.

Your camera and microphone must remain off.

You can ask questions in the chat. At the end of all presentations, Christos Xenophontos will check the chat and ask questions to the panelists.

A limited number of questions can be answered due to the large number of participants.

Tip: Close the chat window to see the full presentations.
PIARC Response to COVID-19: Winter Service

Peter NUTZ
Chair PIARC Technical Committee 3.2 Winter Service
City of Vienna
Austria
Webinar 17th February 2021
Heightened precautionary measures to protect workers

- Winter service operations are critical to maintain roads open and safe for traffic
- WS does not stick to “working hours” and has to continue uninterrupted
- You can’t plough snow in home office
Learn from each other

- Avoid shared/common areas and avoid co-locating.
- Create separate break/lunchrooms.
- Separate the overlap time between shifts.
- Only one person in a vehicle or separate and/or use face mask.
- Disinfect truck interior.
Learn from each other

- Stretch service intervals
- Check for possibility to close roads or reduce lanes
- Create scenarios for different stages of quarantine beforehand
Introduction to the Webinar

Patrick Malléjacq
Secretary General, PIARC

#PIARCCOVID19
Basic rules for Zoom on line meetings

There will be presentations so be sure to access from a device that allows you to see visuals (i.e. a laptop or ipad)

Please mute yourselves and keep the video off during the presentations to avoid background noises and connection overload

Use the chat functionality and ask questions at any time. We will collect them and direct them during the Q&A session

Please be sure to have your full name and country displayed, here you find some useful information:

To change your name after entering a Zoom meeting, click on the “Participants” button at the top of the Zoom window.

Next, hover your mouse over your name in the “Participants” list on the right side of the Zoom window. Click on “Rename”.

Enter the formula Name, Surname (FR) and click on “OK”.

Patrick, Mallejacq (FR)

Use the chat functionality and ask questions at any time. We will collect them and direct them during the Q&A session
Participation in the Webinar

This Seminar is being recorded and will be made public on PIARC’s website and YouTube channel.
Key Concept: Focus on the short-term

The world is going through a crisis and every day counts.

This is knowledge and practice that is not yet confirmed as valid or effective.

A good idea now can save lives, improve business resilience and could minimize disruption of service.

Urgently share knowledge and practices among PIARC member countries to provide support in near real-time.

What works in one country may not work in another, but it can inspire you.

Note: PIARC is also working on the medium and long term, for when the pandemic is in a manageable state and substantially under control.
Summary Terms of Reference (Revised PIARC Strategic Plan)

- To explore rapid sharing of knowledge and practice between PIARC members on COVID-19 impacts, responses & associated socio-economic crisis
- To propose and implement short-term actions to support PIARC members and transport professionals in COVID-19 mitigation and response
- To track the course of COVID-19 over time and advise on further actions to be taken by PIARC and others during the crisis and into the recovery
- To advise on medium- and long-term implications of COVID-19 on the roads and transport sector and how these should be reflected in PIARC activities
- To prepare and publish technical reports, surveys and other analysis on COVID-19, alone or in collaboration with other industry bodies & stakeholders

Currently established to 31st December 2021, extendable as required

Current Membership

- Patrick Mallejacq, Secretary General, PIARC (Chair) (FR)
- Chrlitos Xenophontos, Rhode Island DOT, TC 1.1 Chair (USA)
- José Manuel Blanco Segarra, Ministerio de Transportes, Movilidad y Agenda Urbana, TC 1.1 Spanish Secretary (ES)
- Jonathan Spear, Atkins, TC 1.1 WG 2 Leader (UK)
- Fabio Pasquali, ANAS S.p.A, TC 1.2 Chair (IT)
- Caroline Evans, National Transport Commission, TC 1.4 Chair (AU)
- Yukio Adachi, Hanshin Expressway Engineering Co, TC 1.5 Chair (JP)
- Andrea Simone, University of Bologna, TC 2.1 Chair (IT)
- Luis Miranda-Moreno, TC 2.1 Spanish Secretary (CA)
- Valentina Galasso, Deloitte Consulting, TC 2.4 Chair (IT)
- Martin Ruesch, Rapp Trans Ltd, TC 2.3 Chair (CH)
- Pascal Rossigny, CEREMA, TC 3.3 French Secretary (FR)
- Saverio Palchetti, ANAS S.p.A., TF 3.1 Chair (IT)
- Andrea Peris, Paraguay National Committee (PY)
Disclaimer

Since time is of the essence, it is likely that knowledge and practice that is shared will not have been officially approved by each country’s official authorities.

“The ideas and examples shared here are for illustration only. They do not necessarily represent official policy. Ideas presented will be subject to further evaluation and use in deriving recommendations on policy and practice in due course. While care has been taken in the preparation of this material, no responsibility is accepted for any damage that may be caused.”
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Agenda and Structure

- Brief introduction to PIARC
- Our work so far

- Panelists’ Presentations
- Questions & Answers

- Conclusion and Next Steps
Institutional Presentation
PIARC
Our work so far
Patrick Malléjacq
Secretary General, PIARC

#PIARCCOVID19
What is PIARC?

• PIARC is the new name of the World Road Association

• We were founded in 1909 as a non-profit, non-political association

• Our goal is to organise exchange of knowledge on all matters related to roads and road transport

• We have 124 member governments, as well as regions, groups/companies and individuals.

• It is the first global forum for the exchange of knowledge, policy and practice on roads and road transport.
Key issues on COVID-19 and roads

- **Ensure as far as possible the health and safety of employees and road users**
- **Response to impact on transportation**
- **Relationships and collaboration with customers, users and other interested parties**
- **Maintain activity and continuity of service**
- **Manage impacts on the economy and supply chains; Revive the economy after the crisis**
- **Security (including cyber security)**
More than twenty webinars...

... in English, French, and Spanish

Covid-19 Phase 0 – Economic consequences for a NRA

- The decrease of traffic
  -was higher in the toll motorway network than in the non-tolled motorways and the ordinary roads
  -was higher for light traffic than for heavy traffic

The road transport situation

- Generalisation of electronic toll collection on motorways and limitation of the loading of toll cards on line
- Prohibition of inter-city travel without highly justified authorization
- Abolition of collective means of transport except for taxis with only one passenger per taxi
- Limitation of vehicular movements in the residential area except for justified professional necessity

Freight & Logistics

- On site: main concerns are:
  - Drivers health and food
  - Employees health and safety (C&M is Eligis Especialización Aquitaine, FGC precise)
  - Maintain area clean and secure
  - Service provider economic sustainability (limited turnover) - 4 service stations (total approx. 100 employees)

1. Ensuring employees health and safety

- Primary concern for contractors and their Professional Associations (PA)
- In many countries, recommendations were published regarding appropriate safety measures to be adopted by contractors
- Often drawn up jointly by government and PA
- Either general or specific (e.g. in France, road contractors, pipelines)
- Also discussions on urban/novel environment, building/infrastructure
- PAs have organized training sessions (mainly aimed at SMEs), pilot jobsites

The road transport situation

- Generalisation of electronic toll collection on motorways and limitation of the loading of toll cards on line
- Prohibition of inter-city travel without highly justified authorization
- Abolition of collective means of transport except for taxis with only one passenger per taxi
- Limitation of vehicular movements in the residential area except for justified professional necessity

RECOVERY

COVID-19 Transportation Impacts:
New York City

Source: typingtrends.com for New York City COVID-19 impacts

- Traffic
  - Walk
  - Subway
- Public Transit
  - Bus
- Subway
- Bicycles
- Public Traffic
  - Bus
  - Subway
- Traffic
  - Manhattan
  - Long Island Rail Road

World Road Association - Association mondiale de la Route - World Road Association - www.piarc.org
Many PIARC Partner Organisations agreed to join our Webinars as panelists

- In addition to many panelists from the network of PIARC members
PIARC COVID-19 website


- The recordings of the 20+ webinars held on "COVID-19 and roads"
  - Including the lively and informative Q&A sessions
- The presentations from these seminars in PDF
  - Available in English, French and Spanish in most cases
- PIARC Technical Reports related to pandemic management
- Synthesis Notes and Full Report
PIARC Detailed Technical Report

- COVID-19: initial impacts and responses to the pandemic from road and transport agencies

- Published in December
- Available from www.piarc.org
- Languages: English, Spanish, French (soon)

Thank you for your attention

Patrick Malléjacq
PIARC Secretary General
patrick.mallejacq@piarc.org
@PMallejacq

World Road Association (PIARC)
Grande Arche – Paroi Sud – 5º étage
92055 – La Défense Cedex – France
Declaration of Emergency

Yukio ADACHI
Chair, Technical Committee 1.5 “Disaster management”, PIARC
Hanshin Expressway Research Institute for Advanced Technology
Japan
Webinar 17th February 2021
DECLARATION OF STATE OF EMERGENCY (OR EQUIVALENT)

As soon as governments around the world grasped the gravity of the situation, states of emergency (alarm, alert, catastrophe, etc.) were declared.

➢ Initial overall goal to face the public health crisis
➢ Authorities provided with special powers capacity, funding, or flexibility to act and take extraordinary actions to handle the unprecedented crisis
➢ Critically important to mandate authorities with appropriate emergency powers and give them the ability to issue interpretative orders & instructions
➢ In most jurisdictions the transportation sector was deemed an essential (critical) service
➢ Declarations must be clear and free of ambiguous language to the extend of powers granted to the various jurisdictions and other contentious issues such as if force majeure applies or not, interpretation of it and consequences.
DECLARATION OF STATE OF EMERGENCY (OR EQUIVALENT)

Consequence: “The Great Lockdown”. April 2020: around half of humanity was living under some kind of activity or mobility restriction. Later a key focus on re-opening economies, supporting business and restarting growth.

Challenge: to re-open safely, restore business and consumer confidence and provide right economic and fiscal stimulus for early stages

Provision of road and transport infrastructure and services is an important part of the overall public sector. Not surprisingly there is a broad parallel between the general measures by Governments and those taken by organisations working in the road and transport sector.

➢ Agencies in the road and transport sector were granted powers to monitor or restrict non-essential mobility, while maintaining movement of essential workers, goods and services, keeping networks and facilities open and operational.

➢ Sub-national agencies in most countries have maintained their legal obligations, powers and activities, often conducted within national directives and/or orders.
PIARC Response to COVID-19: Resilience

Caroline Evans
PIARC Response Team Member, Chair PIARC Technical Committee
I.4 Climate Change and Resilience of Road Networks

Australia
Webinar 17th February 2021
Risk & resilience - Pandemic as an «unwanted event»

- The risk is impossible to assess:
  - Low probability, high consequences
  - Vast uncertainty in factors affecting the event.

- Complexity:
  - Road networks and transport, and intermodal transport are complex in itself
  - **Cascade effects** are present: less capacity to handle one problem increases the risk of another problem.
  - **Resonance**: the nature does not “stop”; natural hazards are still there - storms, landslides, avalanches, earthquakes..

Source: Figure from Gordana Petkovic (Norway) at PIARC webinar 15 April 2020
Report Outcomes Relating to Resilience

- Response actions to address the pandemic from a resilience perspective focused on:
  - road network operations e.g. continuity of construction and maintenance work
  - transport restrictions & closed municipalities
  - actions in freight, public transport and intercity passenger transport
  - continuity of telecommunication and broadcasting services.
- Supply chain management from a resilience and risk management perspective.
- Longer-term shifts beyond the immediate crisis, user behavioural change, business resilience planning.

“Roads and the road transport system have demonstrated their resilience and their ability to move people and essential goods safely, even in the midst of a pandemic”
• Develop a disaster-resilient road network, securing road infrastructure in times of crisis
• Apply the Preparedness, Response, Recovery, Prevention/Adaptation model
• Be prepared to face additional disasters while facing a pandemic
Disaster Management under COVID-19

Yukio ADACHI
Chair, Technical Committee 1.5 “Disaster management”, PIARC
Hanshin Expressway Research Institute for Advanced Technology
Japan
Webinar 17th February 2021
What has happened in disaster management activity under COVID-19?

Disaster Management

COVID-19

Various impacts

Various restrictions

March 2020 Zagreb (CRO) Earthquake under COVID-19
Source: Wikipedia commons

May 2020 Philippines Typhoon under COVID-19
Source: Wikipedia commons

July 2020 Kumamoto (JPN) Flood under COVID-19
Source: Ministry of Land, Infrastructure, Transport, and Tourism, Japan
Disaster Management under COVID-19

- Develop a disaster-resilient road network, securing road infrastructure in times of crisis
- Dynamic disaster management
  - Digital transformation
  - New technologies
- Disaster management under other restrictive impacts or effects

- Apply the preparedness, response, recovery, prevention (mitigation)/adaptation model
- Adjust to COVID-19 impact or restrictions for additional disasters
COVID-19 – Road Works

José Manuel Blanco Segarra
Spain
PIARC COVID-19 Response Team (CRT) Member
PIARC TC 1.1 Spanish speaking Secretary

Webinar 17 February 2021, 13h (Paris time)
Declaration of State of Alarm. Health Crisis
Designation of competent and empowered authorities
Coordination & rapid reaction procedures. Public awareness.
Role of subnational jurisdictional levels.
General measures suspension, lockdown but essentials,
of activity, service, meetings, social distance, mobility
Limitations on occupancy of transport vehicles (public or private, collective or not).
Communication.

Instructions from Head of Road Authorities to employees and companies. Protection of staff as a priority (teleworking, e-Administration)
Identification of vulnerable employees / workers
Determination of road (infrastructures) & Transport as essential.
Electronic communication broadband suppliers may not suspend
Need to fulfil Mandate: road network open, road transport in service
Task Force and Crisis team. Message, messenger, media?

Consequences: sharp drop & constraints in economic activity and mobility including tourism, schools, social life.
Border closure. Modal shift. Less revenues (fuel tax, tolls..)
Immobility: only essential trips, quarantines, curfew,
Measures to address crisis, seeking balance essential mobility (not so much immobility) – protecting health
Trying to return to a safe “new normality”. De-confinement.

Realization COVID is as much economic crisis as health one, GDP reduction. Minimization of socio-ec damage
States passing bills on economic considerations (extension of tax deadlines, moratoriums, deferral of credit payment, Credits Funds for helping & stimulus…) protecting:
People in general, workers and self-employed workers
Companies, focus on SMEs and liberal professions
Post-COVID-19 reactivation economy. Billionaire funds on stimulating economy. Roads as priority & efficient means to restart the economy (stimulus)?

Designation of infrastructure workers as essential
Frontline staff and personnel “in the field”.
Focus on transportation provisions and essential workers and supplies (somewhat problematic in many cases, in early stages)
Services Areas (petrol, toilets, food, rest…), and to create networks of open establishments in the rest.
Maintenance is essential.
Different views / responses on Road Works and Tolls
Economic considerations regarding the suspension of contracts
Almost of all tenders have been suspended (but exceptions)
Emergency processing

Project measures: in some nations “a country priority” (high contribution to GDP and jobs). Structuring new projects. Dilemma.
Re-definition and/or re-arrangement of existing contracts
Review of economic balance of concession contracts
ROAD WORKS

Experience of road works has varied widely ranging from immediate action to suspend road activities to ensuring business as usual

➢ Most common response: partial or total suspension followed by safe reactivation or looking to advance works. Tenders and awards: suspended all of them in some countries, suspended partially in other ones, not suspended or just suspended during the worst phase of pandemic evolution in other, in other ones considering voluntary cancellation of postponement in initial steps or accelerated in other ones.

➢ Most contractors did not suspend work voluntarily. Key factors: employee concerns, supply chain failure, national directives, orders. In addition to commercial viability the other primary concern is ensuring employee’s health & safety.

➢ Project slowdowns: even where continuing, some experienced delays due to broken supply chains, receiving materials (abroad and domestic), lower productivity, workforce & experts mobility restrictions, etc.

➢ Consulting sector: switching to teleworking and overcoming initial lack of preparedness

➢ In low income countries: diverse impacts associated with funding from development partners and diversion of resources redirected to fighting pandemic. The important role of Development Banks.
ECONOMIC IMPACT OF COVID-19 IN MALAYSIA

Supply chain are affected across industries both globally and domestically

Decline in GDP growth

Central Bank foresees decline of up to -2% in GDP for 2020

Severe Impact / Unprecedented

Businesses losses during Lockdown*

RM32 billion export value losses every 2 weeks estimated in manufacturing sector alone

Unemployment rate

Estimated one million people will lose their job

Government losses during Lockdown*

RM2.4 billion losses per day estimated from production of goods and services

* Our country has imposed a Nationwide Lockdown or known as Movement Control Order (“MCO”) which started on 18 March 2020 and extended until 12 May 2020

Sources:
Speech and Public Statement made by Ministry of Finance, Malaysia
Statement made by Bank Negara Malaysia

Establishing Engineering Excellence

World Road Association • Association mondiale de la Route • Asociación Mundial de la Carretera • www.piarc.org
ROAD WORKS

Road Maintenance: the main goal is to keep road network open & transport in service ensuring movement of freight & essential workers, while protecting staff and facilities. New opportunities for maintenance and other works in period of low traffic volumes with safer conditions, with operations adjusted according to the traffic decrease.

Road agencies have endeavoured to keep relations with their suppliers. Vulnerabilities and opportunities emerged. Focus on the importance of road work considering economic & social effects.

Some important lessons learned:

➢ Be alert and agile in reacting
➢ Secure access to adequate resources to ensure that works can be continued
➢ Investigate feasibility of strategic stockpiles of material that might be in short supply in the event of global disruption of supply chains. Balance adequate resources in hand versus overhead for keeping them has to be considered.
PIARC Response to COVID-19: Economic measures to support businesses

Fabio PASQUALI

PIARC Response Team Member, Chair of PIARC TC 1.2 - Planning Road Infrastructure and Transport to Economic and Social Development
Head of Planning, ANAS (Italian State Road Agency)

Italy

Webinar 17th February 2021
Economic Measures to Support Businesses – Overview

- What has been done in the short term
  - Types of measures, effects

- What is being done for the short-medium term
  - Expenditure and investment side, revenues side

- Which strategies for the medium-long term – Priorities and case studies
  - Redefinition of paradigms, occasion for major changings

- What about the road industry
  - The current cost and revenue side (loss of users’ revenues for NRAs, effects and measures), the investment side (new criteria, new sources for funding, …)
### Economic Measures to Support Businesses – The short term

- **Immediate and reactive measures and effects:**
  - Increase of earmarked public expenditure
    - Health, supply chain, equipment, IT
  - Cancellation of certain taxes
  - Payment of additional unemployment subsidy
  - Payment of emergency income
  - Non-refundable grants (restoration for losses)
  - In some cases, pro-equity measures
  
- **Decrease of public revenues**
  - Deferral of taxes and other payments
  - Reduced proactivity in tax collecting
  
- **Liquidity provision/guarantee**
  - Loans, liquidity
  - Credit lines
  - Guarantees

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#### Discretionary 2020 fiscal measures adopted in response to coronavirus by 18 November 2020*, % of 2019 GDP

<table>
<thead>
<tr>
<th>Country</th>
<th>Immediate fiscal impulse</th>
<th>Deferral</th>
<th>Other liquidity/guarantee</th>
<th>Last update</th>
</tr>
</thead>
<tbody>
<tr>
<td>Belgium</td>
<td>1.4%</td>
<td>4.8%</td>
<td>21.9%</td>
<td>22/10/2020</td>
</tr>
<tr>
<td>Denmark</td>
<td>5.5%</td>
<td>7.2%</td>
<td>4.1%</td>
<td>01/07/2020</td>
</tr>
<tr>
<td>France</td>
<td>5.1%</td>
<td>8.7%</td>
<td>14.2%</td>
<td>05/11/2020</td>
</tr>
<tr>
<td>Germany</td>
<td>8.3%</td>
<td>7.3%</td>
<td>24.3%</td>
<td>04/08/2020</td>
</tr>
<tr>
<td>Greece</td>
<td>3.1%</td>
<td>1.2%</td>
<td>2.1%</td>
<td>05/06/2020</td>
</tr>
<tr>
<td>Hungary</td>
<td>0.4%</td>
<td>8.3%</td>
<td>0.0%</td>
<td>25/03/2020</td>
</tr>
<tr>
<td>Italy</td>
<td>3.4%</td>
<td>13.2%</td>
<td>32.1%</td>
<td>22/06/2020</td>
</tr>
<tr>
<td>Netherlands</td>
<td>3.7%</td>
<td>7.9%</td>
<td>3.4%</td>
<td>27/05/2020</td>
</tr>
<tr>
<td>Portugal</td>
<td>2.5%</td>
<td>11.1%</td>
<td>5.5%</td>
<td>04/05/2020</td>
</tr>
<tr>
<td>Spain</td>
<td>4.3%</td>
<td>0.4%</td>
<td>12.2%</td>
<td>18/11/2020</td>
</tr>
<tr>
<td>UK</td>
<td>8.3%</td>
<td>2.0%</td>
<td>15.4%</td>
<td>18/11/2020</td>
</tr>
<tr>
<td>USA</td>
<td>9.1%</td>
<td>2.6%</td>
<td>2.6%</td>
<td>27/04/2020</td>
</tr>
</tbody>
</table>

*Source: Bruegel Datasets*
Debt is a limited option, it’s necessary to restore the fiscal revenue scheme

- The most important fiscal sources are heavily affected by Covid: personal and corporate income, VAT and international trade/tourism
- This is important everywhere, but essential in weaker economies
- This also reflects on the capacity of supplying welfare tools to defend people from Covid

Source: Equivalent Fiscal Pressure IDB - CIAT (2019)
Economic Measures to Support Businesses – The medium term

- The fiscal revenues will follow the economic recovery, what to plan for the “New Normal”?
- Many countries – as well as the EU - are starting a huge recovery plan based on infrastructures
  - Emphasis on green investments and transition
  - Higher multiplier in post-recovery times
- A comprehensive plan should include a clear policy for facing aged infrastructures
  - Facing old infras, combined with greening policies is a correct and effective answer

EU Plan for Recovery and Resilience – Based on three axles:

- Digitalisation and innovation
- Ecologic transition
- Social inclusion

Associated to Country Specific Recommendations (National Reform Plans)
Economic Measures to Support Businesses – Focus on the road industry

The new agenda for the road industry:

Economics:
• New ways of assessing projects (green, integrated, “new urban”, …)
• Collaboration between agencies and transport modes
  • New mobility development, affecting new investments
• Simplification of procedures for procurement
• Wider use of PPP
• Innovation in operation, infomobility, toll collection, …
  • Use of innovative technologies, such as drones, sensors, and Internet of Things (IoT)
  • More virtual work, workforce modernization, adequate IT framework, using data scientists to support the current engineering workforce

Finance
• Flexibility in redefining contracts and loans, Force majeure, Additional sources of funding, Extended pay per use/pollute schemes
PIARC Response to COVID-19: Passenger and Public Transport

Andrea SIMONE
PIARC Response Team Member Chair, Technical Committee 2.1 on Mobility on urban areas
Professor, DICAM Department, Alma Mater Studiorum University of Bologna
Italy
Webinar 17th February 2021
Report Outcomes Relating to Passenger and Public Transport

- Passenger transport, whether public or private, has been one of the hardest hit areas. In particular **public transport has faced some extreme difficulties**, from services entirely being suspended to severe declines in ridership and associated revenues, at a time when **operating expenses are sky-rocketing** due to the new protocols that must be implemented for cleaning, disinfecting and capacity reduction in order to maintain appropriate **social distancing**.

- Many people in urban areas have reverted to **active transportation modes**. This has in turn encouraged cities and towns to **look at their streetscapes under a different light and to reconfigure streets to provide safe space for active transportation**.

- How should public transport adapt to public’s demands for new hygiene and disinfection protocols, social distancing, and frequency and reliability of service?
The lesson learned

- Public transport has to be delivered anyway, mass transport has to be treated in a concerned way.

- We’re not talking about ‘public’ vs ‘private’, but about ‘individual’ vs ‘collective’.

- In the first times post COVID-19 emergency, public transport – within city limitations – will mean ‘more individual’ and ‘less collective’, anyway as much sustainable as possible.

Source: Figure from Tommaso Bonino (Italy) presentation at PIARC Webinar 8 April 2020
Report Conclusions and Recommendations

- Restore citizen’s confidence in collective (mass) public transport
- Analyze *how the urban landscapes shifts*
- Look into how we can build flexibility in the infrastructure that we build to allow for the changing and uncertain mobility dynamics and expectations that our customer base is facing
- Analyse *how ITS can help public transport* provide more reliable service
COVID and Road Safety

John Milton, PhD, PE, RSP2I, PTOE

Washington State Department of Transportation, State Safety Engineer

Chair, PIARC TC.3.1 Road Safety Committee

COVID Webinar, 17 February 2021
Fatal and serious crash rates increase as traffic volume
Risky Driving Increases – Speed and Impairment

- Faster Driving with less congestion
- Extreme speeding event
- Impaired driving from drink - driving
- Increase in biking and pedestrians leading to more fatal and serious injury with vulnerable road users
COVID-19
Managing the Workforce

Jonathan Spear, Transport Policy & Strategy Advisor
Technical Committee 1.1 (Performance of Transport Administrations)

Dubai, United Arab Emirates
17 February 2021
Context

- Globally, land transport accounts for 60 million direct jobs, 2% of total employment\(^1\). Indirect employment in wider supply chain is even greater and provides physical mobility for employees in multiple other sectors.

- Direct employment in public agencies in the land transport sector is estimated at around 1.3 million\(^2\).

- The COVID-19 crisis has brought major changes to these agencies, their supply chain, and related workforces:
  - In the public sector, employees have had to continue duties, whether delivering frontline services or working in administration, but under conditions of uncertainty and disruption.
  - In the private sector, economic slowdown has been accompanied by considerable employee furloughs and redundancies.

- Globally, the ILO estimates that 93% of workers reside in countries with some kind of workplace closure or disruption, with 5.4% of working hours lost in Q1 2020 and 14.0% in Q2, equivalent to 400 million full-time jobs\(^3\).

- In many countries, despite COVID-19 resurgence in late 2020, the focus on managing public health is balanced with restarting economic growth, protecting jobs and the fabric of society – this has workforce implications.

- However, the transport workforce is unlikely to recover until well into 2021 – and in some cases beyond.

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\(^2\) Based on an extrapolation of estimates for public transport agencies by UITP 2009.

## Organisational Impacts and Responses

<table>
<thead>
<tr>
<th>Impact</th>
<th>Impacts</th>
<th>Responses</th>
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</thead>
<tbody>
<tr>
<td>Operations &amp; Facilities</td>
<td>• Direct productivity impacts from staff self-isolating, sick or unable to work</td>
<td>• Business Continuity Plans, Emergency Management Committees</td>
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<td></td>
<td>• Frontline disrupted by staff shortages, social distancing</td>
<td>• Maintaining or reopening operations safely, for example through requiring staff to use PPE</td>
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<td></td>
<td>• Offices shut down and shifted to Working from Home</td>
<td>• Strengthening ICT for Working from Home</td>
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<td></td>
<td>• Employees stepping up into new roles and working differently</td>
<td>• Rapidly finetuning key communications platforms</td>
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<tr>
<td>Travel &amp; Mobility</td>
<td>• Commuting curtailed by the closure of offices</td>
<td>• Investment in remote working and ICT reducing the need to travel</td>
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<td></td>
<td>• International travel shut down or requiring top approval</td>
<td>• Organisational travel policies and procedures adapted</td>
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<td></td>
<td>• Domestic business travel for “essential” purposes only</td>
<td>• Review of time and costs of business travel</td>
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<tr>
<td>Workforce</td>
<td>• Staff whose job allows it Working from Home</td>
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<tr>
<td></td>
<td>• Homeworking presents issues of line management, productivity and wellbeing</td>
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<td>• Loss of the “social” aspects of life within the workplace with wider implications for mental health and wellbeing</td>
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<td>• Increased communications and management via intranet, staff notices, virtual team meetings</td>
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<td>• Emphasis on physical &amp; mental well-being (relating to lockdown as well as Working from Home)</td>
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<td></td>
<td></td>
<td>• Virtually replicating team socialising</td>
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<tr>
<td>Contractual &amp; Regulations</td>
<td>• New regulations around workplace Health and Safety</td>
<td>• Complying &amp; going beyond regulatory requirements (e.g. COVID-secure)</td>
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<td></td>
<td>• Need to review and change employment policies and contracts</td>
<td>• Review of workplace policies and contractual conditions</td>
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<td></td>
<td>• Blurring across work, professional, personal space and time</td>
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<tr>
<td>Commercial</td>
<td>• Cancellation, postponement &amp; rescheduling of workload</td>
<td>• Re-scheduling of work and transactions with stringent management of avoidable costs</td>
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<td></td>
<td>• Redundancies, forced leave, retirements and pay cuts, especially in private sector</td>
<td>• Use of furlough, unpaid leave and salary reductions to protect jobs</td>
</tr>
</tbody>
</table>
Theme 1 – Protecting and Celebrating Frontline Workers

Personal hygiene with hand washing with soap and water, provision of alcohol gel. Intensification of facilities cleaning and disinfection frequencies.

Protection of drivers and attendants, social distancing of passengers, sanitisation and restriction of access on public transport vehicles and at stations.

Provision of PPE & Social Distancing

Campaigns for hand washing with soap, use of protective masks, sanitising gel, adjustments to shifts, separation of teams and occupational health and safety.

Thank you to our frontline workers. We’re proud of you.
Theme 2 – The Future of Work

Changing the Way We Work

We need to manage our employees and teams better
- Personal situations around WFH
- Resilience of individuals and teams
- Future of offices and space(s)
- Exploiting Technology
- Redesign employment policies flexibility & resiliently
- Deploy ICT creatively
- Reimagine the office as a portfolio of working spaces
- Ditch the 9 – 5 commute
- Support training and development to adapt to a new environment

Leading and Evolving Roles Remotely

We need to design for organisational resilience
- Dealing with new duties/pressures
- Refining roles and responsibilities
- Communication channels
- Leadership capabilities & skills
- Review and redesign key roles within the organisation
- Strengthen, redistribute and enable leadership and delegated authority
- Support leaders with right capabilities & behaviours
- Adjust organisational values and culture

Staying Physically and Mentally Safe

We need to give a more central role to Wellbeing
- Safety culture to cover wellbeing
- Need to respond to jobs being less active
- Focus on healthy lifestyles, mental wellness & stress management
- Design COVID (and equivalent) processes into organisation
- Broaden employer duty of care to include mental and physical health
- Invest in measures beyond good intentions, platitudes to walk the walk
- Permanent changes beyond COVID

Experiment, Embed and Evaluate
Final Remarks and Recommendations

- During COVID-19, employees in road and transport organisations have encountered many logistical and practical issues common across many other sectors and organisations worldwide.

- However, in many cases, they are “Key Workers” with a specific civic duty and ongoing role to maintain public infrastructure and services and ensure continued mobility during a time of crisis.

- There are numerous stories of employees at all levels rising to the challenge, finding practical workarounds and getting the job done #TransportHeroes #GuardiansofMobility.

- The PIARC Report makes recommendations around:
  - Celebrating the contribution of transport workers at all levels.
  - Promoting broader definitions of health and safety in the workplace and of the workforce.
  - Making Working from Home effective, using technology wisely and examining the wider organisational (and transport) implications.

- Private sector, including SMEs and informal workers, have faced unprecedented pressures – Short-term Government support and long-term economic recovery is a priority to address this.
PIARC Task Force “ROAD INFRASTRUCTURE AND TRANSPORT SECURITY” (2020-2022)

Chairman: Saverio PALCHETTI, Italy
Ph.D, Civil Engineer, Senior Security manager

13 Members, 8 Corresponding Members, 16 Countries

TF 3.1 main goal is embedding security into other 15 infrastructure and transport-related topics (PIARC Technical Committees and Task Forces)
The spread of Covid-19 has called into question the operational management of Road and/or Transport Agencies or Administrations in order to ensure the performance of activities in a pandemic context as a primary service to the mobility.

The timely resumption of operations in the road sector is an absolute civil value and an essential element of the a National emergency system to ensure business continuity during the crisis, in most activities related to road.

For that, the reaction to the pandemic has needed an adequate preventive preparation and planning for the correct management of traffic in critical conditions.

The pandemic has shown so far that some of the security threats may have changed; good risk assessment is therefore critical to establishing what threats a Road Agency might face and what security mitigations are necessary.
• In this period, the strong increase of cyber-attacks, underlines the capital importance of adequate security measures to the IT systems to avoid disruptions or, even worse, exposure to cyber-attacks that can hinder the response to the emergency.

• Cyber viruses had caused disruptions at the most inappropriate time, such as the pandemic time.

• Work from home has also created new challenges for road authorities in dealing with cyber security.

• Biological and cyber viruses have a lot in common and a cybernetic pandemic scenario is among those that must be taken into consideration for the future.

• Security managers and the Departments of Corporate protection are of primary importance for assuring an appropriate level of resilience.
PIARC Response to COVID-19
Freight and Logistics

Martin Ruesch, Rapp Trans Ltd.
PIARC Response Team Member, Chair TC 2.3 Freight

Switzerland
Webinar 17th February 2021
Report Outcomes Relating to Freight and Logistics

- **Impact on world trade and supply chains**
  - World trade heavily affected
  - Partly limitations in capacities of transport and at logistics centers
  - Disruptions in international logistics chains
  - Exploding E-commerce

- **Impact on road freight transport**
  - Obstructions for truck traffic
  - Difficult working conditions for drivers
  - Decrease in truck traffic volumes on motorways and highways
  - More empty trips
  - Increasing urban freight deliveries

Source: WTO
Report Outcomes Relating to Freight and Logistics

- **Some “positive” impacts**
  - More capacity for trucks on motorways
  - Increasing average speed
  - Reduced emissions
  - More appreciation for logistics and freight transport

- **Challenges**
  - Maintain the efficiency and quality of transport services
  - Provide safe working conditions
  - Economic viability of road transport companies
  - Reduced toll revenues and financing
Report Outcomes Relating to Freight and Logistics

General strategy of “Keeping freight moving”

- Closure borders – mostly with the exception of freight
- “The free movement of goods is necessary for the continued availability of goods.” (EU COVID Guidelines)
- A 10-POINT ACTION PLAN TO STRENGTHEN INTERNATIONAL TRADE AND TRANSPORT FACILITATION IN TIMES OF PANDEMIC (UNCTAD)
- Freight transport has to be ensured for delivering food, health equipment, etc.
- “We must take extraordinary measures to protect our citizens”, also drivers and staff at logistics centers etc.
- Reduced bureaucracy for permits/authorisations
Report Outcomes Relating to Freight and Logistics

Easement of truck traffic regulations

- Suspension or easement driving bans on weekends / at night
- Easement of max. weight limits
- Easement of driving and resting time regulations, more flexibility
- Exemptions regarding border restrictions for freight and logistics industry, Exemptions from internal/sanitary control
- Waiver for permits for the passage of non-standard (oversized vehicles) transporting medical equipment
- Extension of certificates for trucks/driver licences and visas
- Actual phase: easements are partly abolished
Report Outcomes Relating to Freight and Logistics

Traffic management and information, tolling

- **Border crossing truck management with priority for trucks and vans**
  - priority lanes for trucks
  - keeping hard shoulders clear for freight vehicles
- **Real time information services for drivers** on facilities and COVD-rules along motorways/freight corridors
- **Free-flow tolling**, high rate of electronic tolling
- **Encourage the use of the TIR system (IRU)**, particularly eTIR to ensure seamless and paperless border crossing
Report Outcomes Relating to Freight and Logistics

Supply and services along motorways

- Supply with health material and equipment (masks, gloves, disinfectants, etc.)
- Increasing cleaning services, keep the use of facilities secure for truck drivers

Rest and service areas (e.g. A63 in France):
  - Zoning: truck separated from light vehicles
  - Dedicated facilities for truck drivers
  - Alternative services: e.g. Foodtruck initiatives, Special offers (cleaning kits, free drinks, etc.), Clothes cleaning
  - More frequent patrols (Sanitizing/cleaning)

Information and communication between road operator and truck/van drivers is key issue
Report Outcomes Relating to Freight and Logistics

Recommendations

▪ **Establish guidelines/agreements** on national/international level to keep freight moving during pandemics – *keep key road networks and facilities open and operational*

▪ **Prepare and implement amendments** to the law/regulations to have more flexibility regarding exemptions during pandemics or other disruptions

▪ **Support the digital transition for ITS solutions in logistics and freight transport** to reduce physical handling and control processes and to minimize obstructions on traffic flows

▪ **Prioritize Investments for key freight corridors** for economic recovery and good framework conditions for long distance road freight transport
Presentation

The role of Data and ITS for the enhancement of Road Network Operations within COVID-19 crisis: findings from Response Team Report

By Valentina Galasso (Italy), Chair of PIARC TC 2.4 and Senior Manager @Deloitte Consulting
There was significant change in road network management even before COVID-19. The pandemic can be viewed as both a challenge and an opportunity. Technology and data have generated the ability of network managers to view the mobility picture from one end to another, and to be able to identify the changing attitudes and behaviors in road users. Road Network Operators gained awareness about the fact that they can develop new ways of undertaking core activities, and this involves the uptake of ITS technologies. Data will guide the disruption and will be for all the main actors within the transportation field. Thanks to that Transport operators have been able to deliver services within very reduced time frames and under severe constraints.
Impact of COVID-19 crisis on Road Network Operations

Road network disruptions and their implication for Road Operators

**Most known impacts on road transport from COVID**

- Service Disruptions
- Variety of mobility forms
- Priority to emergency and freights
- Mixed road users behaviours
- Business continuity vs keeping workers safe
- Variance in traffic ratio
- Change of road users’ needs
- Remote activities
- High reaction capacity

**Main challenges**

- Increase of complexity in mobility management
- More heterogeneous environment to monitor and control 24/7
- Increased pressure on stakeholders
- Constant and real time evaluation of solutions
- Ensuring business continuity
Impact of COVID-19 crisis on Road Network Operations

Some major measures within the RNO domains and their relation with data

- **Exchange of information with road users**
  - Guarantee the information exchange with road users
  - Example of measures:
    - Introduce low cost ITS
    - Use several communication channels to deliver the message, according to road users’ needs
  - Focus on Data:
    - Data coming from road users can highlight patterns of behaviours and expectations

- **Management of Tolling**
  - Allow business continuity in road network operations taking into account the protective measures of COVID-19
  - Example of measures:
    - Dynamin management of tolling with priority to digital payment
    - Free tolling for emergency vehicles
  - Focus on Data:
    - Empower ITS solutions to help the country manage a crisis

- **Network Management & Overall Mobility**
  - Avoid disruptions guaranteeing well defined level of services, even in extraordinary situations
  - Example of measures:
    - Dynamin management of the Network with priority (corridors) to emergency vehicles and freights
    - Use of new technology for mobility management
  - Focus on Data:
    - Data enhances the capability of the RNO to manage the network dynamically

- **Decision management support**
  - Define the best actions from evaluation of different scenario, with an end-to-end approach
  - Example of measures:
    - Integrated information management for managing the mobility along the network
    - Develop practices for high data processing to support decisions
  - Focus on Data:
    - Rapid data processing and real time analysis for better management
Report’s key conclusions and recommendations

**ITS as Road Network Operators best allies**

- Focus on Integration and management of the road network with an end-to-end and user-centered approach.

- Even in ITS: do not reinvent the wheel and instead aim to benefit from others’ experiences and knowledge.

- Consider low-cost ITS solutions as a valid option for road network operations, for all countries and for large and small jurisdictions. ITS does not have to be expensive to be effective.
Report’s key conclusions and recommendations

*Data as an enabler for delivering services to users*

- Think about data as something of great value for road transport organizations.
- Recognise that real time information is needed to meet the needs of users and operators.
- Evaluate the power of partnership for data collection and management to drive innovation through road transport.
Challenges for tomorrow
Rethink RNO into a transformed mobility landscape

Managing data

Mastering data analytics and data-driven decisions

Breaking the individual vs. system tradeoff

Building a public-private coalition to drive transportation innovation
COVID-19 – PIARC’S RESPONSE
Implementation Measures

Patrick Malléjacq, PIARC Secretary General

Christos S. Xenophontos, PIARC TC 1.1 Chair

Webinar 17 February 2021, 13h (Paris time)
Implementation Measures - 1

- *Monitor the New Transport Normal*

  - Be on the alert: what is demand for transport going to look like from now on, including the work from home?
  - How can we build some uncertainty into our models and processes?
  - Pay even more attention to the needs of the users to be more “customer – centric”
  - Do not lose focus of society’s pre-COVID expectations regarding GHG emissions, cost-efficiency, resilience, and service levels… They are still relevant
Implementation Measures - 2

- **Contribute to Economic Recovery**
  
  - Recognise that roads are key for economies and societies (they stayed open during the crisis; road freight worked)
  
  - Include investments in road infrastructure or road transport in national COVID-related economic recovery plans
Implementation Measures - 3

- **Fill Gaps in Evidence / Evaluate**
  - Evaluate all measures that have been implemented in a hurry during the crisis
  - Identify actual user needs and policy demands; i.e., what is the “new normal”

- **Share Knowledge**
  - Promote the use of all available knowledge
  - Engage with LMICs in particular
  - Continue providing a networking tool for people to connect
  - Analyze the survey, renew it when appropriate
**Focus:** The response to Covid must not weaken efforts to make progress on road transportation’s pressing agenda

- Before Covid, the road transport sector was expected to **address societal challenges:** reduce its carbon footprint, help fight extreme poverty, improve access and mobility for all and increase road safety.

- This cannot change in response to the need of prioritizing sanitary concerns in transport, so that **policy choices will be required to combine all aims.**

- Thus, **information sharing** will also be useful to learn how to introduce sanitary concerns into key transport policies such as:
  - Improve shared mobility options in cities
  - Increase the quality of public transportation services
  - Promote integrated multimodal transport options for freight and passengers
  - Combine telecommunications and transport technologies

*Adapted from: Oscar de Buen Richkarday, PIARC Past President*
Focus: Additional strategic issues are emerging

- The economic and social impact of COVID-19 is widespread across governments and private sector operators across the road transport sector:
  - Extensive consequences associated with reduced revenues across the sector
  - Impacts on banking systems and loan disbursements
  - In some countries, slowdown in the execution of development projects due to the impact on project financing, and access to the required inputs that are imported.

- A future pandemic must find the road and transport administrations more resilient
  - Better prepared for the phases of prevention, containment, robustness, recovery and adaptation in the face of this event, to enable the world to return to a (new) normality, an
  - With a battery of measures aimed at assisting employees, customers, suppliers and the public.
  - A pandemic is an unwanted event which has a low probability, but very high consequences at the economic and social levels.

- We need to be aware of how the “new normal” is different (if it is different)
  - What expectations from users? How do we measure and validate them? What priorities for societies as a whole?

- How can investment in roads contribute to economic recovery?

- It is essential to share knowledge and to evaluate measures that were put in place in an emergency
  - What worked, What didn’t work, Why?
**Focus:** How can investment in roads contribute to economic recovery?

- **Roads are key for economies and societies**
  - See recent PIARC report “The Contribution of Road Transport to Sustainability and Economic Development”

- **Roads can create jobs** – roads are essential for economic recovery

- **In some countries, investments in road infrastructure or road transport appear prominently in national recovery plans**
  - Senegal: 15.5% of full plan

- **Good roads are essential for innovative transportation services**
  - Car-sharing, ride-hailing, electric vehicles… all need roads

- **Good roads are essential for public transport**
  - Buses, tuk-tuk… all need roads
Questions and Answers

Moderated by Christos Xenophontos

Rhodes Island DoT (USA)
Chair of PIARC TC 1.1 on Performance of Transport Administrations
Our Speakers today

- Patrick Mallejacq
  - Secretary General, PIARC
- Christos Xenophontos
  - Rhode Island DOT, USA - PIARC TC 1.1 Chair
- José Manuel Blanco Segarra
  - Ministerio de Transportes, Movilidad y Agenda Urbana, Spain - TC 1.1 Spanish Speaking Secretary
- Jonathan Spear
  - Atkins, UK - TC 1.1 WG 2 Leader
- Fabio Pasquali
  - ANAS S.p.A, Italy - TC 1.2 Chair
- Caroline Evans
  - National Transport Commission, Australia - TC 1.4 Chair
- Yukio Adachi
  - Hanshin Expressway Engineering Co, Japan - TC 1.5 Chair
- Andrea Simone
  - University of Bologna, Italy - TC 2.1 Chair
- Martin Ruesch
  - Rapp Trans Ltd, Switzerland - TC 2.3 Chair
- Valentina Galasso
  - Deloitte Consulting, Italy - TC 2.4 Chair
- Saverio Palchetti
  - Consultant, Italy - TF 3.1 Chair
Conclusion and Next Steps
PIARC Detailed Technical Report

- COVID-19: initial impacts and responses to the pandemic from road and transport agencies

- Published in December

- Available from www.piarc.org

- Languages: English, Spanish, French (soon)

Next steps for PIARC

- **Further PIARC webinars are planned**
  - In French on 24 February 2021
  - In English on 24 March 2021, about project appraisal

- Evaluate all measures that have been implemented in a hurry during the crisis

- Identify actual user needs and policy demands; i.e., what is the “new normal”

- All of our Committees are mobilized to share knowledge and best practice
NEXT PIARC CONGRESSES
Save the dates!

- 16th World Winter Service and Road Resilience Congress
  - Calgary, Canada, 8 – 11 February 2022
  - Call for papers is open until 28 February

- 27th World Road Congress
  - Prague, Czech Republic
  - 2 – 6 October 2023
Summary Terms of Reference (Revised PIARC Strategic Plan)

- To explore rapid sharing of knowledge and practice between PIARC members on COVID-19 impacts, responses & associated socio-economic crisis
- To propose and implement short-term actions to support PIARC members and transport professionals in COVID-19 mitigation and response
- To track the course of COVID-19 over time and advise on further actions to be taken by PIARC and others during the crisis and into the recovery
- To advise on medium- and long-term implications of COVID-19 on the roads and transport sector and how these should be reflected in PIARC activities
- To prepare and publish technical reports, surveys and other analysis on COVID-19, alone or in collaboration with other industry bodies & stakeholders

Currently established to 31st December 2021, extendable as required

Current Membership

- Patrick Mallejacq, Secretary General, PIARC (Chair) (FR)
- Christos Xenophontos, Rhode Island DOT, TC 1.1 Chair (USA)
- José Manuel Blanco Segarra, Ministerio de Transportes, Movilidad y Agenda Urbana, TC 1.1 Spanish Secretary (ES)
- Jonathan Spear, Atkins, TC 1.1 WG 2 Leader (UK)
- Fabio Pasquali, ANAS S.p.A, TC 1.2 Chair (IT)
- Caroline Evans, National Transport Commission, TC 1.4 Chair (AU)
- Yukio Adachi, Hanshin Expressway Engineering Co, TC 1.5 Chair (JP)
- Andrea Simone, University of Bologna, TC 2.1 Chair (IT)
- Luis Miranda-Moreno, TC 2.1 Spanish Secretary (CA)
- Valentina Galasso, Deloitte Consulting, TC 2.4 Chair (IT)
- Martin Ruesch, Rapp Trans Ltd, TC 2.3 Chair (CH)
- Pascal Rossigny, CEREMA, TC 3.3 French Secretary (FR)
- Saverio Palchetti, ANAS S.p.A., TF 3.1 Chair (IT)
- Andrea Peris, Paraguay National Committee (PY)
PIARC Webinar
COVID-19
17 February 2021

Thank you very much for your attention!

Visit the PIARC & COVID-19 page
#PIARCCOVID19