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WCTRS COVID-19 Taskforce

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ADBI-WCTRS Webinar 2 on High-Speed Rail (HSR) - Transportation Services During Pandemics: Reforming Transport and Living- Work Systems for Resiliency and Quality of life, June 12, 2020



Why TRANSPORT is important in COVID-19 Pandemic?

The COVID-19 Pandemic

- Spread rapidly across the world.
- A huge number of infections and death.
- Biggest challenge to human society since the Spanish Flu in 1918.
- The whole society is connected to each other by much more rapid and massive transport systems in cities and the world.
- Human beings can access and enjoy the other values but also easily catch virus.

Two Faces of Transport under Pandemic

- Causer of Disastrous Infections
 - Unintentionally contributed to the spread of the virus through international and urban passenger travel
 - Supply-chain disruption undermined activities of economy
- An integral part of solutions
 - to mitigate the impacts of COVID-19 through the delivery of humanitarian goods and services
 - to facilitate resilient supply chains for the recovery phase.



What are happening in Transport under COVID-19?

WCTRS COVID-19 Task Force

https://www.wctrs-society.com/about-wctrs/wctrs-covid-19-task-force/

Chair of WCTRS COVID-TF

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Co-Chairs of WCTRS COVID-TF

- Lawrence D. Frank, Chair of 'WCTRS Transport and Health Special Interest Group'; Prof., Health & Communication Design Lab, University of British Columbia, Canada
- Junyi Zhang, Prof., Mobilities and Urban Policy Lab, Graduate School of Advanced Science and Engineering; Director of ASMO Center, Hiroshima University, Japan Members of <u>WCTRS</u> COVID-TF
- Greg Marsden, Secretary General of <u>WCTRS</u>; Prof., ITS, University of Leeds, UK
- K.E. Seetha Ram, Dr. Eng., Senior Consulting Specialist, Asian Development Bank Institute
- Peter John Forsyth, Adjunct Prof., Department of Economics, Monash University Advisors
- Tae Oum, President of WCTRS; Emeritus Prof., University of British Columbia, Canada
- Werner Rothengatter, Ex-President of <u>WCTRS</u>, Emeritus Prof., Karlsruhe Institute of

Technology, German

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1. Causing Infections

- Airlines can transport infected passengers from one side of the world to the other, within half a day.
- Passengers in crowded public transport are more at risk of infection than automobile users.
- There is increasing evidence of health risks to staff providing essential transport services.
- Infections among operational staff and reduction of transport services will lead to the collapse of supply chains and consequently lower the productivity of industries.

2. Low Resilience in Transport

- 5. Reduction of passengers by lockdown and emergency declaration may bankrupt the transport and tourism industries, thus worsening the regional and national economy.
- 6. Lockdowns have increased pressures on the supply chains of vital goods for medical care and for citizens' daily life.
- 7. In developing countries, paratransit and other informal transport services are very popular because of their low fares and flexibility, but both passengers and drivers face high risks of infection because drivers are poorly equipped and operate in close proximity to passengers.

3. Can Transport be Built Back Better?

- It may be recommended for citizens to temporarily shift from public transit to cars to avoid the risk of infection. However, this may become a permanent change in transport behavior even after COVID-19 has been eradicated?
- Social distancing requires to stay at home and shut-downs of offices, schools, shops, restaurants, tourism places, amusement parks, etc.
 Can we (citizens, transport operators) build back better?

3. Can Transport be Built Back Better?

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- 2. Social distancing requires to stay at home and shut-downs of offices, schools, shops, restaurants, tourism places, amusement parks, etc. Can we (citizens, transport operators) build back better?



Measures and Actions in Transport and its Surrounding

Recommended Measures & Actions by WCTRS COVID-19 Taskforce (1)

https://www.wctrs-society.com/about-wctrs/wctrs-covid-19-task-force/wctrs-covid-19-appeal/

- To allocate enough resources to allow airlines to immediately reduce flights, which will help prevent the spread of COVID-19 and enable a responsible and safe transition in the recovery process.
- To financially support the deficit facing the transport and logistics industries, which are lifelines for regional economies and citizens' daily life and health.
- To financially support public transport service providers and their employees, as well as service users, by subsidizing services during the transition from lockdown restrictions.

Recommended Measures & Actions by WCTRS COVID-19 Taskforce (2)

https://www.wctrs-society.com/about-wctrs/wctrs-covid-19-task-force/wctrs-covid-19-appeal/

- To prevent increased car dependence due to adverse reactions to public transport services after the pandemic.
- To urgently develop knowledge on how best to communicate with the public about risks and safe use of public transport and movement in crowded places.
- To promote collaboration between public health, transport and supply chain experts to inform policy-makers' decisions about lockdowns.
- To make use of the "new normal" after COVID-19 to encourage changes toward more environmentally sustainable life and work choices after the crisis.

Recommended Measures & Actions by WCTRS COVID-19 Taskforce (3)

https://www.wctrs-society.com/about-wctrs/wctrs-covid-19-task-force/wctrs-covid-19-appeal/

- To share the learning of successes and failures in responding to COVID-19 across countries all over the world.
- To take immediate measures to sanitize public transport vehicles/facilities and maintain safe loading factors for different vehicles at different levels of virus management.
- To provide urgent international aid to compensate operators/drivers of paratransit and other informal transport services in developing countries for their economic losses due to social distancing and other operational restrictions.



Mindset in Transport

Normal/Dream in 20th Century are Abnormal/Inconvenient in 21st Century

- 1. Big gaps in economy between metropolises and rural areas
- Living in 5 bedroom big house in a metropolitan suburb and commute by a big car – American dream during 1939-1960 continued still in 2020
- 3. A massive amount of passengers have been transported by airlines to do business, with huge emissions of CO₂ and pollutants
- 4. Big car was a symbol of economic prosperity and prestige
- 5. Metropolitan Mass dependent life is Non-resilient in emergency
- 6. But rural people wish to enjoy Musical and Opera of New York

New Normal in Work - Life Style for 21st Century

- 1. Equal opportunity for business and income in rural areas with small damage on ecosystem
- 2. Remote working within company a venture company abolished their office in Manhattan, New York. This has made employees' living in 1 K apartment house migrate to remote even to Tennessee to live in greens with high QOL
- 3. Tele-conference/business meetings with customers require no flight for long distance preserving rich free time
- 4. We don't need 5-seater⁺ big cars in town. Walking, bicycle and small smart vehicles are sufficient for virus free and health
- 5. Reversible Society with down-sized economy
- 6. Transport must serve Sanitized flights to New York.

New Normal in Transport for 21st Century

- Down sized equilibrium of sales and cost to maximize profit in Transport operators
- Peak-cut merits: less per hour demand-intensity with lower cost for Infrastructure
 Do not be afraid of downsizing!
- Resilience: Reversible Society, Redundancy of Infrastructure, Contingency Plan
- Transport small [not make unnecessary trips], benefit large
- Transport not all at peak hours/seasons, but only essential workers and freights
- Clear policy of congestion charge & off-peak hour discount to realize non-congested transport and cities – Company Season Ticket

What does COVID-19 suggest to Human Society? How to live in Anthropocene ?

>Anthropocene: Living in Full world (Harman Daly)

- ▶ <u>"Come On!" (2018, Springer)</u> "Come on! 目を覚まそう!" (2019,明石書店)
 - Club of Rome 50th Anniversary Book <<u>https://clubofrome.org/</u>>

➢ Citizen's Well-being

- 20th century: higher Product and Income (Income, GDP) as input to the life
- 21st century: Healthy and Sufficient life (QOL, GNH) as outcome of social activity → Higher net income and precious personal time

► Eco-system

- Till mid 20th century: Empty World looked as Unlimited Capacity
- After late 20th century: Full World must be aware Limits to Growth and Climate Emergency

➢ Resilient Society

- Emergency adaptive life-work style
 - Climate Emergency → Excessive Extreme Weather
 - <u>Reversible Society</u> → Infrastructure with Rooms and Redundancy

(cf. "Shingen River-dyke(信玄堤)" in Japan; "Room for the River" in the Netherlands)

Never-coming chance to mindset for human beings

- Think Climate Emergency
- Think Quality of Life
- Think "Life"
- Imagine and Construct

"Shingen Rive-dyke (信玄堤)" for Virus Pandemic!

Protect People from Disasters but still allows Liveable Town and Country

Build Back Better for Everyone (BBBE)

COVID teaches us better transport systems to support happier life-work styles as New Normal - BB<u>BE (Build Back Better for Everyone)!</u> -



Thank you for your attention!

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