

GLOSSARY

ADA (Americans with Disabilities Act): A federal civil rights law that prohibits discrimination against individuals with disabilities in employment, public services, and public accommodations.

Algorithm: A well-defined sequence of steps or instructions designed to perform a specific task or solve a particular problem. It is used to automate processes and make them more efficient and reliable.

Android: An operating system for cellular telephones and tablet computers. Android Inc. was bought by the American search engine company Google Inc., in 2005.

Application (App): A software program designed to perform a specific task, such as word processors or mobile apps.

API (Application Programming Interface): A set of commands, functions, protocols, and objects that programmers can use to create software or interact with an external system. It provides developers with standard commands for performing common operations.

Arrival Time: The time at which a transit vehicle reaches a designated point such as a bus stop or terminal.

Bus Operator: A person responsible for driving and operating a transit vehicle, ensuring passenger safety and adhering to schedules and regulations.

Synonyms: *Operator, Bus Driver, Driver, Motor Coach Operator (MCO)*

Bus Stop ID: A unique identifier assigned to a specific bus stop for the purpose of navigation and scheduling.

Bus Stop Location: The geographical coordinates or address where a bus stop is situated.

Bus Stop Sequence: The order in which bus stops are served along a transit route.

Bus Stop: A designated location where buses pick up and drop off passengers.

CAD/AVL: Computer-Aided Dispatch/Automatic Vehicle Location describes the use of computers and Global Positioning Systems (GPS) in dispatching and tracking transit vehicles.

Cloud-Hosted: Cloud hosting is the procurement of computing resources from a cloud computing provider or facility to host data, services and/or solutions.

Commercial off the shelf (COTS): Pre-existing, commercially available items that can be bought, leased, or licensed without the need for custom development. They are designed to be used “as is” and are often adapted or configured to meet the specific needs of the purchasing organization, rather than being custom-built from scratch.

COTS can include software, hardware, goods, construction materials, and associated services such as installation, training, or cloud services.

Deadhead: The movement of a transit vehicle without passengers, usually to or from a garage or terminal.

Detour: A temporary route deviation due to road closures, construction, or other factors affecting regular service.

Dwell time: The duration a vehicle is at a stop for passengers to board and alight, including the time required for opening and closing doors.

Fixed route: A type of transit service where vehicles operate on predetermined routes with established stops and schedules. Passengers can board and alight at specific locations along the route, and service operates according to a set timetable.

Geospatial data: Refers to information that is associated with a specific location on or near the Earth's surface. It combines location information (e.g., coordinates), attribute information (e.g., characteristics of the object or event), and temporal information (e.g., time or lifespan of the data). This data is crucial for analyzing spatial relationships, patterns, and trends.

GTFS (General Transit Feed Specification): An open data format for public transportation schedules and associated geographic information.

GTFS-rt (General Transit Feed Specification-Realtime): A GTFS Realtime feed lets transit agencies provide consumers with real time information about disruptions to their service (stations closed, lines not operating, important delays, etc.) location of their vehicles, and expected arrival times.

GeoJSON (Geo-JavaScript Object Notation): An open standard data format designed for representing simple geographical features, along with their non-spatial attributes.

Graphic User Interface (GUI): A form of user interface that allows users to interact with electronic devices through graphical icons and visual indicators instead of text-based user interfaces, typed command labels or text navigation.

Geographic Information System (GIS): A system for capturing, storing, analyzing, and managing spatial or geographic data, often used in transit planning and operations.

Headway: The time interval between consecutive vehicles traveling in the same direction on a specific route, usually measured in minutes. This interval helps determine the frequency of service, with shorter headways indicating more frequent service. Headways can be based on demand, such as during peak periods, or set by policy, such as every 30 minutes. Headways can be regular, or clock, depending on scheduling consistency. In some contexts, "headway" may also refer to a gap or missed vehicle in service.

HTML (Hypertext Markup Language): A standardized system for tagging text files to achieve font, color, graphic, and hyperlink effects on web pages.

Inbound bus stop: A stop designated for a vehicle traveling toward the transit center or central hub of a city or system. Inbound or outbound refer to the direction of travel relative to the main transit center. This designation helps riders quickly identify which stop to use depending on their destination.

Interface Control Document: A formal technical document defining how two or more systems interact with each other.

iOS: A multiplatform operating system (OS) created and developed by Apple Inc. for its iPhone.

IVR (Interactive Voice Response): A technology that allows a computer to interact with humans using voice and inputs via a keypad.

JSON (JavaScript Object Notation): A lightweight data-interchange format that is easy for humans to read and write and for machines to parse and generate. It is a subset of the JavaScript programming language.

KML (Keyhole Markup Language): A notation for expressing geographic annotation and visualization within Internet-based, two-dimensional maps and three-dimensional Earth browsers. KML was developed for use with Google Earth, which was originally named Keyhole Earth Viewer.

Layover Point: A designated location at the end of a route where a transit vehicle pauses for a scheduled period of time to wait before resuming service.

Line: A specific route or series of connected routes operated by a transit agency.

Missed trip: A scheduled trip that did not operate due to reasons such as operator absence, vehicle failure, dispatch error, traffic, accident, or other unforeseen circumstances.

Motor Coach Operator: A person responsible for driving and operating a transit vehicle, ensuring passenger safety and adhering to schedules and regulations.

Synonyms: *Operator, Bus Driver, Driver, MCO*

National Transit Database (NTD): A repository of transit-related data collected from transit agencies across the United States, used for reporting and analysis.

Native Application: A native application is software developed specifically for a particular operating system, designed to run directly on a device and fully utilize its features such as the camera, GPS, microphone, or push notifications.

OneBusAway. Originally launched in 2008 as a project by graduate students at the University of Washington, OneBusAway is an integrated suite of open source software

components that stores, manages and delivers real-time information about transit vehicle locations.

On-Time Performance: The percentage of transit trips and stops that adhere to their scheduled arrival and departure times.

Operator Run: A work assignment for an operator including revenue and non-revenue service and any other paid activities.

Outbound bus stop: A stop designated for a vehicle traveling away from the transit center or central hub of a city or system. Inbound or outbound refer to the direction of travel relative to the main transit center. This designation helps riders quickly identify which stop to use depending on their destination.

Pattern: see: **Route Pattern**

Passenger miles: A measure of service utilization representing the cumulative distance traveled by passengers on transit vehicles. It is calculated by multiplying the number of passengers by the distance traveled. For instance, if ten passengers travel two miles each, it totals twenty passenger miles. This measurement is also known as passenger miles traveled.

Revenue Service: A route segment traveled by a transit vehicle while in service and carrying passengers.

Route Pattern: The specific sequence of stops and segments followed by a transit route.

RSS (Really Simple Syndication): A web feed that allows users and applications to access updates to websites in a standardized, computer-readable format.

Route Trace Pattern: A graphical representation or map showing the path followed by a transit route.

Route Trip Pattern Sequence: The predetermined order in which trips are scheduled and operated along a transit route.

Schedule: A predetermined timetable or plan outlining the departure and arrival times for transit trips along specific routes.

Segment Speed Factors: Factors influencing the speed of transit vehicles along specific route segments, such as traffic conditions, road design, and passenger activity.

Segment Speed: The average speed of transit vehicles along specific route segments, typically measured in miles per hour.

Service Day: Defined schedule and service level such as weekday, Saturday, or Sunday.

Service Hours: The total number of hours during which vehicles are in service.

Service Miles: The total distance traveled by transit vehicles while in revenue service during a specified period.

Shapefiles: Digital files containing geographic data representing the shape and location of transit routes, stops, and other relevant features.

Shuttle: A specialized transit service operating on a specific route or between designated points, often serving as a connection to larger transit networks.

Special Route: A transit route serving a particular purpose, area, or demographic, often operating on a limited schedule or frequency.

SMS (Short Message Service): A text messaging service component of most telephone, Internet, and mobile device systems. It uses standardized communication protocols to enable mobile devices to exchange short text messages.

Software-as-a-Service (SaaS): A software licensing and delivery model in which software is licensed on a subscription basis and is centrally hosted. It is sometimes referred to as "on-demand software."

Timepoint: A specific location along a transit route where the arrival and departure times are used to determine schedule adherence and reliability.

Timetable: A printed or digital schedule providing details of transit routes, trips, stops,

Transit Center: A centralized facility where multiple transit routes converge, allowing for transfers between different services.

Trip Segment: A portion of a transit route traveled by a transit vehicle between two designated points.

Trip: A single journey or operation of a transit vehicle along a specific route or segment.

TXT: A TXT file is a standard text document that contains unformatted text.

Vehicle Blocking Assignment: The assignment of specific trips to blocks.

Vehicle Schedule: see: **Block**

Vehicle Type: The specific model or category of transit vehicle used to operate a particular route or service.

Web Hosting: A service that allows individuals or organizations to make their websites accessible on the internet. It involves storing website files (such as HTML, images, and code) on servers—specialized computers that deliver these files to users when they type in the website's domain name.

Work Order: Unique numeric identifier used to track labor associated with a project.

XML (Extensible Markup Language): A markup language that defines a set of rules for encoding documents in a format that is both human-readable and machine-readable.

Yard: A facility where revenue vehicles are stored, maintained, and serviced, and where operators report for their assignments. Vehicles are dispatched and recovered here for scheduled service.

ZIP: An archive file format that supports data compression.