Report on Policies and Measures of the G7 Countries to Improve Access to Transportation of All People in All Regions

2024.4

G7 2023 HIROSHIMA SUMMIT

ISE-SHIMA MIE
Transport Ministers' Meeting

Preface

The G7 Transport Ministers' Meeting in Ise-Shima, Mie held from June 16 to 18, 2023, was the first G7 Transport Ministers' Meeting to focus on "Ensuring Mobility in Rural Areas", "Promotion of Barrier-Free Transport", and "Decarbonization of the Transport Sector" under the theme of "Realization of Accessible and Sustainable Transport for All through Innovation", and the G7 prime ministers discussed these issues.

These policy issues have arisen from the social issues that the transportation sectors of the G7 countries are facing, such as aging societies and climate change due to greenhouse gas emissions. I believe that it was a great achievement for the G7 countries to share their recognition of these issues and compile a Ministerial Declaration on the direction of measures to be taken, and communicate it to the world. I would like to reiterate my gratitude to all those involved in the G7 Transport Ministers' Meeting in Ise-Shima, Mie.

The Deputy Prime Minister for Restoration of Ukraine, Mr. Kubrakov also attended the meeting, and we were able to confirm the direction of the G7's actions to support Ukraine's reconstruction.

In the Declaration, the G7 also affirmed the importance of providing accessible transportation for all in regions including rural areas with shrinking populations, utilizing various approaches such as technological innovation and community development policies. Moreover, the G7 agreed to compile a report on transport policies from the G7 countries to share best practices and solutions.
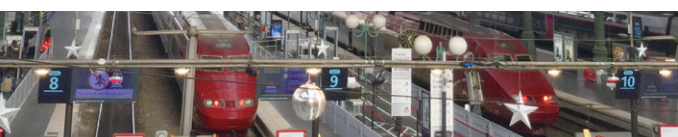
This report compiles case studies of the G7 countries shared by transportation policy authorities of each country. We would like to express our sincere gratitude to the transport policy authorities of the G7 countries for their cooperation with the preparation of this report, and we hope that it will help those who are working enthusiastically to tackle transport issues.

Tetsuo Saito
Minister of Land, Infrastructure, Transport and Tourism, Japan
G7 Presidency in 2023

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1. Background

In 2023, Japan held the G7 presidency and hosted the G7 Transport Ministers' Meeting in Ise-Shima, Mie from June 16 to 18, 2023, in Shima City, Mie Prefecture.

Under the theme of "realization of accessible and sustainable transportation for all through innovation," the G7 Transport Ministers spoke of the respective challenges and related initiatives in each country and discussed directions and joint responses to be taken by the G7.

As a result of these discussions, which focused on "Ensuring Mobility in Rural Areas," "Promotion of Barrier-Free Transport," and "Decarbonization of the Transport Sector," the participants confirmed the importance of accessible and sustainable transport for all in solving common social challenges in the G7 transport sector, and recognized that innovation and collaboration are essential.

Based on the discussions at the meeting, the G7 Transport Ministerial Declaration was adopted. In this Declaration, the G7 countries decided to compile a report on transport policies and measures in each G7 country in order to share solutions and encourage best practices.

References

▌ Excerpted from the G7 Transport Ministerial Declaration

16. We recognize the importance of providing more efficient, sustainable, affordable, equitable, accessible and convenient methods of mobility by utilizing every option available, including through technological advancements, provision of new mobility services and automated and connected road transport designed and developed with accessibility considerations, and implementation of sustainable urban development policy in collaboration with various stakeholders, in order to improve seamless, door-to-door access to all people in all regions, especially outside economic centers including rural areas where the population is decreasing. Based on this recognition, we decide to compile a report on policies and measures in each G7 member to share solutions and encourage best practices.

2. Significance of Transportation and Surrounding Circumstances

Transportation systems and supply chain infrastructure are fundamental to supporting sustainable economic growth, prosperity and employment, and contribute to social well-being by providing access to economic opportunities and essential services. They also promote mobility and connect people, cultures and ideas.

However, recently, the transportation systems and the supply chains which rely on them have been disrupted by external shocks such as the COVID-19 pandemic and Russia's war of aggression against Ukraine, and by changes in socio-economic circumstances such as aging populations and climate change, all of which have undermined the potential benefits that transportation brings.

Barriers to transportation faced by people living in rural areas, older persons, persons with disabilities, low-income households, indigenous peoples, those in the most vulnerable situations, and other disadvantaged people pose major obstacles to achieving multimodal accessibility and affordability for all people. Gender equity and equality are imperative in the transportation sector as well.

Furthermore, human-induced climate change is accelerating, posing grave risks to our nations' transportation infrastructure.

We need to deal with these changes, and innovation is indispensable to accelerate and facilitate the initiatives of each country.

3. Challenges and Opportunities Faced by the G7 Countries

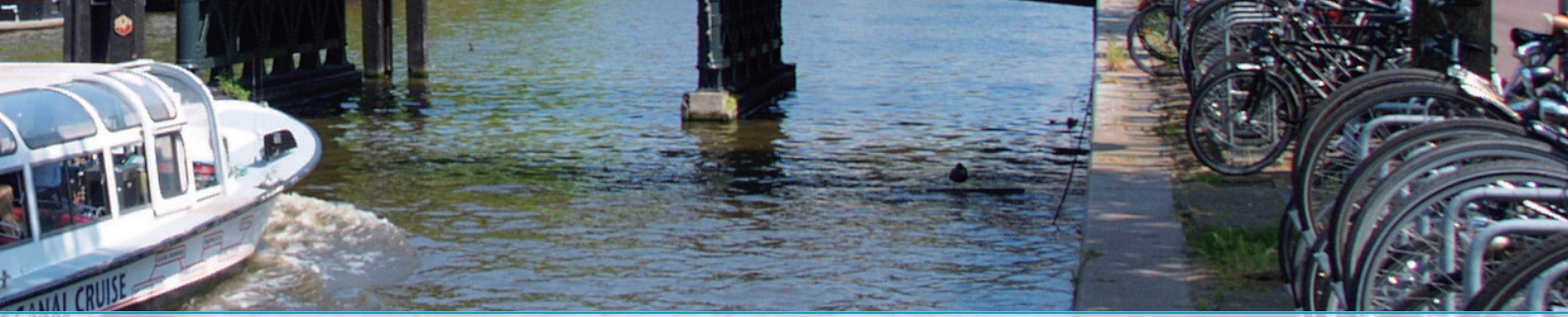## (1) Need for Access to Public Transportation in Rural Areas

As noted above, people living in rural areas face barriers to transportation. This is due to the fact that demand of transportation has been decreasing and transportation is difficult to be sustainable as a result of urbanization and depopulation.

According to UN-Habitat, 56 % of the world's population live in cities as of 2021 and the urban population ratio is expected to increase to 68% in 2050. On the other hand, the percentage of people living in rural areas fell from 38% in 1950 to 22% in 2020, and is expected to drop to 18% in 2070. Under these circumstances, there is concern that the demand for transportation in rural areas will decline, causing difficulties to sustain transportation and less accessibility to services such as health care and education, as well as to employment.

In areas which already face regional disparities in access to such services, online services are becoming more prevalent, but in some cases, people are required to travel long distances to receive medical services. Similarly, in areas with sparse transportation networks, accessibility to employment is limited.

(2) Need for Barrier-Free Transport due to the Aging Population

Another barrier to transportation is related to smooth access. In this regard, the population of 65 years and older in the world accounted for 761 million in 2021, and is expected to climb to 1.6 billion in 2050. The percentage of the elderly is also projected to increase from the current 1 in 10 to 1 in 6 by 2050.

▼Aging Rate in the World

2021	2050 (Prediction)
1 in 10 people 65+ (760 Million)	1 in 6 people 65+ (1.6Billion)
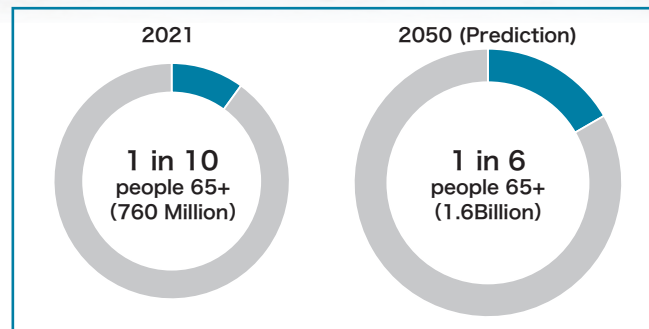
(Source) World Social Report 2023: Leaving No One Behind in an Aging World, United Nations.

Access to transportation is fundamental for the elderly to participate in society and access to services such as medical care. In aging societies, there are aims to increase the number of barrier-free transportations such as stations and vehicles. In some cases, transport networks are designed for commuting purposes. For example, routes for commuting may present obstacles in terms of hospital visits, so the transport network may need to be designed to suit the usage patterns of the elderly people.

(3) Innovation

New technologies and services can address the challenge. Various sectors have been initiated to implement AI and IoT, and in the transportation sector, new modes of transportation such as drones and flying cars, as well as automated delivery vehicles, autonomous vehicles, and smart roads are emerging. New services that efficiently utilize existing means of transportation, including MaaS and sharing services, have also come to the forefront.

4. Policies and Measures of the G7 Countries

(1) Fundamental Laws and Comprehensive Plans for Access to Transportation

Based in part on the social and economic background, the G7 countries have enacted laws and developed comprehensive plans to secure access to transportation. Following these laws and plans, various initiatives are being conducted for accessible and sustainable transportation for all.

For example, France instituted the Mobility Orientation Law (Loi d'orientation des mobilités, LOM), which provides mobility solutions and advice services to guarantee mobility everywhere and for everyone. The Ministry of Infrastructure and Transport (MIT) in Italy developed the Urban Sustainable Mobility Plans (USMP), which support mobility planning to improve urban mobility. Furthermore, from 1 January 2023, application of such plans has become a mandatory requirement for access to funding for mass transport and cycling.

In Japan, problems related to mobility are becoming more serious due to depopulation and other factors, and public transportation operators are facing a deteriorating business environment due to the drop in demand caused by COVID-19. The current major issue is how to provide stable local public transportation services in the future. Japan has done initiatives to offer sustainable local passenger transportation services. For instance, regional public transportation plans, which are master plans for regional public transportation, have been prepared based on the Local Public

Transportation Law to secure the means of transportation for local residents. In addition, in light of the still challenging regional public transportation situation, the Ministry of Land, Infrastructure, Transport and Tourism promotes to "re-design" local public transportation networks to make these more convenient, productive, and sustainable through cooperation and collaboration among local governments, public transportation operators, and various local entities. As an example of transportation collaborating with other sectors, local buses, hospital buses, and school buses were integrated into a single network in cooperation with the welfare and education sectors. There has been a shift from "competition" to "co-creation" even among transportation operators resulting in joint management exempt from antitrust law. Furthermore, in order to promote "re-design," a revised Local Public Transportation Law, which was enacted in 2023, stipulates that the government has to make efforts to encourage cooperation and collaboration among regional stakeholders, and includes the creation and expansion of support systems. Based on the Prime Minister's directive, the government established a conference to accelerate the re-design of regional public transportation network and the resolution of social issues in the region in an integrated manner. In the conference, based on various cases of co-creation, the government, together with related ministries and agencies, deepens the transportation issues in the region and considers solutions that correspond to local conditions, including the use of digital technology.

▼Fundamental Laws and Comprehensive Plans for Access to Transportation

	France	Italy	Japan
Name	Mobility Orientation Law (Loi d'orientation des mobilités, LOM)	Urban Sustainable Mobility Plans (USMP)	Local Public Transportation Law
Back-ground	· Need to respond to the mobility challenges faced by people in situations of economic or social vulnerability, people with disabilities or reduced mobility	· The quantity and quality of public transport services is not adequate · Need to encourage modal shift and the development of soft mobilityand to provide new tools for urbanmobility planning	· A long-term decline in demand due to depopulation, falling birth rates, use of private cars and changing lifestyles, and COVID-19
Objective	· To guarantee mobility everywhere and for everyone	· Provide support in mobility planning	· Promote the revitalization and regeneration of local public transportation systems that help sustainably secure local passenger transport
Measures	· Offer mobility solutions adapted to the different groups of the population in the various territories · Provide mobility advice, services via mobility platforms	· Support for variety of projects · Adoption of USMP became a necessary requirement for access to funding for both rapid mass transport and cycling.	· Enhance cooperation among the parties concerned in each local area · Railway Business Restructuring Project

(2) Support for Access to Local Transportation

Subsidies and other forms of operational support are provided to ensure access to local transportation. For example, Italy provides funding, which is accompanied by USMP, for investment in the operation of various mobility modes such as railroads, ships, and bicycles, as well as on home-work

travel plans. Japan government supports the operation of buses and taxis, as well as marine and aerial routes to remote islands, in order to secure and maintain an optimal daily transport network in accordance with local characteristics and actual conditions. Japan also provides support to local authorities when a local government identifies a network (rail/bus routes) as necessary in the medium to long term in its Local Public Transportation Plan, Location Optimization Plan, or other urban development and tourism plans, and then develops facilities at transport hubs necessary to establish the network.

Aside from subsidies, Japan has taken other approaches to support operations. These include initiatives to encourage cooperation among small- and medium-sized transportation operators.

For example, three regional airlines in the Kyushu Region and two major airlines established the "Essential Air Service Alliance LLP" (EAS LLP) in October 2019, with advice and support from the Ministry of Land, Infrastructure, Transport, and Tourism. In October 2023, the same five airlines evolved further and formed a new "Essential Air Service Alliance" (EAS Alliance).The EAS Alliance aims to enhance sales capabilities and foster deeper collaboration among its members. By leveraging the expertise, market presence, and influential power of major airlines, the alliance, as operators of the same aircraft type, intends to ensure the sustainability of regional aviation services in response to the declining passengers caused by depopulation.

In Japan, the Local Public Transportation Law was revised in 2023 to restructure rail routes which are unable to take full advantage of the characteristics of railways as a form of mass transit. The amendment to this law requires the national government to organize a council of restructuring at the request of local governments or railway companies to discuss and formulate a policy on either maintaining and upgrading rail transport or to alternating to other transportation modes. It is expected that this initiative will realize a highly convenient and sustainable local public transportation network.

(3) Improve Accessibility to Public Transportation

Several G7 countries have taken measures to improve access to public transportation.

In Canada, the Transportation Data Information Hub & Mobility Performance Indicator is a key to visualize the transportation performance (travel time index) and indicate areas for improvement.

In Japan, the local governments have been promoting initiatives to review route networks, fares, and timetables to improve usability. Specifically, the Japanese government provides operational support and other measures to facilitate a project when a business plan prepared is approved by local authorities.

Germany provides local public transport model projects, which aim to fund model projects to strengthen the quality of service and operation (e.g. better timetable frequency). In addition, the "Deutschlandticket" was introduced in Germany, an electronic nationwide ticket for local and regional public transport that offers a fixed monthly fare for all means of public transport. In France, the introduction of a single ticket is being considered to simplify access to existing mobility services for all. In the short term, a pilot project to test a mobile application with a "pay as you go" feature is planned, while in the longer term, a vision was adopted to improve ticketing interoperability and evolve ticketing systems.

The G7 countries are also working to improve accessibility for the elderly, people with disabilities, and others with mobility impairments. In the U.S., for example, regulations have been enacted to allow wheelchair-accessible toilets on airplanes, and barrier-free railroad stations and facilities are also promoted to improve accessibility for persons with disabilities. The U.S. also promotes inclusive design to enable accessibility of electric vehicle charging and automated vehicles for people with disabilities. Similarly, Japan enacted the "Act on Promotion of Smooth Transportation, etc. of Elderly Persons, Disabled Persons, etc." that regulates the structure of passenger facilities including stations and vehicles. This Act also sets forth provisions for subsidies to eliminate steps in existing passenger facilities and to install lifts. As an initiative other than infrastructure renovation, a platform developed in France in collaboration with the regional transport departments and a private

company named Mon Copilote allows people with reduced mobility to find a companion and receive mobility support services. In 2018, the UK government published the Inclusive Transport Strategy (ITS) to achieve an ambitious goal of creating an inclusive transport system by 2030, where disabled people could travel easily, confidently and without additional cost. The ITS included 95 commitments and actions including the introduction of an app to book assistance when using trains and a training package for transport operators.
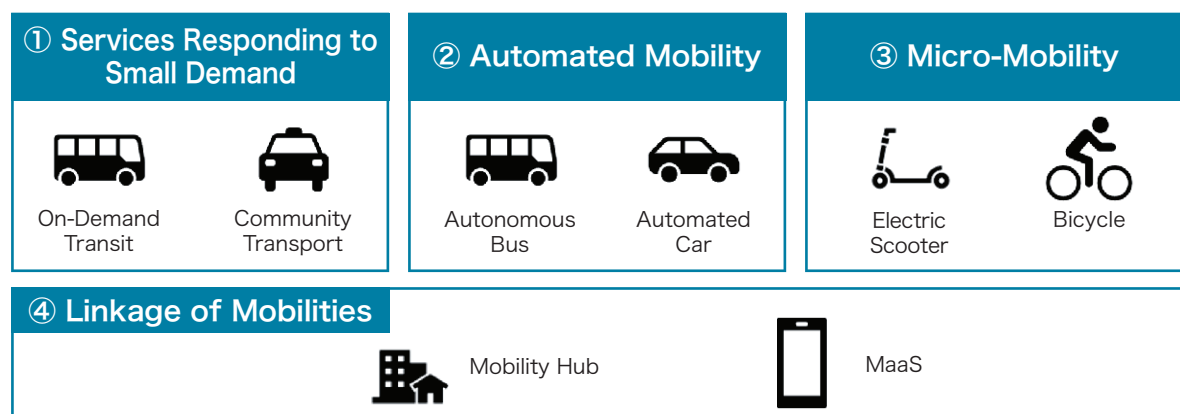
Several programs are implemented in the U.S. to reckon with existing transportation infrastructure to reconnect local communities. The Department of Transportation (DOT) launched its Reconnecting Communities and Neighborhoods (RCN) grant program to support areas that have been cut off from opportunities due to transportation infrastructure such as highways, and areas affected by "burdening facility" that is a source of air pollution, noise and other burdens.

(4) Introduction of New Mobility Services

As access to transportation is more limited in rural areas than in urban areas, it is effective to introduce flexible and innovative mobility services that suit local circumstances to complement or substitute existing transportation by utilizing emerging technologies. Initiatives in the G7 countries can be categorized into the four groups described below.

① **Introduction of Services Responding to Small Demand:** Users travel as passengers sharing the same transport with others. This applies to On-Demand Transport, which is characterized by demand-responsive and flexible transportation, and community transport by volunteers.

② **Introduction of Automated Mobility:** A transportation that can run without a driver on board by utilizing connected and automated driving technologies. Autonomous buses and self-driving vehicles fall under this category.

③ **Introduction of Micro-Mobility:** Often used for short distances and connections to public transportation, this includes micro-mobility such as electric bicycles and mopeds, as well as their sharing services.

④ **Linkage of Mobilities:** Link various mobilities, including public transportation, and make them available in a centralized manner to improve user convenience. Mobility hubs, which are physical infrastructure, and Mobility as a Service (MaaS), which is a digital platform, belong to this category.

▼New Mobility Services

① Services Responding to Small Demand	② Automated Mobility	③ Micro-Mobility
On-Demand Transit / Community Transport	Autonomous Bus / Automated Car	Electric Scooter / Bicycle

④ Linkage of Mobilities
Mobility Hub / MaaS

① Introduction of Services Responding to Small Demand

This section applies to On-Demand Transit, which is characterized by demand-responsive and flexible transportation, and community transport by volunteers.

(i) On-Demand Transport

The characteristics of on-demand transport are flexible routes and operating schedules, and this form of mobility has the potential to improve accessibility for people with diverse needs. Passengers book a ride through a call or mobile app, designating the origin and destination, pick-up and drop-off times, and other information.

On-demand transport has primary two roles: to complement transportation, and to substitute transportation.

In Japan, the government offers subsidies under the Project for Developing Road Transportation, for the introduction of AI on-demand transportation to ensure sustainable, on-time, fast, and comfortable local passenger transport services. A model project in Germany also intends to improve the quality of on-demand services.

In implementing on-demand transport, a deep understanding of the needs in the region and an operation suitable for the demands of users are decisive. Indeed, according to a study by France Mobilités, on-demand transport accelerates modal shift if it supplements other transportation.

(ii) Community Transport

Community transport is a non-profit transport mode organized voluntarily by residents in response to community needs.

For example, in France, an initiative named "Covoit' santé 63" is implemented in sparsely populated areas in which local volunteer drivers take part.

Community transport tends to face common challenges such as a lack of know-how, technology, human resources, and funds because it is often carried out by volunteers. To deal with such issues, the German state of Baden-Württemberg has established a state agency to support the development and operation of community transport by municipalities and residents. The agency also provides manuals and IT tools for route planning, operation, and management.

② Introduction of Automated Mobility

Autonomous vehicles are vehicles that can run solely on their own systems without instructions including human operation.

In the United Kingdom, government and industry funding has been allocated to study the feasibility of autonomous and self-driving vehicles in order to improve cost efficiency, reduce carbon emissions, improve traffic safety and security, and connect to a variety of services. For example, there is a project studying the feasibility of a zero-emission self-driving system called Autonomous Healthlink to improve access to hospitals. And in the city of Inverness in the Scottish Highlands and Islands, another project is being conducted to study a self-driving vehicle service that connects the local university campus to key locations in the city.

Canada is also working to support the safe testing and deployment of automated driving systems which hold great promise to enhance road safety and mobility options for underserved populations. Transport Canada (TC) has published guidelines for vehicles equipped with automated driving systems and implemented funding programs including the "Program to Advance Connectivity and Automation in the Transportation Systems" to support experimental initiatives using automated vehicles in various cities in Canada.

In 2018, France formulated a strategy for the development of autonomous vehicles to prepare the legal and regulatory framework for the use of automation, as well as to support research and experimentation. In 2020, the strategy was updated to deploy the most relevant and feasible mobility services. Specifically, it aims to accelerate safety validation, ownership of the challenges of automated mobility, deployment of pilot services, and European integration of French work.

In Japan, automated driving is expected to contribute to sustaining public transportation that serve as a means of local mobility. Japan has established the "Future of Transportation Society Utilizing Digital Technologies", which is Japan's overall strategy for automated driving, to accelerates initiatives to step toward the practical use of automated driving. In April 2023, revised Road Traffic Law was enforced, which enables the unmanned automated mobility services with only remote monitoring in limited areas, equivalent to the Level 4. In response to this, in May 2023, a driverless Level 4 automated driving service was launched in the town of Eiheiji, Fukui Prefecture, with the approval of the Ministry of Land, Infrastructure, Transport and Tourism. Japan provides support for the initial investment to ensure business feasibility and so on, of the implementation of automated driving by local authorities in order to launch automated driving services in about 50 locations by FY2025 and in more than 100 locations by FY2027.

③ Introduction of Micro-Mobility

Micro-mobility is a form of lightweight mobility such as electric scooters, electric bicycles, and electric kickboards, which have rapidly become popular in recent years. The use of micro-mobility enables people to travel long distances with less physical effort and has a low impact on the environment.

In Italy, with the support of the USMP, €225 million was funded for the design and construction of cycle stations as well as safety initiatives. In France, electric bicycles have been recognized as one important tool in guaranteeing the right to mobility as is defined in the LOM. The EU has agreed on the European Declaration on Cycling with other organizations to promote cycling in the mobility chain.

④ Linkage of Mobilities

In improving accessibility to transportation, it is indispensable to link various mobility services with transportation networks such as rail and bus. Mobility hubs that integrate transportation infrastructure and MaaS, a digital platform, are the main methods of managing and integrating mobility.

(i) Mobility Hub

Mobility hubs are terminals that consist mainly of buses, railroads, and other transportation and are also home to multiple transportation modes, such as on-demand transport, and micro-mobility. In addition to functioning as transportation hubs, community hubs with cafes, offices, and other multi-purpose spaces attach to mobility hubs to revitalize local town centers.

In Japan, the government provides support to local authorities when a local government identifies a network (rail and bus routes) as necessary in the medium to long term in its Local Public Transportation Plan, Location Optimization Plan, or other urban development and tourism plans, and then develops facilities at transport hubs necessary for establishing the network. In France, throughout an initiative named "MOBI'PLUM", a network of genuine mobility stations was created in 36 rural communes to meet the mobility needs of residents who cannot use public transport and are dependent on private cars.

(ii) MaaS

MaaS is an initiative to link and manage multiple transport-related services on a single platform.

Go! Vermont Trip Planner in Vermont, USA, is a MaaS that primarily targets residents in rural areas, people with disabilities, and the elderly. It is a statewide platform in Vermont and provides centralized information on multiple transportation modes, including on-demand transport.

In Germany, in the capital city of Berlin, payments for various types of mobility, such as bike-sharing systems and electric scooters, can be carried out in an application called Jelbi. The local public transport model projects are also supporting the development of a platform for mobility.

In Japan, since there are numerous transportation operators per each region and transportation

mode, MaaS is being promoted to link these into a single service to create a more convenient mobility environment. Operators offer services in consideration of the accessibility for people with mobility difficulties, such as wheelchair users and the visually impaired. They provide services such as arranging assistance collectively in using public transportation and walking route navigation according to the characteristics of the user. To improve the services provided by MaaS, it is essential to link data among participating operators. Therefore, Japan has developed the "Guidelines for Linking MaaS-related Data", which organizes data items to be linked, linkage methods and other matters that should be taken into account for smooth data linkage.

Solidarity Mobility

Background

- For people in situations of economic or social vulnerability, people with disabilities or reduced mobility, transport is very often an obstacle course. A better access to mobility is a fundamental issue, and the French Government is making it a priority.

- The "Loi d'orientation des mobilités" - LOM - (Mobility Orientation Law) brings concrete and long-awaited advances in this direction. The aim is to encourage local authorities and transport operators to improve the overall quality of service for these passengers, to ensure better continuity of the user journey, and to enable the emergence of innovative multimodal information services.

Measures

- The concept of « **solidarity mobility** » is part of a public policy objective by LOM and significant a right to mobility. The aim is to guarantee mobility everywhere and for everyone, in order to respond to the mobility challenges faced by people in situations of economic or social vulnerability, people with disabilities or reduced mobility;

- For the Ministry of Transport, it is now a question of **implementing the objectives of LOM**, which aim to ensure access to mobility, offer mobility solutions adapted to the different groups of the population in the various territories, and to require local authorities to coordinate their actions to ensure more systemic and efficient mobility.

- **Levers for action:**
  - Making current transport services more inclusive by introducing dedicated fares and dedicated information;
  - Developing specific services, for example by setting up socially useful transport, transport on demand, community garages, electric bicycle hire, assistance with driving licenses, etc.;
  - Supporting the most vulnerable groups by providing mobility advice, services via mobility platforms.

Example

① Mon Copilote

- A private company that provides a mobility assistance service for people with reduced mobility, linking them to companions via a platform to help them with their daily journeys. Journeys can be made by various means: on foot, by public transport or by car. Beneficiaries use the platform to describe their journeys and any special needs they may have, and submit an offer to their future companion. This mobility solution was developed in Clermont-Ferrand and Pau in collaboration with the local AOMs (Organising Authority for Mobilities).

② MOBI'PLUM: Mobility stations in rural areas, Pas-de-Calais, Région Haut de France (2020)

- Creation of a network of genuine mobility stations in rural areas (24,000 inhabitants in 36 communes) as a solution to the mobility needs of residents who cannot use public transport and are dependent on private cars. Since mobility stations are equipped with electric-bike and electric-car sharing services and charger of electric cars, people can move between mobility stations as they like.

③ Covoit' santé 63: Puy de Dome, Région Auvergne-Rhône Alpes (2019)

- Strengthening the regional network in sparsely populated areas by mobilising various local actors, volunteer drivers and regional coordinators.
- Health car-sharing is a way for users to take back control of their health care in the broadest sense and to become autonomous in their care. Volunteer drivers help residents to take to hospital and people share their rides to healthcare services.

Expected Outcomes

- The concept of « **solidarity mobility** » is not limited to the sphere of transport, but also includes the social, employment and integration spheres. The challenge now is to bring together this ecosystem of players involved in socially responsible mobility. The desire to get the different spheres (mobility, social, employment/inclusion) to work together is supported by through the obligation to set up joint action plans to promote inclusive mobility.

FRANCE MOBILITÉS
FRENCH MOBILITY

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French Republic Case Study 2

A Single Ticket for All Modes of Mobility

- Why a single ticket? To meet social and ecological challenges:
  - Simplify access to existing mobility services for all;
  - Create interoperability between ticketing systems;
  - Encourage changes in mobility behavior and practices;
  - Cooperation between the State and authorities responsible for organizing mobility.

- The single ticket is a tool for improving local and national public policies. This project doesn't imply a single national fare.
  - In France: 30% of greenhouse gas emissions are caused by transport. 80% of journeys are made by car. There are 200 different ticketing systems in France and 713 authorities responsible for organizing and managing mobility in France.

- The single ticket is developed thanks to the support of the French Transport Innovation Agency. 3 keys missions as follows:
  - Promoting innovation;
  - Supervising and leading local mobility policies;
  - Manage and drive transport data management policy.

- Why set up a Transport Innovation Agency? Developing innovation for sustainable mobility, with all the stakeholders: local and regional authorities, operators, companies and the public sector. To meet four major challenges:
  - The ecological transition;
  - The digital revolution;
  - Territorial cohesion;
  - Resilience in times of crisis.

- Aims of the Transport Innovation Agency:
  - Identify, capture and reference innovations;
  - Encourage and foster a culture of open innovation in the transport ecosystem;
  - Establish partnership with players in the innovation ecosystem;
  - Facilitate experimentation and scaling up in local areas;
  - Support innovative project leaders to remove barriers to innovation;
  - Coordinating, simplifying and centralizing existing and emerging services offered by the French Ministry's departments.

Measures

- A design competition was organized in France with all stakeholders of the mobility ecosystem (over 70 participants) at the beginning of 2023 with two aims:
  - How to facilitate the use of all modes of transport at the national level;
  - How to create a "single ticket" in less than 2 years;

- In July 2023, a roadmap with two milestones was adopted:
  1. A "short-term" project: a mobile application with a "pay as you go" feature tested on a list of pilots (cities or regions) in France;
  2. A "long-run" vision at the national level with public transport authorities: managing ticketing interoperability, the evolution of ticketing systems, strategy on standards, etc.

Expected Outcomes

- Next Steps :
  - Launch a public tender and start the experimentation in the end of 2024;
  - Define a target service by adding functionalities and territories from 2025 onwards.

French Republic Case Study 3

Automated and Connected Road Mobility

- In 2018, France adopted a strategy for the development of autonomous vehicles, updated in 2020.This 2020 update marks a new stage: On the one hand, it explicitly takes into account connectivity issues, and on the other, and more importantly, it focuses not only on vehicles but also on the mobility services made possible by autonomous vehicles, mobility services made possible by automation and connectivity. It aims to accelerate France's commitment to regulatory, technological and economic models that will make our country a leader in the deployment of the most relevant and feasible mobility services and achievable.

- The strategy formulated in 2018:
  · Defined three principles of action: safety, progressiveness, acceptance - which are still in force;
  · Established cross-functional working and leadership frameworks in a public-private ecosystem;
  · Focus on two main areas
    - Preparing the legal and regulatory framework for the use of automation
    - Supporting research and experimentation.

- The objectives of the December 2020 update were:
  · Intensify work on safety validation in support of the regulatory framework;
  · Facilitate local stakeholders to take ownership of the challenges of automated mobility;
  · Support the deployment of "pilot services" to test business models and operating conditions;
  · Strengthen the European integration of French work, which is a precursor.

Measures and Expected Outcomes

- In the second half of 2022, a number of collective working tools will be used to work with all the stakeholders to update the strategy. Three main points emerge:
  1. The need to extend and deepen the strategy, building on what has already been achieved;
  2. Integrating technological opportunities into the range of mobility solutions for passengers;
  3. The need to industrialize vehicle and service offerings and services to move from experimentation to deployment.

- The four priority actions for France are therefore:
  1. Prioritize and coordinate the deployment of connectivity and data exchange systems;
  2. Finance investment projects in industrial supply of automated road mobility, ambitious service pilots, or first commercial deployments, in particular via France 2030 and by mobilizing European credits;
  3. Supporting volunteer local authorities and operators in the deployment of passenger services (the 2030 target is 100 to 500 services without an on-board operator, i.e. several thousand vehicles);
  4. Finalize the legal framework for automated freight and logistics.

- Support actions:

  The actions listed below are intended to contribute to these priority actions:
  - Prospects for use: evaluation of experiments, development factors to 2030 and skills and training needs;
  - Regulations: safety demonstration repositories (including remote intervention and connectivity), specification of a database of safety demonstration scenarios, participation in EU and UN work on regulations and safety demonstration, specific requirements for valet parking cases;
  - Connectivity and data: common priorities for connectivity use cases, functional needs of connectivity use cases, territorial coverage issues and relevance of different technologies, data specifications for the application of national and European regulations, secure data exchange architecture;
  - Coordination: coordination and monitoring procedures will be extended and strengthened, with even greater involvement of local authorities and connectivity and logistics operators in groups to prepare and support regulation (in particular through safety standards) and work on acceptance and social aspects.

Reconnecting Communities and Neighborhoods (RCN) Grant Program

Background

- "Transportation should never divide communities – its purpose is to connect people to jobs, schools, housing, groceries, family, places of worship, and more. That's what the Reconnecting Communities program and the Neighborhood Access and Equity program are designed to ensure." - Secretary Buttigieg

- At least a million people and businesses were displaced mostly in low income, minority neighborhoods during the buildout of the highway system. Community members that remained have continued to deal with the impacts of the highway creating a physical barrier to opportunity.

- In 2023, Americans of every background are still paying the price for decisions made during the midcentury.

- **Reconnecting Communities isn't about assigning blame for choices that were made before most of us were born.**

- But it is about all of us reckoning with the effects of that history that we're still living with; realizing it was the result of man-made decisions. We can make better decisions together.

- DOT (Department of Transportation) is excited to launch the Reconnecting Communities and Neighborhoods program to reconnect communities cut off from opportunity due to transportation infrastructure, and to address the detrimental infrastructure decisions of the past through new transportation that brings communities together.

Image source: US Department of Transportation

Aerial Photo of San Francisco on July 2, 1959
Duke Downey/San Francisco Chronicle/Getty Images

Hands On Atlanta

FHWA: Pueblo of Acoma, NM

Jason Cameron/Getty Images

Measures

- Three grant types under one combined NOFO (Notice of Funding Opportunities)
  - **Grant #1: Capital Construction Grants**
    - Funds for reconnecting-focused projects
    - Would include funding for projects focused on reducing environmental harm and improving access
  - **Grant #2: Community Planning Grants**
    - Funds for planning activities to support future construction projects
    - Would allow for innovative community planning to address localized transportation challenges
  - **Grant #3: Regional Partnerships Challenge Grants (NAE only)**
    - Funds for projects to encourage regional collaboration and innovation among partners to address regional challenges (vs. one facility)
    - Designed to collaboratively focus regions on equitable access and mobility challenges, anti-displacement and GHG reduction
- RCN Combined Funding - Availability and Award Amounts
  - A total of **$1B** in grant funding is available through the **RCP Program** for FY 2022-26 for planning, construction and technical assistance.
  - A total of **$3.155B*** in grant funding is available through the **NAE Program** for FY 2023-26 for planning, construction and technical assistance.
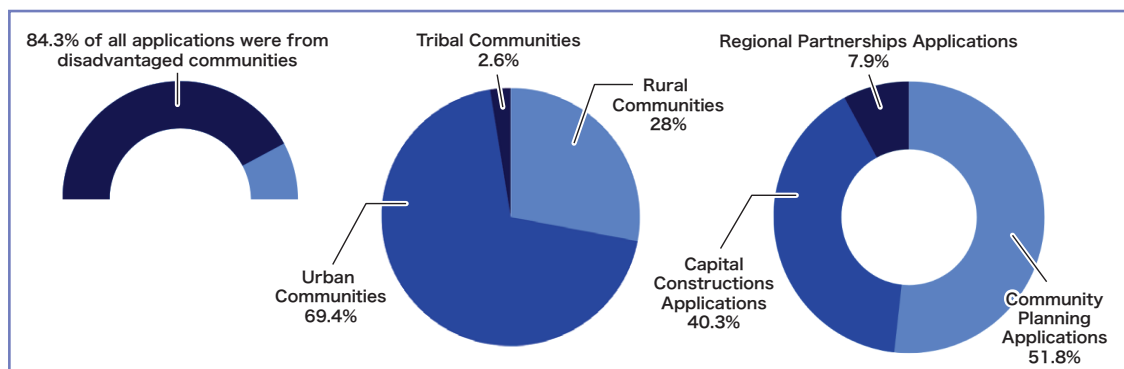
Fiscal Year	2022	2023	2024	2025	2026	TOTAL
Planning	$50M	$50M	$50M	$50M	$50M	**$250M**
Capital	$145M	$148M	$150M	$152M	$155M	**$750M**
Total	**$195M**	**$198M**	**$200M**	**$202M**	**$205M**	**$1000M**

* "Up to" $3.155B of NAE funding available in FY23. DOT is reserving the right to not expend all funds. Final numbers will depend on application numbers and quality.

Fiscal Year	2023 - 2026
Planning	$135M
Capital	Up to $2.57B
Regional Partnership Challenge	Up to $450M
Total	**$3.155B**

- RCN Eligible Transportation Facilities
  - **RCP (Reconnecting Communities Pilot) & NAE (Neighborhood Access and Equity)**
    - ***Transportation facilities*** *that create barriers to community connectivity"* due to high speeds, grade separations, or other design factors. This includes barriers to mobility, access, or economic development.
    e.g.) Highways, arterials, parkways, collectors, local roads, transit lines or rail lines, viaducts or bridges, gas pipelines, tunnels, bus depots
  - **NAE**
    - ***"Burdening facility"***: a surface transportation facility that is a *source of air pollution, noise, stormwater, heat, or other* **burden** to a disadvantaged or underserved community.
    e.g.) Highways, arterials, parkways, collectors, local roads, viaducts or bridges, rail yards, bus depots that are the **source of the burdens (not necessarily dividing facilities)**

- Examples of Reconnecting Solutions
  - •**Examples of removing, retrofitting, mitigating or replacing an existing, eligible facility may include:**
    - High-quality public transportation
    - Infrastructure removal
    - ADA (Americans with Disabilities Act) Accessible Pedestrian walkways and overpasses
    - Capping and lids
    - Linear parks and trails / tree canopy cover improvement
    - Roadway redesigns and complete streets conversions
    - Main street revitalization, and more

- The Disadvantaged Community Designation
  - The FY 2023 RCN Grant Opportunity includes an updated definition of an economically disadvantaged community and different tools to determine whether a project is located within an economically disadvantaged community.
  - The NAE Statute defines economically disadvantaged communities as a community that:
    - A. is economically disadvantaged, underserved, or located in an area of persistent poverty;
    - B. has entered or will enter into a community benefits agreement with representatives of the community;
    - C. has an anti-displacement policy, a community land trust, or a community advisory board in effect; or
    - D. has demonstrated a plan for employing local residents in the area impacted by the activity or project proposed under this section.

- Merit Criteria: Planning and Capital Construction
  1. Equity and Environmental Justice
  2. Access
  3. Facility Suitability
  4. Community Engagement and Community-based Stewardship, Management, and Partnerships
  5. Equitable Development
  6. Climate and Environment
  7. Workforce Development and Economic Opportunity

- FY23 RCN at a Glance
  - The FY23 Reconnecting Communities and Neighborhoods (RCN) NOFO closed on September 28, 2023. Applications are currently under review.
    - **- 84.3% of all applications were from disadvantaged communities**
  - **$8.4 Billion was requested through the Reconnecting Communities and Neighborhoods Program**
  - **$3.35 Billion is available for FY23 awards.** This oversubscription demonstrates the demand for this innovative program.

84.3% of all applications were from disadvantaged communities

Tribal Communities 2.6%
Rural Communities 28%
Urban Communities 69.4%

Regional Partnerships Applications 7.9%
Capital Constructions Applications 40.3%
Community Planning Applications 51.8%

- A Look Back – FY22 RCP Awards
  - 45 Awards were granted in FY22 totaling **$185.2 million** in funding
    - 6 awards were Construction Grants ($138.2M / ~75%)
    - 39 awards were Planning Grants ($47M / ~25%)
  - All awards were given to projects serving disadvantaged communities

Example

① (Rural Project) - Reconnecting Bluefield RCP Award: $1 million

- The planning award allows the West Virginia Department of Transportation to examine how to improve connectivity for Bluefield's historic Black community, the "East End," currently divided from downtown Bluefield by Norfolk Southern Railyard.
- The Planning Study and Preliminary Engineering Analysis will focus on a "T" shaped corridor connecting the East End, downtown Bluefield, and local amenities.

② (Rural Project) - Route 2 Overpass Study (R2OS)
RCP Award: $741,800

- The City of North Adams, MA will use award this award to assess the Route 2 overpass that divides the downtown core of North Adams
- Assessing the re-integration of Route 2 into the downtown of North Adams
- R2OS will involve a consolidation of past studies, commission of multiple analyses and diverse community engagement

Expected Outcomes

- This program will accelerate community-led efforts to reconnect their communities, making it easier, safer, more affordable to get around.

(References)
- Climate and Economic Justice Screening Tool (CEJST)：
  https://screeningtool.geoplatform.gov/en/#3/33.47/-97.5

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Actions to Advance USDOT Disability Policy Priorities

Background

- More than **12,000 wheelchairs** were mishandled on flights between October 2022 and October 2023. Enabling passengers to stay in their personal wheelchairs on aircraft will increase the safety and dignity of air travel and **increase access for travelers with disabilities.**

- According to the National Transit Database in 2022, nearly **17% of all transit stations in the U.S. were not accessible**. As of 2023, FHWA has not accepted ADA Transition Plans for **4 States and territories**. Our streets should be safe for everyone, regardless of age or ability.

- The labor force participation rate of American adults with disabilities is approximately **half** of that of the population of adults without disabilities, and the unemployment rate is approximately **double**.

- Current ADA standards do not fully address EV charging infrastructure, risking lack of access for people with disabilities. For example, the **weight of EV charging cables** makes them inaccessible to some.

Measures

(1) Enable Safe and Accessible Air Travel

- Develop and advance a research roadmap, building from the Access Board / Transportation Research Board (TRB) Report on the Feasibility of Wheelchair Securement Systems on Passenger Aircraft, to support future rulemaking

  · **Completed**. The research roadmap was published on USDOT's website and promoted as part of the July 2023 anniversary of the ADA. USDOT plans to complete this roadmap by December 2025.

- Issue rulemaking on Ensuring Safe Accommodations for Air Travelers with Disabilities Using Wheelchairs

- Issue Notice of Proposed Rule-Making (NPRM) and Final Rule on Accessible Lavatories on Single-Aisle Aircraft: Part 2

  · **Completed**. The final rule was published in August 2023. Accessible lavatories will be required on new large single-aisle aircraft.
  · In the short term, the rule requires airlines to provide accessible lavatory interior features, to improve the safety and accessibility of on-board wheelchairs (OBWs), and to inform passengers on request about lavatory accessibility.
  · In the long term, the rule requires airlines to install lavatories large enough for a passenger using an OBW, along with an attendant. We expect this rule to benefit millions of individuals with mobility impairments who cannot independently access the lavatory.

- Expand compliance and enforcement activities related to the Air Carrier Access Act and its implementing regulation in 14 CFR Part 382

- Educate people with disabilities about their rights under Air Carrier Access Act (ACAA) and how to exercise them

  · **Completed**. In December 2023, the Office of Airline Consumer Protection (OACP) revised travel tips for wheelchair users on its website in order to further educate passengers with disabilities about the benefits of sharing information in advance with the airlines about their wheelchairs and scooters. Among other things, the updates instruct passengers to provide notice in advance to airlines whenever possible, to share device information (e.g., weight and dimensions) for better handling, and to check with the airline if it offers a wheelchair information request form.

- Disabilities Bill of Rights applies to people with disabilities traveling on flights to, from, and within the United States. It describes the fundamental rights of air travelers with disabilities under the ACAA.
  1. The Right to Be Treated with Dignity and Respect
  2. The Right to Receive Information About Services and Aircraft Capabilities and Limitations
  3. The Right to Receive Information in an Accessible Format
  4. The Right to Accessible Airport Facilities
  5. The Right to Assistance at Airports
  6. The Right to Assistance on the Aircraft
  7. The Right to Travel with an Assistive Device or Service Animal
  8. The Right to Receive Seating Accommodations
  9. The Right to Accessible Aircraft Features
  10. The Right to Resolution of a Disability-Related Issuee

(2) Enable Multimodal Accessibility of Public Transportation Facilities, Vehicles, and Rights-of-Way

- Issue NPRM and Final Rule on Accessibility Standards for Pedestrian Facilities in the Public Right-of-Way and promote awareness and adoption

- Require State and local DOTs to complete ADA Transition Plans to eliminate legacy inaccessible infrastructure and work with them to implement ADA transition plans through formula and discretionary funding in the Bipartisan Infrastructure Law (BIL) ; Enforce ADA compliance in new investments

- Promote opportunities for infrastructure investment in rural and Tribal communities, where roadways, sidewalks, and street crossings may be in need of repair
  · **Completed**. Rural Opportunities to Use Transportation for Economic Success (ROUTES) released a revised Rural Grant Applicant Toolkit for Competitive Federal Transportation Funding (November 2023) and companion DOT Discretionary Grants Dashboard (May 2023) to help communities navigate and apply for discretionary opportunities. The revised Toolkit and Dashboard provide expanded content on DOT requirements related to Civil Rights and Nondiscrimination and identify grants that can be used for projects that improve accessibility.

- Issue NPRM and Final Rule on Equitable Access to Transit Facilities, updating minimum guidelines

- Make legacy transit rail stations and facilities accessible through the All Stations Accessibility Program in the BIL and enforce ADA compliance in new investments in rail stations and vehicles

- Enforce ADA compliance in existing and new investments in Amtrak stations and rail vehicles

- Promote opportunities for federal funding and financing to expand transportation alternatives for people with disabilities living in rural communities
  · **Completed**. The same measures as above were taken.

(3) Enable Access to Good Paying Jobs and Business Opportunities

- Incorporate standard language on encouraging hiring of people with disabilities in discretionary DOT grant NOFOs and explanatory materials.

- Engage state, local, and private sector leaders to encourage programs that prioritize hiring of people with disabilities in DOT-funded projects

- Promote Disadvantaged Business Enterprise (DBE) program to the disability community

- Incorporate standard language encouraging hiring of people with disabilities in DOT direct contracts

- Coordinate with other federal agencies on regulatory and policy actions to expand broadband

(4) Enable Accessibility of Electric Vehicle Charging and Automated Vehicles

- Accelerate development and adoption of accessibility standards for rollout of the national electric vehicle charging network in the BIL

- Help manufacturers and designers identify and integrate accessibility considerations in AVs for the diverse needs of people with disabilities

- Incentivize development of accessible automated vehicles and promote inclusive design to the next generation of automotive engineers

(5) Foundational Actions

- **Reinvigorate Programmatic Enforcement of ACCA, ADA, Section 504, and Section 508**
  - Conduct strategic planning for ADA, Section 504, and ACAA programs.
  - Support comprehensive pre-award compliance activities, including ensuring that civil rights compliance is reflected in NOFOs and pre-award assessments.
  - Drive proactive civil rights training and compliance, including a new DOT order on ADA and Section 504 and technical assistance through the Thriving Communities Initiative.
  - Publish best practices, trainings, and guidance on meaningful public involvement which specify accessibility requirements.

- **Advance Diversity, Equity, Inclusion, and Accessibility in the DOT Workforce** (DOCR, OST-M)
  - Support activities outlined within the DOT DEIA Strategic Plan to proactively support accessibility and establish a culture of equitable access.
  - Conduct data analysis to determine whether DOT employees, particularly DOT employees from underserved communities, such as people with disabilities, appear to progress or pause at specific grade levels.

- **Address Gaps in Data on People with Disabilities to Inform Policymaking** (OST-R, OST-P)
  - Quantify benefits of transportation investments for people with disabilities
  - Develop roadmap for economic analysis of accessible travel
  - Create National Transportation Atlas Database layers for walking networks and accessible facilities

- **Ensure all Internal and External DOT Meetings and Resources are Fully Accessible to People with Disabilities** (DOCR, OCIO, OST-M)
  - Research current resources, identify challenges, recommend and implement solutions, including potential updates to DOT Guidance for Accessible Workplace Programs and Activities for Individuals with Disabilities
  - Explore options to improve the process and resourcing for external meeting accessibility, with a focus on BIL program stakeholder meetings

Expected Outcomes

(1) Enable Safe and Accessible Air Travel

- Passengers can stay in their personal wheelchairs on aircraft, a generational improvement in the equity, safety, and dignity of travel

- Decrease in number of passengers with disabilities whose wheelchairs are damaged during air travel and are injured in transfer to/from aircraft

- Passengers in wheelchairs can access lavatories on aircraft

- Decrease in frequency of incidents where passengers' civil rights are violated and increase in equal access to quality air transportation service for persons with disabilities

(2) Enable Multimodal Accessibility of Public Transportation Facilities, Vehicles, and Rights-of-Way

- People with disabilities can safely access roadways, sidewalks, and street crossing, reducing the number of pedestrian fatalities

- People with disabilities can reliably access all public transit rail stations and facilities, increasing independent travel.

🇬🇧 United Kingdom Case Study 1

Self-driving Mass Transit

- Local Authorities and regional transport operators will study how self-driving vehicle technology can improve local transport in remote, rural, and urban areas.
- £2.1 million in joint UK government and industry funding has been allocated to study the feasibility of self-driving mass transit solutions across the UK.

Measures

- Six projects have received Government and industry funding to conduct feasibility studies on how self-driving vehicle technology can improve local transport.
- Studies will look at how self-driving vehicle technology could be more cost effective, emit less carbon, and increase transport safety and security.
- The funding will help local places to build evidence on using emerging transport technologies to connect underserved communities to employment centres, education opportunities, and healthcare services.

Example

① Autonomous Healthlink

- The project will study the feasibility of a zero emission self-driving system on a route between Seaton Delaval Train Station to Northumbria Hospital.
- The study will aim to increase accessibility to the hospital.

② Scottish Highlands and Islands

- The project will study the potential of a self-driving vehicle service in the Scottish Highlands and Islands.
- The service will link the Highlands and Islands Campus of Inverness College University to key locations in Inverness.
- It will also connect ferry passengers to public transport at Uig Pier on the Isle of Skye.

Expected Outcomes

- Self-driving vehicles have the potential to revolutionise public transport and passenger travel, better connect communities and reduce road collisions caused by human error.
- The Government-funded research projects play an important role in testing this technology in real-life scenarios.

🇬🇧 United Kingdom Case Study 2

Inclusive Transport Strategy

- In 2018, the UK government launched the Inclusive Transport Strategy, which set out its ambition for the creation of an inclusive transport system by 2030, where disabled people could travel easily, confidently and without additional cost. The ITS included 95 commitments and actions across all transport modes.

Measures

- The UK has successfully delivered many of these commitments, which aim to improve the travel experience for disabled people, including:
  - A Rail Ombudsman, established to investigate and rule on unresolved customer complaints (including on the provision of assistance and access to advertised accessibility facilities), with the power to issue decisions that are binding on the industry.
  - The launch of a new railways Passenger Assist app, which has delivered an improved 2 hour booking window for users.
  - The 'It's Everyone's Journey' media campaign, which aims to build disabled people's confidence to travel by creating a more considerate and supportive environment.
  - The development of the REAL disability awareness training package that is available free of charge across modes to all transport operators.
  - Updating and publishing in November 2023, the best practice guidance for taxi licensing authorities in England, clearly emphasising the importance of councils making taxis and private hire vehicles more accessible.
  - The Maritime and Coastguard Agency (MCA) conducting passenger rights inspections on ferry and cruise operators, investigating staff training and the accessibility of ports and vessels to ensure compliance with UK regulations.
  - Work with the aviation sector, consumer and disability groups to develop and publish the Aviation Passenger Charter in July 2022, providing a single point of information for consumers on their rights and responsibilities when travelling by air.

Expected Outcomes

- In addition to commitments set out in the Inclusive Transport Strategy (2018), the UK is improving transport accessibility for disabled people through the 2021 National Bus Strategy and 2021 Plan for Rail, which includes development of the National Rail Accessibility Strategy (NRAS).

- The UK will publish the results of the final ITS evaluation report in 2024, which will show us what progress has been made since the publication of the ITS and help us understand the areas we may need to focus on next.

Federal Republic of Germany Case Study 1

"Deutschlandticket"

- Due to our federal system, responsibility for regional and local public transport lies with the federal states or their designated public transport authorities.

- However, the Federal Government supports the federal states and municipalities in the performance of their tasks in a variety of financial ways - in particular through various legal bases and through funding programs.

- The aim is to further improve the public transport offer, make it more attractive and thereby achieve a traffic shift from the own car to buses and trains. In this way, public transport should contribute to achieving climate protection goals in the transport sector.

Measures

(1) "Deutschlandticket"
- New fare offer for public transport
  - Available in digital form
  - Affordable (49€ / month)
  - Monthly cancellable subscription
  - Nationwide validity
  - All means of local and regional public transport (such as bus, tram, metro, regional train)
  - First introduced in May 2023
  - The federal and state governments provide funds to compensate for financial disadvantages

Expected Outcomes

- Making public transport more attractive and more efficient
- Fewer trips in motorized individual vehicles
- Higher percentage of public transport in the modal share
- Achieving climate protection goals in the transport sector

(References)
- "Deutschlandticket":
  https://int.bahn.de/en/offers/regional/deutschland-ticket

Local Public Transport Model Projects

Background

- Due to our federal system, responsibility for regional and local public transport lies with the federal states or their designated public transport authorities.

- However, the Federal Government supports the federal states and municipalities in the performance of their tasks in a variety of financial ways - in particular through various legal bases and through funding programs.

- The aim is to further improve the public transport offer, make it more attractive and thereby achieve a traffic shift from the own car to buses and trains. In this way, public transport should contribute to achieving climate protection goals in the transport sector.

Measures

(1) Local Public Transport Model Projects
- Funding program for public transport projects
  - 19 model projects to strengthen public transport in two different segments: rural regions, urban regions
  - Projects can be submitted by local authorities and transport associations
  - The model projects are intended to improve e.g.
    - The quality of services and operations (better timetable frequency, implementation of on-demand services etc.),
    - Digitization of information and sales systems (development of mobility platforms etc.)
  - All measures must be well integrated into an overall concept

Bild: Olaf Kosinsky
(kosinsky.eu)

Lizenz:
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Expected Outcomes

- Making public transport more attractive and more efficient

- Fewer trips in motorized individual vehicles

- Higher percentage of public transport in the modal share

- Achieving climate protection goals in the transport sector

(References)
- Local public transport model projects:
  https://www.balm.bund.de/EN/FundingPrograms/PublicTransport/publictransport_node.html

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🇯🇵 Japan Case Study 1

Co-creation in Local Public Transportation

Background

- Local public transport is indispensable to realize a prosperous life for residents and to enhance the socio-economic activities of the region. However, there are difficulties stemming from a long-term decline in demand due to depopulation, falling birth rates, use of private cars and changing lifestyles, as well as the disruptions in lifestyle caused by COVID-19.

- In light of these circumstances, it is necessary to promote the 're-design' (reconstruction) of the local public transport network to increase convenience, productivity, and sustainability through 'co-creation' (cooperation and collaboration) of various stakeholders in the region.

Measures

(1) Revision of "Local Public Transportation Law" (*) (Revised in 2023)

- "Cooperation" among "the parties concerned in each local area" such as the local government, public transportation operators, and local people was added to the aims of the Local Public Transportation Law, and the national government was additionally obligated to do its best to promote cooperation among the parties concerned.

- "Mutual cooperation" among "the parties concerned in each local area" was added to the matters that should be included in the Local Public Transportation Plan.
  (*) the Local Public Transportation Law is a law that sets forth provisions for the creation of Local Public Transportation Plans and projects for implementation based on these plans to promote the revitalization and rehabilitation of local public transportation systems that help sustainably secure local passenger transport services through proactive efforts in local areas.

(2) The Project for Co-creation Model Demonstration (Started from 2022)

- This project aims to maintain and revitalize regional transportation through "co-creation" (cooperation and collaboration) by various stakeholders in the region, viewing transportation as a part of regional life and work.

- Councils consisting of multiple co-creation entities, including transportation operators, are subsidized for expenses necessary for the project to implement systems, purchase and modify vehicles, and demonstrate proof of concept.

Example

① Attracting People to Bus Terminals

- A bus terminal is developed and operated by utilizing shops operated by a bus company in a housing complex to create a lively atmosphere at the bus terminal, including residents who do not intend to take buses, generate a flow of people, strengthening the bus terminal's function as a nodal point.

- At the bus terminal, local agricultural products are sold and medical institutions provide health consultation services, etc.

Example

② Non-fare Income Expansion for Bus Operators and Revitalization of Housing Complexes

- To increase non-fare income, buses transport vegetables and rice from agricultural direct sales outlets and products sold in shopping malls at terminal train stations.
- Buses modified as "marche buses" transport goods from shopping malls to hold events in housing complexes in the suburbs, in turn revitalizing the communities.

(3) Project for Developing Human Resources Involved in Regional Transportation
(Started from 2023)

- This project aims to spread co-creation initiatives by operating mechanisms to develop human resources involved in regional transportation and community planning.

- Private operators and nonprofit organizations that train people to work in transportation and community planning in the region are subsidized for expenses to develop human resources for the planning and coordination of regional transportation.

Expected Outcomes

- To revitalize regional communities by creating flows of people through the active involvement of public transportation operators.

- To solve problems in regional communities through the cooperation of public transportation operators with players from various industries in the region.

- To maximize the value of transport by fostering momentum among members of communities to adopt transportation as their own issue to tackle.

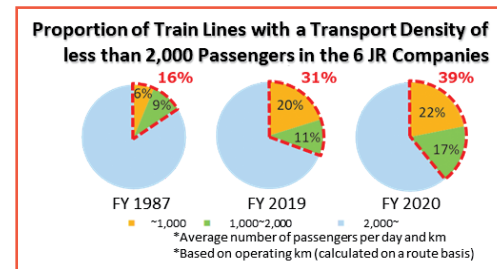- Support for Co-creation Model Demonstration: 15 cases (in FY2022)

🔴 Japan Case Study 2

Restructuring of Local Trains

Background

- Many local railways are unable to take full advantage of the characteristics of railways as a form of mass transit due to a significant decrease in the number of passengers because of the falling population and the increasingly widespread use of private cars.

- In Japan, the railway business is generally operated by private railway business operators which manage both the operation and facilities. Given this situation, there is an urgent need to restructure the railway business into a highly convenient and sustainable regional public transport system through cooperation and collaboration with local stakeholders, including railway business operators and local governments.

Proportion of Train Lines with a Transport Density of less than 2,000 Passengers in the 6 JR Companies

FY 1987: 16%, 6%, 9%
FY 2019: 31%, 20%, 11%
FY 2020: 39%, 22%, 17%

~1,000   1,000~2,000   2,000~
*Average number of passengers per day and km
*Based on operating km (calculated on a route basis)

Measures

**(1) Revision of the Local Public Transportation Law**

Example ①

❘ Restructuring Council

- The government established "Restructuring Council" system organized by the Minister of Land, Infrastructure, Transport and Tourism at the request of local governments and railway business operators, taking into account feedback from local governments. (The government provides support for the holding of councils, surveys, and experimental projects, etc.).

- When the councils reach a consensus on measures to improve convenience and sustainability by either (1) maintaining and upgrading rail transport or (2) alternating to other transport such as bus, a restructuring plan will be drawn up. The government is actively involved in the councils.

- The local government working on infrastructure development will be supported financially once a specific project, such as the Railway Business Restructuring Project, is categorized as a restructuring plan by the council and approved by the Minister.
  Financial support: ex) The Social Capital Development General Grant

Example ②

❚ Railway Business Restructuring Project

· This project aims to restructure the railway business by changing its business structure, such as vertical separation, and ensuring user convenience. The project targets sections where it is difficult to take advantage of the characteristics of railways as a form of mass transit (sections with a density of less than 4,000 passengers).

· For the "public-owned and privately-operated" method of vertical separation certified for the railway business restructuring projects, there is an exception for the criteria for business permission in the Railway Business Act regarding business profitability.

· Furthermore, in line with the amendment, the "deemed vertical separation method", which is expected to have the same effect as the vertical separation method, was also include in the Railway Business Restructuring Project.
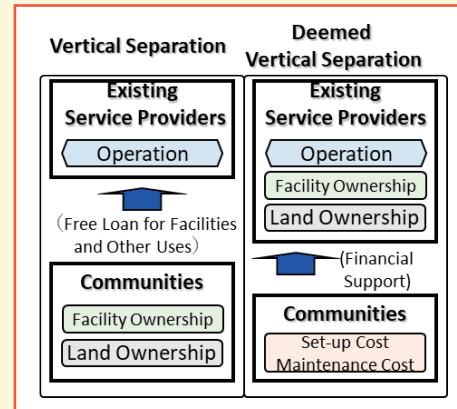
(2) Comprehensive Grant for Social Asset Development

· This grant can be used for the construction of railway facilities that contribute to the improvement of sustainability and convenience when a local authority receives approval for the implementation plan of a Railway Business Reconstruction Project. (Half of the project cost is subsidized by the national fund).

Expected Outcomes

● Increase of measures to restructure local railways through cooperation and collaboration between local stakeholders and railway business operators.

● Highly convenient and sustainable regional public transport network

🇯🇵 Japan Case Study 3

Accelerating DX and GX of Transportation

- In Japan, fixed route bus services are mainly operated by private transportation operators, with financial support from the government covering the deficit of the operations.

- While there are growing social demands to achieve carbon neutrality by 2050, CO_2 emissions from the transportation sector, including the public transportation and logistics sectors, account for approximately 20% of Japan's total CO_2 emissions (17.7% in 2020).

- Therefore, corresponding to rapid changes in social structure, it is essential to improve productivity of business and strengthen management capabilities through DX and GX of transportation to improve convenience, productivity, and sustainability of local public transportations.

Measures

(1) Introduction of New Payment Methods

- Supporting the introduction of cashless payment systems such as IC cards, QR codes, credit card touch payments, and facial recognition. The seamless transportation using cashless payment will sophisticate services accumulating payment data, and will help solve issues in the transportation sector such as labor shortages.

Ticket Turnstiles with QR Scanning Feature

(2) Introduction of AI On-Demand Transportation

- Supporting the introduction of AI on-demand transportation, which leverages systems to optimize dispatch of a vehicle for multiple bookings in real time. As the system streamlines the operation, it is expected that it will secure means of transportation in rural areas with low demand and profitability of transportation services, and improve the convenience of daily life, through diversified transportation services, including in urban areas.

(3) Acceleration of Data Linkage

- In addition to supports for the implementation of MaaS in various parts of the country, Japan has developed the "Guidelines for Linking MaaS-related Data". The guideline organizes the data items to be linked, linkage methods and other matters that should be taken into account for the linkage. It aims to smooth linkage of data among participating operators, which is essential for the further expansion of MaaS.

(4) Introduction of Operation Management Systems, Automatic Daily Crew Report Systems, Vehicle Booking Applications, etc.

- Supporting investment in labor-saving measures, such as the introduction of operation management systems, automatic daily crew report systems, and vehicle booking applications, to create a highly productive and attractive business environment for passenger transport operators that are facing a shortage of staff.

(5) Electrification of Commercial Vehicles for Decarbonization

- Following the enforcement of the Revised Act on the Rational Use of Energy (April 2023), Japan has obligated transportation operators to prepare medium- to long-term plans to introduce non-fossil energy vehicles (EVs, FCVs, PHVs, and vehicles using synthetic fuels, etc.).

- As a target, Japan set the proportion of non-fossil energy vehicles by vehicle type in 2030.

- The Government provides subsidies for electrification of commercial vehicles (trucks, buses, and taxis) to accelerate the introduction in the early stages of popularization, thereby enhancing industrial competitiveness and economic growth through price reductions and reducing greenhouse gas emissions.

○Transport Operators' Targets for Non-Fossil Energy Vehicles	
Vehicle Type	**Proportion of Vehicles in the Fleet in FY2030**
Truck※	5% (Approx. 26,000 vehicles)
Bus	5% (Approx. 5,400 vehicles)
Taxi	8% (Approx. 18,000vehicles)

※1 8t and less

(6) Business Improvement Support Project by Transportation DX and GX

- In 2023, a system was established to accelerate DX and GX of transportation by utilizing technologies such as AI on-demand transport and cashless payment system and by introducing EV buses and EV taxis.

- The national government provides budgetary support and supports the businesses through the Fiscal Investment and Loan Program as well as through preferential measures for taxes.

AI On- Demand Transport
(Booking via Smartphone or Call Routing with AI)

EV Bus

Expected Outcomes

- Improve productivity of business and strengthen capabilities of management through DX and GX of transportation, and improve convenience, productivity, and sustainability of local public transportation.
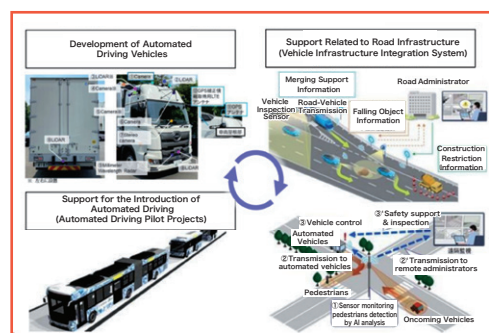
🇯🇵 Japan Case Study 4

Initiatives for Automated Driving

- Due to the depopulation and aging society, there are challenges in sustaining public transportation that serve as a means of local mobility and logistics services. Automated driving is expected to contribute to solving these social issues; therefore, it is necessary to realize and expand it soon.

Measures

- Japan has established the " Future of Transportation Society Utilizing Digital Technologies", which is Japan's overall strategy for automated driving. Japan also accelerates initiatives to step toward the practical use of automated driving in private cars, transportation services, and logistics services, respectively.

- In 2019, the Road Trucking Vehicle Act, which aims to secure safety of vehicles on road under the jurisdiction of the Ministry of Land, Infrastructure, Transport, and Tourism, was revised. The revision aimed to add "automatic operation equipment" to the equipment covered by the national safety standards in order to accommodate automated vehicles. Japan formulated the Level 3 standards for expressways, then in 2020, type certification was admitted for vehicles equipped with automatic operation devices based on the revision of the Road Trucking Vehicle Act. Sales of these vehicles has initiated in 2021, realizing the Level 3 automated vehicles on expressways.

- As for mobility services, with the enforcement of the revised Road Traffic Law in April 2023, specified automated operations were institutionalized. This enables the unmanned automated mobility services with only remote monitoring in limited areas, equivalent to the Level 4. In response to this, in May 2023, the first driverless Level 4 automated driving service in Japan was launched on the "Eiheiji Mai Ro-do", a bicycle-pedestrian path utilizing an abandoned railway line in the town of Eiheiji, Fukui Prefecture, with the approval of the Ministry of Land, Infrastructure, Transport and Tourism.

- Japan has set a goal to launch automated driving services in about 50 locations by FY2025 and in more than 100 locations by FY2027. To achieve the above goal, Japan is aiming to realize automated driving for transportation and logistics services in cooperation with local communities and other stakeholders by working together to "develop automated vehicles," "support the introduction of automated driving," and "support related to road infrastructure.

- With regard to support for the introduction of automated driving, starting in 2022, the government provides support for the initial investment to ensure business feasibility and so on, of the implementation of automated driving by local authorities.

Expected Outcomes

- Re-design local transportation network to improve convenience, productivity, and sustainability, including the introduction of new technologies such as automated driving, ensuring mobility in regions

- Government targets
  - Launch automated driving services in about 50 locations by FY2025 and in more than 100 locations by FY2027.
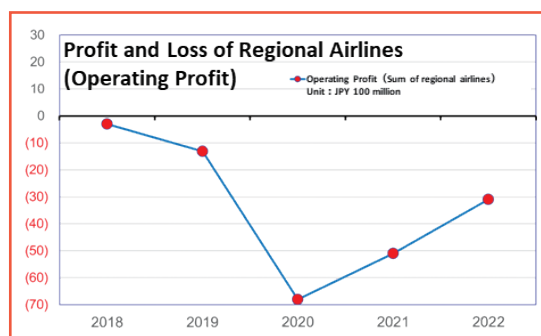
Japan Case Study 5

Promotion of Collaboration for Sustainable Regional Aviation

Background

- In order to make regional aviation sustainable amid a decline in the number of passengers due to depopulation, the Ministry of Land, Infrastructure, Transport and Tourism (MLIT) had conducted studies with experts and concerned parties since 2016. As a result, three regional airlines in the Kyushu Region and two major airlines established "Essential Air Service Alliance LLP" (EAS LLP) in October 2019. EAS LLP was expected to encourage cooperation among regional airlines, and various initiatives have been implemented collaboratively under the framework of EAS LLP. After 4 years of activities, the five airlines mentioned above formed a new framework named "Essential Air Service Alliance" (EAS Alliance) in October 2023, in order to further develop their collaborative relationship.

Profit and Loss of Regional Airlines (Operating Profit)
Operating Profit (Sum of regional airlines)
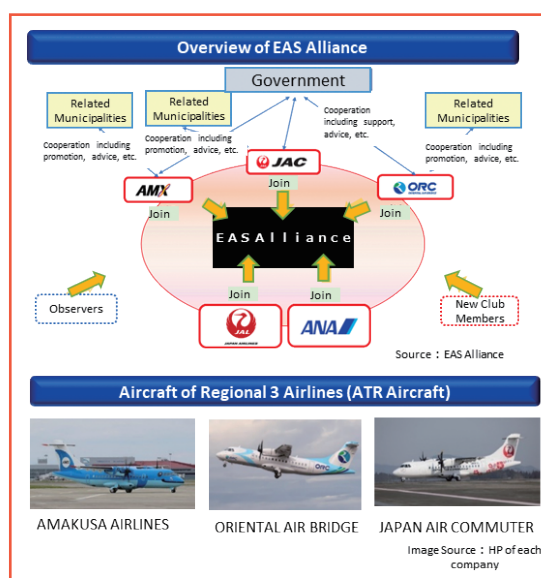Unit : JPY 100 million

Regional airlines: AMAKUSA AIRLINES [AMX], ORIENTAL AIR BRIDGE [ORC], JAPAN AIR COMMUTER [JAC]
Major airlines: ALL NIPPON AIRWAYS [ANA], JAPAN AIRLINES [JAL]

Measures

- By leveraging the expertise, marketing capabilities, and influential reach of major airlines, as well as the advantages of operating the same aircraft type (ATR), regional airlines aim to facilitate collaboration and establish a solid foundation for cooperative initiatives.

- The EAS Alliance continues to deepen cooperative initiatives to ensure the sustainability of regional air services covering remote islands and essential routes for residents.

- Main results of this cooperation:
  · Code-sharing with ANA and JAL which goes beyond airline affiliations.
  · (For example, ANA put its code on flights operated by JAC, which is an affiliate of JAL.)
  · Providing support on introducing ATR, sharing spare parts and technical expertise among regional airlines.
  · Joint promotion by the five companies.

Overview of EAS Alliance
Source : EAS Alliance
Aircraft of Regional 3 Airlines (ATR Aircraft)
AMAKUSA AIRLINES　ORIENTAL AIR BRIDGE　JAPAN AIR COMMUTER
Image Source : HP of each company

Expected Outcomes

- Generating opportunities for income growth of regional airlines
- Improvement of reliability in flight operations of regional airlines
- Sustainable regional aviation

🇮🇹 Italian Republic Case Study

Urban Sustainable Mobility Plans (USMP)

Background

- The current evolution framework of sustainable local mobility presents several critical points, both economical and structural. From an economic perspective:
  - Public transport is recovering passengers and revenues, but pre-covid market shares still appear distant;
  - The recovery perspectives of public transport companies are currently held back by the huge increase in both energy and general costs;
  - Active mobility has experienced a period of great expansion but today there is a reversal of the trend.
- On a structural level:
  - The quantity and quality of public transport services is not adequate, as demonstrated by the satisfaction indices which are very far from those of private transport;
  - The infrastructures for rapid mass transport, especially in medium and large cities, are currently not sufficient as emerges from the european comparison, as well as for the average age and emission profile of the rolling stock;
  - The opportunities related to the use of info-mobility devices have not currently been exploited extensively, despite the spread of increasingly advanced, flexible and integrated technological services;
  - The policies activated by the administrations to direct demand in favor of low impact modes are still insufficient.
- The Ministry of Infrastructure and Transport (MIT) is therefore committed in various activities aimed at improving urban mobility and overcoming the above critical issues.

Measures

- In order to encourage modal shift from private to public transport, to encourage the development of soft mobility and to provide new tools for urban mobility planning, various interventions, managed by MIT, are planned:

(1) **The National Strategic Plan for Sustainable Mobility** (€3.700 million + €185 million of the 2019 Investment Fund), aimed at renewing the TPL bus fleet which provides financing for the purchase of alternatively fueled buses (electric, hydrogen, methane) and related infrastructure network (e.g. vehicle charging systems) in order to allow the complete replacement of vehicles currently in circulation, now at the limit of their useful life, with vehicles with low environmental impact;

(2) **Funding for Rapid Mass Transport** (around €14,000 million), aimed at cities with populations greater than 100.000 inhabitants, in which large-capacity electric-powered transport systems, such as subways, tramways and trolleybuses, represent the strong points of the local public transport, necessary to overcome the critical issues related to the ever-increasing demand for transport;

(3) **Funding for Naval Public Transport** (€512.65 million);

(4) **Funding for Cycling Mobility** (€225 million);

(5) **Other Funding for Local Public Road Transport** (€1,136 million);

(6) **Purchase of Railway Rolling Stock** (€1,752 million);

(7) **The National Recovery and Resilience Plan (NRPP)** (€6,465 million);

(8) **The Complementary Fund to the NRPP** (€600 million);

(9) **Financing of Home-Work Travel Plans** (€50 million for 2021).

- All these investments are accompanied by support activities by the MIT in mobility planning through urban sustainable mobility plans (USMP). The observatory platform for local public transport policies becomes the system for monitoring and verifying the adoption of USMO by Local Authorities.

- Furthermore, the MIT has established that the adoption of USMP becomes a necessary requirement from 1 January 2023 for access to funding for both rapid mass transport and cycling.
- For the whole of 2022, the adoption of USMP is a reward element in the possible allocation of resources relating to rapid mass transport and cycle routes.

Expected Outcomes

- The following objectives are expected to be achieved:

(1) The National Strategic Plan for Sustainable Mobility:
- The renewal of bus fleets in order to reduce the age of italian vehicles which is much higher than the european average;
- The improvement of air quality with the introduction of "green" rubber vehicles (powered by electricity, hydrogen and methane) and the strengthening of the related infrastructures;
- The relaunch of the industrial bus production chain.

(2) Funding for Rapid Mass Transport:
- The renewal and improvement of the vehicle fleet;
- The strengthening of existing lines;
- The completion of the lines under construction;
- The extension of the network.

(3) Funding for Naval Public Transport:
- Purchase for local maritime, lake, lagoon and river public transport services under regional jurisdiction

(4) Funding for Cycling Mobility:
- Design and construction of cycle stations and interventions concerning the safety of city cycling;
- Construction of cycle paths connecting the universities and the main railway stations.

(5) Other Funding for Local Public Road Transport:
- Funding dedicated to the regions for the renewal and technological innovation of the fleet used for local public transport.

(6) Purchase of Railway Rolling Stock:
- Renewal of railway rolling stock and strengthening of mass rapid transport in urban and metropolitan areas.

(7) NRPP (by the second half of 2026):
- Purchase of at least 2690 zero-emission buses and construction of power supply support infrastructure;
- Implementation of approximately 45 green and digital transformation projects of the bus industry in order to produce electric and connected vehicles;
- Construction of approximately 565 km of urban and metropolitan cycle paths;
- Purchase of 50 new trains to replace an equivalent number of trains
- Construction of 240 km of network equipped for rapid mass transport infrastructures divided into metro (11 km), trams (85 km), trolleybuses (120 km), cable cars (15 km);

(8) The complementary fund to the NRPP:
- The total purchase of 1500 buses is expected by the end of 2026;
- Strengthening of the railway lines and the simultaneous strengthening and/or renewal of the rolling stock.

(9) Financing of Home-Work Travel Plans:
- Funding of sustainable mobility initiatives, including car-pooling, car-sharing, bike-pooling and bike-sharing initiatives, walking buses, in line with the provisions of the home-work travel plans and home-school-home plans.

- Conclusions
  - Public transport in Italy suffers from shortages and delays. In recent years, many resources have been allocated to make local public transport more sustainable. A strong input is and will be given by the NRPP which envisages many investments to implement new, more technological engines and to encourage the use of local public transport services and soft mobility.

🍁 Canada Case Study 1

Improving Mobility

Background

- Governments at all levels in Canada are working to address mobility issues through various means, such as infrastructure investments, new and adaptive regulations, assessment and deployment of new technologies, transportation demand management initiatives, and further integration of transportation modes.

- The Canadian mobility landscape is complex, with shared national and unique regional issues. Governments at all levels and across jurisdictions must work together. Improving mobility in a cooperative and concerted fashion boosts productivity and economic performance, contributes to a cleaner environment, and increases social inclusion and health outcomes for Canadians.

Measures

- **Task Force under Canada's Council of Ministers for Transportation** explored key policy areas, including: Microtransit; Regional Fare Integration; First/Last Mile; Fare Zone/Time of Use Pricing; Transportation Demand Management; New Mobility Models/Service Integration; Freight Delivery and Intermodal Hubs; Data and Information Management; and Congestion Management.

- **Transportation Data Information Hub & Mobility Performance Indicators:**
  Transport Canada (TC) is using a key mobility indicator (travel time index) to track performance of key urban trade corridors across Canada.

- **Canadian Urban Mobility 2.0** is a research report funded by TC that established a new tool – **the Mobility Innovation Index** designed to map cities' transportation projects to support sustainability, innovate with technology, and advance the public good.
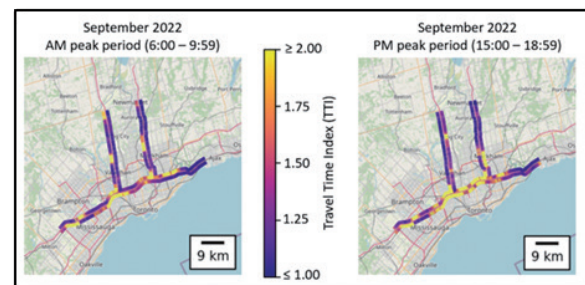
SUPPORT SUSTAINABILITY
Private vehicle electrification
Public transit electrification
Carshare
Bikeshare
Shared electric micromodes
Mode integration
Smart land use

INNOVATE WITH TECHNOLOGY
Vehicle-to-vehicle communication
Vehicle-to-infrastructure communication
Autonomous technology
On-demand transit service
Trip planning
Smartfare
Data sharing

ADVANCE PUBLIC GOOD
Equity
Accessibility
Public-private partnerships
Health and safety
Mobility pricing

- **Safe and Secure Testing, Deployment, and Integration of Mobility Innovations**
  · Advance air mobility
  · Connected and automated vehicles

Expected Outcomes

- Improve safe and sustainable urban mobility;

- Support job creation and economic prosperity;

- Reduce pollution and minimize impacts on the environment;

- Alleviate gridlock;

- Enhance liveability for communities through access to workplaces, leisure activities and promotion of social equity; and

- Advance new policies and programs (e.g., funding for zero emission public transit in cities, and transit solutions for rural communities with flexibility for different local transit system innovations from fixed route to on-demand services to ride-shares).

(References)

- Final Report of Task Force under Canada's Council of Ministers for Transportation:
https://www.comt.ca/Reports/Urban Mobility 2021.pdf

- Canadian Urban Mobility 2.0:
https://www.leadingmobility.com/canadian-urban-mobility

- Advanced Air Mobility:
https://tc.canada.ca/en/aviation/advanced-air-mobility

- CAV:
https://tc.canada.ca/en/aviation/advanced-air-mobility

🇨🇦 Canada Case Study 2

Strategies to Advance Automated Driving Systems (ADS) Testing and Deployment

Background

- In 2021, 1,768 Canadians lost their lives on Canada's roads, with approximately 85% of these collisions involving human behavior as a contributing factor.

- Canada recognizes that automated driving systems hold great promise to enhance road safety and the mobility of underserved populations, including those with unique accessibility needs.

- Transport Canada (TC) is actively working to support the use of automated driving systems by adapting our safety regime to ensure the safe testing and deployment of these technologies. Testing considerations include a range of accessibility considerations.

- In Canada, motor vehicle safety is a shared responsibility among federal, provincial/territorial, and municipal governments, industry partners, and road users. Under the *Motor Vehicle Safety Act* (MVSA), TC regulates and enforces the safety performance of new and imported motor vehicles and equipment.

- Canada's provincial and territorial road safety administrators are responsible for licensing of drivers, vehicle registration and insurance, vehicle and equipment maintenance, as well as laws regarding the safe operation of vehicles on public roads. Some provinces and territories may have accessibility legislation or standards that organizations testing ADS technology may need to consider.

Measures

- The MVSA was most recently amended in 2018 to strengthen the Minister of Transport's enforcement and compliance authorities and afford the Minister greater flexibility to keep pace with emerging technologies in the automotive industry, including for connected and automated vehicles (CAVs).

- TC's Guidelines for Testing Automated Driving Systems in Canada, Version 2.0 includes a diverse inventory of safety best practices, including guidelines pertaining to human-machine interfaces and accessibility of controls. To support accessibility, interfaces and controls are to follow principles of universal design: equitable use, flexibility in use, simple and intuitive use, perceptible information, tolerance for error, low physical effort, and size and space for approach and use.

- TC has a suite of other non-regulatory guidance and tools to facilitate consistent, safe testing and deployment of ADS-equipped vehicles on public roads across Canada including:
  · Safety Assessment for Automated Driving Systems in Canada;
  · Canada's Vehicle Cyber Security Guidance, TC's Vehicle Cyber Security Strategy, and TC's Vehicle Cyber Security Assessment Tool; and,
  · Canada's Safety Framework for Connected and Automated Vehicles (version 2.0 to be published in Spring 2024).

- TC's Enhanced Road Safety Transfer Payment Program (ERSTPP), established in 2019, directly supports Canada's national road safety priorities and provides new opportunities to invest in Canadian projects to promote the innovative design, testing, and integration of CAVs and other technologies that hold promise to enhance road safety. The ERSTPP program also provides funding to organizations that promote road safety awareness; increase knowledge of road safety issues, practices, and behaviors in Canada; and support regulatory compliance. The results of these projects help inform the development of road safety policies, best practices, guidelines, and frameworks.

Expected Outcomes

- The accessibility needs of all Canadians will continue to inform future policy development. TC continues to develop domestic policy instruments including planned updates to its existing guidance documents.

- Canada will also continue to work with the international community to develop globally aligned regulatory requirements for automated driving systems including co-sponsoring the development of a Global Technical Regulation for ADS safety by the World Forum for the Harmonization of Vehicle regulations.

(References)
- TC's Guidelines for Testing Automated Driving Systems in Canada, Version 2.0:
  https://tc.canada.ca/en/road-transportation/innovative-technologies/connected-automated-vehicles/guidelines-testing-automated-driving-systems-Canada
- Enhanced Road Safety Transfer Payment Program:
  https://tc.canada.ca/en/programs/funding-programs/enhanced-road-safety-transfer-payment-program

🇨🇦 Canada Case Study 3

Program to Advance Connectivity and Automation in the Transportation System

Background

- Although automotive manufacturers and companies innovating in the connected and automated vehicle (CAVs) industry are relatively well funded, jurisdictional road transportation authorities face significant operational and funding pressures to build the capacity to address the opportunities and challenges of emerging technologies.

Measures

- Established in 2017 with a $10.4M (CAD) investment, Transport Canada's (TC) Program to Advance Connectivity and Automation in the Transportation System helps Canadian jurisdictions prepare for CAVs, with a focus on infrastructure readiness. To achieve this, the program:
  - Provides grant and contribution funding for research and capacity building projects, mainly targeted at road authorities;
  - Undertakes directed technical analysis and studies in areas such as cybersecurity, spectrum, and privacy; and
  - Organizes workshops, panels, presentations, and other information dissemination activities.

- Since inception, the program has awarded $2.9M (CAD) in funding for 15 projects from across Canada, that were led by provinces and territories, academia, and not-for-profit organizations. The program also contracted a total of nine studies or projects relating to a variety of technical issues such as wireless communications technologies for CAVs, cyber security, and the development of specifications for a possible Canadian Security Credential Management System (SCMS).

- Over the last few years, the program's focus has been on Intelligent Transportation Systems (ITS) architectures and cyber security. The program developed new resources, including an ITS cyber security primer and self-assessment tool, ITS architecture overview video, and delivered multiple education and outreach sessions to Canadian stakeholders.

Expected Outcomes

- The immediate outcome of the program is an increased awareness of Canadian jurisdictions about the safety, security, environmental, social, and other considerations of CAVs. This outcome was achieved as demonstrated through the results of two surveys (December 2018 and August 2020), combined with program staff participation in stakeholder-led initiatives (e.g., TAC CAV committee, CSA CAV code), and delivery of presentations and workshop efforts.

- The intermediate outcome of the program is an enhancement in the capacity to develop policies, regulations, guidelines, and strategies to support the safe and secure deployment of CAVs. This was measured through the number of policies, regulations, guidelines, and strategies developed by jurisdictions or TC, of which four were developed.

- Finally, the program facilitates a transportation system that supports innovation. This is measured through an overall increasing trend in the number of new transportation technology deployments – measured as CAV trials and active test beds - in Canada. Using available information, the program counted the number of CAV trials and active test beds between fiscal years 2019-20 and 2021-22. The result suggests an overall even trend in trials (26 - 21 - 24) with a slight reduction in 2020-21 due to the COVID-19 pandemic halting some trials.

(References)
- Program to Advance Connectivity and Automation in the Transportation System:
  https://tc.canada.ca/en/programs/funding-programs/program-advance-connectivity-automation-transportation-system

🇨🇦 Canada Case Study 4

Policy Measures to Advance Accessible Transportation for Persons with Disabilities

Background

- In 2022, 27% of Canadians aged 15 and older, or 8.0 million people, identified as having one or more disabilities that limited them in their daily activities. The rate of disability in Canada has increased by 5 percentage points since 2017, when 22% of Canadians, or 6.2 million people, had one or more disabilities.

- More than half of Canadians with disabilities are experiencing at least one barrier when travelling by air, train, ferry, or interprovincial bus.

- Canada's transportation policy objectives for accessible transportation are centered around creating an inclusive and barrier-free transportation system. The goal is to ensure no matter one's disability, accessibility need, accommodation, or location, that all Canadians enjoy the same access to travel opportunities.

Measures

- The Accessible Canada Act was enacted on June 21, 2019, with the purpose of identifying and removing barriers, and preventing new barriers in priority areas under federal jurisdiction, including transportation. The overarching goal of the Accessible Canada Act is to realize a barrier-free Canada by 2040.

- On June 22, 2019, the Accessible Transportation for Persons with Disabilities Regulations were published, which aim to enhance the accessibility of transportation services for persons with disabilities. These regulations focus on eliminating barriers and ensuring dignified access in federally regulated air, rail, marine, and interprovincial bus modes. Key aspects include requirements for service providers on communication, training, technical specifications for air, rail, marine and interprovincial bus terminals and equipment, and accommodations.

- On December 13, 2022, the Accessibility Transportation Planning and Reporting Regulations came into force, which requires federally regulated transportation service providers to develop and publish accessibility plans, report on progress of implementing these plans, and provide feedback. These regulations were made under the Accessible Canada Act and ensures a continuous focus on removing barriers and improving transportation services for persons with disabilities.

- Ongoing engagement internationally on accessible transportation is essential for Canada to foster collaboration. This includes key exchanges with G7 partners, including the sharing of best practices and innovative solutions in accessibility.

Expected Outcomes

- Legislative and regulatory measures aim to improve access to transportation services, thereby increasing mobility, autonomy, and access to employment, healthcare, education, and social activities for persons with disabilities, leading to positive outcomes in terms of equality, dignity, and community integration.

- International collaboration will help to establish harmonized international standards for accessible transportation, making travel more seamless for persons with disabilities across borders.

- These steps will further advance Canada's goal to be barrier-free by 2040.

(References)
- 2022 Canadian Survey on Disability (CSD):
  https://www23.statcan.gc.ca/imdb/p2SV.pl?Function=getSurvey&SDDS=3251
- Accessible Canada Act (S.C. 2019, c.10):
  https://laws-lois.justice.gc.ca/eng/acts/a-0.6/
- Accessible Transportation for Persons with Disabilities Regulations (SOR/2019-244):
  https://laws-lois.justice.gc.ca/eng/regulations/SOR-2019-244/index.html
- Accessible Transportation Planning and Reporting Regulations (SOR/2021-243):
  https://laws-lois.justice.gc.ca/eng/regulations/SOR-2021-243/FullText.html
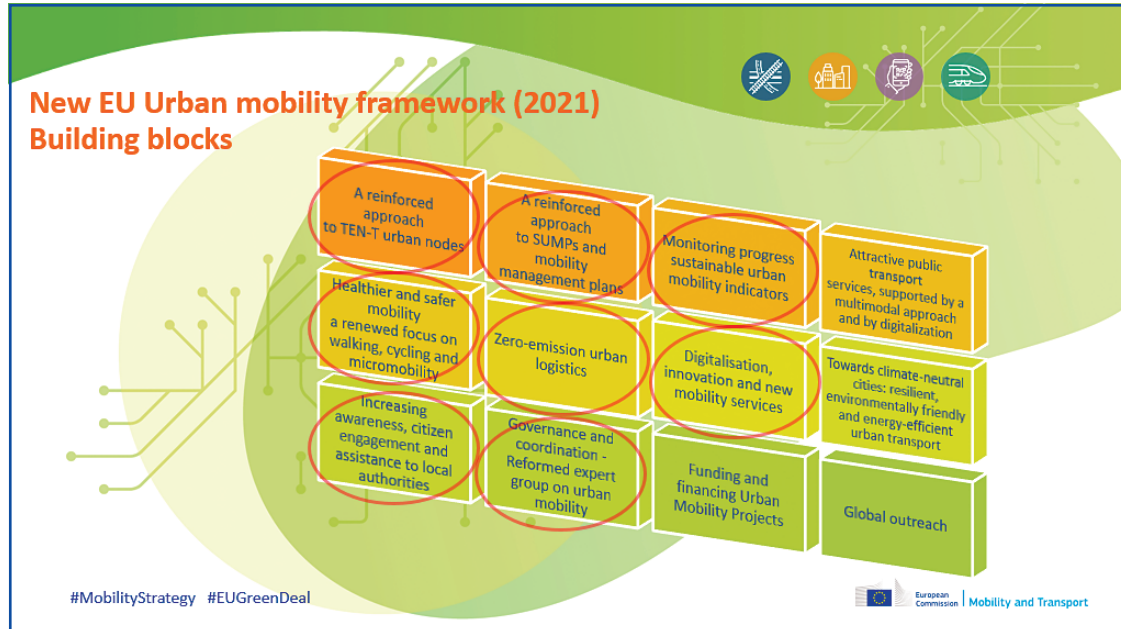
Sustainable Urban and Rural Mobility

Background

- Urban areas (cities, towns and suburbs) host over 70% of the EU population and generate around 80% of its greenhouse gas emissions (transport and buildings being the biggest contributors). Some 23% of the EU's transport greenhouse gas emissions come from urban areas.

- European cities, including small and mid-sized ones, towns and communities, are also increasingly facing challenges from congestion, limited urban space and, at the same time, urban sprawl, dangerous streets, impactful freight transport and delivery of goods, poor air quality and excessive noise affecting the livability.

- Moreover, climate change and increasing adverse weather events (heat waves, cold snaps, storms and heavy rain and floods) also increasingly pose challenges.

- Sustainable and efficient urban mobility is also important for their economic attractiveness.

- Finally, urban mobility is undergoing a transformation throughout the EU. Users are using new mobility services, from e-scooters to ride-hailing or ride-sharing platforms, with emerging issues to be addressed in urban mobility planning.

- Furthermore, urban (and rural) mobility still does not sufficiently cater for the needs of all transport users so to allow them to be mobile and participate in society.

- Across the EU, certain rural areas, especially the most remote ones, suffer from chronic isolation. This results in a loss of cultural and economic dynamism, ageing population, and a strong mobility dependence on individual transport. Citizens without cars are limited in their ability to participate in social and economic life.

Measures

- **Urban Mobility**
  - The 2021 Urban Mobility Framework gave a new impetus to the urban mobility sector, putting public transport, cycling and walking as well as sustainable urban mobility planning at its core in response to above challenges.
  - It promotes a proactive and participatory planning approach and ensures a better quality and faster uptake of sustainable urban mobility plans (SUMPs) – the cornerstone and methods of EU urban policy and implementation.

Building Blocks of the 2021 Urban Mobility Framework

New EU Urban mobility framework (2021) Building blocks

A reinforced approach to TEN-T urban nodes

A reinforced approach to SUMPs and mobility management plans

Monitoring progress sustainable urban mobility indicators

Attractive public transport services, supported by a multimodal approach and by digitalization

Healthier and safer mobility a renewed focus on walking, cycling and micromobility

Zero-emission urban logistics

Digitalisation, innovation and new mobility services

Towards climate-neutral cities: resilient, environmentally friendly and energy-efficient urban transport

Increasing awareness, citizen engagement and assistance to local authorities

Governance and coordination - Reformed expert group on urban mobility

Funding and financing Urban Mobility Projects

Global outreach

#MobilityStrategy #EUGreenDeal

European Commission | Mobility and Transport

- SUMPs are "European Success" story. The method and principles are applied throughout Europe and is extended to many countries in different geographies outside the EU in a coherent way.
- The revised Trans-European Transport Network (TEN-T) Regulation contains legal requirements for "urban nodes". Consequently, 431 (big) European cities and their functional urban area have been made an integral part of the European transport network, with an obligation to adopt a Sustainable Urban Mobility Plan, and to collect data for indicators related to safety, accessibility and sustainability. Enhancing corridor connectivity is key.
- "Not leaving cities alone" is essential and therefore, the European Commission adopted recommendations for EU Member States to put in place national SUMP support programmes (NSSP), managed by a dedicated office under a national SUMP contact point. This includes training programmes, capacity building, technical expertise and guiding materials for better quality SUMPs.
- Furthermore, an inter-institutional European Declaration on Cycling has been agreed that identifies key principles to boost cycling in the mobility chain that will guide future action in the EU.

- **Rural Mobility**
  - The 2020 Sustainable and Smart Mobility Strategy (SSMS) highlights inter alia the need for improved connectivity in rural and remote regions, including outermost regions and islands, as well as inclusive transport options for persons with disabilities and persons with reduced mobility.
  - In the 2021 Long-Term Vision for Europe's Rural Areas, the Commission calls on Member States and regions to develop sustainable rural mobility strategies, with the overall objective of "stronger, connected, resilient and prosperous rural areas by 2040".
  - The European Commission will continue its role as a facilitator for the implementation of policies that consider the social and territorial cohesion aspects of transport and mobility and has supported a European Rural Mobility Network to engage rural municipalities and other rural areas from all over Europe in capacity-building and exchange of knowledge and experience, and is preparing guidance documents.

Expected Outcomes

- The application of the Urban Mobility framework will support European cities along their journey to reduce emissions and improve mobility in a sustainable manner. It endeavors the transition agenda for people and goods to move sustainably and safe in our cities, to shift to better multi-modal solutions, to move towards zero and low emissions transport solutions and freight, boost walking, cycling and public transport etc.

- By developing and implementing SUMPs, key challenges of congestion, air and noise pollution, the increasing logistic traffic, urbanization, limited urban space etc. are addressed by shifting to better multi-modal solutions, towards zero and low emissions passenger transport and freight solutions, the boosting of walking, cycling and public transport etc. Putting people in the center is essential under this approach.

- By providing guidance and supporting the rural mobility network, sustainable and resilient mobility connections between rural areas, within remote areas such as islands, and between remote rural areas (including isolated regions) and urban areas will be enhanced.
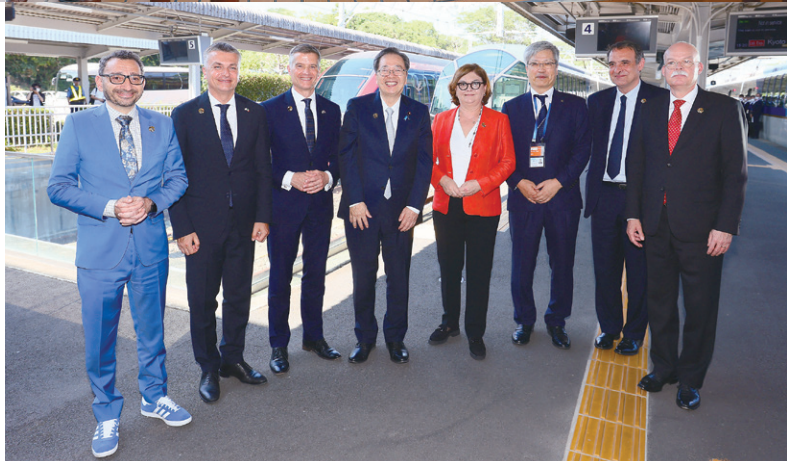
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- Urban mobility is undergoing a transformation throughout the EU: See European Commission, Directorate-General for Mobility and Transport, Armoogum, J., Garcia, C., Gopal, Y. et al., Study on new mobility patterns in European cities – Final report. Task A, EU wide passenger mobility survey, Publications Office of the European Union, 2022,
https://data.europa.eu/doi/10.2832/728583

- The 2021 Urban Mobility Framework:
https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=OJ:C_202301058

- The revised Trans-European Transport Network (TEN-T) Regulation:
to be signed April 2024

- National SUMP Support Programmes (NSSP):
https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:32023H0550

- This includes training programmes, capacity building, technical expertise and guiding materials for better quality SUMPs:
https://urban-mobility-observatory.transport.ec.europa.eu/news-events/news/eltis-20-2019-03-05_en

- European Declaration on Cycling:
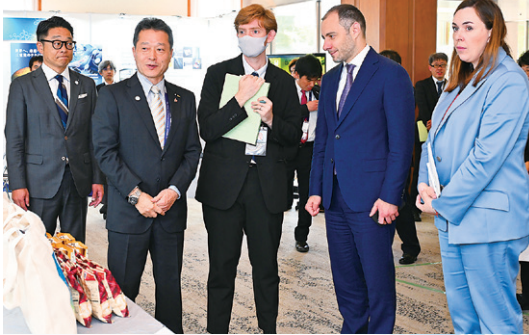https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=OJ:C_202301058

G7 2023
HIROSHIMA SUMMIT

ISE-SHIMA MIE
Transport Ministers' Meeting

Memories

in

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