ورشة العمل الفنية حول "إنشاء المركز الوطنى للنقل المستدام في العراق" بغداد، 30 كانون الثاني/ يناير 2024



اللجنة الاقتصادية والاجتماعية لغربي آسيا



الجلسة الخامسة تجارب دولية لمراكز وطنية لدر اسات وبحوث النقل المستدام

> د. يعرب بدر المستشار الإقليمي للنقل واللوجستيات مجموعة الرفاه الاقتصادي المشترك



Transportation Research Board , 1920

The mission of the TRB is to mobilize expertise, experience, and knowledge to anticipate and solve complex transportation-related challenges.

- One of seven major program divisions of the National Academies of Sciences, Engineering, and Medicine.
- The program is supported by:
 - Federal agencies, including the component administrations of the U.S. Department of Transportation (DoT)
 - State transportation departments
 - Other organizations and individuals interested in the development of transportation

- Consensus and Advisory Studies
- Cooperative Research Programs
- Technical Activities
- AV/SM Forum
- Marine Board
- SHRP 2
- Transportation Research Information Services (TRIS)
- Innovations Deserving Exploratory Analysis
- Minority Student Fellows Program
- ACRP Academic Engagement Programs



THE FUTURE OF TRANSPORT



Transport Research Laboratory (TRL), 1933-1996.

- Established in 1933 as the UK government's Road Research Laboratory (RRL), it became Transport and Road Research Laboratory in 1972 (TRRL). The institute was privatized as TRL in 1996.
- TRL is a wholly owned subsidiary of the Transport Research Foundation (TRF), a non-profit distributing company limited by guarantee and established for the impartial furtherance of transport and related research, consultancy, and expert advice.

TRL has no shareholders, which makes it independent from government, industry, and academia.

Vision: to create the future of transport using independent research and innovative thinking.

Mission: to create clean and efficient transport that is safe, reliable, and accessible for everyone.

- <u>TRL's</u> work contributes to <u>preventing serious injuries and fatalities</u> from road traffic accidents in the UK and all over the world.
- At the heart of <u>TRL's</u> mission is the need to <u>make transport more</u> <u>accessible</u> and easier to use while preserving customer convenience and comfort.
- <u>TRL</u> is supporting road authorities to make their transport policies <u>fit for the</u> <u>derived demands of all road users</u>, including cyclists and pedestrians, people, vehicles, and freight.
- <u>TRL aims</u> to <u>reduce the inefficiencies</u> in operations and processes that delay goods delivery and people transit.
- TRL is helping <u>achieve the UK's Net Zero target</u> to decarbonize the transport sector by <u>2050.</u>



Federal Highway Research Institute (BASt), 1951

Mission: The improvement of safety, environmental compatibility, efficiency, and performance relating to roads.

Aims <u>to:</u>

- Improving and increasing the efficiency of construction and maintenance and improving the reliability of road infrastructure
- Improving the efficiency of the road transport system
- Improving road safety
- Improving the environmental friendliness of road construction and road transport
- Strengthening the resilience of the road transport system
- Strengthening the technological progress in the road transport system

Research lines are the following:

- Reliability of road infrastructure
- Sustainable road infrastructure
- Improving resilience of the road transport system
- Ensuring availability
- Holistic view of the road surface
- Road condition determination and evaluation
- Resource-saving and environmentally friendly road construction
- Innovations in road construction
- Vehicle automation
- Connected mobility

- E-Mobility
- Increasing freight traffic measures for a sustainable road infrastructure
- Road transport and environmental protection
- Maintaining and optimizing road performance
- Design and equipment of safe roads
- Improve vehicle safety
- Social change and behavior in traffic
- Behavior change of road users
- Safety of pedestrians, cyclists and physically weaker road users



SWOV, Institute for Road Safety Research, 1962

- SWOV is the national scientific institute for road safety research in the Netherlands.
- Most of SWOV's research is made possible by public funds, as grants from the Ministry of Infrastructure and the Environment.
- But SWOV also works for other parties: decentralized and semi-governments, consulting firms, business companies, and international clients use our research experience (<u>SOURCE</u>).

Missions:

- Prevent crashes
- Reduce injuries
- Save lives

SWOV's research is divided across ten topics:

- 1. Road safety in numbers
- 2. Transport mode:
 - Pedestrian
 - Bicycle
 - Powered two-wheeler
 - Passenger car
 - Freight and delivery traffic
 - Other modes of transport
- 3. Risks
- 4. Infrastructure
- 5. Technology and ITS
- 6. Policy
- 7. Human behavior in traffic
- 8. Enforcement
- 9. Infrastructure Education
- 10. International



Ministry of Infrastructure and Water Management

KiM Netherlands Institute for Transport Policy Analysis, 2006

- The Netherlands Institute for Transport Policy Analysis (KiM) is an independent institute within the Ministry of Infrastructure and Water Management (IenW).
- KiM supplies knowledge for use in the development and review of the ministry's mobility policy. KiM also makes this knowledge freely available to other interested parties.

Research line:

A: Mobility and accessibilityB: Sustainability and regionsC: Policy evaluations and the role of government

Themes of Work:

- 1. Give direction to accessibility
- 2. Developing sustainable mobility
- 3. Urbanization and housing
- 4. Modalities and measures
- 5. Digitalization and innovation
- 6. Uncertain future
- 7. Considerations in times of scarcity
- 8. Data and models
- 9. Professionalizing policy assessment

Vti

Swedish National Road and Transport Research Institute VTI, 1923-1925

- Is an independent and internationally prominent research institute in the transport sector.
- VTI's principal task is to conduct research and development related to infrastructure, traffic, and transport.
- Almost 80 percent of VTI's income is derived from customers and clients; the remainder is made up of State grants.
- The knowledge that the VTI develops provides a basis for decisions made by stakeholders in the transport sector. In many cases, VTI's findings lead to direct applications in both national and international transport policies.

Research departments:

- Infrastructure
- Society, environment, and transport
- Traffic and road users

Research areas:

- 1. Aviation
- 2. Bicycling and cycleways
- 3. Environment
- 4. Highway engineering and maintenance
- 5. Maritime transport research
- 6. Rail transport
- 7. People in the transport system
- 8. Traffic analysis and engineering
- 9. Traffic safety
- 10. Transport economics
- 11. Transport systems analysis and logistics
- 12. Vehicle technology and driving simulation





- Previously <u>known as the Belgian Road Safety</u> <u>Institute (BRSI)</u>
- Established in 1986 by the Belgian government, <u>it has been</u> fully independent since 2016.
- Vias Institute is a major Belgian knowledge center.
- Vias aims to improve road safety, along with mobility and safety in general.

Part of the **funding** for the Vias institute is provided by the **Belgian Federal Public Service Mobility & Transport.**

- Micromobility
- Safe and eco-driving
- Smart, Safe, and Secure Infrastructure
- Behavioral change
- Data collection and analysis
- Traffic analysis
- Autonomous vehicles
- Mobility policy
- Modal change
- Teleworking



Center for Innovation in Transport (CENIT), 2001

- CENIT was created in 2001 as a partnership between the Catalan Government and the Polytechnic University of Catalonia (UPC-BarcelonaTech) to centralize expertise in transportation innovation.
- In addition to R&D activities, CENIT also organizes courses and seminars aimed at professionals seeking to update their specific technical knowledge and learn about the latest developments in the transportation sector.

CENIT Mission: to build the next generation of solutions in global transport.



- Mobility and urban transport
- Travel behavior
- Transport economics
- Urban freight distribution
- Electromobility
- Traffic modeling
- Demand analysis
- Port terminal operations
- Port management
- Public-Private Partnership (PPP)



French Institute of Science and Technology for Transport, Development and Networks, 2011-2020

- Public Scientific and Technical Research Establishment (EPST), created in 2011 merging INRETS and LCPC.
- Dissolved in 2020 within University <u>Gustave-Eiffel</u>



Axe 1 - L'automatisation de la conduite

Axe 2 - Des questions de sécurité routière renouvelées

Axe 3 - Mobilité et santé pour tous

Axe 4 - Modéliser l'humain

Axe 5 : Conception, développement et exploitation de bases de données

- Civil engineering, infrastructure
- Natural hazards
- Digital urban systems
- Embedded systems
- Transport systems and infrastructure
- Urban engineering
- Urban economics
- Architecture
- Geomatics
- Information and communication sciences
- Spatial transformation and social relationships
- Mobility of people, goods, cultural objects



French Centre for Studies and Expertise on Risks, the Environment, Mobility and Urban Planning, 2014

- Is the major French public agency for developing public expertise in the fields of urban planning, regional cohesion and ecological and energy transition for resilient and climate-neutral cities and regions.
- Established in 2014, merging CERTUS, SETRA and CETE (Regional)
- Multidisciplinary scientific and technical resource and expertise center

Provides assistance in <u>developing</u>, <u>implementing</u> and <u>assessing</u> public policies at national and local levels, where the challenges of the climatic and ecological transition & regional cohesion are paramount

6 areas of Expertise:

- 1. <u>Regional expertise and engineering</u>
- 2. Buildings
- 3. Mobility
- 4. Transport infrastructure
- 5. Environment and risks
- 6. Sea and coast





Malaysian Institute of Road Safety Research (MIROS), 2007

- Established in 2007 as an agency under the Ministry of Transport Malaysia.
- In 2014, the ASEAN Transport Ministers had appointed MIROS as the ASEAN Road Safety Centre.
- The aims of this centre are to promote and provide knowledge on road safety issues among ASEAN Member States which includes road traffic laws and regulations, data management, standards development, and road safety awareness and education.

Vision

To emerge as the world leader in road safety research **Mission**

To foster the science and arts of road safety interventions

Functions

(a) to conduct comprehensive research on road safety, and to provide general directions for activities in respect of road safety research;

(b) to assist in the development of national objectives, policies and priorities for the orderly development and administration of road safety;

(c) to enhance and increase knowledge based on new developments regarding issues related to road safety;

(d) to raise the level of public awareness on road safety;

(e) to propose practical solutions with optimal effectiveness on road safety issues;

(f) to collect, analyze and manage data in relation to road safety;

(g) to develop, promote the use of, value add and commercialize research findings on road safety;

(h) to collect, collate and disseminate information relating to research findings on road safety by way of publishing or sponsoring the publication of periodicals, journals, books and any other means available, and to provide consultation and advice on road safety issues;

(i) to plan and evaluate road safety programmes, and to conduct related training;
(j) to review standards and learning outcomes of the curriculum for courses of instruction provided by driving institutions and audit the benchmark in respect of the delivery system of driving institutions;

(k) to review testing methods carried out by vehicle inspection organizations;

(I) to be a member of, be affiliated with or to maintain liaison with, other organizations, both public and private, local and foreign, having similar functions or activities as those of the institute; and

(m) to co-operate with any person, association or organization, both local and foreign, with a view to furthering the effective performance of the institute.



Qatar Transportation and Traffic Safety Center (TTSC)

- Established in 2012 to address the needs and aspiration of Qatar in terms of road safety.
- In April 2016, its scope was broadened to include transportation studies.
- External Research Funding.

Vision

To become the premier Center of Excellence that addresses the national and regional challenges for safe, efficient and environmentally sustainable transportation systems.

Mission Statement

The mission of QTTSC is to advance innovation and scholarship through research, development, education, and engagement of Qatar University and the society in general, in order to support road safety and transportation activities in Qatar

Research

- 1. Sustainable transportation
- 2. Traffic Safety
- 3. ITS
- 4. Traffic control and operations
- 5. Transportation planning
- 6. Logistics and supply chain

Training



- 1. Transportation planning
- 2. Traffic impact studies
- 3. Parking studies
- 4. Traffic signal design and operations

Qatar Transportation and Traffic Safety Center provides opportunities for professional training in the areas or tracks listed below.

- Road Safety Engineering
- Road Safety Audits
- Road Safety Management



Egypt National Institute of Transport, ENIT

- Established by Presidential <u>Decree 194 of Year 1983</u>
- Under the Ministry of Transport.
- The Minister of Transport is the Chairman of the Board of Administration
- Aims at preparing transport specialists, enhancing the capacity of the employees in the transport Sector, conducting studies and researches in the field of transportation

Sources of Funding (Article 3)

- 1. Resources allocated to the institute in the state budget
- 2. Revenues in exchange for researches, studies and services
- 3. Subsidies, gifts and donations accepted by the Institute's Board of Administration
- 4. Any other revenues

Missions

- 1. Preparation of specialists in transport planning and its economics
- 2. Capacity Building of the employees in the transport sector
- 3. Conducting scientific, applied and practical research
- 4. Providing Advice and Expertise
- 5. Providing internal and international scholarships
- 6. Knowledge base (Library) on Transport issues
- 7. Providing services to external entities in Egypt and other countries.





For more info: badr3@un.org

