

المسار almasar

The Official Monthly Magazine of Dubai's RTA Issue No. 162 December 2021



Vision

The world leader in seamless & sustainable mobility.

Mission

Develop & manage integrated and sustainable roads & transportation systems at a world-class level, and provide pioneered services to all stakeholders for their happiness, and support Dubai's vision through shaping the future, developing policies and legislations, adopting technologies, innovations & world-class practices and standards.



Future of Global Mobility

The self-driving concept has been gathering pace over the past years towards the realm of reality. It is poised to see vast changes over the next few years, and using autonomous modes of mobility will be as common as owning a smartphones today. Dubai has come a long way in building its profile as a global pioneer of technology-driven driverless transport solutions. The starting point was when His Highness Sheikh Mohammed bin Rashid Al Maktoum, Vice-President, Prime Minister of the UAE, Ruler of Dubai, endorsed the Dubai Self-Driving Transport Strategy aimed to convert 25% of total trips in Dubai to journeys on autonomous means of transport by 2030.

Trials have already begun on different types of autonomous vehicles and means. Last November, His Highness Sheikh Mohammed endorsed the starting of tests of autonomous vehicles on the roads of the UAE. "The UAE will be the first country in the Middle East and the second globally to undertake road tests of autonomous vehicles. Our goal is to make these types of vehicles safer and more reliable," said His Highness.

The spread of autonomous vehicles marks a paradigm shift in transport systems and offers creative mobility solutions that ease congestion and raise the level of traffic safety, as human errors are key contributors to about 90% of road incidents. Such advances have the potential to

ease the mobility of huge numbers of people and enhance the integration between mass transit means, especially in regards to first and last-mile challenges.

RTA is keen to turn the vision and directives of His Highness Sheikh Mohammed into reality through undertaking experiments which included the trial run of a 10-seater electricity-powered autonomous vehicle, the first autonomous air taxi and automated and connected smart mobility pods of different sizes and demand volumes. RTA signed an agreement with General Motor's Cruise to deploy the company's autonomous vehicles to provide taxi services and shared mobility by 2023.

RTA has also charted out a plan to upgrade the infrastructure to serve autonomous vehicles and air taxis in the future. It has also coordinated with the relevant bodies to enact legislation and rules to govern autonomous vehicles, ensure the highest standards of safety, and enhance the community's acceptance of this technology. Such efforts include developing regulations for the testing and licensing of autonomous vehicles along with insurance and accountability structures.

Recently, RTA hosted the 2nd Dubai World Congress and Challenge for Self-Driving Transport. The event was marked by the signing of three agreements with participating companies to further develop and advance autonomous technology solutions.



المسار almasar

Strategic Map For AlMasar Magazine Team

Vision

The Pioneer Government Magazine in Dubai

Mission

To work in the spirit of team in presenting achievements, enhance Success, and document roles of RTA.

Core Values

Transparency &
Credibility
Corporate Reputation
Excellence
Spirit of Team
knowledge Sharing

Reciprocal Ads Initiative

Al Masar magazine Editorial Board offers the Reciprocal Ads initiative whereby a space for an advert is allocated to strategic partners and other government entities against allocating the same space in the magazine of the beneficial entity during the same month for the benefit of the RTA.

GENERAL SUPERVISOR Rowdah. Al Mehrizi

EDITOR IN CHIEF AlMoatasem Belah Mohammed

MANAGING DIRECTOR

Mohammed Al Munji

EDITING MANAGER

Nashwan Mahmood

PHOTOGRAPHY Sahir Babu

DESIGN & MARKETING



www.spotlightuae.net

ART DIRECTOR Said Mansour

Printed by Al Nisr Publishing LLC

CONTACT US

P.O.Box: 118899 Dubai,U.A.E Tel: +971 4 2902638 Fax: +971 4 2903933 almasar@rta.ae www.rta.ae









Almasar Application is available on Apple store & Goole play by name: **almasar magazine**



News

- 12 UAE flag flutters high in the sky
- 14 Dubai hosts 18th IRF World Meeting
- 28 MoU with Dubai Police to enhance transport safety
- 33 Careers UAE attracts talents
- 34 Self-Driving Transport Challenge offers autonomous services
- 37 Al Tayer opens Cityscape Global

Projects

36

New bridge to connect Al Manama and Al Meydan Streets



Cover story

- Mohammed bin Rashid honours Government winners of Dubai **Excellence Programme**
- Hamdan bin Mohammed launches Dubai programme to enable drone transportation

Projects

Trial run launched of two electric buses fitted with Opportunity Charging technology



Expo

RTA opens new bus route from Umm Al Quwain to Expo 2020







RTA, Brand Dubai launch a new era of partnership



Mohammed bin Rashid honours the winners of the Dubai Government Excellence Program

Mohammed bin Rashid praises the winners for their continuous dedication, saying that their efforts play a key role in maintaining Dubai's status as a leading global model that consistently demonstrates adaptability, efficiency, and innovative thinking

His Highness Sheikh Mohammed bin Rashid Al Maktoum, Vice President and Prime Minister of the UAE and Ruler of Dubai, said that the Dubai Government Excellence Program, over the course of the last 24 years, has set high global benchmarks for government excellence and continues to pursue new opportunities to embed exceptional standards of innovation and performance within governmental institutions.

His Highness said: "Innovation within the government sector will play a crucial role in the future. The UAE and Dubai have indeed spearheaded creativity and excellence, and while we have come a long way, we must continue to innovate new approaches to further positively transform the way the government operates."

"The pandemic has truly shed a light on the level of efficiency of our government and its agility in dealing with changes as they arise, as a result of the mechanisms that were put in place, which have raised our readiness to respond quickly to challenges. Our presence today reaffirms our commitment to maintaining and further consolidating the values of innovation, excellence and creativity as we move towards a brighter future, which will open up new creative opportunities," His Highness added.





His Highness awarded the distinguished innovators in the Government of the Dubai based on the results of the evaluation cycle of the Dubai Government Excellence Program under various categories at the institutional and functional levels, in the presence of His Highness Sheikh Hamdan bin Mohammed bin Rashid Al Maktoum, Crown Prince of Dubai and Chairman of The Executive Council, and His Highness Sheikh Maktoum bin Mohammed bin Rashid Al Maktoum, Deputy Ruler of Dubai, Deputy Prime Minister and Minister of Finance, and the executive leadership of the participating government entities.

His Highness congratulated the DGEP award winners and praised their efforts in setting an example for excellence in their fields and urged them to continue supporting their colleagues in strengthening their performance and capabilities. He added: «I would like to thank you for your dedication and commitment in defining new standards for future governments. You are the pillar on which we build our future, and with your support, the Government of Dubai will remain a beacon of excellence and creativity."

Recognition

During the ceremony, the results of the 2021 evaluation cycle were announced, highlighting government entities that maintained their standards of excellence and those that made leaps to reach the Elite level.

Winners of the Dubai Government Excellence Program

Dubai Excellence Medals

- **Dubai Medal for Innovative Employee**: Bassam Hassan Mahboub from Dubai Health Authority
- **Dubai Medal for Supervisory Employee:** Ahmed Obaid Al Muhairi of Dubai Police
- **Dubai Medal for Young Employee:** Aisha Mohammed Al Rumaithi from Dubai Electricity and Water Authority
- Dubai Medal for 'Customer Happiness'

 Employee: Rashid Mohammed Karmostaji from the

 Department of Economy and Tourism in Dubai
- **Dubai Medal for Field Employee:** Haifa Abdullah Al Ali from the Roads and Transport Authority
- **Dubai Medal for Administrative Employee:** Zainab Ali Al Balushi from Dubai Courts
- Dubai Medal for Specialized Employee: Aisha Abdullah Al Nuaimi from Dubai Electricity and Water Authority
- Dubai Medal for Assistant Director General/ CEO: Sa'ed Mohammed Al-Awadi from the Department of Economy and Tourism in Dubai

Variable Awards

Best 'People of Determination' Friendly Entity: Dubai Police General Command

Best Entity in Emiratization: Dubai Electricity and Water Authority





Institutional Awards for leading government entities and its affiliated categories – based on the main criteria:

- Best Entity in Service Provision: Dubai Airports
- Best Entity in Digital Government: Public Prosecution Dubai
- Happiest Work Environment: Dubai Courts

The winner of the Best Entity Achieving Dubai Plan 2021, Best Entity in Efficiency and Governance, and the grand award Leading Government Entity is the General Directorate of Residency and Foreigners Affairs

The group of government entities that won the Elite Award by scoring 600 points or more, achieving global leadership standards and maintaining their positions as the elite of the Dubai government, include (no order implied):

- Roads and Transport Authority
- Dubai Customs
- **■** Dubai Police
- Dubai Electricity and Water Authority

The Unknown Soldiers

■ Mal Allah Abdullah Al Hammadi

Dubai Police

■ Habib Yasin Balushi

Dubai Corporation for Ambulance Services

■ Hayat Hassan Al Jaber

Public Prosecution Dubai

■ Ahmed Mohamed Mohamed

Directorate General of Civil Defense Dubai

■ Yousef Mohammed Sultan

Dubai Statistics Centre

■ Ahmad Mohammed Al-Hashimi

Islamic Affairs & Charitable Activities Department

■ Abdullah Hassan Al Bisher

Dubai Health Authority

■ Ali Hassan Al Blushi

Roads and Transport Authority

■ Ali AbdulKarim Abdullah

Dubai Customs

■ Ramadan Hassan Al Rouabi

Dubai Department of Economy and Tourism

■ Mohamed Hassan Abdullah Al Balushi

Dubai Culture & Arts Authority

■ Hussein Shahi Taheri

Department of Finance

■ Abdulhaq Nour Ahmad

Dubai Municipality

■ Ahmed Butti Ben Ashour

Dubai Airports

The results of the evaluation included the advancement of 6 government entities from the basic level to the excellence level by achieving 450 points or above, including:

- Islamic Affairs & Charitable Activities Department
- **■** Dubai Statistics Centre
- Dubai Corporation for Ambulance Services
- Dubai Civil Aviation Authority
- Dubai Air Navigation Services
- **■** Department of Finance

Special Recognition

- The Supreme Committee for Emergency, Crisis and Disaster Management for optimally handling COVID-19 crisis, overcoming its consequences, and managing to resume normal life in a record period
- COVID-19 Command and Control Centre for combating the Coronavirus in Dubai and ensuring the operation of social and economic processes during the pandemic
- Her Excellency Reem Al Hashimy for her continuous efforts over the past 8 years to organise the world-class Expo 2020 Dubai
- His Excellency Sami Al Qamzi for his efforts and



contributions to support economic development in Dubai in his role in the Government of Dubai

- **His Excellency Abdulla Al Shaibani** for his dedication to the Government of Dubai for many years
- Dr. Ahmed Al-Nuseirat for promoting the concept of excellence in the Government of Dubai
- Professor Mohamed Zairi, head of the jury in the program award for his unparalleled expertise in the field of global excellence. The award given posthumously was received by his son, Dr. Adel Zairi.







Hamdan bin Mohammed launches Dubai programme to enable drone transportation

DUBAI, 20th November, 2021 (WAM) - H.H. Sheikh Hamdan bin Mohammed bin Rashid Al Maktoum, Crown Prince of Dubai and Chairman of Dubai Executive Council, and Chairman of the Board of Trustees of Dubai Future Foundation (DFF), launched the Dubai programme to enable drone transportation.

The programme promotes the development and adoption of cutting-edge technologies in line with the vision of His Highness Sheikh Mohammed bin Rashid Al Maktoum, Vice President, Prime Minister and Ruler of Dubai, to strengthen Dubai's global competitiveness in adopting advanced technologies in vital sectors.

Sheikh Hamdan bin Mohammed said, «The Dubai Programme to Enable Drone Transportation will create an advanced infrastructure that enables innovators and relevant entities to test prototypes of unmanned aerial vehicles in designated areas and develop legislation that optimises their implementation. The programme aims to provide new economic opportunities and consolidate Dubai's leadership in advanced technology research and development across diverse future–oriented sectors.»

«Our projects place quality of life at the top of their priorities. We will continue to develop and implement innovative ideas on the ground. We have the right environment, infrastructure, and legislation for the use of drones. We also have the laboratories, expertise and talent to translate prototypes into viable solutions,» he added. «We have recognised the potential of drones in shaping the future early on, and started testing it in the UAE through attracting thousands of innovators in this field from 165 countries to participate in the UAE Drones for Good Award that we

launched in 2014. This marked the beginning of our journey with this emerging technology, and reaffirmed our believe in the importance of leveraging future technologies for the benefit of humankind.»

H.H. Sheikh Ahmed bin Saeed Al Maktoum, Chairman of Dubai Civil Aviation Authority, Chairman of Dubai Airports and Chairman and Chief Executive of Emirates Airline and Group, Omar bin Sultan Al Olama, Minister of State for Artificial Intelligence, Digital Economy, and Teleworking Applications, and Mattar Mohammed Al Tayer, Director-General Chairman of the Board of Executive Directors of the Roads and Transport Authority – Commissioner General for Infrastructure, Urban Planning and Well-Being, witnessed the signing of a Memorandum of Understanding (MoU) between several government and private sector entities to initiate the program's operations.

Signatories included DFF, DCAA, Dubai Silicon Oasis Authority (DSOA), Fakeeh University Hospital, Majid Al Futtaim, and Emirates SkyCargo. The agreement was signed by Mohammed Abdulla Ahli, Chief Executive Officer of Dubai Civil Aviation Authority, Khalfan Belhoul, Chief Executive Officer of Dubai Future Foundation, Ahmed Bahrozyan, Chief Executive Officer of The Public Transport Agency at Roads and Transport Authority, Engineer Muammar Al Katheeri, Executive Vice President at Engineering





and Smart City, Dubai Silicon Oasis Authority, Alain Bejjani, Chief Executive Officer of Majid Al Futtaim, Nabil Sultan, Divisional Senior Vice President at Emirates SkyCargo, and Ammar Soliman Fakeeh, Chairman of the Board of Fakeeh Care Group.

The launch and signing took place during Dubai Airshow 2021 that drew the participation of more than 1,200 exhibitors as well as civilian and military delegations from over 140 countries.

The primary objective of the Dubai Programme to Enable Drone Transportation is exploring the use of drones in several sectors, including health, security, shipping and food. The programme seeks to improve people's lives by reducing carbon emissions generated by traditional shipping and transportation methods and facilitating the movement of goods and materials. This way, it will contribute to positioning Dubai as one of the smartest cities in the world.

The programme also aims to attract talent as well as local and foreign investments to the drone applications sector, in addition to creating new jobs and stimulating economic activity in relevant fields.

DFF will oversee the implementation of the outputs of the Dubai Program to Enable Drone Transportation through Dubai Future Labs, the first applied R&D lab in the region specializing in future technology, in partnership with DCAA, Dubai Silicon Oasis Authority (DSOA), Fakeeh University Hospital, Majid Al Futtaim, and Emirates SkyCargo, Talabat and Kitopi.

A unique pilot area will be allocated in Dubai Silicon Oasis for innovators and related entities from the UAE and abroad to develop and test new drone solutions and transform them into effective services that improve people's lives and help achieve national economic goals.

The Dubai Program to Enable Drone Transportation will significantly contribute to the development of the emirate's transport and shipping infrastructure, which is considered one of the most advanced in the world and support the growth of multiple economic sectors. The programme will also place great emphasis on upgrading the underlying digital infrastructure in cooperation with its partners.

Participants of the programme will benefit from an enabling legislative

framework that facilitates drone technology prototyping, testing, development, and implementation.

Mattar Al Tayer said that the signing of an MoU with the Dubai Future Foundation constituted a big push in support of trials of autonomous vehicles. «The MoU will also leverage Dubai Programme for Autonomous Air Vehicle Services in designated test zones across Dubai. It will also support the Dubai Self-Driving Transport Strategy aimed to convert 25% of total mobility journeys to driverless journeys by 2030.

«Self-driving transport has become a reality. International firms are moving faster in developing technologies and software of autonomous vehicles. Under the leadership of His Highness Sheikh Mohammed bin Rashid Al Maktoum, Dubai is taking a leading role in venturing self-driving transport and has launched its Self-Driving Transport Strategy in 2016,» said Al Tayer.

«RTA is keen to turn the vision and directives of His Highness into reality through carrying out trials on various patterns of autonomous vehicles and mobility means. Experiments included the trial run of a 10-seater electricity-powered autonomous vehicle, the first autonomous air taxi and automated and connected smart mobility pods of different sizes and volumes of demand. RTA has also signed an agreement with General Motor's Cruise to deploy the company's autonomous vehicles to provide taxi service and shared mobility by 2023.

«RTA has also charted out a plan to upgrade the infrastructure for autonomous vehicles and air taxis. It has also coordinated with the relevant bodies to enact legislation and rules to govern autonomous vehicles and enhance the community's acceptance of this technology. Such efforts also include developing stipulations and regulations for the testing and licensing of autonomous vehicles along with insurance and accountability structures.

«This MoU supports RTA's efforts to promote Dubai World Congress and Challenge for Self-Driving Transport, which has recently completed its 2nd edition by signing three agreements with participating companies to develop technology solutions for self-driving transport,» concluded Al Tayer.



Public Transport Day 2021 in partnership Dubai Culture

Events of the Public Transport Day, held by Roads and Transport Authority in collaboration with Dubai Culture and Arts Authority (Dubai Culture), will kick off tomorrow under the theme (Together to Expo 2020 Dubai). The event aims to encourage Dubai residents and visitors to use public transport means in their travel from and to the Expo site

RTA launched Arts in Public Transport initiative in partnership with Dubai Culture and Arts Authority to support the cultural sector and offer innovators and artists a chance to put forward initiatives and concepts that can raise the image of Dubai as a first-class cultural and innovative hub in the region and the world over. Artworks will be on display at several metro stations namely: Expo 2020, Dubai Mall, Jebel Ali, Dubai Investment Park and Al Ghubaiba stations. The public will be treated to the latest and top artist, cultural and innovative works while using public transport means in Dubai.

Enhanced Role of Mass Transit Means

His Excellency Mattar Mohammed Al Tayer, Director-General, Chairman of the Board of Executive Directors of the Roads and Transport Authority, expressed his deep thanks to Her Highness Sheikha Latifa Bint Mohammed bin Rashid Al Maktoum, for supporting the events of the Public

Transport Day. He praised the contribution of Dubai Culture in raising public awareness about the modern public transit means that RTA had provided for Dubai residents and visitors, such as the metro, tram, public buses, and marine transit means.

"The 12th edition of the Public Transport Day coincides with the hosting of Expo 2020 in Dubai. It offers a fine opportunity for shedding light on the importance of public transport to the mobility of residents. From its inception, RTA focused on the development of public transport network capable of becoming the safest and preferred mobility means for all community segments. Projects accomplished include Dubai Metro extending 90 km and connecting 53 stations, and the Dubai Tram running 11 km and linking 11 stations. Dubai Metro and Tram are used by about 210 million riders per annum. RTA also provides marine transit means, which were restricted to abras only, but now include the ferry, water bus, water taxi and air-









conditioned abras. Improving and integrating mass transit means contributed to increasing the number of trips made by public transit means and shared transport from less than 6% in 2006 to 18.1% in 2019, which means a cumulative increase of about 8.86% p.a.," added Al Tayer.

Hala Badri, Director General of Dubai Culture and Arts Authority (Dubai Culture), expressed her appreciation of RTA's role in shaping the emirate's outlook through creative projects and initiatives, affirming the Authority's keenness to support such projects, saying: "Dubai Culture seeks to strengthen its cooperation with all public and private entities in Dubai to support the emirate's strategic direction. Such cooperation represents a part of our strategic relationship with the RTA aimed at showcasing the cultural and creative image of the emirate, especially during Expo 2020 Dubai.

Badri added: "This initiative offers metro users access to artworks presented by our creative community, which is in line with one of the priorities of our strategic roadmap aimed at stimulating participation and making culture and art accessible to everyone, everywhere. The initiative also contributes to supporting creative talents in Dubai by showcasing their works to a wide audience, thus contributing to the growth of cultural and creative industries and achieving our vision of cementing the emirate's position as a global centre for culture, an incubator for creativity, and a thriving hub for talent as well as the global capital of the creative economy."

Events and Contests

Expo 2020 Metro Station will be the focus of the photography contest launched by RTA in October 2021 in collaboration with Canon Middle East, and Keolis-MHI marking Expo 2020. Launched via social media platforms, the contest aimed to encourage the public to use public transport to and from Expo site.

The exhibition includes photos and videos that highlight the cultural landmarks on the way to Expo, roads network and flyovers, and pictures highlighting the beauty of using different means of transportation. It also includes Dubai Metro stations on Route 2020, which boast a unique architectural design. The names of the winners will be announced after each of the three stages of the competition and will continue until the end of the Expo next year.

Treasure Hunt

RTA will also host a challenge to be run via social media sites such as Tik Tok and Instagram Reel. It involves swiping the nol Plus card virtually in a challenge aimed to encourage the public to use public transport and go to several parts of Dubai to share their journeys with others. RTA will continue to roll the treasure hunt contest in this edition of the Public Transport Day through its website. The competition prompts the public to discover a hidden treasure in public transport stations. The search is focused on the Dubai Metro Red Line and stations near Expo 2020 site. 8 winners will be selected and each of them will be rewarded with up to two million nol Plus points to be added to their nol cards to be used later.

This year's Public Transport Day initiative includes activities and events that will run throughout November by RTA in cooperation with Dubai Culture and Arts Authority, Expo 2020 Dubai office, and Keolis-MHI (operator of Dubai Metro, Tram), Canon, Noon, Jumeirah Group and Flydubai.





Under the patronage of Hamdan bin Mohammed, Dubai hosts 18th IRF World Meeting and Exhibition

Under the patronage of His Highness Sheikh Hamdan bin Mohammed bin Rashid Al Maktoum, Crown Prince of Dubai and Chairman of The Executive Council of Dubai, His Highness Sheikh Ahmed bin Mohammed bin Rashid Al Maktoum, Chairman of the Dubai Media Council, inaugurated the 18th IRF (International Roads Federation) World Meeting & Exhibition. The event, which is hosted by Dubai, represented by the Roads and Transport Authority (RTA), is themed: 'Roads To Tomorrow'.



Featuring a total of 100 international firms and start-ups, the event, running from 7 – 10 November will see 250 road and infrastructure specialists sharing their perspectives in more than 70 sessions and discussion panels.

His Highness was received by His Excellency Mattar Mohammed Al Tayer, Director-General, Chairman of the Board of Executive Directors of the Roads and Transport Authority (RTA), and His Excellency Abdullah Al-Mogbel, IRF Global Chairman.

Prominent attendees at the event included HE Suhail Al

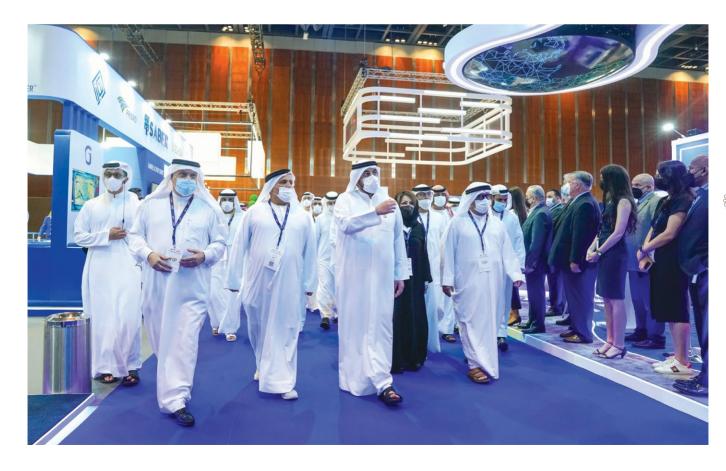
Mazrouei, Minister of Energy and Infrastructure; HE Omar bin Sultan Al Olama, Minister of State for Artificial Intelligence, Digital Economy and Remote Work Applications; in addition to director generals of a number of government departments, senior officials and representatives of local and international companies. His Highness and attendees watched a video on the importance of investment in roads and transport networks, and their critical role in promoting rapid growth and sustainable economic development.





Global Leadership

Al Tayer delivered an opening address in which he welcomed the participants and attendees of the meeting. "Under the leadership of His Highness Sheikh Mohammed bin Rashid Al Maktoum, Vice-President and Prime Minister of the UAE and Ruler of Dubai, and the follow-up of His Highness Sheikh Hamdan bin Mohammed bin Rashid Al Maktoum, Crown Prince of Dubai and Chairman of The Executive Council, the Dubai Government has made sustained investments in improving infrastructure and transportation, which it considers a key driver of economic growth and development. These investments have led to the UAE being ranked first in the quality of roads worldwide in the 2013-2017 period, according to the Global Competitiveness Report published by the World Economic Forum," said Al Tayer.









Improvement of road and transport infrastructure

"Since 2006, the Dubai Government has spent over AED140 billion on the improvement of roads and transport infrastructure to serve the needs arising from urbanisation and rapid economic development, as well as to enhance the happiness of the community. RTA brought

about massive improvements in infrastructure with the length of the roads network increasing from 8,715 lane-kilometres in 2006 to 18,255 lane-kilometres in 2020. RTA used cutting-edge smart systems and 4th Industrial Revolution technologies, such as artificial intelligence, big data and the internet of things, to broaden traffic coverage," commented Al Tayer.





















Smart Mobility

Speaking about meeting requirements arising from urban and demographic growth anticipated in the future, Al Tayer said: "Smart mobility is one of the key pillars of future cities that prioritises the wellbeing of the population. As part of the vision to transform Dubai into the smartest and happiest city in the world, His Highness Sheikh Mohammed bin Rashid Al Maktoum approved the Dubai Smart Strategy for Self-Driving Transport that seeks to convert 25% of total mobility journeys in Dubai to smart driverless journeys by 2030. RTA is completing trial runs on autonomous air taxis, the operation of an autonomous taxi, and studying suspended transportation systems.

Non-Conventional Solutions

HE Eng. Abdullah Al-Mogbel, IRF Global Chairman, said: "This IRF World Meeting & Exhibition articulates the key objectives of the IRF established in 1948. The objectives seek to ensure the roads and transport sector keeps pace with the latest technical and scientific developments and promote greater exchange of ideas and experiences in the field. The COVID-19 pandemic caused changes in the movement of people and goods in the recent past. It required non-traditional solutions to ensure the smooth movement of goods, especially food and medicine. Throughout the pandemic, the transport sector was resilient enough to adapt to the unprecedented conditions to provide transportation services for societies. It focused on the digital infrastructure to achieve the best means of communication and ensure necessary supplies.

"The IRF was able to quickly adapt to the challenges posed by the pandemic and provide virtual tools for delivering information and conducting training and conferences. The number of beneficiaries of our training and educational programmes in 2020 exceeded 5,000 technicians and specialists from 100 countries.

Lord Philip Hammond - Ex Chancellor of the Exchequer in the UK, delivered a keynote speech in which he stressed the role of



governments in preparing the transport sector for future challenges, and the importance of targeted investments and policies designed to support transport innovation and sustainability.

Man of The Year

His Highness Sheikh Ahmed bin Mohammed bin Rashid Al Maktoum honoured His Excellency Eng. Khaled Al-Hogail, Director-General and Executive Director of the Saudi Public Transport Company, winner of the IRF's Man of the Year Award 2021. Al-Hogail was honoured in recognition of his numerous achievements in the field of transport in Saudi Arabia, and his efforts as Chairman of the International Association of Public Transport.

His Highness Sheikh Ahmed bin Mohammed also honoured the sponsors of the event as well as the keynote speaker Lord Philip Hammond, following which he opened the exhibition

(Roads to Tomorrow: Pathways to Sustainable Mobility) session kickstarts 18th IRF World Meeting & Exhibition

The 18th IRF (International Roads Federation) World Meeting & Exhibition has held a first panel (Roads to Tomorrow: Pathways to Sustainable Mobility) on the opening day of the event, which runs through Nov 10th. The gathering is characterised by a strong line-up

of international participants.

Participants in the session included Her Excellency Abou-Zeid, Commissioner for Infrastructure and Energy, African Union Commission, His Excellency Mark Boris Andrijanič, Slovenian



Minister for Digital Transformation, and Lord Philipp Hammond, ex-Chancellor of the Exchequer, UK (20162019-).

Lord Hammond started by highlighting the huge global carbon footprint and its considerable impact on life as a whole. However, he revealed the good news that modern technology would raise human hopes in reducing the carbon footprint on the earth. "Technology here is represented in electric vehicles, artificial intelligence and smart applications, Internet of Things and the strong government involvement. We must think about vehicles of the future and the sustainability of infrastructure. We also ought to think about the luxury in our homes, as the concept of sustainability goes beyond vehicles and roads to include society and ways of decent living. All of this will not be achieved without societal consent as well as a solid

infrastructure to reduce accidents and achieve financial sustainability," he added.

Starting his address, Mark Boris Andrianic, Minister of Digital Transformation of the Republic of Slovenia, expressed his passion for themes such as sustainability. electric vehicles, self-driving vehicles and shared Mobility.

"By 2035, no non-electric vehicle will be sold in Europe and the continent will reach carbon neutrality by 2050. Slovenia is now developing the best electric aircraft in the world and is keen to work with international partners in the exchange of knowledge. technologies and expertise in this field," he added.

Amani Abou-Zeid, Commissioner for Infrastructure and Energy, African Union Commission, began her speech by highlighting the efforts of the African Union countries to achieve integrated transport systems and innovative public transport networks. "The Black Continent is developing a 10-year programme covering public transport, energy, digital transformation and sustainability across the board. Women must have active participation in this field, through a programme called Women's Contribution to Infrastructure.

(Roads of the future: Dubais path to sustainable mobility)

His Excellency Mattar Mohammed Al Tayer, Director-General, Chairman of the Board of Executive Directors of the Roads and Transport Authority (RTA) revealed that the massive investments of the Dubai Government in improving the infrastructure of roads and transport contributed to saving about AED210 billion (about US\$60 billion) in terms of time and fuel wasted through traffic congestions during the period 20062020-. In contrast, the total investment in the improvement of roads and transport during the same period amounted to AED140 billion (about US\$40 billion). Al Tayer made these statements in his keynote speech to the 18th IRF (International Road Federation) World Meeting and Exhibition, entitled: Roads to Tomorrow: Dubai's Pathway to Sustainable Mobility. Attendees of the session included several high-ranking officials as well as representatives of concerned entities.

Numbers and Achievements

Al Tayer reviewed the elements of excellence in managing infrastructure projects, which form part of the key drivers of the sweeping development and the economy. "Under the directives of His Highness Sheikh Mohammed bin Rashid Al Maktoum, Vice-President, Prime Minister of the UAE, Ruler of Dubai, and His Highness Sheikh Hamdan bin Mohammed bin Rashid Al Maktoum, Crown Prince of Dubai and Chairman of the Executive Council, and His Highness Sheikh Maktoum bi n Mohammed bin Rashid Al Maktoum, Deputy Ruler of Dubai, Deputy Prime Minister and Minister of Finance, RTA has achieved mega projects in a record time highlighted by the Dubai Metro project, which had been delivered in just four years, and the Dubai Water Canal project that had been completed in less than three years," said Al Tayer.

"We have more than doubled our road network from 8,715 in 2006







Al Tayer addressing IRF Meeting:
Dubai's roads and transport
infrastructure projects saved AED210
billion between 2006-2020

to 18,255 lane km in 2020 and increased the number of vehicle bridges and tunnels 5 folds from 129 in 2006 to 844 in 2020. Similarly, we have increased the number of pedestrian bridges and tunnels by 4 times from 26 to 125 around the same time and extended our cycling track network from 9 km in 2006 to 463 km in 2020, and is expected to reach 668 km by 2025.

"RTA's projects have cemented the competitiveness of the UAE, which had consequently been ranked no. 1 in Road Quality Worldwide for 5 years in a row. RTA's joint efforts with the General HQ of Dubai Police have reduced road accident fatalities from almost 22 cases to 1.8 cases per 100 thousand during the period 20062020- and reduced pedestrian fatalities per 100,000 population from 9.5 to 0.5 between 2007 and 2020," noted Al Tayer.

Climate Neutrality

"Environmental sustainability is a key pillar of the agenda of the UAE's Government, which is the first government in the region committing to the climate neutrality strategy 2050. 22% of global carbon emissions directly result from the transport sector. To support the UAE's efforts to conserve the environment, RTA has revamped its vision to fit with the future directions of Dubai to become 'The world leader in seamless & sustainable mobility," he commented.

"Sustainability is an integral part of RTA's strategies and initiatives launched to conserve the environment and reduce the carbon footprint of the transport sector. RTA developed a roadmap towards zero-emissions public transport by 2050 and its initiatives contributed to reducing carbon dioxide emissions by 400k tons by 2020," added Al Tayer.

In his speech, Al Tayer touched on the efforts of the Dubai Government to achieve sustainable urban development in the context of the human-centric Dubai Urban Plan 2040 aimed to improve the wellbeing of people and make Dubai the best city for living in the world. According to the plan,55% of the population will live within 800 meters of metro stations, which will allow residents to access more than 80% of daily needs in no later than 20 minutes walking, cycling and by other soft modes of mobility. 60% of the Emirate's total area will be nature reserves and rural areas.

Giant Projects

Al Tayer reviewed RTA's role in adopting innovation to cope with the challenges of designing and constructing mega projects to ensure their timely delivery. Such projects are highlighted by the Dubai Metro project, which has been accomplished in four years, and the Dubai Water Canal, which has been completed despite the complex challenges such as the that the route of the channel crosses over three busy roads comprised of 28 lanes in an area with completed infrastructure and a massive network of utility lines. It required moving 2.2 million cubic metres of the excavated material which was used to create a man-made island at the end of the canal near

Bridges and underpasses increased have from 129 to 844 between 2006-2020

Footbridges and pedestrian subways have jumped from 26 to 125

the beach. RTA adopted an advanced technique in digging the canal and reinstalled the utility network underneath the canal. The canal contributed to improving the quality of Dubai Creek water by 33%.

Digitisation

"RTA is a key partner in the smart city initiative aimed to transform Dubai into the smartest and happiest city in the world. RTA leads the smart mobility drive and undertook a portfolio of projects in support of digitisation. It adopted an artificial intelligence strategy, as manifested in the Intelligent Traffic Systems Centre at Al Barsha, one of the most sophisticated traffic control centres in the world in terms of using smart technologies. It is a key pillar in RTA's traffic safety strategy and managing the traffic movement across the emirate. It forms an integrated digital platform that uses advanced technologies such as artificial intelligence, big data, and the Internet of Things along with the latest communication systems. It links all signalised traffic junctions with the centre. The centre raised the percentage of road network coverage with smart traffic systems from 11% to 60%, which is expected to increase to 100% by 2023. It also reduced fatal accidents by 42%, and the delay time at intersections by 25%.

"RTA manages 190,000 paid parking slots using an integrated centre for parking management. RTA deployed vehicles equipped with digital cameras supported by artificial intelligence and machinelearning technologies capable of scanning more than 10,000 parking spaces per hour, with 99% accuracy, and issuing tickets for violations automatically," explained Al Tayer.

His Highness Sheikh Mohammed bin Rashid Al Maktoum, Vice President. Prime Minister of the UAE and Ruler of Dubai, said:

"We are building a new reality for our people, a new future for our children. and a new model of development."

Smart Mobility

In his speech, Al Tayer reviewed RTA's efforts to implement the directives of His Highness Sheikh Mohammed bin Rashid Al Maktoum to convert 25% of total mobility journeys in Dubai to smart journeys on driverless means by 2030. "This strategy differs from other strategies as it includes all public and private modes of transport, such as the metro, buses, marine transportation, taxis and private vehicles, as opposed to numerous cities focusing on a limited number of modes of transportation. In this regard, RTA signed a partnership agreement with General Motors-Cruise to operate GM's autonomous vehicles to deliver taxi and shared mobility services by 2023, which would make Dubai the first city in the world, outside America, to operate these vehicles," commented Al Tayer.

Private Sector Partnership

"RTA expanded the scope of partnership with the private sector to provide innovative services and new opportunities in the mobility and finance sectors. For example, RTA established Hala, a joint venture with Careem considered the first of its kind e-hailing between a government transport authority and the private sector. It contributed to reducing customer waiting time for taxis from 11.4 minutes to 3.7 minutes.

Al Tayer concluded by emphasising that Dubai's journey of excellence in the field of roads and transport is underpinned by key success factors, the most important of which are effective leadership, clear vision, making the right and timely decisions, to build a sustainable model to boost the wellbeing of Dubai's residents and visitors.



IRF Meeting session examines Transport Beyond Covid-19

The 18th IRF World Meeting and Exhibition held a session entitled: Transport Beyond Covid-19 - Agile Policies of 21st Century, moderated by Dr. Bill Sowell, Senior Vice Chairman of the International Roads Federation (IRF), and His Excellency Sheikh Nasser Majid Al Qasimi,

Undersecretary for the Infrastructure and Transport Sector at the Ministry of Energy and Infrastructure, His Excellency James Macharia, Cabinet Secretary for Transport, Infrastructure, Housing and Urban Development in Kenya, Paul Ajegba, Director of Michigan Department

21

Nasser Al Qasimi: Roads and marine transport proved critical for the community as other transport sectors ceased operation due to Covid

of Transportation, Dr Sung Hwan Kim, President of Road Engineering Association of Asia and Australasia, and

Professor Claude Fan explained that the association

Prof. Claude Van Rooten, President, PIARC.

had prepared a response team to gather experiences around the world. It released information that include objectives focused on preparedness and adaptation, and how to prepare for upcoming crises while dealing with the pandemic itself. He also reflected on the importance of developing a system through which risks are identified and assessed on a priority basis, before developing response plans and finally achieving integration.

In his speech, His Excellency Sheikh Nasser Al Qasimi said, "Thanks to a system of resilient legislation, The UAE has demonstrated the ability and efficiency to cope with global changes and emergency conditions forced by the Covid 19 pandemic. It has made unremitting efforts to confront the pandemic through continuing land and marine transport system, which represented the lifeline of society at a time where other transportation means were disrupted.

"We are on the cusp of overcoming the epidemic. With the reopening of cities and the return of life to normal, we are at a crossroads to transform the Covid-19 crisis into real opportunities. It requires crisis management from the perspective of corporate agility, resilient economic performance and end-to-end digitisation of operations. It also entails re-planning the transport strategy and re-designing transport projects to align them with the logistical changes in terms of increased land and water transport patterns. It also requires accelerating the adoption of more sustainable and flexible urban mobility policies to ensure the wellbeing of people," added Al Qasimi. His Excellency Al Qasimi identified three main variables that set the base for organising or reorganising land and marine transport means after the Covid-19: Building a strong relationship and proactive interaction with customers, accelerating the digitisation of services and processes to ensure priority and resilience, and developing sound crises management methods to better anticipate risks and improve the resilience of transport operations.

"The wise policy of the UAE assigned due consideration to the





sustainable environment sector and the integrated infrastructure, known as logistical performance. It aims to streamline land and maritime transport sectors, and lay legislative structures for their development to achieve global supremacy in development, diversity, integration and sustainability. The UAE is aware of the importance of land and water transport and recognises the importance of storage in supporting the national economy, which is a key driver of comprehensive development. Therefore it is keen to design pioneering initiatives and projects that support the UAE's goals for the next fifty years, which in turn contribute to maintaining the gains over the past fifty years.

Dr Sung Hwan Kim, President of Road Engineering Association of Asia and Australasia spoke in the session about how the pandemic closed borders and affected the economy and mobility. He noted that the positive side of the pandemic was the improvement in air quality due to reduced pollution. Countries also realised the importance of cooperation and openness after the isolation that prevailed during the pandemic.

His Excellency James Macharia, Cabinet Secretary for Transport, Infrastructure, Housing and Urban Development in Kenya, explained the impacts of Covid-19 in Kenya, and how the government took precautionary measures including lockdown. "To mitigate the effects of the pandemic from an economic perspective on people, the Kenyan government decided to put forward a programme to provide food support. The transport sector came up with initiatives to renovate roads that connect cities and one of the key challenges encountered was the delivery of vaccinations to all regions.

Paul Ajegba, Director of Michigan Department of Transportation, said, "Michigan succeeded in adapting to the challenges of Corona, most notably reforming infrastructure, transporting goods, and providing masks and personal protection tools. Lessons learned from the pandemic are summarised in the adaptability, development of new methodologies for investment in infrastructure, and resilience to strike a balance," he added.

The future of vision zero for 2030 deaths

Key officials with expertise in Transportation and Safety discuss the challenges and way forward towards zero road deaths by 2030 at the 18th IRF World Meeting and Exhibition

Dubai: In a panel discussion by key personnel at the 18th IRF Global meet held in Dubai challenges and solutions were discussed towards achieving

zero road deaths by 2030. The panel included Dan Chen, Vice President of 3M's Transportation Safety Division, Dr. Benjamín Colucci-Ríos, Transportation Engineering Professor of the University of Puerto Rico, Hon. Mavis Nkansah-Boadu, Deputy Minister of Roads and Highways Ghana, Chris Sanders, IRF Board member and Chair of its Road Safety, H.E Abdulla Al Marzouqi, Director General, Intelligent Transport Center, Abu Dhabi, Ms. Song Hye Yeon Deputy Director of Road Facility Safety division in Ministry of Land, Infrastructure and Transport(MOLIT) of Republic of Korea

Each expert presented facts on what can be done towards dropping roads fatalities noting that what works in one city may not work in





the other. Some of the measures include partnerships between the Government and Private Sector, road safety audits, awareness in the society , need for better collaborations, safer speed, safer road designs, new transportation means and most importantly a strategic plan with purpose, mission, vision and goal.

At the end of the panel discussion two 'Find a Way Award' was presented. One to Benjamín Colucci-Ríos, Transportation Engineering Professor of the University of Puerto Rico for his passion and continuous engagement in road safety and the second to H.E Abdulla Al Marzouqi, Director General, Intelligent Transport Center, Abu Dhabi for his role in making Abu Dhabi a safer city.

Delivering the Next Generation of Road Mobility

Attendees included Randell Iwasaki, Leader, State and Local Transportation for Amazon Web Services; Daniel Avdagič, City of Ljubljana, CEO of AV Living Lab, and Shailen Bhatt, Senior Vice President – Global Transportation Innovation, AECOM. The session was moderated by Shelley Row, Former Director, ITS Joint Program Office. Iwasaki started his speech by congratulating Dubai on its great attention to roads safety and wished the emirate to continue this advanced approach to serve residents, including road users. He cited Apple and iPhone founder Steve Jobs experience with connectivity. He stressed the importance of data, computing power and electronic connectivity, which are very important in addressing climate change, which is considered one of the challenges to the development of transportation means.

The second speaker in the session, Daniel Avdagič, began by expressing his love for mass transportation and cycling as they have a positive impact on public health and the environment. "In Slovenia, we have invested heavily in the development of modern transportation means, including self-driving transportation. We still face great challenges in achieving our goals in this regard. Other transportation

areas in which we invest include electric and shared transport.

Shailen Bhatt concluded the session by thanking RTA for its amazing achievements in mobility and transportation infrastructure. "Modern technology is a key pillar in the development of the next generation of transportation means. What caught my eye in RTA's records is the clear drop in the number of road accident deaths, thanks to plans, effective strategies, and hard work," he commented.

"RTA's roadmap is a model that deserves to be emulated by similar entities in other countries to make achievements and successes in this field.







IRF session discusses decarbonising roads by 2050, proposes practical solutions to reduce emissions

The Decarbonising Roads by 2050 session at the 18th International Road Federation (IRF) World Meeting and Exhibition at the Dubai World Trade Centre discussed reducing carbon emissions and how technology can reduce pollution. The session also reviewed the prominent solutions to reduce environmental emissions and the role of governments and experts in encouraging the public to take advantage of public transportation,

smart vehicles, and bicycles as opposed to driving private vehicles which is associated with significant pollution levels and a higher rate of traffic accidents.

"The imposition of road tolls can affect the number of trips, the mode of transport and the behaviour of road users. Germany's experience in a road toll system is comprised of two elements: the type of vehicle emissions generated and the type of road used. The application of this system has reduced carbon emissions during 20052020-.

"There are numerous reports prepared by a panel of international experts in this field, which presented results recommending the





implementation of paid parking, using self-driving vehicles, shifting from fuel-powered engines to electric engines, and using solar power to drive vehicles instead of combustible fuel," commented Dr. Robert Jaffe, Chair of IRF ITS Committee, on how to identify the needs, goals, and tasks that must be implemented to reach the desired goal of decarbonising roads by 2050.

The Chairman of IRF's Global Scientific Committee, Dr. Kamil Kaloush stressed the importance of the life cycle of sidewalks. He noted that materials used in making sidewalks may generate higher emissions. Therefore, it is advised to avoid such materials, and use fibre and panels instead.

IRF gathering discusses Speeding up Knowledge Sharing and Talent Development

The third day of the 18th International Road Federation (IRF) World Meeting and Exhibition was held on Tuesday, Nov 9th, 2021 under the theme: Speeding up Knowledge Sharing and Talent Development.

Dr. Mohamed Abdel-Aty, Trustee Chair, University of Central Florida, Pegasus Professor and Dept. Chair, and Dr. Benjamin

Colucci, University of Puerto Rico Transportation Engineering Professor delivered speeches in the session which was moderated by Shelley Row, Former Director, ITS Joint Program Office.

Row began the session by praising the Youth Council of the Roads and Transport Authority (RTA), noting that the council was a successful initiative to build a new generation of Emirati youth to contribute effectively to the development of public transport projects.

Dr. Mohamed Abdel-Aty made a presentation on effective





academic learning and emphasized that academic learning is not limited to university students and engineering colleges but extends to specialists and experts working in the field of roads and mass transit networks.

«I encourage and support efforts to establish colleges specialised in transportation engineering, such as the college established by the Kingdom of Saudi Arabia in the city of Dammam,» said Abdel-Aty. He referred to the importance of using modern technologies in transportation and integrating with smart cities. He explained that University of Central Florida established a college for undergraduate students to specialise in smart city engineering.

Dr. Benjamin Colucci started his speech by a presentation stating

that effective learning should be collective. The presentation was interspersed with interesting gestures and enjoyable movements that pleased attendees who quickly interacted.

ITS for Climate Impact Mitigation (ICIM) Preliminary Report launched on the side lines of 18th IRF World Meeting & Exhibition

Dubai: In accordance of building knowledge among road transport stakeholders from public and private sectors and to identify appropriate, feasible and effective decarbonisation measures the IRF ITS Committee Task Force has released a report named 'ITS for Climate Impact Mitigation' at the 18th IRF World Meeting & Exhibition. It includes a comprehensive review of existing ITS solutions and their impact, and their potential contribution to reduce substantially the carbon emissions due to road transport.

Following successful research and demonstration activities, the ITS industry in close cooperation with transport authorities and road operators has been developing knowledge from operational case studies in different regions of the world that give concrete evidences on the potential of ITS in contributing to emission reduction and therefore in helping road transport community in meeting climate impact mitigation targets.

According to the report, road transport stakeholders from public and private sectors have a major role to play in transforming road infrastructure towards drastic emission reduction by 2030. Intelligent Transport Systems and Services (ITS) and enabling Information and Communication Technologies (ICT) has been very successful in the last decades in delivering key solutions to

improve road safety and traffic efficiency. Transport infrastructure is essential to sustainable development and to regional, national and transnational cooperation and can improve a region's global competitiveness.

However, the transport sector is also one of the largest sources of greenhouse gas (GHG) emissions, largely driven by the fact that fossil fuels remain the dominant source of energy consumption in transport, the sector is responsible for approximately 16% of global GHG emissions, making it the third-largest contributor to GHG pollution after energy and buildings.

In addition, the ITF Transport Outlook 2021 predicts that the global transport activity is expected to more than double by 2050, due to population growth and economic development and traffic emissions are expected to rise by 16% compared to 2015 – even if existing commitments to decarbonise transport are fully implemented. Any currently expected emissions reductions will be more than offset by the increased demand for transport, which would overshoot the levels needed to reduce global warming by 1.5% by about 3 times. To guide those responsible for deployment this report highlights a suggested "top 10" of ITS tools for decarbonising roads, transport and mobility. Criteria for their selection include:



mature and affordable solutions, ready for rapid implementation strong, or at least sufficient evidence of effectiveness to reduce CO2 (and pollutant) emissions

widely deployed or available, and able to deliver immediate benefits

together they should address all main sources of emissions, and be of value to their owners.



RTA scoops IRF's Traffic Management and ITS Award 2021

Dubai's Roads and Transport Authority (RTA) has won the Traffic Management and Intelligent Transportation Systems Award, part of the Global Road Achievement Award of the International Road Federation (IRF) for Dubai's Intelligent Traffic Systems (ITS) Centre. The award honours the innovative road projects and model staff who attach priority to the roads industry in the objectives of social and economic development around the world. The awards distribution ceremony took place as part of the events of the 18th IRF World Meeting and Exhibition at the Dubai World Trade Centre 79– November 2021.

During the ceremony, RTA as well as other participating international organisations were honoured in 12 categories highlighted by: Asset Preservation & Maintenance Management, Construction Methodology, Design, Technology, Equipment & Manufacturing, Urban Planning & Mobility, Research and other local and global projects nominated. The award was received by Salahaldeen Almarzooqi, Director of Intelligent Traffic Systems, RTA, from His Excellency Abdullah Al-Mogbel - IRF Global Chairman.

This felicitation confirms the efforts of RTA to employ the latest technologies and smart software in facilitating mobility around Dubai, increasing the ITS coverage of main roads in the emirate, and improving the monitoring and response time to accidents and congestions in the emirate. Thus, it contributes to realising RTA's vision to become The World Leader in Seamless & Sustainable Mobility.

The IRF congratulated RTA on this achievement and pointed out that RTA had been instrumental in integrating transportation means and developing the infrastructure of road and bridge projects. He noted that introducing the ITS in traffic management would considerably increase transportation safety.

An MOU was signed marking the official launch of AI in training drivers at Dubai's Excellence Driving Centre by Location Solutions (UAE) and AV Living Lab in partnership with Excellence Driving Centre (UAE)



Artificial Intelligence to be used in training drivers at Excellence Driving Centre

On November 15, 2021, Location Solutions LLC will launch the use of artificial intelligence (AI) in training drivers at Dubai's Excellence Driving Centre; the centre that prides itself on providing training technologies to ensure the graduation of competent drivers that fulfil the needs of safe and secure driving.

To this effect, an MOU was signed between Location Solutions, AV Living Lab of Slovenia, and Excellence Driving Centre on November 7, 2021, at the side-lines of the International Road Federation (IRF) World Meeting and Exhibition at the Dubai World Centre.

The Slovenian technology provided by AV Living Lab, a hightech mobility start-up, has been developed over the last six years in collaboration with the finest data scientists from Slovenia and the USA.

The Excellence Driving Centre aims to apply AI technologies to drivers training to achieve Zero-Accident Society in line with the goals of UAE Vision 2021. The system uses a motion driving simulator, biometric sensors for data collection, Digital Twin technology, real traffic scenarios with critical road situations, a patented platform of cognitive AI, and avatars simulation. These technologies will enable drivers to understand better points of their strengths and driving behaviour patterns that require improvement. The system aims to provide drivers with better driving experiences and skills to enable them to have better chances of passing driving license tests.

RTA concludes 18th IRF World Meeting and Exhibition by technical visits to landmark projects

Dubai's Roads and Transport Authority (RTA) has brought the curtain down on the 18th International Roads Federation (IRF) World Meeting and Exhibition by arranging technical visits to key projects in the emirate. The gathering, which was hosted by Dubai represented by RTA, was held at the World Trade Centre from 7 to 9 November under the theme: Roads To Tomorrow.

Omran Sharaf, Director of the Emirates Mars Mission at the Mohammed bin Rashid Space Centre, made the final presentation entitled: "Roads To Tomorrow, a Vision to 2030." Dr. Bill Sowell, Senior Vice Chairman of the IR, gave the closing speech. He praised the agenda of the event, which was attended by more than 2.500 visitors and saw the participation of 250 speakers. experts, and specialists in the field of roads, infrastructure, and artificial intelligence from 60 countries.

His Excellency Mattar Mohammed Al Tayer, Director-General, Chairman of the Board of Executive Directors of the Roads and Transport Authority, posed for group photos with sponsors.

The event discussed 150 papers tackling a variety of topics including key challenges and the pathway to the future of roads and smart mobility. Topics discussed included climate-resistant sidewalks, roads landscaping, mobility pricing, the latest technologies to support the infrastructure, and vehicle mobility. About 80 international companies and start-ups participated in the accompanying exhibition to showcase the latest technology trends, services and solutions related to roads.

On the final day, RTA arranged technical tours for the participating delegations to some of Dubai's iconic projects namely the Intelligent Traffic Systems Centre, Dubai Water Canal, Improvement of the Dubai-Al Ain Project, and a footbridge at the Marina.

At the Dubai Water Canal, the delegations got a closer look at the infrastructure of roads network, investment and environmental aspects and the returns on the tourist activities of the project which is shaping into a key tourist destination and one of the prominent waterways in the Gulf.

At the Dubai-Al Ain Improvement Project, the delegations had a feel of one of RTA's biggest projects currently underway. The project, which has a cost tag of about two billion dirhams is intended to keep pace with the development drive seen by the emirate.

At the Marina, the delegations were familiarised with a unique 4-way footbridge that serves pedestrians and constitutes an iconic addition to pedestrian bridges constructed by RTA recently. The delegations' visits concluded at the Dubai Intelligent Traffic Systems Centre where they were acquainted with the sophisticated technologies and smart software used in the Centre, which supports Dubai Government's drive to become the smartest city in the world.





RTA, Transportation Security sign MoU to step up transport protection and safety

The two entities announced the formation of the Lifeline Team

His Excellency Lieutenant General Dhahi Khalfan Tamim, Deputy Chairman of Police and General Security in Dubai, His Excellency Mattar Mohammed Al Tayer, – Director General, Chairman of the Board of Executive Directors of the Roads and Transport Authority (RTA), and His Excellency Major General Awad Hader Al Muhairi, Deputy Director General of the State Security Department in Dubai attended the signing of Memorandum of Understanding (MoU) to protect and ensure the safety of the transport sector and its users. The two parties announced the establishment of a Lifeline Team to cater to the security of transport.

Abdul Mohsen Ibrahim Younes, CEO of Rail Agency signed the MoU on behalf of RTA, and Brigadier Obaid Saeed Al Hathboor, Director of Transportation Security Department signed on behalf of Dubai Police.

The signing of the agreement signals the commitment of the two parties to make consolidated efforts towards protecting and ensuring the safety of transport, riders and related facilities in the emirate. The MoU calls for sustained improvements of procedures in place to set up the security, safety and flow of transit means across Dubai. It also calls for sharing information regarding potential risks facing the transport riders and facilities, streamlining processes and coordinating emergency drills. The MoU stresses on supporting bilateral communication in the public interest, accelerating the exchange of information between the

two operation rooms, and implementing the best global practices of the transport industry.

Transportation Security

According to the MoU, the Transportation Security Department is to ensure a high level of security and safety for transport riders and facilities, apply top international practices and technologies, and identify and analyse the risks to which transportation is exposed. The department has to provide the required security support during hazards to maintain the safety of the sector. It shall also develop plans to address the basic needs and tackle incidents, disasters, and potential threats; besides developing standards and specifications of transportation security and ensuring, they are implemented and updated



periodically. The department shall identify the security needs to be addressed in facilities of future projects, attract and qualify national talents, conduct joint training and drills as needed, and coordinate with the local and federal government entities as well as foreign entities and international authorities.

According to the MoU, RTA shall inform Dubai Police of all requirements that may assist the Dubai Police to carry out its duties, including the link with the existing electronic and smart devices. RTA shall also supply the department with the layouts of transport means and facilities, affiliated entities including those under planning to develop appropriate security and protection plans.

Lifeline Committee

During the signing of the MoU, an announcement was made to establish joint security committees, which include the Lifeline Transport Security Committee. The committee oversees the strategic plans, examines risks to which the sector is exposed, and endorse the final decisions relating to security projects and plans to be undertaken. It will also develop suitable solutions to the security challenges of the transport sector. There are four sub-committees: Strategy and Assessment Committee, Operations and Security Training Committee, Emergency Security Situation Committee, and Future Projects Committee.

Coordination

His Excellency Lieutenant General Dhahi Khalfan Tamim - Deputy Chairman of Police and General Security in Dubai praised the signing of the MoU, which would enhance the cooperation between the two parties. "This MoU builds on the earlier MoU relating to the security of public transport means used by hundreds of thousands every day. The continued coordination between the two sides contributed to higher security and safety of riders and facilities of transportation means. We are keen on providing top training to individuals to cope with all emergency cases, and all modern security means needed by the sector," added Tamim.

His Excellency Mattar Mohammed Al Tayer, Director General, Chairman of the Board of Executive Directors of



Roads and Transport Authority thanked the General HO of Dubai Police under the commandment of His Excellency Lieutenant General Dhahi Khalfan Tamim, Deputy Chairman of Police and General Security in Dubai, His Excellency Lieutenant General Abdullah Khalifa Al Marri. Commanderin-Chief of Dubai Police, and His Excellency Major General Talal Hamid Belhoul Al Falasi. Director General of the State Security Department in Dubai for the huge support of RTA's efforts to ensure the safety and security of public transport means. He noted that such cooperation had reflected positively on public transport riders.

"Dubai's integrated public transport means have now become the backbone of people's mobility around Dubai. RTA is committed to the safety and convenience of riders at all times and seeks to improve the level of service align it with the top international standards," added Al Tayer.

His Excellency Major General Awad Hader Al Muhairi, Deputy Director General of the State Security Department in Dubai commended the partnership and security strategies between Transportation Security Department and RTA. "The signing of this MoU is a further step towards boosting the corporate relationships of the two parties, which will enhance the security strategies and sustain the development of the public transport network. It will also consolidate the joint efforts and capabilities to improve the security service in the Emirate. The continued support of RTA contributed to the security and safety of public transport means, riders and facilities, which serves in the interest of Dubai's community."





Addressing Global Manufacturing and Industrialisation Summit 2021

Al Tayer: Our leaders envisioned global digitisation and artificial intelligence early on

His Excellency Mattar Mohammed Al Tayer, Director-General, Chairman of the Board of Executive Directors of the Roads and Transport Authority (RTA) stated that the perceptive vision of His Highness Sheikh Mohammed bin Rashid Al Maktoum, Vice-President, Prime Minister of the UAE, Ruler of Dubai, had anticipated earlier the trending digitisation and artificial intelligence worldwide.

"It started in 1999 by launching the e-Government at a time where the internet penetration rate was less than 5%. In 2013, His Highness launched the Smart Dubai initiative, and this journey continues with the recently launched Dubai Urban Plan (Dubai 2040) to improve the quality of life in the emirate, enhancing its global competitiveness, and provide multiple mobility options for residents such that Dubai will become the best city for living in the world," said Al Tayer.

Al Tayer made these remarks in a keynote address at the main session of the Global Manufacturing and Industrialisation Summit (GMIS) held at Expo 2020 Dubai in the presence of top officials and industry leaders from the UAE and far afield.

20-Minute City

Al Tayer made a presentation focused on redefining cities towards achieving people-centric mobility. "Through time, the technology advancement cycles have become shorter, and this trend is set to accelerate as far as we move further in the future. The use of self-driving transport means will become quite common like having smartphones now. Dubai Urban Plan 2010 revolves around serving people, improving their wellbeing, and adopting the 20-minute concept," he said.

"Dubai 2040 Plan will re-imagine the city through different strategies and policies, and one way is through the adoption of the "20-minute city" concept, where 55% of the population will live within 800



meters of metro stations, which will allow residents to access more than 80% of daily services by walking, cycling and other soft modes of mobility. The total area allocated for high-tech industrial and economic activities will increase to 168 square kilometres, equivalent to 25% of the total urban area in Dubai by 2040 to promote innovation and attract global companies and start-ups.

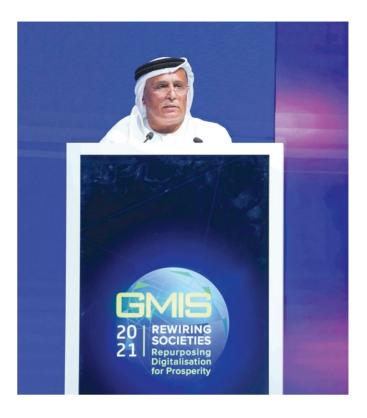
"In consideration of the importance of roads and transport infrastructure for urban planning. RTA is currently engaged in revamping its strategic transport plan for the next 20 years to align it with Dubai Urban Plan 2040, following its revised vision to become: "The world leader in seamless and sustainable mobility," he commented.

Future Transport

"Achieving the future of transportation is based on three main enablers. The first is Infrastructure, which entails upgrading the transport infrastructure with technologies capable of supporting future modes and trends in transportation, such as the landing areas of autonomous air vehicles, adding smart sensors and upgrading control centres. The second is Fostering New Modes of Transportation, and the third is Legislation, which entails enhancing new legislation to support futuristic modes of transportation such as self-driving vehicles and E-scooters," explained Al Tayer.

In 2017, His Highness Sheikh Mohammed bin Rashid Al Maktoum launched the Enterprise Command and Control Centre (EC3), one of the biggest and most sophisticated control centres in the world in utilising smart technologies. It controls and integrates RTA's mass transit systems, and manages incidents, crises, and events related to roads, transportation, and traffic.

In 2020, His Highness Sheikh Mohammed bin Rashid Al Maktoum launched Dubai Intelligent Traffic Centre, which sets a platform for integrated digital technologies that use artificial intelligence, big data and the Internet of Things. The coverage of roads network in the Emirate by intelligent traffic systems increased from 11% to 60% currently and is expected



to reach 100% by 2023. Through adopting artificial intelligence technologies. RTA's control centres collect and analyse 50 billion data records annually, which helped enable RTA to plan smart mobility, improve transport efficiency and develop futuristic modes of transportation in Dubai.

Self-Driving Transport

In his speech, Al Tayer reviewed RTA's efforts to implement the directives of His Highness Sheikh Mohammed bin Rashid Al Maktoum to convert 25% of total mobility journeys in Dubai to smart journeys on driverless means by 2030. "RTA's journey in self-driving transport began as early as 2009 with the inauguration of the Dubai Metro, a fully automated driverless mobility mode with an average daily ridership of 650,000 riders. "RTA has recently completed the process of identifying and selecting potential locations in Dubai to deploy a fully operational smart infrastructure to monitor and communicate with autonomous vehicles in a safe manner. It is also considering the technology options for communicating with these vehicles and the technological infrastructure.

"RTA also started to test autonomous robotics for logistics during the Dubai World Challenge for Self-Driving Transport this year and trialled self-driving buses. In cooperation with global firms, RTA is piloting several self-driving transportation modes, including the



Autonomous Aerial Taxi, the first of its kind, in addition to Dubai Sky Pods and the E-scooter. The adoption of these futuristic modes of transportation is associated with various challenges, such as potential accidents, technical failure, lack of readiness of infrastructure and difficulty with public acceptance," commented Al Tayer.

Public-Private Partnership

"RTA expanded the scope of partnership with the private sector to provide innovative services and new opportunities in the mobility and finance sectors. For example, RTA signed a partnership agreement with General Motors–Cruise to operate GM's autonomous vehicles to deliver taxi and shared mobility services by 2023, which would make Dubai the first city in the world, outside America, to operate these vehicles. In addition, RTA established Hala, a joint venture with Careem considered

the first of its kind e-hailing agreement between a government transport authority and the private sector. It contributed to reducing customer waiting time for taxis by 70%," noted Al Tayer. Al Tayer concluded his speech by recognising the powerful force of Research and Development (R&D) in driving innovation across RTA. "RTA deployed vehicles equipped with digital cameras supported by artificial intelligence and machine-learning technologies capable of scanning more than 10,000 parking spaces per hour, with 99% accuracy. It also used Big Data to optimise public bus schedules, which resulted in improving 45 service routes between 2018 and 2019 and 24 routes in 2020. RTA also signed 11 partnerships agreements with international and local academic institutions to support the corporate R&D culture as well as dedicating an Innovative Research Fund and holding Corporate Research Scientific Award for RTA employees," he added.

Utilizing Blockchain Technology for Vehicle Lifecycle Management Dubai Blockchain Strategy & Pillars

Keynotes of Mohammed Al Mudharreb, CEO of Corporate Technology Support Services at Roads and Transport Authority, in Global Manufacturing and Industrialisation Summit 2021. In Oct 2016, H.H. Sheikh Hamdan crown prince of Dubai and the Chairman of The Executive Council, announced the Dubai Blockchain Strategy developed by Dubai Future Foundation and Smart Dubai. The Strategy was developed to help Dubai achieve the vision of H.H. Sheikh Mohammed bin Rashid Al Maktoum by making "first city in the world to conduct applicable Government transactions via Blockchain by 2020" and make Dubai the happiest city on earth.

The strategy is based on 3 pillars:

- Government Efficiency: Achieving efficiency by using blockchain technology in applicable government services.
- Industry Creation: Creating an economic sector and effective blockchain-enabling environment, especially for entrepreneurs and start-ups
- International Leadership: Leading the theoretical and practical aspects of blockchain applications and putting Dubai on the global map for thought leadership in the field.



Dubai Blockchain Strategy Achievements

"A roll-out plan was developed for the Strategy; to identify blockchain applications; design use cases strategically and technologically with government entities and implement the first stages of blockchain according to these identified used cases", Al Mudharreb said.

He added that 24 Blockchain use cases are being implemented across 8 industry sectors. These use cases include:

- Settling payments for Dubai Pay (Finance),
- Issuance of digitally accredited certifications from Hamdan Bin Mohammed Smart University and Zayed University (Education),
- Verification of property titles (Real Estate),
- Emirates' loyalty program (Tourism).

CEO of Corporate Technology Support Services highlighted that from 2015 to 2017, Dubai's Blockchain community grew by 24%, five percentage points above the global average of 19%. "Dubai was crowned 'World Capital of Blockchain' by CNBC and won 'First Smart City on the Blockchain' award at the Barcelona Smart City Expo", he said.

Al Tayer meets British Transport Minister

His Excellency Mattar Mohammed Al Tayer, Director-General, Chairman of the Board of Executive Directors of the Roads and Transport Authority (RTA), received a visiting British delegation headed by His Excellency Grant Shapps, Secretary of State, Department for Transport.

The British Minister was accompanied by His Excellency Simon Penney – HM Trade Commissioner & HM Consul General, and several other British officials. Al Tayer discussed with the British delegation opportunities for cooperation between the two parties and the prospects of benefiting from the expertise of the British companies in supporting RTA's plans.

Al Tayer hailed the efforts of the British government in operating public buses powered by clean energy. Discussions also included several issues relating to public transport and mobility systems as well as the potentials of cooperating in an array of projects and initiatives to support eco-friendly transit systems.



Careers UAE 2021 attracts talents

Dubai's Roads and Transport Authority (RTA) took part in the 20th Careers UAE (1517- Nov 2021) at the Dubai World Trade Centre. On the opening day of the event, fresh graduates flocked to RTA's stand to review the training programmes on offer, which proved remarkably attractive. They were also familiarised with the diverse cast of vacant jobs and fields which offer youth a superb opportunity to prove their merits and pursue their career ambitions.

"Careers UAE is a great platform for communicating with job seekers and attracting local talents with the aim of grooming young Emiratis to build successful careers," said Sultan Al Akraf, Director of Human Resources and Development, Corporate Administrative Support Services Sector, RTA.

"As we are keen to support the nationalisation strategy and attract talented Emiratis seeking to chart out successful career paths, we enabled visitors of RTA's stand at Careers UAE 2021 to apply for jobs on offer through the Talent Pool.

"A variety of training and vocational programmes have been designed for RTA's training centre to support the Emiratisation drive. They include Edaad) programme, which qualifies and trains several Emirati graduates and offers them placements in the RTA. This two-year program ensures the deployment of well-trained Emiratis capable of contributing to sustainable development. The programme has extra features such as specialist practical training, provided the students



achieve distinction. We also have the Tamkeen programme designed to deliver a 6-month training to graduate Emiratis who spent a year without joining a job since graduation. It aims to prepare them for the job market in various fields," added Al Akraf.

RTA is keen to participate in career fairs to attract young Emirati talents graduating from universities and colleges in various disciplines as well as experienced and highly qualified personnel. It also focuses on providing a positive and attractive environment for Emiratis to take up positions in administrative, supervisory, and operational fields.



Three agreements with participants in self-driving solutions challenge

His Excellency Mattar Al Tayer, Director-General, Chairman of the Board of the Executive Directors of the Roads and Transport Authority (RTA) attended the concluding event of the Dubai World Congress and Challenge for Self-Driving Transport where three agreements were signed. The agreements signed between participating companies call for developing technology-driven solutions for self-driving transport.

The first agreement was signed between Careem and Kiwibot to develop food and grocery delivery robots. The second one was made between Majid Al Futtaim and Yandex to explore independent technology solutions to enhance the scope of the last-mile delivery of Carrefour orders. The third agreement was between Noon, Neolix and Rochester Institute of Technology (RIT) to provide self-driving logistical services within RIT campus.

Pioneering Dubai

Al Tayer stressed that the signing of the agreements boosts the global profile of Dubai in developing pioneering solutions for self-driving transport that support the last-mile journeys to deliver items to customers. It also supports Dubai's Smart Self-Driving Transport Strategy aimed to convert 25% of total mobility journeys in Dubai to self-driving transport means by 2030.

"These agreements are part of Dubai World Challenge for Self-Driving Transport outcomes, which sets a global platform for companies, academia, and R&D centres to run case scenarios and introduce self-driving transport technologies in Dubai. It also contributes to broadening the use of autonomous transport means, and encouraging entities to tackle the existing challenges," noted Al Tayer. Careem and Kiwibot

The agreement between Careem and Kiwibot entails the introduction of robot delivery for food and grocery items across residential areas in Dubai, the first of its kind in the



region. Together with Kiwibot, Careem will launch a pilot program to study the feasibility of the market and assess the best geographical locations. College campuses and highly dense residential areas are primary locations for the pilot, with RTA helping to facilitate the deployment of the product through a regulatory framework.

The agreement was signed by Bassel Al Nahlaoui, Managing Director of Mobility at Careem, and Felipe Chávez Cortés, Chief Executive Officer of Kiwibot.

"We are looking forward to working with Kiwibot and RTA to introduce autonomous vehicles in our offerings and support Dubai's Autonomous Transportation Strategy to provide simple, affordable, and reliable mobility," said Bassel Al Nahlaoui. Managing Director of Mobility at Careem.

"Our mission is to make people's everyday lives simpler and being at the forefront of the technology industry in the region, we are in a perfect position, alongside our partners, to introduce such an innovative and convenient feature to the food and grocery delivery space," added Al Nahlaoui. "We are delighted to launch this pilot phase with Careem and RTA, taking a step towards the introduction of delivery robots in the region. The Kiwibot team works hard to further last-mile delivery technology innovation, and to watch this partnership unfold before our eyes, bringing our dreams one step closer to reality is incredibly exciting," said

Al Futtaim and Yandex

Felipe Chávez Cortés, Kiwibot's CEO.

Majid Al Futtaim, the leading shopping mall, communities, retail, and leisure pioneer across the Middle East, Africa, and Central Asia, has announced its collaboration with Yandex, one of the largest IT companies in Europe, to explore autonomous technology solutions to enhance Carrefour's last-mile delivery capabilities and to deliver orders using self-driving technology.

Responding to the high demand for online orders, Carrefour customers in selected neighbourhoods across the UAE could receive their online orders via Yandex autonomous delivery robots as part of the pilot program, which is set to launch in early 2022.

The agreement was signed by Hani Weiss, Chief Executive

Officer of Majid Al Futtaim Retail and Artem Fokin, Head of Business Development at Yandex Self-Driving Group.

The partnership supports Yandex's autonomous vehicle technology, which can efficiently plan the safest route in real-time, detect approaching vehicles and pedestrians, and travel at speeds of up to 8 km/h on sidewalks or other pedestrian areas. Customers will be able to track its movement in real-time on the MAF Carrefour App.

"As a leading retailer, driving the retail industry into the future is our responsibility. Together with Yandex, and the ongoing support of the RTA, we are excited to explore this innovative new last-mile solution to offer our customers greater flexibility, convenience, and speed with their online orders. What was once considered science fiction, we are delighted that the wheels are in motion for Carrefour to start delivering orders via self-driving, fully automated robots," said Hani Weiss, Chief Executive Officer of Majid Al Futtaim Retail.

"The demand for automated last-mile delivery continues to grow across the world. Not only businesses but also cities and even whole states have now taken an interest in this technology. Autonomous delivery has the potential to improve the life of people in cities while helping companies optimize their logistics and cut down the costs, said Dmitry Polishchuk, Head of Yandex Self-Driving Group.

"Yandex robots have already delivered tens of thousands of orders in the USA and Russia. We appreciate the support from RTA and together with Majid Al Futtaim we will explore the opportunities to bring the advantages of robotic delivery to Dubai's daily life", he added.

Noon, Neolix and RIT

The agreement between Noon, Neolix and Rochester Institute of Technology entails operating Neolixmanufactured autonomous vehicles to provide self-driving logistical services and deliver Noon products to customers, at the Rochester Institute of Technology campus in Dubai. The agreement was signed by Mansoor Al Ghurair, from Noon, Jason Wang, Neolix UAE Manager and Dr Yousef Al-Assaf, President of Rochester Institute of Technology Dubai.

Eng. Muammar Khalid Al Kathiri, Executive Vice President





of Engineering Affairs at the Dubai Silicon Oasis Authority, said, "The announcement of the development of an autonomous vehicle for logistical services within the Rochester Institute of Technology campus in Dubai in Dubai Silicon Oasis, in collaboration with Neolix and Noon, is a quality step forward. It comes in the aftermath of RTA's Dubai World Challenge for Self-Driving Transport, and honouring supporters, including the Dubai Silicon Oasis.

"This cooperation to create smart future mobility solutions in the Oasis paves the way for more partnerships between entities that are keen on research, development and innovation. This field has become an arena for creative competition worldwide as it contributes to shaping the future of smart and sustainable mobility in smart cities and communities. It will also raise the profile of Dubai at the top of smart global cities and transform it into the capital of innovation and technological advancement."

"This agreement is a significant milestone in our ongoing collaboration. Neolix is a company from China that produces self-driving vehicles and aspires to lead the future smart city way of life with state-of-the-art technologies. I sincerely hope that with this agreement we will even strengthen our cooperative partnership. Let's work together, working closely to meet the expectations and aspirations of more people and make Dubai smarter and more driverless," said Jason Wang, Neolix UAE Manager.

Mansoor Al Ghurair, Entrepreneur in Residence from Noon, said: "Known as a local digital commerce platform, Noon was established to serve and support companies and individuals in the United Arab Emirates. Our partnership with Neolix and the Rochester Institute of Technology in Dubai is a testament to our commitment to achieving the core goals for which Noon was founded. We are proud of this partnership, which will enable Noon to provide services at RIT campus in Dubai using innovative self-driving vehicles."

Dr. Yousef Al-Assaf. President of the Rochester Institute of Technology in Dubai, said: "The DSO-based Rochester Institute of Technology-Dubai is keen on instilling a culture of innovation, entrepreneurship, and applied research, making it a comprehensive business environment for its students, partners, and the technology sector. We are also focused on forging partnerships with companies committed to supporting applied research that boost quality of life by finding innovative solutions. In that context, we have announced testing a self-driving vehicle for logistic purposes to be used within our campus, further advancing its technologies with the use of artificial intelligence, in collaboration with Neolix and Noon. This step highlights the role of universities as open labs for researching and developing smart future-proof technologies, linking exceptional students with specialized technology companies."

Mattar Al Tayer inaugurates Cityscape Global 2021 Dubai at EXPO Exhibition Centre

His Excellency Mattar Al Tayer, Commissioner-General for Infrastructure, Urban Planning and Well-Being Track, and Chairman of the Supreme Committee for Urban Planning, inaugurated the exceptional 21st edition of Cityscape Global being held at the Dubai Exhibition Centre (Expo 2020 site) until 11 November in the presence of His Excellency Sultan Butti bin Mejren, Director General of Dubai Land Department (DLD), and a number of CEOs from DLD.

The global event provided investment opportunities for visitors in the two events, Cityscape and Expo 2020 Dubai, by major and sub-developers, including the diversity and suitability for different investors and those interested in the real estate sector and their needs, whether residents or international visitors alike.

Al Tayer toured the exhibition, visiting the pavilions of a number of government entities and local and international private entities participating in this global event. Al Tayer visited DLDs stand and was briefed on the innovative services it provides, which directly contributed to enhancing the technical aspect of the real estate environment in Dubai. During his tour of the exhibition, Al Tayer stopped at stands of a number of private and international entities, including Damac, Dubai Investments, Azizi, and The Avenue, reviewing services, investment opportunities and various experiences in the real estate markets.

More than 70 real estate developers, architecture companies, and

leading consultancies in the world will present the latest developments in the various real estate markets, specifically the Middle East, with exceptional opportunities and services at Cityscape Global 2021. It is a unique and comprehensive platform that allows investors, developers and various stakeholders to meet in one place, exchange knowledge and experiences, and attract interested local and international investors looking for properties that meet their various needs. The event continues until 11 November at the Dubai Exhibition Centre (Expo 2020 site).









RTA opens a 4-lane bridge linking Al Manama, Al Meydan Streets

Dubai's Roads and Transport Authority (RTA) opened on (20th November 2021), a new bridge linking Al Manama and Al Meydan Streets crossing over the Dubai Al Ain Road. RTA has accordingly eradicated the previous roundabout and adjusted the sloping ends of the existing bridges on Al Meydan Street. The bridge extends 328 meters and consists of 4 lanes in each direction. The sloping ends of the bridge span 400 metres and the capacity of the bridge is 16,000 vehicles per hour in both directions.

"The new bridge, which links Al Manama and Al Meydan Streets, is part of the Dubai-Al Ain Road Improvement Project currently under construction by RTA. The project scope covers constructing six key intersections and widening the road from 3 to 6 lanes in each direction over a 17 km stretch from the intersection with the Emirates Road to the intersection of Bu Kadra and Ras Al Khor," said His Excellency Mattar Mohammed Al Tayer, Director-General, Chairman of the Board of Executive Directors of the Roads and Transport Authority.

"The project includes remarking of the traffic lanes at the intersection of Al Manama Street and Dubai Al Ain Road, and constructing a 4-land bridge in each direction to link Al Meydan and Al Manama Streets and serve the development projects of Meydan. The intersection will improve the traffic safety and ease the traffic flow on the intersection during peak hours," he added.

Completion Rate

"RTA has completed 85% of construction on Dubai-Al Ain Road Improvement Project; one of the biggest infrastructure projects currently undertaken by RTA. Upon completion, the project is expected to benefit about 1.5 million people, enhance the traffic flow, and improve the link with Ras Al Khor Road, Sheikh Mohammed bin Zayed Road, Sheikh Zayed bin Hamdan Al Nahyan Street and the Emirates Road," explained Al Tayer.

"It will also serve the existing and future development projects on both sides of the Dubai-Al Ain Road, and double up the road capacity to 12000 vehicles from 6000 vehicles in



each direction. It will also reduce the transit time on the road from Bu Kadra intersection to the Emirates Road intersection from 16 to 8 minutes, which will ease snarls that used to extend about $2 \, \text{km}$.

The scope of Phase II of the Dubai-Al Ain Road Improvement Project encompasses widening the main road from 3 to 6 lanes in each direction and building flyovers and service roads to ensure a safe entry/exit for residential areas and service facilities on both sides of the road. These intersections include Nad Al Sheba intersection, Dubai-Al Ain Road link with Al Manama Street, a bridge of 4 lanes in each direction to link Al Meydan Street and Al Manama Street, and improving the existing bridge over Al Meydan Street and Dubai-Al Ain Road to serve the development projects of Meydan.

Flyovers

RTA has recently opened a key 170-metre bridge at the junction of Nad Al Sheba and Dubai-Al Ain Roads comprised of two lanes in each direction. The bridge serves the traffic from and to Dubai-Al Ain Road heading to Nad Al Sheba, Meydan and development projects in the neighbourhood. RTA had previously accomplished the construction of ramps at the junction of Sheikh Mohammed bin Zayed Road with Dubai-Al Ain Road enabling traffic movement in all directions, which is now fully opened for traffic. Work is currently underway in constructing the main bridge at the same junction to provide turns in all other directions besides completing the junction of Sheikh Zayed bin Hamdan Al Nahyan Street. The link with the existing Sheikh Zayed bin Hamdan Al Nahyan Street and its extension that was opened in 2018 will be completed by constructing a bridge across Dubai-Al Ain Road comprising four lanes in each direction, which can be widened to five lanes in future.

The existing ramp will be upgraded to serve the traffic inbound from Dubailand Residence Complex heading westwards to Dubai-Al Ain Road in the direction of Dubai. A new ramp will be built to serve the traffic inbound from Dubai heading North to the Academic City and the Dubai Silicon Oasis. Service roads will be constructed on both sides of the road along with turns to serve other movements and development projects. These works are expected to be completed by the second half of next year.

The project covers the improvement of the junction of Al Meydan Road with Dubai-Al Ain Road and links it with Al Manama Road. A bridge of four lanes in each direction will be constructed to link Al Manama Road with Al Meydan Road. The existing bridge on Al Meydan Road and Dubai-Al Ain Road will be upgraded to serve the development projects of Meydan.

Smooth Traffic

The Dubai-Al Ain Road Improvement Project, which extends 17 km from the intersection of the Emirates Road to Bu Kadra-Ras Al Khor intersection, encompasses widening the road from 3 to 6 lanes in each direction, and constructing service roads on both sides to step up the traffic safety. The whole project includes six key intersections to ensure easing the traffic and serve residential communities on both sides of the road such as the Dubai Silicon Oasis, Dubailand Residence Complex, Liwan, Meydan and Dubai Design District. The overall length of the project's six junctions amounts to 6600 metres and all bridges span 4900 metres.

Works include improving the junctions with Emirates Road, Sheikh Zayed bin Hamdan Al Nahyan Street, Nad Al Sheba, Al Meydan and Ras Al Khor. It also included improvements of the junction of Sheikh Mohammed bin Zayed Road with a capacity of 36000 vehicles per hour in all directions, which was opened last year and had improved the flow of traffic on Sheikh Mohammed bin Zayed Road from Al Ousais in the direction of Al Ain.

- Al Tayer: The new junction can handle 16k vehicles per hour
- Completion rate has reached 85% on the Dubai-Al Ain Road Improvement Project comprising 6 intersections
- 1.5m riders will benefit from the Dubai-Al Ain Road Improvement Project
- The project will double up the road capacity from 6,000 to 12,000 vehicles per hour
- The transit time from Bu Kadra to Emirates Road intersection will drop from 16 to 8 minutes during peak hours



RTA launches trial operation of two electric buses fitted with Opportunity Charging technology

Buses will shuttle on a path between La Mer and Al Sufouh Tram Station

Dubai's Roads and Transport Authority (RTA) has launched a trial run of two electric buses, branded Volvo 7900. The two buses will shuttle on a specific path in both directions between La Mer South, King Salman bin Abdul Aziz Street and Al Sufouh Tram Station. The launch is coordinated with Dubai Electricity and Water Authority (DEWA), Volvo Bus Company, Meraas Real Estate, and ABB Group - leader in the electric bus charging industry. The step reflects RTA's efforts to provide sustainable and environmentally friendly mass transit means.

The two buses are fitted with Opportunity Charging technology, which is experimented for the first time in Dubai. Buses are charged by a standing electric charger supplied by ABB Group at La Mer South. A night electric charger is provided at Al Quoz Bus Depot to run the night charging when the two buses are out of service. Therefore, buses can be electrically charged either through Pantograph using a standing arm under which the bus is parked at La Mer, or cables connecting direct and alternate currents (DC and AC).

Each bus is equipped with modern batteries that enable it to travel 200 km when fully charged. The length of the distance travelled is a function of several factors such as the terrain of the road, temperature, and the operation of the air conditioners. Each bus has 38 seats in addition to 3 foldable seats, a place for People of Determination, and an interactive display screen.

Operational Efficiency

During the trial period, which will continue until March



2022, RTA will measure the operational efficiency of the two electric buses and experiment the charging of electric buses using the charger at La Mer as well as the overnight charger at the Al Quoz Bus Depot. It will train drivers on driving the electric bus and familiarise them with the bus system. It will also train controllers on monitoring the electric bus and the charging unit. RTA will work with project partners to ensure the readiness of buses, electric charging units, and the charging station.

"This unique and comprehensive electric bus charging system that uses the Opportunity Charging technique for operating electric buses on a specific path responds to the initiative of His Highness Sheikh Mohammed bin Rashid Al Maktoum, Vice-President, Prime Minister of the UAE and Ruler of Dubai themed: 'Green Economy for Sustainable Development.' It is part of RTA's initiatives to support the use of eco-friendly vehicles and sustainable transit means. It concurs with the Dubai Government's energy and carbon strategy aimed to make Dubai a model in the efficient use of energy and reduced carbon emissions," said His Excellency Mattar Mohammed Al Tayer, Director-General, Chairman of the Board of Executive Directors of Roads and Transport Authority.

"The project is a unique example of integrated efforts of government departments as well as Public Private Partnership (PPP). It illustrates the integrated efforts of RTA, DEWA, Volvo Bus Co, Meraas Real Estate and ABB Group

aimed to promote sustainable transport in Dubai and reduce carbon emissions of the transport sector," he noted.

"The success of deploying and operating electric buses and vehicles as part of RTA's mass transit fleet hinges largely on the availability and reliability of the charging technology, and whether it supports the continuous operation of buses without stopping or having to return to the charging stations.

priority attaches top environmental conservation and powersaving policies and sets safety and environmental sustainability as one of

its strategic goals. It, therefore, seeks to keep pace with the latest technologies of manufacturing buses, electric batteries, and various charging systems. It underscores the intention to add electric buses to RTA fleet in future to ensure the operation of safe, smooth, and sustainable mass transit means. It is recalled that RTA had launched a series of projects and initiatives to leverage sustainable transport including the trial run of electric buses and the operation of hydrogen or water-powered taxis," concluded Al Tayer.

Encouraging Green Mobility

His Excellency Saeed Mohammed Al Tayer, Vice-Chairman of the Dubai Supreme Council of Energy, Managing Director and CEO of Dubai Electricity and Water Authority (DEWA) praised RTA's efforts of promoting the use of environmentally friendly mobility means. He also commended RTA's project to operate two electric buses using innovative fast-changing technologies.

"Government departments are keen to make concerted efforts towards realising the vision of His Highness Sheikh Mohammed bin Rashid Al Maktoum, Vice-President, Prime Minister of the UAE and Ruler of Dubai, to transform Dubai into the smartest and happiest city in the world besides cementing the profile of the emirate as a global destination of green economy and sustainable development. Dubai's Green Mobility Initiative 2030 aims to stimulate the use of sustainable transit means and align them with the strategic







Mattar Al Tayer:

- The project sets a unique model of integration between government entities and PPP Saeed Al Tayer:
- The Green Mobility 2030 initiative promotes the use of sustainable mobility means



goals of the emirate in terms of sustainability, air quality and the reduction of greenhouse gas emissions," he noted. "The incentives package launched by the Dubai Supreme Council of Energy of which DEWA is part has encouraged green mobility and increased the number of electric cars in Dubai. We hope that this new initiative from RTA would increase the number of environmentally friendly electric buses and encourage community members to use public transport and electric vehicles. This particularly fits with the spread of green charging stations of DEWA, which now exceed 300 stations offering 530 charging points across Dubai," concluded Saeed Mohammed Al Tayer.

Improved Mobility Experience

Manish Sahi, Vice President, Volvo Bus Corporation stated "This trial of Volvo Electric buses is a coming together of RTA Dubai, a leading public transport provider in the region; Volvo Buses, a leader in electromobility globally; ABB, leading charging infrastructure provider and our exclusive local partner for Volvo Buses in Dubai, Al Futtaim Auto & Machinery Company (FAMCO). We are excited about the possibilities electric buses will open up for cities like Dubai. Without emissions and noise, you can even build bus stops indoors.

"Volvo Electric buses will enhance travelling experience not only for passengers but also drivers and other road users, making cities more attractive for their inhabitants. This trial is a strong step forward towards achieving Dubai's goal of being the world's happiest city. We are excited to be RTA's partner in providing sustainable and environmentally friendly public transportation."

Frank Muehlon, President of ABB's E-mobility Division said, "We've witnessed a great example of private-public partnerships at RTA electric Bus Project, where it brought together key stakeholders from the Transport, Utility and Automotive industries. With more than 460,000 chargers installed worldwide in more than 88 countries and along with our global partners like Volvo Buses and local partners like Al Nabooda MENA Mobility."

Ramez Hamdan, Managing Director of Al Futtaim Auto & Machinery Company (FAMCO) stated: "We are excited to be part of this highly strategic initiative and we have worked closely with our partners at (RTA) to provide them with the optimal solution for their strategic vision and we have partnered with the Volvo Bus Corporation to ensure our teams deliver the highest service, maintenance, response and support levels to our valued customer, the RTA."

Promising Initiatives

RTA managed to convert 50% of the total Dubai Taxi fleet into environmentally-friendly hybrid vehicles in 2020. It intends to convert the entire taxi fleet to hybrid and electric vehicles by 2027. In December 2019, it launched the trial run of the first hydrogen taxi in the Middle East and deployed it as a limo service at the Dubai International Airport.

RTA opens new bus route from Umm Al Quwain to Expo 2020

Free transport to visit the event from all emirates of the UAE

Dubai's Roads and Transport Authority (RTA) has launched a new bus route to serve Expo 2020 Dubai visitors from Umm Al Quwain for free. The new service is added to the other 9 bus routes launched recently by RTA to lift Expo visitors from other emirates.

The new bus route (Service No. 152), which is dedicated to transporting visitors from the Emirate of Umm Al Quwain, starts from the vicinity of Mohammed bin Rashid Hall Wedding, passes through the Emirate of Ajman, and heads towards the Expo Opportunity parking zone. The service will feature the newly deployed buses designated for the event, with a daily service frequency of 150 minutes.

"RTA is working to offer the best services to Expo visitors, by providing numerous services such as free bus services (inside or outside Dubai), taxis, Bus on Demand services and Dubai Metro—which is characterised by the proximity of the Expo 2020 station to the entrance of Expo, as well as Al Wasl Plaza, which is located at the heart of Expo 2020 Dubai," said Adel Shakri, Director of Transportation Systems, Public Transport Agency, RTA.

"Several passengers take advantage of the free bus services to travel between the emirates, hence, RTA restricted the ride of these buses to Expo 2020 ticket holders only," commented Shakri.

Free bus rides for Expo visitors from 9 locations in Dubai Roads and Transport Authority (RTA) allocated 126 public buses to serve Expo 2020 Dubai visitors for free from 9 locations across Dubai. Additionally, two routes will be launched to lift Expo visitors from hotels directly to the site of Expo.

RTA provides a unique, smooth, and express transit service for Expo 2020 visitors from various locations in Dubai and across the UAE through the deployment of 203 buses. These buses feature high safety and luxury standards, and comfortable seats and are compatible with Euro 6 low-carbon emission standards, making them the first of their kind in the MENA region.

Movement Within Expo

RTA provides two additional services to Expo 2020 visitors. The first service is EXPO Parking Shuttle to lift visitors from the car parks to the three Expo Gates: (Opportunity, Mobility, and Sustainability). The second service is EXPO People Mover to lift visitors between Expo Gates.





Brand Dubai and RTA renew partnership to provide new creative and artistic experiences in Dubai's public spaces

Brand Dubai, the creative arm of the Government of Dubai Media Office and Dubai's Roads and Transport Authority (RTA) have announced the renewal of a partnership to launch joint initiatives to provide the community with new creative experiences in Dubai's public spaces. The announcement was made during a meeting held at the Government of Dubai Media Office (GDMO) between His Excellency Mattar Mohammed Al Tayer, Director General, Chairman of the Board of Executive Directors of the Roads and Transport Authority (RTA), and Her Excellency Mona Al Marri, Director General of GDMO. As part of the new partnership, the two organisations will work closely with each other to launch projects that will consolidate efforts to realise Dubai's vision to transform itself into an open-air museum.

A fresh series of initiatives to be implemented by Brand Dubai and RTA will see them working with local and international artists to enrich Dubai's public environment and create new connections with the public through art and other forms of creative expression. The renewal of the partnership is the continuation of a fruitful three-



year collaboration which resulted in several unique collaborative creative projects.

His Excellency Mattar Mohammed Al Tayer Director General, Chairman of the Board of Executive Directors of the Roads and Transport Authority (RTA), said: "We are looking forward to combining our resources and capabilities with Brand Dubai to roll out another series of creative projects that will add a new vitality to Dubai's urban spaces. Our previous three-year partnership had yielded several projects that brought the community together to celebrate art, creativity, culture and heritage. RTA is committed to working with leading organisations and artists to transform the environment that Dubai offers to both residents and visitors. Through the next phase of joint projects, we seek to creatively enrich a new set of public spaces in Dubai that will allow the community to relate to these areas in unique new ways."

Her Excellency Mona Al Marri, Director General of the Government of Dubai Media Office said: "Brand Dubai is pleased to further extend its collaboration with RTA to launch a new set of projects that make Dubai's public spaces more inspiring and engaging. Building on our previous three-year partnership, we will be jointly implementing fresh initiatives to infuse a new creative energy and artistic liveliness into the emirate's urban environment, as part of Vice President and Prime Minister of the UAE and Ruler of Dubai HH Sheikh Mohammed bin Rashid Al Maktoum's vision to transform Dubai into the world's best city to live in and work. These projects seek to celebrate the rich heritage, modern cosmopolitan character and future aspirations of the city, in addition to enhancing the quality of life and happiness of people who live in and visit Dubai. We believe these initiatives will also support efforts to promote creativity and innovation and attract talent. tourism and investment into our city."

Rowdah Al Mehrizi, Director of Marketing and Corporate Communication, at the Roads and Transport Authority, said: "We are very happy to launch a new phase of our partnership with Brand Dubai, as part of our commitment to working with our strategic partners to

- Announcement made during a meeting between Mattar Al Tayer and Mona Al Marri at the Government of Dubai Media Office
- Fresh series of joint projects, aimed at further enhancing Dubai's urban ambience, to be rolled out

enrich the public spaces where people live, interact and commune. RTA will continue to work closely with Brand Dubai to create exciting platforms to showcase art and other forms of creativity. This partnership strongly reflects our keenness to work with other organisations to highlight Dubai's identity and values and raise the city's profile as a creative hub and a lifestyle destination." Nehal Badri, Director of Brand Dubai said: "We are excited about the new possibilities that the second phase of our partnership with RTA will bring. By synergising our assets and competencies, we look forward to offering exciting new creative experiences to the public. Brand Dubai will pool its strengths with RTA to undertake joint projects that will creatively reinvigorate community spaces and facilities across Dubai and will contribute to deepening people's connection with urban spaces and their sense of identity, inclusiveness and community, apart from driving innovation and economic vitality." In 2018, Brand Dubai and RTA implemented the Dubai Metro Murals Project, which saw international artists paint murals on pillars of the Dubai Metro on Sheikh Zayed Road between the Dubai International Financial Centre and Emirates Towers stations. As part of the Jumeira Project, the two organisations also launched a series of public art installations at bus stops in 2020 to raise the neighbourhood's profile as a social and

In 2019, Brand Dubai and RTA organised the Metro Music Festival, which featured performances by a host of musicians from both traditional and non-traditional genres of music at Dubai Metro stations. In the same year, they jointly launched the first phase of the Parking Metres Project that saw parking machines in prominent

creative destination.



areas being turned into beautiful artworks.

Brand Dubai, the creative arm of the Government of Dubai Media Office, in partnership with the Roads and Transport Authority (RTA), has launched the second phase of the 'Parking Metres Project', a creative initiative that aims to revitalise parking spaces in key areas of Dubai.

As part of the joint initiative, Brand Dubai has collaborated with five Emirati digital artists to transform parking metres across Dubai into unique works of art inspired by the theme 'Tradition Meets Modernity'. The project, which seeks to infuse a new creative vitality into Dubais urban environment, supports Vice President and Prime Minister of the UAE and Ruler of Dubai His Highness Sheikh Mohammed bin Rashid Al Maktoum's vision of transforming the city into an openair museum.

Rowdah Al Mehrizi Director of Marketing and Corporate Communication, Corporate Administrative Support Services Sector, Roads and Transport Authority (RTA), said: "RTA is pleased to partner with Brand Dubai once again to implement the 'Parking Metres Project' in prominent locations in the city. The launch of the second phase of the project comes as part of our commitment to creatively enrich Dubai's urban environment, enhance the happiness and quality of life of the community, and achieve leadership as a global city that celebrates its cultural richness and diversity."

Shaima Al Suwaidi, City Branding Manager, Brand Dubai, said: "The 'Parking Metres Project', implemented together with RTA, forms part of a series of innovative initiatives we have jointly undertaken over the last few years to enhance Dubai's ambience and develop creatively inspiring urban environments that enhance the experience of both residents and visitors. The diverse artworks featured on the parking metres serve as a fascinating showcase of Dubai's rich heritage and modern multicultural character.



These creative projects are aimed at enhancing Dubai's public spaces as part of the vision to further consolidate the emirate's position as the world's most preferred lifestyle destination."

Fatma Al Mulla, Project Manager of the Parking Metres Project, said: "We have selected five exceptionally talented Emirati digital artists to curate a series of unique aesthetic experiences as part of the effort to transform the city into a canvas for art and creativity. One of the key objectives of this project is to support talented local artists who have made a mark in Dubai's art world. The artworks have been used to decorate parking metres in areas frequented by both residents and tourists including: Burj Khalifa, Al Wasl, Business Bay, 2nd December Street, Marsa Dubai, Al Ras, Gold Souq, Al Shandaghah, Al Buteen, Al Rigga and Rega Al Buteen."

The Emirati artists participating in the project include artist and illustrator Mohamed Aljneibi, who enjoys

experimenting with different ideas, mediums and art styles including cubism, surrealism and storytelling; and Saeed Alemadi, whose art blends popular cartoon characters with Emirati culture and heritage.

Other artists whose works have been featured in the project include Maryam Alobeidli, Founder of 'Kadis's Art Organization'; Alia Alhammadi, whose comic and illustration art combines elements of culture, literature, music and nature; and Alya Fowzan, who uses watercolors, coloured pencils and digital programmes to create unique illustrations.

- Brand Dubai and RTA launch second phase of 'Parking Metres Project'
- Project aims to creatively revitalise parking spaces in key areas of Dubai
- Parking metres to be converted into unique artworks inspired by the theme 'Tradition Meets Modernity'





