

# **APPENDIX A**

# **GLOSSARY**

**JANUARY 2019**





# ACRONYMS

AARP	American Association of Retired Persons	DFD	Denver Fire Department	MPH	Miles per hour
ACS	American Community Survey (U.S. Census)	DHS	Denver Human Services	NACTO	National Association of City Transportation Officials
ADA	Americans with Disabilities Act	DMT	<i>Denver Moves: Transit</i>	NPI	Neighborhood Planning Initiative
AV	Autonomous vehicle	DOF	Denver Department of Finance	OCA	Denver Office of Children's Affairs
BAT	Business access and transit (lane)	DPD	Denver Police Department	OED	Denver Office of Economic Development
BID	Business improvement district	DPR	Denver Parks and Recreation Department	RNO	Registered Neighborhood Organization
BRT	Bus rapid transit	DPS	Denver Public Schools	RTD	Regional Transportation District
CBD	Central business district	DPW	Denver Public Works Department	SOV	Single-occupant vehicle
CCD	City and County of Denver (the City)	DRCOG	Denver Regional Council of Governments	SRTS	Safe Routes to School
CDOT	Colorado Department of Transportation	FHWA	Federal Highway Administration	TAC	Technical advisory committee
CIP	Capital Improvement Program	FTA	Federal Transit Administration	TDM	Transportation demand management
CPD	Denver Community Planning and Development Department	FTN	Frequent Transit Network	TMA	Transportation management association
CPTED	Crime Prevention Through Environmental Design	GTFS	General transit feed specification	TNC	Transportation network company
DA&V	Denver Arts and Venues	HIN	High injury network ( <i>Vision Zero</i> )	TOD	Transit-oriented Development
DDP	Downtown Denver Partnership	HCT	High-capacity transit	TOL	Transit-only lane
DDPHE	Denver Department of Public Health and Environment	HOT	High-occupancy toll lane	TPI	Transit propensity index
		HOV	High-occupancy vehicle (lane)	TS	Denver Technology Services
		HR	Denver Human Resources	TSP	Transit signal priority
		MCT	Medium-capacity transit		

## TERMS

**Alighting:** The act of getting off or out of a transit vehicle (bus, train, streetcar). The “number of alightings” is the number of people who alight a transit vehicle.

**Amenities, stop or station:** Objects or facilities (such as a shelter, bench, or information display) to enhance passenger comfort, safety, and transit usability at stops or stations.

**Autonomous vehicle (AV):** A vehicle that can operate without human assistance.

**Boarding:** The act of getting on or into a transit vehicle (bus, train, streetcar). The “number of boardings” is the number of people who board a transit vehicle.

**Blueprint Denver:** Denver’s integrated land use and transportation plan, establishing key policy direction on land use, transportation, and urban design. The plan is a policy document adopted by City Council as a supplement to the Comprehensive Plan.

**Bus bulb:** An extension of the sidewalk or pavement out into the roadway for a bus stop.

**Bus rapid transit (BRT):** A bus transit mode that provides service similar to rail transit, at a potentially lower cost depending on the level of investment. Features of BRT include exclusive transitways or busways, enhanced stations, branded vehicles, high-frequency all-day service, simple route structures, off-board (pre-paid) fare collection, and technologies such as real-time information. These combined features improve bus speed, reliability, and identity.

**Business access and transit lane (BAT):** Traffic lanes primarily dedicated for transit use, but allow non-transit vehicles to enter the transit lane to access driveways or intersecting streets.

**Buy-up service:** A fee-for-service system in which a city, business district, or some other organization pays for incremental service or the extension of transit service offered by a transit provider.

**Bypass lane:** Short dedicated transit lanes with signal priority that allow buses to easily enter traffic flow in a priority position and bypass congested areas. Also referred to as a queue jump.

**Circulator service:** Transit service confined to a specific locale, such as a downtown area or a suburban neighborhood, with connections to major corridors.

**Commuter rail (regional rail):** Rail system that carries passengers within urban areas, or between urban areas and their suburbs, but differs from light rail transit in that the passenger cars are heavier, the average trip lengths are longer, there are few standing passengers, and the operations may be carried out over tracks that are part of the railroad system in the area. In RTD’s system, the University of Colorado A Line to Denver International Airport is an example of a commuter rail line.



**Complete transit system:** A unifying concept for complementary transit service quality and land use elements (e.g., service levels and land use policies) and non-service elements (e.g., facilities, pedestrian and bicycle access) that function together to achieve desired local outcomes for transit. A complete transit system may include increased transit information and legibility, expanded frequent service, flexible and affordable fare and pass programs, safe and convenient pedestrian and bicycle access to transit, and coordinated land use, parking, and placemaking policies.

**Consolidation/consolidated, bus stops:** Reducing the number of bus stops so that transit vehicles make fewer stops.

**Crime Prevention Through Environmental Design (CPTED):**

A multi-disciplinary approach to deterring crime by designing a physical environment that positively influences human behavior and creates a climate of safety in a community.

**Daily boardings:** The number of passengers getting into or onto a transit vehicle per day. May be counted by stop, by route, or by system.

**Dedicated transit lane:** A highway or street lane reserved for buses, light rail or streetcar vehicles, or both. Also called an “exclusive” transit lane.

**Denver Moves: Pedestrians and Trails Plan:** Denver’s long-term plan for creating a world-class pedestrian city and trail network.

**Enhanced transit:** Transit service that includes elements that improve speed and reliability of operation and the quality of the passenger experience. Enhanced transit falls between standard fixed-route service and bus rapid transit. Changes from fixed-route service may include capital improvements, such as queue jumps and upgraded stop amenities (like higher-capacity shelters or real-time information), and service enhancements.

**First/last mile, first/final mile:** How transit riders get to and from transit stops and stations. Since transit trips do not start precisely where transit riders live, work, shop or visit, people must walk, drive, or use another method to access a transit stop or station, completing the link between transit and the trip origin and destination.

**Frequent Transit Network (FTN):** A vision for a network of transit corridors identified for phased implementation of frequent service in Denver. The FTN is envisioned to provide transit services that are scheduled to arrive every 15 minutes or sooner, 6 AM to 10 PM, 7-days a week.

**Game Plan:** Part of *Denverright*, the Game Plan for a Healthy City is the City and County of Denver’s adopted parks and recreation plan.

**Green infrastructure:** An approach to stormwater management that uses vegetation, soils, roots, and natural processes to slow and filter stormwater runoff. Green infrastructure can include large-scale systems such as parks, open spaces, and floodplains, or smaller, site-scale green infrastructure such as rain gardens, stormwater planters, and tree trenches.

**High-capacity transit (HCT):** High-capacity transit includes any form of public transit that has an exclusive right-of-way, a non-exclusive right-of-way, or a combination of both. High-capacity transit vehicles make fewer stops, travel at higher speeds, have more frequent service, and carry more people than local service transit. High-capacity transit can include light rail, rapid streetcar, commuter rail, and bus rapid transit.

**High injury network (HIN):** The corridors in Denver with the highest number of fatal and injury crashes, as identified in Denver’s *Vision Zero Action Plan*.

**High-occupancy toll (HOT) lane:** A traffic lane that is available to high-occupancy vehicles without charge; other vehicles are required to pay a fee.

**High occupancy vehicle (HOV) lane:** A traffic lane reserved for vehicles with multiple passengers.

**Intermodal station:** A transit stop or station at the meeting point of several routes or lines or of different modes of transportation. It is located on or off the street and is designed to handle the movement of transit vehicles or trains and the boarding, alighting, and transferring of passengers between different modes (also known as a modal interchange center).

**Intersection density:** The number of street intersections per unit of area. Higher intersection density is associated with improved walkability because there are more opportunities and a shorter distance required to reach the same destination.

**Light rail transit (LRT):** An electric railway system characterized by its ability to operate single cars or short trains along exclusive rights-of-way at ground level, on aerial structures, in subways, or occasionally, in streets.

**Medium-capacity transit (MCT):** Corridors that can accommodate rapid bus or bus rapid transit service with improvements such as dedicated lanes, transit signal priority, and/or bypass/queue jump lanes.

**Microtransit:** A shuttle service that can be on-demand in real-time, or fixed-route service updated frequently to meet market needs. Shuttles often operate during peak-period commute hours in areas where public transit is reaching capacity or may be unavailable. Microtransit companies vary by fleet type (buses or vans), route structure (fixed or dynamic), and fleet ownership. Microtransit is distinguished from private shuttles by its ability to automate routing, billing, customer feedback, and reservations (in addition to being available to the public).

**Mobility hub:** A transit stop or station area with access to a variety of transportation modes including pedestrian, bicycle, and shared mobility options. It is a safe, convenient, and attractive place that often includes commercial retail.

**Mode share:** The proportion of total person trips that use each mode of transportation. For example, the number of commuters taking transit versus the number driving alone, bicycling, or other possible travel modes.

**Off-board ticketing/fare payment:** A fare payment system that is located off or outside a transit vehicle.

**On-time performance:** For fixed-route service, the percentage of on-time arrivals at stops along the route. For demand-response service, the percentage of scheduled trips that are picked up within the assigned on-time window (typically 30 minutes).

**On-demand ride services:** Services that provide people with point-to-point rides via a network of privately owned vehicles. Rides are scheduled using a computer or mobile device (smart phone). Examples of on-demand ride service providers include Lyft and Uber (also known as transportation network companies or TNCs). Rides may also be shared (shared ride services).

**Park-n-ride:** Transit access by driving private automobiles or riding bicycles to a transit station, stop, or carpool/vanpool waiting area and parking the vehicle in the area provided for that purpose (park-n-ride lot, park-n-pool lot, commuter parking lot, bicycle rack or locker). Passengers then ride the transit system or take a car or vanpool to their destinations.



**Parklet:** Curbside spaces converted into vibrant community spaces with public seating and landscaping. Most parklets incorporate seating, greenery, and bicycle racks. Also known as street seats or curbside seating.

**Plaza:** Public space for the surrounding community that is created from transformed or underused right-of-way.

**Payment technology:** The type of payment (fare) accepted for transit services. Examples include on-board cash fareboxes, electronic smart cards, tokens, and mobile phone ticket applications.

**Queue jump:** See bypass lane.

**Rapid bus:** A less full-featured version of bus rapid transit that is envisioned for many of the Medium-Capacity Transit corridors. Rapid bus differs from BRT in the level of passenger capacity and design quality, including the extent in which dedicated transit lanes are provided (full BRT operates in dedicated lanes along 50% or more of its route).

**Real-time information:** System that communicates to passengers exactly when the next bus will arrive. This information may be provided on electronic displays at transit stops, by an automated telephone system, by text message, on a website, or by mobile phone applications.

**Rider experience:** The overall perceived quality of riding transit, which is based on both physical characteristics of the system and the way in which it operates. Some contributing factors include route legibility (i.e., the simplicity or understandability of a route's path and schedule); availability and clarity of information; on-board comfort; real-time arrival information; quality of access to transit from other modes such as bicycling or walking; the convenience and flexibility of the fare system used; and stop amenities such as lighting, seating, and shelters.

**Safe Routes to School (SRTS):** A Denver program that uses a variety of strategies to improve safety for children walking and biking to school.

**Service frequency or headway:** Frequency is the number of transit vehicles per hour that serve a particular route or line in each direction (e.g., 4 buses per hour). Headway is the interval of time between scheduled arrivals of a transit vehicle on a particular line in each direction (e.g., 15 minutes). These terms are often used interchangeably; headway is calculated by dividing 60 minutes by the frequency of a line (e.g., 60 minutes / 4 buses per hour = 15 minute headway).

**Service span:** The number of hours during the day between the start and end of service on a transit route.

**Shared mobility/shared mobile services:** Services such as car share, bike share, and on-demand transportation services such as Uber and Lyft (also TNCs or on-demand ride service providers).

**Special Districts:** City Charter and State Statutory Districts that can be used to finance several kinds of public improvements, amenities, and programs. Districts in Denver include General Improvement Districts (GIDs), Local Improvement Districts (LIDs), Business Improvement Districts (BIDs), Local Maintenance Districts (LMD), and Metropolitan Districts.

**Speed and reliability improvement:** One of the levels of investment on Transit Capital Investment Corridors. Improvements include transit signal priority to make transit more reliable and rapid in existing traffic. These corridors also have improved stop amenities and pedestrian and bicycle access improvements.

**Streetcar:** An electrically powered rail car that is operated singly or in short trains, usually on tracks in mixed traffic on city streets. In some areas, it is also known as a trolley car or tram.

**Transit Capital Investment Corridor:** A set of corridors in Denver identified for major transit capital investments ranging from rail, bus rapid transit, or rapid bus to a more moderate level of speed and reliability improvements.

**Transit-oriented development (TOD):** A type of development that provides a mix of uses within walking distance of public transit. TOD can be implemented around rail lines or major bus lines, such as along the Frequent Transit Network.

**Transit Priority Street:** Corridors where transit is prioritized over other modes when making decisions about how to design or operate the right-of-way. In *Blueprint Denver*, transit priority streets are those that have been identified as High- or Medium-Capacity Transit corridors in *Denver Moves: Transit*.

**Transit propensity index (TPI):** A measure of a particular area's demographics that combines the densities of populations who are more likely to use transit, often including people over age 65, people with disabilities, and people with low incomes (less than 150% of the poverty level). Data are taken from the U.S. Census.

**Transit Score:** A proprietary measure of the availability and usefulness of the transit options in a particular place, normalized to a 100-point scale. Input factors include the distance to the nearest transit stops/routes, the frequency of service on those routes, and the type of transit service. This measure was developed by the Center for Neighborhood Technology (CNT).

**Transportation demand management (TDM):** Various strategies that change travel behavior (how, when, and where people travel) in order to increase transport system efficiency and achieve objectives such as reduced traffic congestion, increased safety, or energy conservation. It may include

programs to shift demand from single-occupant vehicles to other modes such as transit and ridesharing, to shift demand to off-peak periods, or to eliminate demand for some trips.

**Transportation Management Association (TMA):** An association of public or private agencies and firms joined to cooperatively develop transportation programs in a given area. TMAs work with employers, residents, and neighborhood organizations to improve awareness of transportation options and manage transportation demand.

**Transit signal priority (TSP):** A tool used to modify traffic signal phases to advance transit vehicles through intersections, helping to reduce delays at intersections and increase transit speeds. TSP is sometimes used in combination with queue jumps, bypass lanes, or dedicated transit lanes.

**Vehicle miles traveled (VMT):** A measure of the total miles traveled by all vehicles over a certain time period.

**Vision Zero:** *Vision Zero* is a transportation safety philosophy that was developed in Sweden in the late 1990s to eliminate traffic deaths and serious injuries in the transportation system. The City of Denver's *Vision Zero Action Plan (2017)* is a five-year approach to achieve the City's commitment to eliminate all traffic-related deaths and serious injuries on Denver's roadways by 2030.

**Walk Score:** A proprietary measure of the walkability of a particular place that combines a number of factors and normalizes the score to a 100-point scale. Input factors include distance to amenities, population density, block length, and intersection density, among others. This measure was developed by the Center for Neighborhood Technology.

**Wayfinding:** Signage or other methods that help orient people and make it easier to navigate between places.

