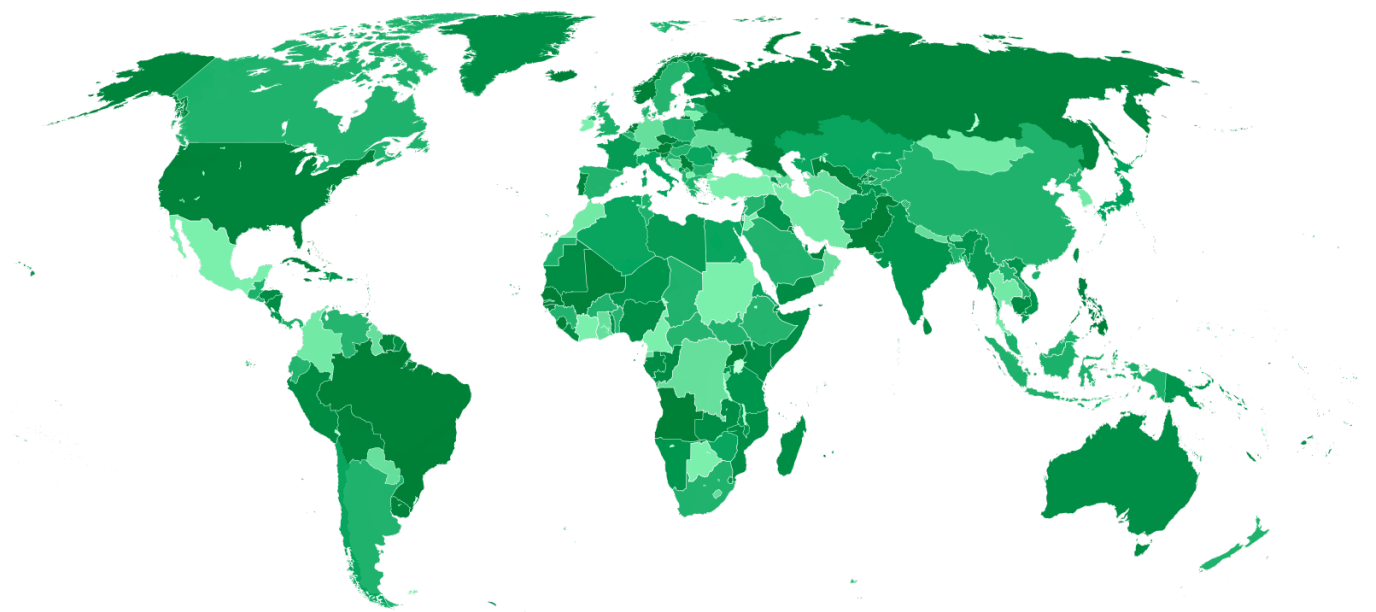


GLOBAL TOLLING & MOBILITY NEWSLETTER

A SCAN OF TOLLING & MOBILITY DEVELOPMENT AROUND THE GLOBE

WINTER 2020



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Table of Contents

AFRICA/MIDDLE EAST	1
Uganda is to introduce a road toll on the Entebbe Expressway in January 2020	1
Three east African countries to introduce road tolling	1
Nigeria, the highest number of transport projects in the project pipeline with 49 projects.....	1
The government wants to reduce traffic congestion in the capital by introducing toll roads.....	1
ASIA/OCEANIA	1
Indonesian toll operator develops IoT lab.....	1
Australia considers toll road to improve access to remote region	2
Malaysia plans to acquire four highways in order to prevent an increase in toll rates	2
NORTH AMERICA	3
PayTollo brings mobile platform to five US states	3
Virginia's I-95 could return to its roots as a toll road	3
Mexico looks to make progress on delayed toll road projects	3
GM advances autonomous research.....	3
SOUTH AMERICA	3
(4G) public-private partnership infrastructure program continues to advance but slowly.....	3
The concession for a key highway link in Chile will be launched	4
Honduras – Guatemala highway connection being built	4
EUROPE	4
The College of Commissioners agreed on the European Green Deal	4
CCAM platform - Cooperative, Connected, Automated and Autonomous Mobility	5
Tender for new Norwegian Bridge	5
INTERNATIONAL INDUSTRY EVENTS CALENDAR	6
GLOSSARY	8

About IBTTA

The International Bridge, Tunnel and Turnpike Association (IBTTA) is the worldwide association for the owners and operators of toll facilities and the businesses that serve them. Our mission is to advance toll financed transportation. Each year the association engages thousands of transportation professionals from toll agencies, concessionaires and allied businesses through educational meetings, knowledge sharing and advocacy. Founded in 1932, IBTTA has members in more than 20 countries on six continents.

AFRICA/MIDDLE EAST

Uganda is to introduce a road toll on the Entebbe Expressway in January 2020

The country's government will start collecting money over 40 years for the 55km route which links the capital, Kampala, with Entebbe International Airport. The tolls will be used to help repay a \$476 million loan from China Exim Bank for the construction.

Three east African countries to introduce road tolling

Elsewhere in East Africa, Kenya intends to introduce tolling on the Thika Superhighway, Southern Bypass, Nairobi-Mombasa highway, JKIA-Wetlands expressway and the yet-to-be-built second Nyalı Bridge. Additionally, Tanzania wants to charge a toll on the Chalinze-Morogoro road which forms part of the 921km Tanzania-Zambia highway. The cost of tolls will be revealed to the public before the end of the year by the Ministry of Works.

Nigeria, the highest number of transport projects in the project pipeline with 49 projects

Economic growth in the Africa region remains high, particularly in sub-Saharan Africa (SSA), which has some of the fastest growing economies in the world. The International Monetary Fund (IMF) and African Development Bank (AfDB) have both predicted that Africa's overall growth will improve in 2019 and 2020. However, the region's growth prospects continue to be constrained by a lack of infrastructure to support the expansion in trade, both within the region and externally.

Nigeria, with 49 projects, has the highest number of transport projects in the project pipeline, amounting to US\$48.3 billion, while Egypt, with 20 transport projects, has the highest value in the pipeline, amounting to US\$52.9 billion, followed by Algeria (30 projects valued at US\$37.9 billion), Kenya (27 projects valued at US\$31.8 billion), Tunisia (nine projects valued at US\$21.2 billion) and Tanzania (20 projects valued at US\$16.7 billion).

The government wants to reduce traffic congestion in the capital by introducing toll roads

Authorities in Abu Dhabi have announced that the new toll gates in the UAE capital will not charge motorists from October 15, 2019 – when they become operational – until January 1, 2020. Four toll gates will be activated at Sheikh Zayed Bridge, Sheikh Khalifa bin Zayed Bridge, Al Maqtaa Bridge and Mussafah Bridge. A total of Dh4 will be charged every time a vehicle passes through one of the gates between Saturday and Thursday, from 7am-9am and then from 5pm-7pm. During off-peak hours, Fridays and public holidays the toll will be reduced to Dh2 and daily maximum fee of Dh16 will be placed on each vehicle. Drivers will be required to create an account and top it up with credit to continue driving on the roads in the city before the tolls launch in October. The free trial period is aimed at giving motorists more time to complete the registration system and will also provide residents a chance to “plan the best travel times and explore transport alternatives”.

ASIA/OCEANIA

Indonesian toll operator develops IoT lab

Indonesia's state-owned toll operator PT Jasa Marga Tbk is developing an Internet of Things lab in Jakarta in an effort to boost research and development innovation. Goals include improving services for toll road users and improving traffic monitoring.

State-owned toll operator PT Jasa Marga Tbk has begun the development of an internet of things (IoT) laboratory in the company's former Jakarta-Tangerang branch office in Jakarta as part of the company's preparation to enter the Industry 4.0 era. The laboratory would become the center of research and technology development to create new innovations that can provide more benefits for toll road users.

In addition to improving services for toll road users, the development of the digital technology within the IoT laboratory is also intended to improve the traffic monitoring system and social media comment center. Jasa Marga, the country's largest toll road operator, plans to operate 245 kilometers of new toll roads in Java, Sumatra, Kalimantan and Sulawesi this year.

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The new toll roads include the Cengkareng-Kunciran (14.2 km), Kunciran-Serpong (11.2 km) and Serpong-Cinere (10.14 km), as well as the Jakarta-Cikampek II elevated toll road (36.4 km), the Pandaan-Malang road (38.49 km) and the Gempol-Pandaan (1.6 km).

[Australia considers toll road to improve access to remote region](#)

The Dampier Peninsula is a top tourist destination in remote Western Australia, and the country is considering a toll road to make accessing the region easier. The income from tolls could be used to fund improved services for the expected influx of tourists.

[Malaysia plans to acquire four highways in order to prevent an increase in toll rates](#)

The Malaysian Government plans to acquire four highways in order to prevent an increase in toll rates. Deputy International Trade and Industry Minister Ong Kian Ming said the government had shown its commitment to reducing and eventually eliminating tolls, particularly intracity tolls. "So instead of allowing toll hikes to happen or compensate toll companies in lieu of toll hikes, the government is taking the money for compensation to acquire the tolls with a promise of toll discounts during off-peak periods without the increase of toll rates."

He added that by acquiring these tolls, the temptation to defer compensation for toll concessionaires by extending the length of concessions would also be removed.

This, he said, was something the previous administration had done when it did not want to pay toll concessionaires compensation and instead increased the length of toll concessions by 10 to 15 years.

"This is something which could not have taken place if there was no change of government.

"Instead, this acquisition of tolls is funded by the proceeds of toll collections with no cost implications to the government. It will not increase our budget deficit."

Ong said the takeover of tolls would be fully funded by toll collections which would be channeled to a special purpose-vehicle while allowing users to enjoy off-peak discounts.

Putrajaya said in February that it intends to abolish the existing toll mechanism upon successful takeover of the highways and introduce a congestion charge instead.

NORTH AMERICA

[PayTollo brings mobile platform to five US states](#)

PayTollo is launching its mobile payment platform for toll roads and bridges in the US states of California, Texas, Florida, Colorado and Washington.

The company says the platform reduces costs and the time needed for toll authorities to collect funds by removing the need for paper invoices.

According to PayTollo, the solution's GPS toll recognition technology algorithm and user interface can notify, verify and charge a driver for toll crossings.

Alternatively, drivers can also use the tolling solution with an adapter from Automatic, a SiriusXM company that recently acquired PayTollo. This device collects information about each vehicle's geolocation, use, operation, performance and maintenance status in order to operate and provide the features of the Automatic service.

[Virginia's I-95 could return to its roots as a toll road](#)

Interstate 95's Richmond-Petersburg Parkway was the first part of I-95 to open in Virginia in 1958, and did so as a toll road. Planned express lane extensions in Stafford County will also be tolled, but director of engineering King Gee of the American Association of State Highway and Transportation Officials said tolling should be a larger part of the highway picture.

[Mexico looks to make progress on delayed toll road projects](#)

Mexico's transport and communications ministry (SCT) has announced plans to resume work on long-running toll highway projects. These include the Barranca Larga-Ventanilla highway, Mitla-Tehuantepec highway and the Atizapan-Atacomulco Highway, which have all seen significant delays and setbacks due to various obstacles.

[GM advances autonomous research](#)

GM is refining and expanding autonomous-vehicle testing in tricky environments while it awaits federal approval on an exception to rules requiring brake pedals and steering wheels in cars. The company is also focusing on building public trust in its testing, and it has the talent and processes to eventually make safe, reliable autonomous cars, writes Michael Martinez.

SOUTH AMERICA

[\(4G\) public-private partnership infrastructure program continues to advance but slowly](#)

The Colombian Government has been investing in the ambitious Fourth Generation (4G) public-private partnership infrastructure program, which continues to advance slowly eight years after its inauguration. The completion of the 4G program is expected to have a positive impact on Colombia's economic competitiveness by lowering relatively high logistics costs that hamper the country's productivity and drive up costs of consumer goods and industrial inputs. The 4G program envisions a USD 17 billion investment to build over 4,400 miles of new roads, 141 tunnels, and 1300 viaducts.

Most of the road projects were designed to expand the country's transportation system and include more than 30 primary road improvements and construction projects. Many planned concession projects (such as the Prosperity Corridor and the Sun Route) will link main ports with major cities to augment the current state of cargo transportation and lower the relatively high costs of shipping goods over land.

Generally, U.S. companies have not participated in the 4G program due to the uncertainty surrounding cost recovery, the high risk associated with the projects (many in remote areas), and the complexities of environmental licensing and consulting with local communities. Many of these companies have found the return on investment to be too low given the risks and have preferred to participate in less risky portions of the projects, such as engineering, architectural design, and financing.

The concession for a key highway link in Chile will be launched

The concession is for a stretch of Route 5, between Talca and Chillan in central Chile, lying to the south of capital Santiago. The deal is worth around US\$804 million. So far 25 firms have shown interest in the highway concession, which will feature construction work along three stretches of the 150km between Talca and Chillan.

Moreover, a contract to improve Chile's Route 66 has been won by Spanish contractor Sacyr. The deal is worth \$575 million. Route 66 connects San Antonio on Chile's coast with Route 5. San Antonio lies to the west of Santiago and south of Chile's main port at Valparaiso.

Honduras – Guatemala highway connection being built

Construction work is now underway in Honduras for the highway connection linking the country with neighbouring Guatemala. A significant portion of the US\$184 million funding required for the CA11 highway upgrade is being provided by the Central American Bank for Economic Integration (CABEI) and the European Investment Bank (EIB). The Corredor de Occidente project is being carried out in three phases and these measure, 36.2km, 46.3km and 36.6km. The work will extend from El Florido, on the border with Guatemala, to La Entrada.

EUROPE

The College of Commissioners agreed on the European Green Deal

The European Green Deal is the European vision for a climate neutral continent in 2050. It is fifty actions for 2050. The goal is to reconcile the economy with the planet, to reconcile the way things are produced and the way they are consumed. Regarding the transport sector, the plan target to reducing emissions by 90%. Related to the road sector, the solutions suggested are multimodal shift (freight to the maritime and rail), smart and connected mobility, and alternative fuels. The European Commission want to really make things different by being the frontrunners in climate friendly industries, in clean technologies and in green financing.

By March 2020, the Commission will propose the first European "Climate law" that will enshrine the 2050 climate-neutrality objective. The document stresses that "all sectors will have to play their part".

By June 2021, the Commission will carry out a review of all relevant climate-related policy instruments, including the Emission Trading System (ETS) with possible extension to new sectors;

A revision of the Energy Taxation Directive (the current tax framework has not changed since 2003, and so there are still, for instance, a range of incentives for fossil fuels).

If international partners do not share the same ambitions as the EU, the Commission will propose a carbon border adjustment mechanism for selected sectors in order to reduce the risk of "carbon leakage" (to prevent production to be transferred from the EU to other countries with lower standards, or the replacement of EU products by more carbon-intensive imports).

In March 2020, the Commission will adopt an EU industrial strategy addressing “the twin challenge of the green and digital transformation”. Regarding the digital part, the Commission previously stressed it will work on data sharing, so there is a need to watch out for open data regulations targeting public service operators. Regarding the green part, we already know that it will include a “re-orientation of public procurement” which might be the Commission’s first concrete step towards green & innovative procurement rules.

Regarding projects financing, the Commission has estimated that €260 billion of additional annual investment will be necessary to achieve the current 2030 climate and energy targets. To this end, it will issue a Sustainable Europe Investment Plan with dedicated financing to support sustainable investment. It will also set up a technical assistance and advisory services for projects promoters. In the same way, 30% of the Invest EU fund will contribute to fighting climate change.

CCAM platform - Cooperative, Connected, Automated and Autonomous Mobility

The European Commission has set up the Cooperative, Connected, Automated and Autonomous Mobility (CCAM) Single Platform which consists of an informal group of both private and public stakeholders. The group includes one hundred experts, representing European organisations in the first round. The CCAM Single Platform is a joint initiative of the Directorate-General for Mobility and Transport (DG MOVE), the Directorate-General for Communications Networks, Content and Technology (DG CNECT), the Directorate-General for Internal Market, Industry, Entrepreneurship and SME’s (DG GROW) and the Directorate-General for Research and Innovation (DG RTD).

The aim of this platform is to advise and support the EC in the area of open road testing and making the link to pre-deployment activities. Six sub working groups have been set up to address any issues related to data access and exchange, digital and road transport infrastructure, communication technology, cybersecurity and road safety. The objective of the CCAM platform is to facilitate the convergence of investments and regulatory frameworks across the EU, in order to see deployment of mature C-ITS services.

Tender for new Norwegian Bridge

The tender process is reopening for Norway’s Sotra Bridge project, with the site lying to the west of the city of Bergen. The contract value will exceed €1.05 billion and will be managed under the PPP model. Norwegian firms have previously stated that they will not enter the tender process for such a high value project however.

The new Sotra Connection (Sotrasambandet) is required as the existing bridge, opened in 1971, is no longer able to cope with demand. There has been a major increase in traffic in the area over the last 10-15 year period due to population growth and greater commercial activity in the area. In addition, the existing bridge also has to be closed to traffic when there are high winds. The new suspension bridge will connect Sotra/Øygarden and Bergen and will be 29.5m wide, carrying two lanes of traffic in either direction as well as featuring dedicated provision for cyclists and pedestrians. The new Sotra bridge will be 954m long and have a central span of 592m, with bridge towers 144m in height.

The project includes building 19 smaller bridges, 11 overpasses/underpasses and 21 tunnel portals, six dual level intersections and 11km of tunnels. Of the tunnels, the largest will be the Drotningstveit Tunnel (including junctions and ramps to Drotningstveit), which will be around 2km. The Kolltveit Tunnel will be around 950m long, the Straume Tunnel will be around 850m long and the Knarrvika Tunnel will be around 750m long. There will be three tunnels for pedestrians and cyclists, the Janahaugen, Kiplehaugen and Harafjellet.

INTERNATIONAL INDUSTRY EVENTS CALENDAR

IBTTA Board of Directors & Committee Meetings

Coral Gables, FL, January 8-10, 2020

<https://www.ibtta.org/all-events>

TRB Annual Meeting

Washington, D.C., January 12-16, 2020

<http://www.trb.org/AnnualMeeting/Blurbs/177818.aspx>

The Freeway Operations Committee Workshop

Vision, Concepts, for the Next Generation of Traffic Management Systems (TMSs)

Washington Convention Center - January 12, 2020

IBTTA's Leadership Academy

Washington, D.C., February 23-28, 2020

<https://www.ibtta.org/leadershipacademy>

ASECAP marketing workshop

Vienna, Austria, February 27-28, 2020

www.asecap.com

13th ASECAP Road Safety Conference

Brussels, Belgium – EU Parliament

March 16-17, 2020

www.asecap.com

Intertraffic

Amsterdam, Netherlands

April 21-24, 2020

www.intertraffic.com

IBTTA's Technology Summit

San Diego, CA, April 2-4, 2020

<https://www.ibtta.org/ibtta/sandiego>

Board of Directors and Committee Meetings

Denver, CO, May 4-6, 2020

<https://www.ibtta.org/all-events>

IBTTA/TRB/AASHTO's Finance Summit

Denver, CO, May 7-9, 2020

<https://www.ibtta.org/denver>

14th ITS European Congress

Lisbon, Portugal, May 18-20, 2020

<https://itsineurope2020.com/>

International Transport Forum

Leipzig, Germany, May 27-29, 2020

<https://2020.itf-oecd.org/>

48th ASECAP Study & Information Days

Brussels, Belgium, June 29-July 1, 2020 (date to be confirmed)

<http://www.asecap.com/asecap-days.html>

2021 Conference Planning Ideas Roundtable

Louisville, KY, July 11, 2020

<https://www.ibtta.org/ibtta/conference-planning-ideas-roundtable>

IBTTA's Maintenance & Roadway Operations Workshop

Louisville, Kentucky, July 12-14, 2020

<https://www.ibtta.org/Louisville>

IBTTA Board of Directors and Committee Meetings

Austin, TX, September 11-12, 2020

<https://www.ibtta.org/events/board-directors-committee-meetings-3>

IBTTA's 88th Annual Meeting and Exhibition

Austin, TX, September 13-15, 2020

<https://www.ibtta.org/Austin>

IRF Special Session

FIDIC Annual Infrastructure Conference

Geneva, Switzerland, September 14-15, 2020

<https://irfnet.ch>

IBTTA's Global Tolling Summit

Spain - October 2020 (city and dates to be announced shortly)

<https://www.ibtta.org/all-events>

27th ITS World Congress

Los Angeles Convention Center, US, October 4-8, 2020

www.itsworldcongress2020.com

GLOSSARY

AA	Automobile Association
ABB	Asea Brown Boveri
ADB	Asian Development Bank
AET	All-Electronic Toll
AfDB	African Development Bank
AAF	American Action Forum
AG	Stock company
AI	Artificial Intelligence
ALPR	Automatic License Plate Recognition
ALO	Avenida Longitudinal de Occidente
ANPR	Automated Number Plate Recognition
ARRB	Australian Road Research Group
ASECAP	Association euro penne des concessionnaires d'autoroutes et d'ouvrages à péage – European Association of Operators of Toll Road Infrastructures
AV	Autonomous Vehicle
AVI	Automatic Vehicle Identification
BOOT	Build-Own-Operate-Transfer
BOT	Build-Operate-Transfer
BPTJ	Greater Jakarta Transportation Management Authority
CABEI	Central American Bank for Economic Integration
CAGR	Compound Annual Growth Rate
CAV	Connected and Autonomous Vehicle
CCCC	China Communications Construction Company
CCRSA	Companhia de Concessões Rodoviárias
CCTV	Closed Circuit Television
CEO	Chief Executive Officer
C-ITS	Cooperative Intelligent Transportation Systems
CO2	Carbon Dioxide
COP	Climate Change Summit
CRBC	China Roads and Bridges Company
CRT	Concessionária Rio Teresópolis
CSIR	Council of Scientific and Industrial Research
CSS	Customer Service System

CTR	Austin's Center for Transportation Research
DC	District of Columbia
DDI	Diverging Diamond Interchange
DG Environment	Directorate-General for Environment
DG MOVE	European Commission's Directorate-General for Mobility and Transport
DOT	Department of Transportation
DPR	Detailed Project Report
DRC	Democratic Republic of Congo
DSRC	Dedicated Short-Range Communication
EBRD	European Bank for Reconstruction and Development
EC	European Commission
ECERDC	East Coast Economic Region Development Council
EETS	European Electronic Toll Service
EGNOS	European Geostationary Navigation Overlay System
EIB	European Investment Bank
EP	European Parliament
EPC	Engineering, Procurement and Construction
ERF	European Union Road Federation
ERP	Electronic Road Pricing
ETC	Electronic Toll Collection
EU	European Union
EV	Electronic Vehicles
FEMA	Federal Emergency Management Agency
FETC	Far East Electronic Toll Collection Company
FHWA	Federal Highway Administration
FIA	Federation Internationale de l'Automobile
GALILEO	European satellite navigation system
GDOT	Georgia Department of Transportation
GNSS	Global Navigation Satellite System
GPS	Global Positioning System
HMI	Human Machine Interface
HOT	High Occupancy Toll
HOV lane	High Occupancy Vehicle lane
IADB	Inter-American Development Bank
IBTTA	International Bridge, Tunnel and Turnpike Association
IEC	International Electro Technical Commission

IIRSA	Initiative for the Integration of the Regional Infrastructure of South America
INEA	Innovation and Networks Executive Agency
IoT	Internet of Things
ISO	International Organization for Standardization
ITC	International Trade Commission
ITF	International Transport Forum
ITS	Intelligent Traffic System
ITSSA	Intelligent Transport Society of South Africa
JLR	Jaguar Land Rover
JORR	Jakarta Outer Ring Road
KFD	National Road Fund
KPC	Kuantan Port City
KURA	Kenya Urban Roads Authority
LAMBDA-V	Learning through AMBient Driving styles for Autonomous-Vehicles
LTA	Land and Transport Authority
LTA	La Trobe Autonobus
MaaS	Mobility-as-as-Service
MdTA	Maryland Transportation Authority
MENA	Middle East & Africa region
MOPC	Ministry of Public Works Commission
MOT	Ministry of Transport
MTA	Metropolitan Transportation Authority
MTM app	MyTransport.SG mobile application
NHAI	National Highways Authority of India
NPRA	Norwegian Public Roads Administration
NTE	North Tarrant Express
nVDC	Vehicle Detection and Classification Sensor
OBE/OBU	On Board Equipment/On Board Unit
OCTA	Orange County Transportation Authority
OECD	Organization for Economic Cooperation and Development
ORT	Open Road Tolling
OUTA	Organization Undoing Tax Abuse

PANYNJ	The Port Authority of New York & New Jersey
PIARC	Association Mondiale de la Route – World Road Association
PKM	Peshawar-Karachi Motorway
PPP	Public-Private Partnership
PTJLJ	PT Jalantol Lingkarluar Jakarta
QMB	Atténuateur d'impact, barrières automatisées et mobiles
RACV	Royal Automobile Club of Victoria
RFID	Radio Frequency Identification
RGV	Rio Grande Valley
RIA	Road Infrastructure Agency
RIDOT	Rhode Island Department of Transportation
RMS	Roads and Maritime Services
RSU	Road Site Units
RTA	Roads and Transport Authority
RUTA	Red Urbana de Transporte Articulado
SANRAL	South African National Roads Agency Ltd.
SCDOT	South Carolina Department of Transportation
SCT	Secretariat of Communications and Transport
SLEX-TR4	Southern Luzon Expressway-Toll Road
SRTA	State Road and Tollway Authority
SUMP	Sustainable Urban Mobility Planning
SwRI	Southwest Research Institute
TCC	Traffic Control Center
TEN-T	Trans-European Transport Network
TMETC	Tata Motors European Technical Center
TMT	Technology, Media and Telecommunications
TRA	Transport Research Arena
TRB	Transportation Research Board
TRY	Turkish Lira
TTI	Texas A&M Transportation Institute
TxDOT	Texas Department of Transportation
UAS	Unmanned Aerial Systems
UHF	Ultra-High-Frequency
UK	United Kingdom

UN	United Nations
UNECE	Economic Commission of the United Nations for Europe
US	United States of America
V2I	Vehicle-to-Infrastructure
V2V	Vehicle-to-Vehicle
V2X	Vehicle-to-Everything
VAT	Value Added Tax
VW	Volkswagen
WHSD	Western High-Speed Diameter
WIM	Weigh In Motion