GLOSSARY					
TERM	ACRONYM	DEFINITION (<100 words)			
Advanced Traffic Management System	ATMS	An advanced traffic management system (ATMS) is a sophisticated system that utilizes technology, data, and algorithms to monitor, control, and optimize traffic flow in a transportation network. ATMS integrates various components such as traffic sensors, cameras, communication systems, and advanced software to collect real-time data on traffic conditions. It enables operators to actively manage and control traffic signals, monitor incidents, detect congestion, and implement strategies to improve traffic flow and reduce delays. ATMS helps optimize signal timings, reroute traffic, and provide real-time information to travelers, contributing to safer, more efficient, and more sustainable transportation systems.			
Big Data	BD	In the context of transport, Big Data refers to the large volume, variety, and velocity of data generated from various sources within the transportation system. This includes data from sensors, GPS devices, traffic cameras, mobile apps, social media, and more. Big Data in transport encompasses information on traffic patterns, passenger behavior, vehicle performance, weather conditions, and other relevant factors. Analyzing and interpreting this vast amount of data can provide valuable insights for improving transportation planning, optimizing traffic flow, enhancing safety measures, and making informed decisions to enhance overall transport efficiency and effectiveness.			
Bus Rapid Transport	BRT	Bus rapid transit is a high-capacity bus-based transit system that delivers fast, reliable, high quality, safe, and cost-effective services at relatively low cost, metro-level capacities. It achieves that through dedicated bus lanes that are median aligned, off-board fare collection, level boarding, bus priority at intersections, and fast and frequent operations.			
Data Aggregation		Data aggregation in the context of transport refers to the process of collecting, merging, and summarizing various types of data from multiple sources within the transportation system. It involves gathering information from diverse sensors, devices, and databases to create a unified dataset for analysis and decision—making. This can include data such as traffic flow, vehicle speed, public transportation schedules, weather conditions, and user–generated information. By aggregating this data, transportation planners and stakeholders can gain valuable insights into system performance, identify trends, detect anomalies, and make informed decisions to optimize traffic management, improve infrastructure planning, enhance safety, and enhance overall efficiency of the transportation network.			
Data cleaning		Data cleaning in the context of transport data refers to the process of identifying, correcting, and eliminating errors, inconsistencies, and inaccuracies in the collected transportation data. It involves a series of activities such as removing duplicate entries, addressing missing values, standardizing formats, and resolving discrepancies between different data sources. Data cleaning ensures that the transport data is reliable, accurate, and suitable for analysis and decision-making purposes. By improving the quality of the data, transportation analysts, researchers, and planners can make more robust and valid interpretations, derive meaningful insights, and develop effective strategies to optimize transportation systems and enhance overall performance.			
Data visualisation		Data visualization in the context of transport refers to the graphical representation of transportation-related data to enhance understanding, analysis, and communication of information. It involves transforming raw data into visual elements such as charts, graphs, maps, and interactive displays, making complex transportation data more accessible and meaningful. Data visualization allows users to perceive patterns, trends, and relationships in the data at a glance, enabling stakeholders to make informed decisions and take appropriate actions. It helps in visualizing traffic congestion, transportation network performance, public transit usage, route planning, and other key aspects of the transportation system. By presenting data visually, it facilitates effective communication, fosters data-driven decision-making, and supports efficient management of transport infrastructure and operations.			
Demand data		Transport demand data refers to information that captures the travel patterns, preferences, and behavior of individuals or groups using various modes of transportation. It includes data on trip origins and destinations, travel times, travel distances, mode choice, frequency of travel, and other relevant factors.			
Development Finance Institution	DFI	A Development Finance Institution (DFI) is a specialised financial institution or a government-owned entity that provides long-term financing and investment to support economic development in countries or regions. DFIs aim to promote sustainable and inclusive growth by offering financial products and services that may include loans, equity investments, guarantees, and technical assistance. They often focus on sectors such as infrastructure development, agriculture, renewable energy, small and medium-sized enterprises (SMEs), and social impact projects. DFIs work in collaboration with governments, private sector entities, and international organisations to mobilize capital and promote economic and social development in target areas.			
Digital Product Designers		A digital product designer focusing on developing tools for transport users is a professional who specializes in creating user-centric digital solutions for the transportation industry. They possess a deep understanding of the unique challenges and needs of transport users, such as commuters, travelers, or logistics professionals. Their role involves conducting user research to identify pain points, designing intuitive interfaces for mobile apps or web platforms, and integrating features that enhance the user experience, such as real-time updates, trip planning, ticket purchasing, or route optimization. They collaborate closely with stakeholders, including transportation companies, engineers, and data analysts, to create efficient and user-friendly tools that streamline and improve the overall transport experience.			
Digitisation		Digitisation in the context of transport refers to the process of transforming traditional transportation systems and operations into digital formats by leveraging technologies and data-driven approaches. It involves the adoption of digital tools, software, and platforms to capture, analyze, and manage transportation-related information. Digitization enables the integration of various elements such as smart sensors, Internet of Things (IoT) devices, data analytics, and connectivity to improve efficiency, safety, and user experience. It facilitates real-time monitoring, predictive modeling, optimization of operations, intelligent decision-making, and the development of innovative mobility solutions that enhance the overall performance of transport systems.			

Emerging city		An emerging city refers to a rapidly growing urban area experiencing significant economic, social, and population growth. It often implies a transition from a less developed or rural state to a more urbanized and industrialized one. The transportation system in emerging cities typically undergoes profound changes to accommodate the increasing demands and challenges. This may involve the expansion of road networks, the introduction of mass transit systems, the implementation of intelligent transport systems, and the integration of sustainable and efficient transportation solutions. The transport system in emerging cities plays a crucial role in supporting economic development, improving accessibility, and enhancing the overall quality of life for residents.	
Functional Urban Area	FUA	Functional urban areas (as defined by Europenan Union) are clusters of local administrative units that are either part of a city or its commuting zones. Local units in the commyting zones have at least 15% of their working populaion commuting to the city for work.	
General Transit Feed Specification Data	GTFS	GTFS data, or General Transit Feed Specification data, is a standardised format for public transportation schedules and related geographic information. It is used to describe the routes, stops, schedules, and other details of a public transit system. GTFS data enables the integration and interoperability of transit information across different platforms and applications, allowing for the development of real-time transit apps, trip planning services, and multimodal transportation solutions. It provides a structured and consistent way to share public transit data, making it easier for travelers to access accurate and up-to-date information about public transportation services in a given area.	
Geographic Information System	GIS	A geographic information system is a computer system for capturing, storing, checking, and displaying data related to positions on Earth's surface. GIS connects data to a map, integrating location data (where things are) with all types of descriptive information (what things are like there). This provides a foundation for mapping and analysis that is used in science and almost every industry. GIS helps users understand patterns, relationships, and geographic context.	
Historical data		Historical data in the context of transport refers to the collection and storage of past information related to transportation systems. It encompasses data collected over a period of time, typically from various sources such as traffic sensors, vehicle tracking systems, and ticketing systems. Historical data is valuable for trend analysis, pattern recognition, and long-term planning. It can provide insights into traffic volume, travel patterns, peak hours, and mode preferences. By analysing historical data, transportation planners and researchers can make informed decisions regarding infrastructure development, capacity enhancements, and policy formulation to improve the efficiency and effectiveness of transport systems.	
Historical data		Historical data in the context of transport refers to the collection and storage of past information related to transportation activities. It includes various data points such as travel times, routes, vehicle speeds, passenger counts, and other relevant metrics recorded over a specific period. Historical transport data provides valuable insights into patterns, trends, and performance indicators of transportation systems. By analyzing this data, transportation planners, policymakers, and researchers can make informed decisions, optimize routes, improve infrastructure, predict demand, and enhance overall efficiency and safety in the transport sector.	
Informal transport		Informal transport also referred to as para-transit, refers to a mode of transportation that operates outside the formal regulatory framework and typically involves small-scale, unregistered vehicles or services. It is characterised by flexible routes, low fares, and a lack of official licenses or permits. Informal transport is prevalent in many developing countries and serves as a vital transportation option for communities with limited access to formal public transportation. Examples include cycle rickshaws, motorbike taxis, and minibusses. While informal transport fills gaps in the transportation system, it often faces challenges such as safety concerns, lack of regulation, and limited integration with formal transport networks.	
Intelligent Transport Systems	ITS	Intelligent Transport Systems (ITS) refer to the integration of advanced technologies and communication systems in transportation infrastructure and vehicles to enhance safety, efficiency, and sustainability. ITS utilises real-time data collection, processing, and dissemination to improve traffic management, optimise transportation networks, and provide customized services to users. It encompasses various components such as traffic monitoring and control, vehicle-to-infrastructure and vehicle-to-vehicle communication, intelligent navigation systems, and advanced driver assistance systems. By leveraging cutting-edge technologies like sensors, artificial intelligence, and data analytics, ITS aims to create smarter, more connected, and environmentally friendly transportation systems.	
Internet of Things	loT	Internet of things in the context of transport refers to to the network of interconnected devices, vehicles, infrastructure, and software that collect and exchange data to improve efficiency, safety, and sustainability. It involves the use of sensors, actuators, and communication technologies to connect various elements of the transportation system, enabling real-time data collection, analysis, and control.	
Macroscopic Transport modelling		Macroscopic transport modeling focuses on aggregated, high-level representations of traffic flow and movement. It involves analyzing and predicting traffic patterns and behavior at a larger scale, such as at the level of road networks or entire urban areas. Macroscopic models use simplified assumptions and equations to estimate traffic flow characteristics, including volume, speed, and density, without considering individual vehicle interactions. This modeling technique is useful for long-term planning, network-level analysis, and evaluating the overall performance of transportation systems, providing insights into congestion, capacity, travel demand, and the effectiveness of various transportation strategies.	
Microscopic Traffic simulation		Microscopic traffic simulation is a modeling technique that simulates individual vehicles and their interactions in detail to replicate real-world traffic behavior. It involves representing each vehicle as a separate entity and simulating their movements based on factors like acceleration, braking, lane changing, and interaction with other vehicles and infrastructure elements. Microscopic simulation models provide a detailed understanding of traffic dynamics, allowing for analysis of congestion, capacity, safety, and the effects of various control strategies. They are valuable for assessing the performance of specific intersections, road segments, or transportation scenarios and aid in optimizing traffic operations, signal timings, and infrastructure design.	
Mobility as a Service	MaaS	Mobility as a Service refers to the transition towards using on-demand services for transportation, which provides cost advantages, saves time, and enhances the overall travel experience. It involves the preference for using services instead of owning a vehicle due to factors like traffic congestion and the burdensome nature of vehicle maintenance. This concept encompasses multimodality of transport, integrating various modes of public and private transportation, as well as subscription services that offer a comprehensive range of services, including maintenance and insurance, based on the consumer's needs and preferences.	

Non-Governmental Organisation	NGO	An NGO, or Non-Governmental Organisation, is a non-profit organization that operates independently from government entities. NGOs are typically driven by a	
9		mission to address social, environmental, or humanitarian issues. They often work on a local, national, or international level to advocate for change, provide services, or raise awareness about specific causes. NGOs rely on funding from various sources, such as donations, grants, and partnerships, and are governed by a board or committee. They play a crucial role in areas such as humanitarian aid, human rights, environmental conservation, healthcare, education, and community development.	
Non-Motorised Transport	NMT	Non-motorised transport refers to modes of transportation that do not rely on motorised vehicles, typically involving human-powered means of travel. It includes various forms such as walking, cycling, and the use of non-motorised conveyances like skateboards, scooters, and wheelchairs. Non-motorised transport promotes physical activity, reduces congestion, lowers pollution levels, and enhances urban livability. It is often prioritized in urban planning and transportation policies to create pedestrian-friendly and bike-friendly infrastructure, including sidewalks, dedicated bike lanes, and shared-use paths, to encourage and support sustainable and healthy modes of transportation.	
Open Data		Open Data in the context of transport refers to the practice of making transportation-related information and datasets freely available to the public in a standardized, accessible, and machine-readable format. It includes data such as public transport schedules, real-time vehicle tracking, traffic congestion information, road network data, and more. By sharing this data openly, governments, transportation agencies, and organizations aim to promote transparency, innovation, and collaboration, enabling developers, researchers, and the general public to create applications, services, and solutions that improve transportation efficiency, planning, and user experience.	
Open Street Maps	OSM	OpenStreetMap (OSM) is a collaborative and freely accessible mapping project that creates and provides open-source geographic data and maps to users worldwide. It operates on a wiki-like model, where volunteers contribute to the project by mapping roads, buildings, landmarks, and other features using GPS devices or aerial imagery. The data is stored in a geodatabase and can be accessed, edited, and used by anyone under an open license. OpenStreetMap serves as an alternative to proprietary mapping services and is widely used for a range of applications, including navigation, urban planning, disaster response, and community mapping initiatives.	
Operational Control Center	OCC	A transport operational control center (OCC) is a centralized facility where real-time monitoring, coordination, and management of transportation systems take place. It serves as a command center for collecting and analyzing data from various sources such as traffic sensors, CCTV cameras, and vehicle tracking systems. OCCs use advanced technologies and software to provide operators with real-time information on traffic conditions, public transit operations, and other transport-related data. They enable efficient response to incidents, facilitate proactive management of transportation networks, and support decision-making to optimize operations, enhance safety, and improve the overall efficiency of the transport system.	
Origin-Destination data	OD	Origin-Destination (OD) data is a type of data that captures the movement of people or goods between specific locations. It provides information about the origins and destinations of trips, along with associated attributes such as travel times, distances, modes of transport, and demographics. OD data is valuable for transportation planning, traffic management, and urban design. It helps identify travel patterns, congestion hotspots, demand for transportation services, and supports the development of effective transportation policies and infrastructure. OD data is often collected through surveys, mobile phone data, GPS tracking, or automated fare collection systems.	
Pedestrian simulation		Pedestrian simulation is used to simulate the movement and behavior of pedestrians in various environments such as streets, sidewalks, public spaces, and buildings. It involves representing individual pedestrians as agents and simulating their movements based on factors like walking speed, desired destinations, interactions with other pedestrians, and the built environment. Pedestrian simulation models provide insights into pedestrian flow, crowd dynamics, evacuation planning, and pedestrian safety. They are useful in designing pedestrian-friendly spaces, optimizing crowd management strategies, assessing the impact of infrastructure changes, and enhancing pedestrian mobility and safety in urban environments.	
Private Transport		Private transport refers to modes of transportation that are owned, operated, and primarily used by individuals or private entities rather than the public sector. It typically includes passenger vehicles such as cars, motorcycles, bicycles, and privately owned micro-mobility options (e.g., e-scooters). Private transport are characterised as non-commercial, personal-use mobility that contrasts with public transport systems, which are accessible to the general public.	
Public Transport		Public transport refers to any mode of transport that is available for hire and reward, and is accessible to the general public. This includes buses, trains, taxis, as well as air and sea services. It encompasses both passenger and freight services, excluding own-account freight services. Public transport systems can vary in terms of costs and capacity, ranging from low-capacity options like taxis and mini-micro-buses to higher-cost variants such as demand responsive transport (DRT) and personal rapid transit (PRT) systems. Medium-capacity public transport systems include buses, trams, and light rapid transit (LRT) systems. High-capacity public transport systems are typically associated with heavy rail technology, with distinctions made between urban, suburban, and inter-urban services.	
Raw data		Raw data refers to unprocessed, unformatted, and often unorganized data collected directly from its source. It represents the initial stage of data before any manipulation, cleaning, or analysis has occurred.	
Real-time data	RT	Real-time data in the context of transport refers to the collection and analysis of live information related to transportation systems. It involves capturing data from various sources such as sensors, GPS devices, and traffic cameras, and processing it instantly to provide up-to-date insights. Real-time data in transport includes information on traffic flow, congestion, road conditions, public transit schedules, and availability of parking spaces. This data is used to optimise traffic management, improve navigation and routing systems, provide accurate travel time estimations, and enhance the overall efficiency and safety of transportation networks.	

Real-time data		Real-time data in the context of transport refers to the continuous and instantaneous collection and analysis of information related to transportation activities. It encompasses up-to-the-minute data on variables such as traffic flow, vehicle locations, road conditions, and transit schedules. Real-time transport data is obtained through sensors, GPS devices, cameras, and other monitoring systems embedded in the transportation infrastructure. This data is processed and disseminated in real-time, enabling stakeholders such as commuters, traffic management authorities, and transportation service providers to make informed decisions, respond promptly to incidents, optimize routes, and provide accurate and timely information to users, thereby improving the overall efficiency and reliability of transport systems.	
Real-time passenger information	RTPI	Real-time passenger information (RTPI) refers to the provision of up-to-date and accurate information to passengers regarding public transportation services. It involves real-time data collection, processing, and dissemination to inform passengers about the arrival and departure times of buses, trains, or other modes of transport. RTPI systems utilize various communication channels, such as digital displays, mobile apps, and websites, to provide real-time updates on service disruptions, delays, and alternative routes. RTPI enhances the passenger experience, improves journey planning, reduces uncertainty, and enables users to make informed decisions about their travel options in real time.	
Road Weather Information Systems	RWIS	RWIS is a comprehensive system that integrates various technologies to collect, transmit, model, and distribute vital weather and road condition information.	
Street design		Street design refers to the process of planning and creating the physical layout and features of streets to accommodate various modes of transportation and meet the needs of communities. It involves considering factors such as safety, accessibility, efficiency, aesthetics, and sustainability. Street design incorporates elements such as sidewalks, bike lanes, crosswalks, traffic calming measures, lighting, landscaping, and signage. The goal of street design is to create well-designed, user-friendly, and inclusive spaces that prioritize the safety and comfort of pedestrians, cyclists, and motorists, while also promoting vibrant, livable communities and sustainable transportation options.	
Supply data		Transport supply data refers to information that quantifies the available capacity and resources within a transportation system, such as the number of vehicles, routes, and infrastructure. It helps in understanding the capabilities and potential of the transport network. On the other hand, transport demand data refers to information that captures the volume and patterns of travel demand, including the number of passengers or goods, origin–destination pairs, and trip characteristics. It helps in identifying the needs and preferences of users and predicting future travel behavior. In summary, transport supply data focuses on the system's capacity, while transport demand data focuses on the users' requirements.	
Sustainable Urban Mobility Plans	SUMP	A <u>Sustainable Urban Mobility Plan</u> is a strategic plan designed to satisfy the mobility needs of people and businesses in cities and their surroundings for a better quality of life. It builds on existing planning practices and takes due consideration of integration, participation, and evaluation principles. It is Europe's de facto urban transport planning concept.	
Traffic engineering		Traffic engineering involves the application of engineering principles and techniques to analyze, design, and manage the flow of vehicles and pedestrians on roadways. It focuses on optimizing the efficiency, safety, and capacity of transportation networks. Traffic engineering encompasses various tasks, including traffic flow analysis, signal timing, intersection design, parking management, and road safety measures. It aims to alleviate congestion, mimimize travel delays, improve traffic operations, and enhance overall transportation system performance. Traffic engineers use data collection, modeling, and simulation tools to make informed decisions and implement strategies that ensure the smooth and safe movement of vehicles and pedestrians.	
Traffic signal optimisation		Traffic signal optimisation is the process of fine-tuning the timing and coordination of traffic signals at intersections to improve traffic flow and minimise congestion. It involves analysing traffic patterns, considering factors such as traffic volume, peak hours, pedestrian movement, and transit priorities, and adjusting the signal timings accordingly. By optimising traffic signal phasing and timing plans, transportation authorities aim to reduce travel delays, improve intersection capacity, enhance pedestrian safety, and create a smoother and more efficient traffic flow, ultimately leading to a better overall transportation experience for motorists, pedestrians, and public transport users.	
Transport operations		Transport operations involve the day-to-day management and control of transportation systems, including the coordination of various activities such as scheduling, routing, and monitoring. Operational control centers play a crucial role in transport operations by serving as command centers where real-time information is collected, analyzed, and used to make decisions. These centers utilize advanced technologies, data analytics, and communication systems to monitor and manage traffic, public transit, and other transportation modes. They facilitate efficient response to incidents, optimize operations, and improve overall system performance, ensuring smooth and reliable transportation services for users.	
Transport planning		Transport planning involves the systematic analysis, design, and management of transportation systems to meet the current and future mobility needs of a community or region. It encompasses various aspects such as assessing transportation demand, analyzing travel patterns, designing transportation infrastructure, and implementing policies and strategies to enhance efficiency, safety, and sustainability. Transport planning aims to create an integrated and multimodal transportation network that optimizes the movement of people and goods while considering factors like land use, environmental impact, social equity, and economic viability. It involves collaboration between government agencies, urban planners, engineers, and stakeholders to shape the transportation system of a specific area.	