

AT A GLANCE

2020 - 2021



SYSTRA

[systra.com](https://www.systra.com)

Our Group



Our mission is to provide communities with safe and sustainable transportation solutions.



“Our ambition is to be the signature team for transportation solutions. It’s ensuring that people think of SYSTRA because of its unique way of initiating mobility projects, its ability to seek out the best experts and to mobilise them to push ever further.”

Pierre Verzat, Chief Executive Officer

Our values



EXCELLENCE

Rooted in our engineering culture, excellence is at once an objective and a way of doing things. Our customers are ambitious and demanding. Our commitment to design the best solutions under the best conditions is a promise of trust, performance, and sustainability.

CONNECTED TEAMS

We connect our experts throughout the entire Group and coordinate them in order to respond to the most complex issues. By going beyond cultural and technical particularities, we create teams around the same objective, in which the talent of each individual contributes to the success of all.

BOLD LEADERSHIP

The projects we accompany profoundly transform mobility. Via our capacity for innovation and our project management know-how, we bring fresh answers to our clients and the bold leadership necessary for change. Our task is to consider, design, and imagine today the mobility solutions of tomorrow.

Our solutions



We are present for all transportation solutions and we support our customers throughout the project lifecycle.



BUS AND BUS
RAPID TRANSIT



LIGHT RAIL
TRANSIT



RAIL



METROS



HIGH SPEED



URBAN CABLE
CARS



BRIDGES



STATIONS



UNDERGROUND
STRUCTURES



ROADS &
HIGHWAYS



DIGITAL AND NEW
MOBILITY SOLUTIONS



CONSULTANCY



PROJECT MANAGEMENT



DESIGN



CONSTRUCTION SUPERVISION



TESTING & COMMISSIONING



OPERATION & MAINTENANCE
ENGINEERING

Our definition of innovation



Innovation at SYSTRA allows us to better serve our clients and all mobility solution users. We constantly strive to transform our service offers to best meet their needs and expectations.

1

STRENGTHENING SOCIAL AND TERRITORIAL COHESION

Emerging new mobility services must serve everyone's needs. Public transport is a driver of reduced social and territorial inequalities. Innovation can help achieve these goals by changing the architecture of our transit systems. More coherent and connected, it needs to facilitate travel and the transition from one mode to another. The idea of Mobility as a Service (MaaS) brings together technology, planning, and data, and significantly boosts our consultancy role. The challenge is to determine the added value of transit solutions and how they can be integrated through technology. From automation to digital platforms, pricing policies, and shared autonomous vehicles, it's a social and economic equation with multiple factors.



2

IMPROVING THE PERFORMANCE AND SAFETY OF TRANSIT SYSTEMS

The demographic growth of cities is placing a strain on transportation infrastructure, which must do more and more within highly constrained environments. Many of our clients are faced with ever-increasing passenger flows and complex traffic patterns caused by a diversity of uses. They also need to ensure the profitability of their infrastructure and quality of service. By innovating in these areas, we can strike the right balance between supply and demand, and between performance, availability, and security. The issues of cybersecurity, optimising the use of data for maintenance, asset data management, and the transformation of existing systems into data-driven technical architectures are especially important for our clients.



3

DESIGNING AND PROMOTING SUSTAINABLE SOLUTIONS TO TACKLE CLIMATE CHANGE

Decarbonised mobility is a key driver in the fight against climate change and environmental challenges. It has become a core component of urban development and helps support regional growth. It is also one of the leading demands made by civil society and a central pillar of public investment and recovery policies. Innovation and technology are valuable tools for boosting the carbon performance of existing infrastructure and integrating environmental issues into project scaling and planning.

Solutions like our Carbontracker tool can be used to calculate the carbon footprint of a project at the design stage and help decision makers make responsible choices.



4

TAKING ADVANTAGE OF THE DIGITAL TRANSFORMATION

Digitalisation is rapidly and profoundly transforming every aspect of mobility. The emergence of new technologies creates as many uses as challenges for our customers. Building on our existing business expertise, we help them implement new technologies to benefit their company. We put BIM at the heart of our engineering projects to strengthen collaboration and design quality but also to serve the needs of future operators or maintenance staff by structuring asset information at the design stage, ensuring digital continuity throughout the lifecycle.



Our approach to sustainability



Our approach to sustainability is rooted in the expectations of our stakeholders and the continuous improvement of our performance. Through our engineering activities, we are committed to significantly reducing our environmental footprint and actively contributing to the United Nations SDGs.

1

TERRITORIES AND COMMUNITIES

Serve by inspiring confidence and providing low-carbon solutions to combat climate change and improve the lives of communities.

2

ENVIRONMENT

Promote low-carbon pathways for our clients by offering low-emission solutions adapted to the challenge of climate change.

3

CLIENTS

Ensure the satisfaction of our clients and establish a close and long-term relationship of trust with them.

4

PEOPLE

Promote engagement and well-being by providing a work environment that fosters dialogue and collaboration, allowing employees to grow and develop their potential.

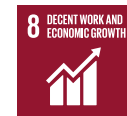
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SHAREHOLDERS

Improve our financial performance to drive long-term profitable growth.

SYSTRA's contribution to the UN Sustainable Development Goals

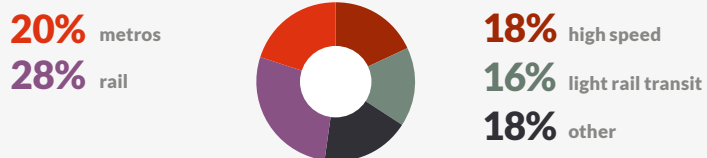
SYSTRA's engineering activities play an especially strong role in achieving the following five UN Sustainable Development Goals:



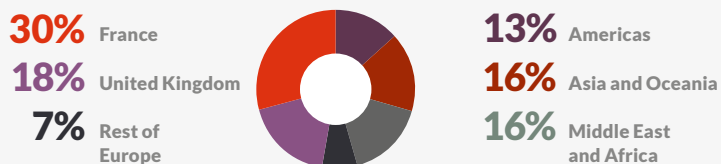
Key figures



BREAKDOWN OF TURNOVER BY MODE OF TRANSPORT



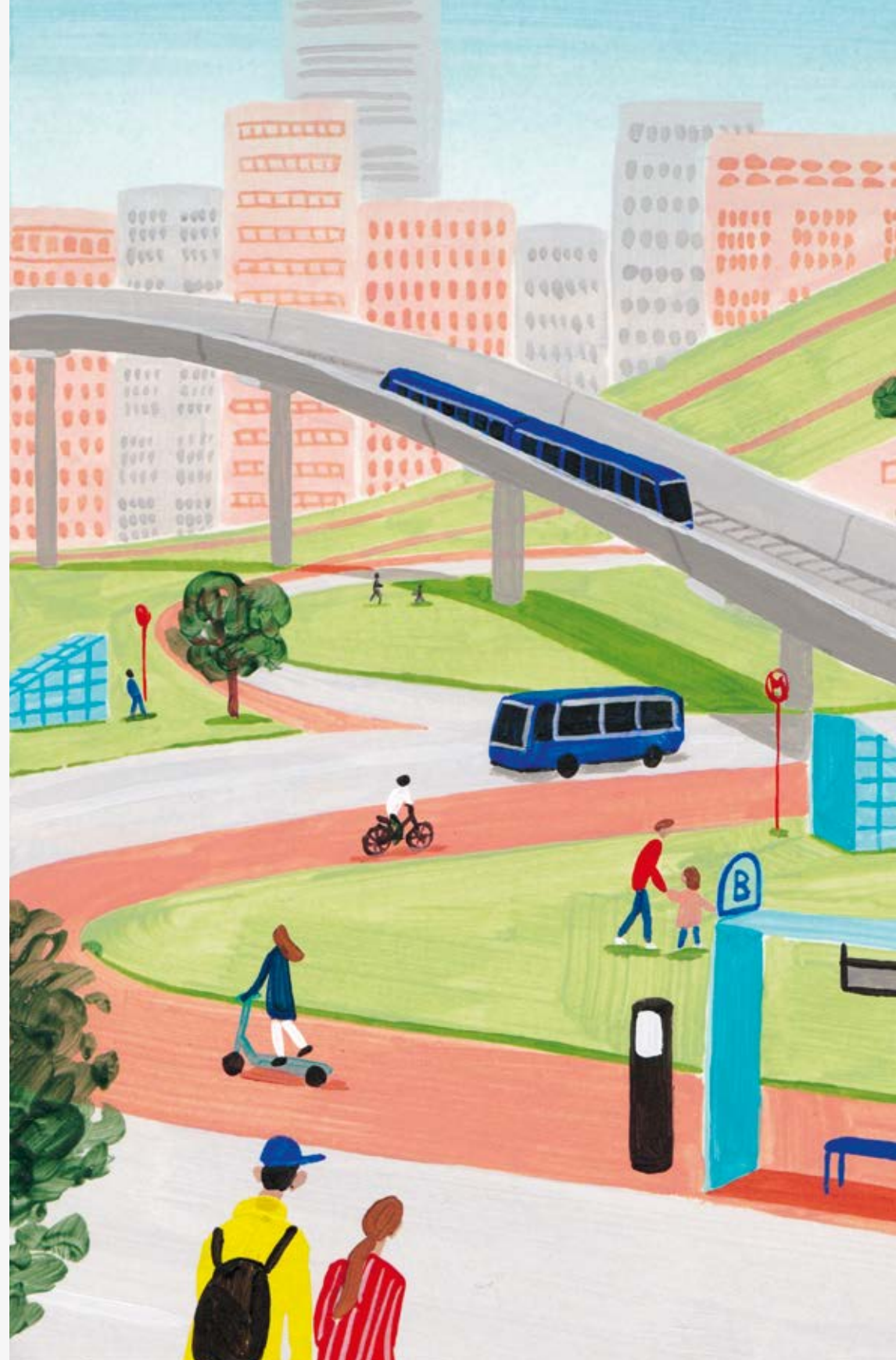
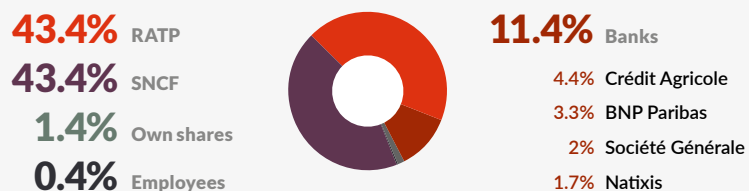
BREAKDOWN OF TURNOVER BY LOCATION



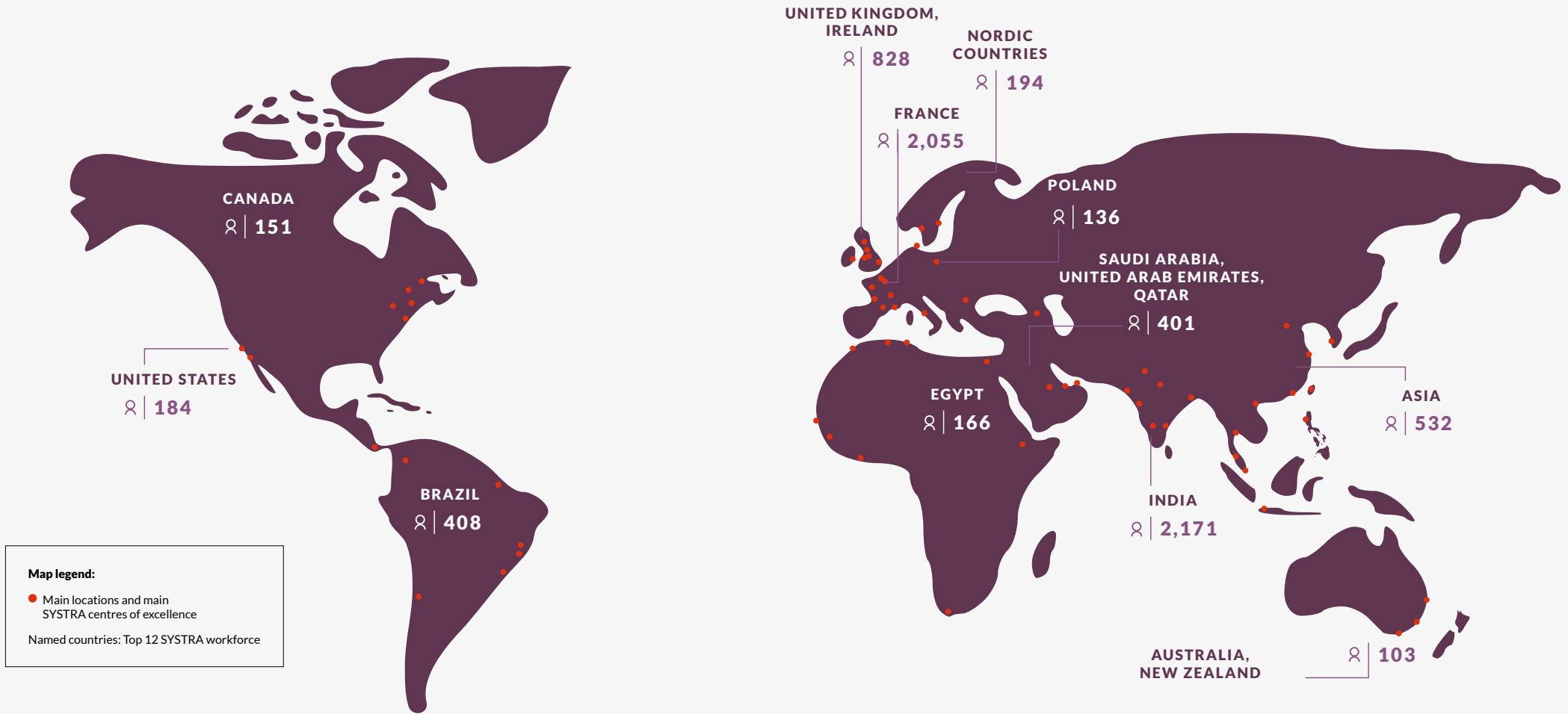
OUR CLIENTS



SHAREHOLDER STRUCTURE



OUR INTERNATIONAL NETWORK: TEAMS AROUND THE WORLD



7,542
employees
40%
growth in
the workforce between
2015 and 2020

€668m
Turnover 2020

€726m
in orders

60+ years
of expertise
in transportation

50%
of high-speed
lines in service
worldwide

1 in 2
metros
designed
worldwide

Ranking 2020 Engineering News-Record (ENR)

#4 Mass transit & rail* #8 Bridges* #10 Transportation** #29 International Design Firms**

* Based on 2019 turnover, published in December 2020

** Based on 2020 turnover, published in August 2021

The maps shown in this public document aim only to illustrate the organisation of operational activities specific to SYSTRA. They do not reflect any intention to express an opinion concerning geopolitical issues. SYSTRA, its subsidiaries and affiliates can in no case be held responsible for any interpretations that may arise.

Key contracts won in 2020



Railway Lines

UNITED ARAB EMIRATES

ETIHAD RAIL

The *Design & Build* teams have won a second round of implementation studies for the largest rail project currently underway in the Middle East. The line will transport some 2 million containers and 30 million tons of construction materials every year to Abu Dhabi and Dubai.

FRANCE

NEW PROVENCE-CÔTE D'AZUR LINE

At the end of 2020, SYSTRA was awarded a single-contractor framework agreement, in a consortium with Egis, for this major rail project between Marseille and Nice. The companies will start by carrying out the environmental engineering design and implementation studies over a period of 13 months, for inclusion in a public inquiry file.

THAILAND

HIGH-SPEED RAIL LINKING 3 AIRPORTS PROJECT

Private concession-holder EHSR has entrusted SYSTRA with the concept design and project management assistance for the construction of a 220-kilometre line linking three international airports on the Gulf of Thailand coast.



Urban

UNITED STATES

SAN FRANCISCO BART

SYSTRA is working on CBTC (Communications-Based Train Control) automation for the Bay Area Rapid Transit (BART), the rail network serving the San Francisco Bay Area. The Design Services During Construction (DSDC) contract covers the modernisation of train control equipment as part of one of the most complex programmes ever undertaken in North America.

DENMARK

COPENHAGEN S-TOG

A joint venture team consisting of COWI, Parsons and SYSTRA was awarded an eight-year framework contract chosen by Danish operator DSB to provide engineering and consultancy services for the automation of the Greater Copenhagen S-rail network. The new transit system will be one of the world's largest and fastest in its class.

INDIA

MUMBAI NETWORKS

In Mumbai, SYSTRA was awarded the contract to deploy a CBTC system for three corridors of the suburban network. This represents half of the journeys made by the city's inhabitants and serves more than 450 kilometres of tracks. Our teams also created the brand image for all the stations on the subway network, which is set to be one of the busiest in the world.

ITALY

GENOA MONORAIL

SYSTRA-SOTECNI will be the lead company of a joint venture responsible for the technical and economic feasibility study and the preliminary studies for the country's first-ever monorail line. It will connect the future Erzelli railway station at the top of a hill housing a university campus, a tech centre, a hospital, and residential areas.

FRANCE/ITALY

LYON-TURIN EURALPIN TUNNEL

SYSTRA was awarded a second project management contract for the Lyon-Turin tunnel, currently one of the largest rail infrastructure projects in Europe. The French and Italian teams are working on a 10-kilometre section, the only underground twin-tube section of this future cross-border tunnel.

BRAZIL

STUDIES FOR THE NATIONAL BANK FOR ECONOMIC AND SOCIAL DEVELOPMENT

SYSTRA was awarded the largest consulting contract in its history in Brazil. Conducted in consortium with GPO, Cescon and Rhein, the project relates to modelling studies for public railway line concessions on several major urban networks: Natal, Recife, João Pessoa, Belo Horizonte, Maceió, and Porto Alegre.

Underground structures

Consultancy

A few emblematic projects



GRAND PARIS EXPRESS

FRANCE



The Grand Paris Express is Europe's largest urban transport project. With its 68 new stations and 200km of lines, it is expected to drive new growth in the Paris region. At its peak, up to 21 tunnel boring machines will operate simultaneously in an area with an already densely concentrated network.



SANTIAGO METRO

CHILE



Meeting the needs of a growing city, SYSTRA has been an actor in the development of the Chilean capital's metro system since the first studies were made in 1967. The Group is involved in the construction of the six lines of the network, which now has 142km of lines, three driverless, and 136 stations serving 1.1 million inhabitants, making it the second largest network in Latin America.



SUBIYAH BRIDGE

KUWAIT



The Sheikh Jaber Al-Ahmad Al-Sabah Bridge is transforming travel in Kuwait Bay and holds the world record for the longest offshore section, with 34.1km of road built over the sea. It forms part of the country's development strategy to keep pace with its Emirati and Saudi neighbours and revive the ancient trade routes between Asia and Europe.

AFD FRAMEWORK AGREEMENT

WORLD



Agence Française de Développement (AFD) finances sustainable mobility infrastructure projects in multiple countries. Under its *Mobilize Your City* framework agreement, AFD has entrusted us with the design of transport plans, feasibility studies and strategic consultancy assignments, including for projects in Douala in Cameroon, Santo Domingo in the Dominican Republic, and Kochi in India.

HIGH SPEED 2

UNITED KINGDOM



The High Speed 2 project will link London to the major central and northern English cities of Birmingham, Manchester, and Leeds. HS2 will increase the country's transport capacity and connectivity, effectively linking 8 of its 10 largest cities. Seven hundred SYSTRA employees from our production centres in seven different countries are involved in this vast project of high environmental value.



BUS NETWORK ELECTRIFICATION

CANADA

6

RTC, the transport network of Quebec, plans to electrify its fleet of 600 buses. SYSTRA Canada has worked with the operator since 2019 on defining a strategic approach to the project, which will lead to the complete overhaul of the bus network within a decade, driven by the opening of a new tramline on which SYSTRA is also working.



6



7

NEW YORK CITY SUBWAY

UNITED STATES

7

The NYCT (New York City Transit) authorities have chosen SYSTRA's expertise in communications-based train control (CBTC) to automate several lines, including the Culver Line in Brooklyn, and the 8th Avenue Line in Manhattan. SYSTRA is also actively involved in plans to increase the accessibility of the New York subway through three assignments entrusted to us.



8

TOURS TRAMWAY

FRANCE

8

After working on the design and construction of the first line nine years ago, SYSTRA was made project manager for the second line of the Tours urban area tramway network. With 12.5km of new lines and 22 stations opening in 2025, this new line will transform mobility in the city and the local area.





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Design and production: La nouvelle

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