

2021 Regional Plan Glossary

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A

ABM

See **Activity Based Model**

ABM2+

ABM2+ is the second-generation Activity Based Model system used in the 2021 Regional Plan.

accessory dwelling unit

A dwelling unit with complete independent living facilities for one or more persons located on the property of a primary residence. Accessory dwelling units can be detached (separated from the primary structure), attached (attached to the primary structure), or converted existing space (a part of the existing structure that is converted into an independent living unit). Also known as granny flats, in-law units, or backyard cottages.

active transportation

Active Transportation includes any method of travel that is human-powered, but most commonly refers to walking and biking. With technological advances, the definition has expanded to include **e-scooters** and **e-bikes**.

Active Transportation and Demand Management

The dynamic management, control, and influence of travel demand, traffic demand, and traffic flow of transportation facilities using real-time information and technology to manage the entire trip from origin to destination, including influencing **mode choice** and how and when the transportation system is used. ATDM uses value pricing and the following strategies:

The dynamic management, control, and influence of travel demand, traffic demand, and traffic flow of transportation facilities

- **Active Demand Management (ADM)**
The use of information and technology to influence mode choice, route choice, and time of travel.
- **Active Traffic Management (ATM)**
The ability to manage congestion on roadways in real-time based on current traffic conditions.
- **Active Parking Management (APM)**
The ability to manage the supply and price of parking in real time and provide real-time parking availability information to reduce circling around parking facilities.

activity based model

SANDAG transitioned from an enhanced four-step transportation model to an activity based model (ABM) for the 2015 Regional Plan. The ABM simulates individual and household transportation decisions that compose their daily travel itinerary. People travel outside their home for activities such as work, school, shopping, healthcare, and recreation, and the ABM attempts to predict whether, where, when, and how this travel occurs.

activity centers

Places that attract a significant number of people or vehicles daily, including employment centers, shopping centers, business parks, hospitals, major tourist attractions, colleges/universities, and other destinations.

ADA

See **Americans with Disabilities Act**

adaptation

Adjustment in natural or human systems in anticipation of or response to a changing environment in a way that effectively uses beneficial opportunities or reduces negative effects.

ADT

See **average daily traffic**

ADU

See **accessory dwelling unit**

advanced air mobility

Advanced air mobility refers to the use of aerial drones or unmanned air vehicles to transport people and goods. These aerial vehicles use GPS and sensors to fly autonomously, providing a new transportation option in both rural and urban environments. Recent deployments of these aerial services have relied on electric vertical takeoff and landing aircrafts (eVTOLs), which have multiple small rotors enabling them to take off and land like a helicopter, that then rotate forward like a propeller so the vehicles can fly like an airplane upon takeoff.

Advanced Clean Cars Program

The Advanced Clean Cars Program is a state program to increase vehicle efficiency by combining the control of smog, soot, greenhouse gases, and other air pollution requirements into a single package of standards.

affordable housing

Housing developed and subsidized for residents with low incomes and social equity focused populations.

AI

See **artificial intelligence**

air cargo

Revenue-producing items in domestic or international air commerce, composed of freight, express, and mail, but excluding passenger baggage.

air carrier

An aviation operator that provides regular round-trips per week between two or more points, and publishes flight schedules that specify the times, days of the week, and places between which such flights are performed; or that transports mail by air pursuant to a contract with the United States Postal Service.

air quality conformity

A demonstration of whether a federally-supported activity is consistent with the State Implementation Plan for air quality — per Section 176 (c) of the Clean Air Act. Transportation conformity applies to plans, programs, and projects approved or funded by the Federal Highway Administration or the Federal Transit Administration.

Air Pollution Control District

The APCD is a government agency that regulates sources of air pollution within San Diego County, other than emissions from motor vehicles. Assembly Bill 423 (Gloria, 2019) restructured and expanded the APCD Board, separated APCD from County of San Diego government structure, and added duties to increase transparency and public engagement. The APCD Governing Board is composed of 11 appointed members representing the Board of Supervisors (two members), the City of San Diego, a City Council member from each of the five supervisorial districts, and three public members.

alternative transportation fuels

Low polluting fuels that are used to propel a vehicle, in place of petroleum-based gasoline or diesel fuels. Examples include biodiesel, electricity, hydrogen, ethanol, propane, compressed natural gas, and liquid natural gas.

American Community Survey

Ongoing survey that provides vital information related to jobs and occupations, educational attainment, veterans, whether people own or rent their homes, and other topics, on a yearly basis.

Americans with Disabilities Act

The federal civil rights legislation for people with disabilities that was passed in 1990; it requires public transportation systems to be more fully accessible; includes the provision of paratransit service.

Amtrak

The National Railroad Passenger Corporation, or Amtrak, is the nation's intercity passenger rail provider. Amtrak operates trains in partnership with 15 states and four commuter rail agencies.

APCD

See **Air Pollution Control District**

apportionment

A federal budgetary term that refers to a statutorily prescribed division of assigned funds. It is based on formulas prescribed by law.

arterial

Streets with traffic lights that serve primarily to carry traffic through an area as quickly and efficiently as possible.

artificial intelligence

A science that focuses on enabling computers to replicate a human body's ability to sense, learn, reason, and act. It is an umbrella term that covers machine learning, deep learning, reinforcement learning, robotics, computer vision, natural language processing, and the application of algorithmic game theory.

ATDM

see **Active Transportation and Demand Management**

automated vehicle location

A transportation device that uses the coordinates from earth-orbit satellites to determine the precise location of a vehicle on the earth's surface. AVL is used to manage taxi, bus, and commercial vehicle fleet operations.

autonomous vehicles

Vehicles that are computer driven and do not require a human to safely operate the vehicle. Sensors collect data about nearby objects (like size and speed) and categorize these objects to determine how the vehicle should react.

auxiliary lane

An additional freeway lane between adjacent interchanges that reduces the weaving conflicts between exiting and entering vehicles.

average daily traffic

The average number of vehicles that travel through a specific point of a road over a short duration of time (often seven days or less).

AVL

See **Automated Vehicle Location**

B

bicycle boulevard

Mixed traffic environments that operate at speeds ≤ 20 mph and have a lower threshold for vehicle traffic ($\leq 1,500$ ADT). These designs work well as primary routes in a local network, and on roads with narrow lanes and up to 1,500 cars per day. These do not fall under a given class but are most similar to the Class 3 facility. Also referred to as neighborhood greenways.

big data

Fusing multiple data sources together to uncover seemingly unrelated facts and identify patterns, trends, and associations. Refers to not only the amount of data, but a mature suite of data handling (including security), usability, analysis, and usage metrics that provide governance teams with the oversight needed to protect this valuable asset.

bike lane

An on-road facility in which dedicated space for bikes is demarcated, usually using a painted line. Bike lanes create a space that is for the exclusive use of people bicycling (or bicycle family vehicles). This is considered a Class 2 facility.

bike path

A paved path completely separated from a street or highway, sometimes referred to as a “multi-use path”. Bike paths may be used by other active transportation users such as walkers and joggers. This is considered a Class 1 facility.

bikeshare

Bikeshare services provide low-cost, on-demand, and convenient access to a fleet of shared bikes for short-term use. Services can be accessed by using a smartphone app.

bikeway priority

Priority arrangements for bikeways that are the same as the roadway along which they travel. Where a bikeway on a major road intersects with a minor road, the bikeway would have full priority over the minor road, requiring traffic crossing the bikeway to yield. The design treatments will differ according to the speed and volume of traffic, and function of the road. Design features can include raised continuous sidewalks and bikeways or tight corner radii.

broadband connectivity

Broadband refers to any high-speed internet access that is always on and is faster than dial-up. Broadband connectivity is the an individual or household's access to broadband internet in their home.

BRT

See **Bus Rapid Transit**

buffered bike lane

Similar to a **bike lane**, a buffered bike lane is a dedicated space for bicyclists, demarcated using paint, but includes a painted buffer (e.g. ≥ 1.5 ft) between the bike lane and adjacent vehicle travel lanes. Buffered bike lanes are a Class 2 facility.

Bus Rapid Transit

Defined in Assembly Bill 1560 (Friedman, 2019) as a public mass transit service provided by a public agency or by a public-private partnership that includes full-time dedicated bus lanes or separate right-of-way with a maximum 15 minute interval service frequency during peak commute periods, transit signal priority, all-door boarding, efficient fare collection system, defined stations, and bus rapid transit stations that clearly define stations served by BRT.

C**CAA**

See **Clean Air Act**

California Environmental Quality Act

CEQA requires state and local agencies in California to identify the significant environmental impacts of their actions, including impacts to cultural resources, and to avoid or mitigate those impacts if feasible.

CalEnviroScreen

Also known as the California Communities Environmental Health Screening Tool, CalEnviroScreen is screening/mapping tool developed by the California Office of Environmental Health Hazard Assessment (OEHHA) to identify communities disproportionately impacted by various pollutants and stressors.

CALeVIP

See **California Electric Vehicle Infrastructure Project**

California Air Resources Board

California's state agency responsible for adopting state air quality standards, establishing emission standards for new cars sold in the state, overseeing activities of regional and local air pollution control agencies, and setting regional targets for reducing greenhouse gas emissions from passenger vehicles.

California Clean Air Act

A California law passed in 1988 that provides the basis for air quality planning and regulation, independent of federal regulations.

California Department of Transportation

The state agency that manages more than 50,000 miles of California's highway and freeway lanes, provides inter-city rail services, permits more than 400 public-use airports and special-use hospital heliports, and works with local agencies. Caltrans' mission is to provide a safe and reliable transportation network that serves all people and respects the environment.

California Economic Development Department

A state agency responsible for job growth, economic development, and business assistance efforts throughout the State of California.

California Electric Vehicle Infrastructure Project

The California Electric Vehicle Infrastructure Project (CALeVIP) is an incentive program that provides incentives for electric vehicle charger installations, working with local partners to develop and implement projects that meet current and future regional electric vehicle needs for Level 2 and DC fast charging electric vehicle charging station installation projects. The program is funded by the California Energy Commission and implemented by the Center for Sustainable Energy. In 2020 SANDAG partnered with San Diego County Air Pollution Control District (SDAPCD) and CALeVIP to launch the San Diego County Incentive Project under CALeVIP to promote the installation of electric vehicle charging installations in San Diego County with a total of \$21.7 million in available funds over three years.

California High Speed Rail

California High-Speed Rail (HSR) provides air-competitive travel times between major urban centers of the state (when used for long-distance travel); and high capacity for longer distance regional and interregional trips between hubs (often used to link passengers to other services at one or both ends). HSR has numerous nonstop or limited-stop services tied to meeting long-distance market demand, but also offers trains that stop at all stations on a regular basis (every 30 or 60 minutes, based on market demand), allowing connectivity throughout the statewide rail network. Unlike the other categories, most sections of infrastructure used by HSR are designed for speeds over 125 mph (with long sections allowing speeds up to 220 mph). The California High-Speed Rail Authority is responsible for planning, designing, building and operation of the state's high-speed rail system.

California High-Speed Rail Authority

CHSRA was created by the California Legislature in 1996 to develop a plan for the construction, operation, and financing of a statewide, intercity high-speed passenger rail system.

California Highway Patrol

The state law enforcement agency responsible for highway safety.

California State Transportation Agency

The state agency that develops and coordinates the policies and programs of the state's transportation entities to achieve the state's mobility, safety, and air quality objectives from its transportation system.

California Transportation Commission

A state agency that is responsible for programming and allocating funds for the construction of highway, passenger rail, transit and active transportation improvements throughout California. The Commission also advises and assists the Secretary of the California State Transportation Agency and the Legislature in formulating and evaluating state policies and plans for California's transportation programs.

Call Box Program

The Call Box Program is a free motorist aid service designed to help travelers who experience vehicle problems while on the highway. Call boxes are self-contained, solar-powered cellular telephones with voice communication to a call center. The Call Box Program is operated by SANDAG in cooperation with Caltrans and the California Highway Patrol.

CalSTA

See **California State Transportation Agency**

Caltrans

See **California Department of Transportation**

CAP

See **Climate Action Plan**

capacity

A measure of the number of vehicles or people that can be carried by a roadway segment or via transit during a period of time.

Cap-and-Trade Program

A market-based program that limits greenhouse gas emissions from outputters and creates an exchange market in which to trade credits.

CARB

See **California Air Resources Board**

carbon neutrality

Achieved when the amount of carbon emitted is balanced by the amount of carbon absorbed from the atmosphere

carbon sequestration

The process of capturing and storing atmospheric carbon dioxide.

carpool

An arrangement in which two or more people share the use of a privately-owned automobile to travel together to and from pre-arranged destinations.

carsharing/ridehailing

Carshare services offer access to vehicles 24 hours a day, seven days a week. These cars can be found within a specified service area, at transit stations, or other locations, and people can find them through a smartphone app or provider's website.

CCAA

See **California Clean Air Act**

census block group

A geographical unit used by the United States Census Bureau. Typically, Block Groups have a population of 600 to 3,000 people. This is the smallest geographical unit for which the Census Bureau publishes sample data (i.e., data that are only collected from a fraction of all households).

CEQA

See **California Environmental Quality Act**

CHP

See **California Highway Patrol**

chronic diseases

Chronic diseases include heart disease, stroke, asthma, diabetes, and cancer, which cause long-term health problems. Poor nutrition and a lack of physical activity are cited as the primary causes for chronic diseases, among other factors.

CHSRA

See **California High-Speed Rail Authority**

Class 1 bikeway

See **bike path**

Clean Air Act

Federal legislation that sets national air quality standards and requires each state with areas that have not met federal air quality standards to prepare a State Implementation Plan (SIP). The 1990 amendments to the CAA (often referred to as the CAAA), established new air quality requirements for the development of metropolitan transportation plans and programs.

Climate Action Data Portal

The Climate Action Data Portal is an online resource for climate planning data for the San Diego region. "Climate planning" refers to the process of preparing for and reducing the effects of climate change in local planning.

climate action plan

A climate action plan (CAP) is a comprehensive policy document that outlines the actions a local jurisdiction is taking or will take to reduce community-wide greenhouse gas (GHG) emissions.

CMAQ

See **Congestion Mitigation and Air Quality Improvement Program**

CMCP

See **Comprehensive Multimodal Corridor Plan**

CMP

See **Congestion Management Program**

commercial vehicles

A commercial vehicle is a vehicle required to be registered and it is used or maintained for the transportation of persons for hire, compensation, or profit or designed, used, or maintained primarily for the transportation of property. Vehicles may be registered as passenger or commercial.

community-based organizations

Community-Based Organizations (CBOs) are non-profit organizations who might be service providers or advocacy organizations who work with the target populations in a specific community/neighborhood.

community collaborative

Community collaboratives are made up of a variety of social institutions in a given community, including social service providers, ethnic associations, schools, churches, chambers of commerce, and other local non-profit organizations.

community plan

More specific versions of General Plans, generally dealing with smaller geographical areas, but having the same force of law. See **General Plan**.

commuter

A person who travels regularly between home and work or school.

commuter rail

High-speed rail passenger service within a metropolitan area serving the most traveled corridors. While predominately used for longer commuter trips, commuter rail connects major residential areas with employment centers, commercial areas, and other popular destinations.

complete corridors

Roadways that offer dedicated, safe space for everyone, including people who walk, bike, drive, ride transit, and use Flexible Fleets, as well as those who drive freight vehicles. Travelers on highways and major roads benefit from technology deployed to dynamically manage the flow of traffic. Complete Corridors incorporate various transportation improvements to enhance connectivity on urban roads, rural corridors, freeways, highways, regional arterials, and bikeways. These transportation improvements can include active transportation facilities, connectors, managed lanes, and public transit priority lanes.

Comprehensive Multimodal Corridor Plan

Comprehensive Multimodal Corridor Plans (CMCPs) evaluate all travel modes and transportation facilities in a defined **corridor** within San Diego County with the goal of identifying transportation facility enhancements and improvements that will reduce congestion, support climate action initiatives and generate increased transportation choices and access within the region. CMCPs are developed using real-time travel data and shaped by public input.

conformity

See **air quality conformity**

congestion

Travel time or delay in excess of what is experienced under free-flow traffic conditions. Congestion is typically accompanied by lower speeds, stop-and-go travel conditions, or queuing, such as behind ramp meters or heavily used intersections.

congestion management process

This federal requirement involves addressing congestion management through a process involving an analysis of multimodal metropolitan-wide strategies.

Congestion Management Program

Required of every county in California with a population of 50,000 or more to qualify for certain state and federal funds. CMPs set performance standards for roads and public transit and show how local agencies will attempt to meet those standards. The CMP is required to be adopted by the Congestion Management Agency, and it must be consistent with the adopted Regional Transportation Plan (RTP). The San Diego region elected to be exempt from the California State CMP in October 2009 and follows the federal Congestion Management process.

Congestion Mitigation and Air Quality Improvement Program

A category of federal funds for projects and activities that reduce congestion and improve air quality in regions not yet attaining federal air quality standards.

connected infrastructure

Infrastructure, such as roads, that is embedded with sensors that are connected to a communication backbone which allows real-time data to be exchanged with other connected devices.

connected vehicles

In-vehicle and wireless technology enables connected vehicle communication. CVs give the car and driver advanced information and warnings to inform safer driving decisions, such as when a car ahead brakes suddenly, or if there is an accident that causes traffic to slow or reroute. CVs can share data about the vehicle with other vehicles (V2V), infrastructure (V2I), and everything (V2X).

connectivity

The general ability for people to reach destinations. In the transportation context, enhanced connectivity is achieved by increasing the options and opportunities for travel to various destinations.

conventional highway

A highway with no control of access, which may be divided or have grade separations at intersections.

corridor

A broad geographical band that follows a general directional flow connecting major trip origins and destinations. A corridor may contain several streets and highways as well as bike routes and transit route alignments.

courier services

For-hire delivery services that use an online application or platform (such as a website or smartphone app, like Uber Eats and Instacart) to connect couriers using their personal vehicles, bikes, or scooters with goods (e.g., packages, food, etc.).

COVID-19

Coronavirus disease 2019 (COVID-19), is a contagious disease caused by severe acute respiratory syndrome coronavirus 2. It was first detected in humans in December 2019. The World Health Organization declared a COVID-19 pandemic in March 2020, leading to shut-downs and social distancing measures worldwide.

CTC

See **California Transportation Commission**

curb management

Curb management seeks to inventory, optimize, allocate, and manage curb spaces to maximize mobility, access, and safety for the wide variety of curbside transportation demands through the application of curbside pricing and allocation of priority roadway and street design treatments. Potential curbside users include shared mobility service providers including transportation network companies (TNCs) such as Lyft and Uber, transit services, goods movement delivery services, electric vehicles, and on-demand bike/scooters.

D**DARs**

see **direct access ramps**

data analytics/data science

Applying scientific interpretation over data sets by using peer-reviewed and validated processes, algorithms, and other visually interpretative approaches to aid in the broad or deep understanding of information found in raw data.

data hub

In transportation systems, a data hub is the central location of data storage, analysis, and transport. It includes data input channels; high-speed, high-volume computing platforms; and data storage technologies. Data hubs are used to receive field data from local and regional data providers; process, analyze, and verify quality of received data; message and communicate data within the system; store data; and provide security measures for stored data.

dedicated lanes

Traffic lanes set aside for particular types of vehicles, travel, and shared mobility applications. These include dedicated lanes designated by signs and markings for the preferential or exclusive use of transit services; shared mobility services; bike, pedestrian, and other active transportation modes; and delivery vehicles sometimes permitting limited use by other vehicles, services, and modes. Allocating dedicated lanes can boost reliability, travel speed, capacity, and modal balance, to increase safety and the total performance of the transportation network.

delivery bot

A delivery robot is an autonomous robot that is used for delivering goods to specified locations (e.g., Amazon Scout).

demand responsive

Services that allow passengers to schedule non-fixed route transportation services in advance or in real-time.

delay

see **congestion**

delivery bots

Small autonomous robots used for last-mile delivery.

density analysis

A method that overlays limited points of data (e.g., population or employment) over a geographic area (e.g., San Diego County) for visualization.

Department of Finance

California's official source of population estimates for the state, counties, and cities and population projections for the state and county. SANDAG population estimates and forecasts rely on data from DOF for control totals.

Department of Transportation

At the federal level, the cabinet agency headed by the Secretary of Transportation that is responsible for highways, transit, aviation, and ports. The DOT includes the Federal Highway Administration (FHWA), the Federal Transit Administration (FTA), the Federal Aviation Administration (FAA), Federal Motor Carrier Safety Administration (FMCSA), Federal Railroad Administration (FRA), and other agencies. The state DOT is Caltrans.

development impact fee

A fee charged to private developers, usually on a per-dwelling-unit or per-square-foot basis, to help pay for infrastructure improvements necessitated as a result of the development.

Diamond Awards

A program sponsored by SANDAG that honors employers who have developed, maintained, and marketed superior transportation benefit programs for their employees.

digital divide

The digital divide refers to the growing gap between the members of society who have reliable access to broadband service and an adequate device for connecting to the internet and those who do not. This includes people with limited incomes, seniors, tribal communities, and people in rural areas.

Direct Access Ramps

Direct Access Ramps (DARs) allow buses, carpools, vanpools, and motorcycles along with emergency vehicles and low-emission vehicles with appropriate decals to directly access the Managed Lanes in the center of the freeway. They connect from above the mainline, or up from below, and merge into the Managed Lane from inside the median and connect to adjacent transit facilities or roadways.

disadvantaged communities

For the purposes of developing pollution reduction strategies in accordance with AB 805, disadvantaged communities are identified as the highest scoring 25% of Census tracts on the CalEnviroScreen 3.0 environmental/socioeconomic vulnerability scale.

DOF

See **Department of Finance**

DOT

See **Department of Transportation**

drive alone

See **SOV**

drone delivery

Use of a small and unmanned aerial vehicle (UAV) to deliver lightweight goods to a destination.

dynamic pricing

A congestion pricing strategy to manage the demand and availability of a transportation facility (e.g., Managed Lanes and parking facilities). It uses real-time information to continuously monitor the transportation facilities and uses pricing algorithms and tolling technology to apply a charge and change pricing based on current demand. Dynamic pricing/tolls can be applied in response to changing congestion levels or changes in parking availability. The strategy is used to influence travel, provide transportation choices, reduce the negative impacts of travelers searching for parking, reduce traffic impacts associated with peak period trips, and provide incentives and priority access to transportation facilities to more effectively balance the demand and available supply.

dynamic ridesharing

Technology that matches drivers and riders in real time, right before their trips, thereby reducing congestion, pollution, and travel costs to the individual.

E**Early Action Program**

A variety of high-priority *TransNet* transportation projects that have been accelerated into construction. Projects include highway, transit, active transportation, and goods movement.

e-bikes

Suggested definition, please refine: Electric bikes, also known as e-bikes, are bicycles equipped with an integrated motor to help riders achieve higher speeds and reduce difficulty riding in areas with hilly topography. E-bike motors may be pedal-activated or throttle-based.

e-scooters

see **electric scooters**

EAP

See **Early Action Program**

Economic Development Corporation

Enhances regional economic competitiveness and supports key industries with policy priorities to improve the region's emerging industries, workforce, infrastructure, transportation, housing, and access to capital.

EDC

See **Economic Development Corporation**

EIR

See **Environmental Impact Report**

electric scooters

Kick scooters are equipped with an electric motor, making it easier for people to travel to work or other destinations when topography is challenging. E-scooters typically have two small wheels and can travel at a maximum speed of 15 to 20 mph.

electric vehicles (EVs)

There are three different types of electric vehicles: 1) all-electric vehicles known as battery electric vehicles (BEVs) that are powered completely by electricity, 2) plug-in hybrid electric vehicles (PHEVs) that are a combination of gasoline and electric vehicles, so they have a battery, an electric motor, a gasoline tank, and an internal combustion engine, and 3) hydrogen fuel cell electric vehicles (FCEVs) that have electric motors powered by hydrogen gas. EVs can come in different vehicle classes including passenger cars, microtransit vehicles (e.g., NEVs), shuttles, zero emission trucks (ZET), and zero emission buses (ZEB). See also **zero emission vehicles, zero emission vehicle infrastructure, electric vehicle charging infrastructure, and neighborhood electric vehicles.**

electric vehicle charging infrastructure

Electric vehicles (EVs) are fueled by plugging in to an electrical power source, ranging from a standard 120-volt electrical outlet (Level 1) or 240-volt circuit (Level 2), to commercial-grade Direct Current (DC) Fast Chargers. How fast a vehicle can fully recharge continues to advance and is based on the battery size, technology, and rate of charging. Currently, Level 1 charging provides about 5 miles of range per hour (RPH). Level 2 charging can provide about 25 miles RPH. Level 2 chargers are commonly installed in residential as well as commercial settings where parked for 1 or more hours. DC fast charging has high power requirements only suited to commercial settings and can provide 200-300 miles RPH, though not all EVs are capable of DC fast charging. Wireless charging is an emerging technology that could provide similar RPH without a cord connecting the vehicle to the charger. See also **wireless electric vehicle charging.**

emerging technology

New or unrealized technology practices that result from a convergence of different technologies that work together to achieve a common set of goals. Advances in technology allow for improved communication systems that use big data, wireless communications, sensors, and more, to improve efficiencies in safety, sustainability, infrastructure, and transportation options. For example, emerging technologies can range from evacuation improvements to using connected vehicle features, all with the same goal of improving safety.

EMFAC

Emission FACtor (or EMFAC) is an emissions model developed by **CARB** to assess emissions from on-road vehicles including cars, trucks, and buses in California. It is used to support air quality and climate planning efforts.

EMP

See **Environmental Mitigation Program**

Environmental Impact Report

A detailed statement prepared under the California Environmental Quality Act (CEQA) that describes and analyzes the significant environmental effects of a project and discusses ways to mitigate or avoid the effects.

environmental justice

Environmental justice (EJ) is the fair treatment and meaningful involvement of all people regardless of race, color, national origin, or income with respect to the development, implementation and enforcement of environmental laws, regulations and policies

Environmental Mitigation Program

Provides *TransNet* funding for the mitigation of local and regional transportation projects, and additional funding for activities that help implement the region's habitat preservation plans.

express service

Point to point transit service with very limited stops that often only operates during peak commute periods.

expressway

Similar to a freeway, but with some signal-controlled intersections.

F**FAA**

See **Federal Aviation Administration**

farebox recovery ratio

The proportion of operating expenses covered by passenger fares. The ratio divides the farebox revenue by the total operating expenses.

fare structure

The varying fees charged to use transit, normally differing by the age of the transit rider, single versus multiple transit trips, the type of service (Trolley, bus, etc.), and, for some types of services, the length of the trip.

FasTrak®

The statewide toll collection system used to pay tolls electronically in California. In the San Diego region, FasTrak lets customers pay their tolls electronically on the I-15 Express Lanes and South Bay Expressway. Along the I-15 corridor, the FasTrak® Program uses dynamic pricing that allows solo drivers to use the lanes for a fee. The net revenues generated by the program are used to improve transit and carpool services along the I-15 corridor.

Federal Aviation Administration

The federal agency that regulates the use of airspace and is responsible for evaluating and disseminating information about hazards and obstructions to aviation. FAA is a component of the federal DOT.

Federal Highway Administration

The federal agency responsible for the administration of federal highway funds and issuing policy and procedures for implementing federal legislative directives. FHWA is a component of the federal DOT.

Federal Motor Carrier Safety Administration

The federal agency responsible with regulating and providing safety oversight of commercial motor vehicles. FMCSA's mission is to reduce crashes, injuries, and fatalities involving large trucks and buses. FMCSA is a component of the federal DOT.

Federal Railroad Administration

The FRA is a component of the federal DOT and is concerned with intermodal transportation to enable the safe, reliable, and efficient movement of people and goods.

Federal Transit Administration

The federal agency that provides financial and technical assistance to local public transit systems, including buses, subways, light rail, commuter rail, trolleys and ferries. FTA also oversees safety measures and helps develop next-generation technology research. FTA is part of the federal DOT.

ferry

A regular service provided via ship for persons that transports passengers over a relatively short distance.

FHWA

See **Federal Highway Administration**

fiscal year

The 12-month period established for budgeting purposes. In California, the commonly accepted fiscal year for governmental purposes begins on July 1 and ends on June 30.

fixed route service

Service provided on a regular, fixed-schedule basis along a specific route, with vehicles stopping to pick up and deliver passengers to specific locations.

Fixing America's Surface Transportation (FAST) Act

The current federal surface transportation bill signed into law in 2015 and establishes the nation's surface transportation priorities and federal funding structure to support these priorities.

flexible curb space

Allows the mobility network to better balance street demands as they change throughout the day. For example, specific curb space can be designated for some mobility services during their peak demand periods, while the same space can be designated for other uses such as mobile retail during off-peak periods.

flexible fleets

On-demand, shared services that provide different mobility options and vehicles for all types of trips, reducing the need own a car. Vehicle types can range from small, low-speed scooters to a 12-passenger shuttles. These services can make it easier to connect to high-speed transit and other important destinations by providing a last-mile connection or fulfilling a complete trip.

FMCSA

See **Federal Motor Carrier Safety Administration**

FRA

See **Federal Railroad Administration**

freeway

A divided highway with limited access and grade-separated junctions, and without traffic lights or stop signs.

Freeway Service Patrol

An ongoing program to provide a roving tow and motorist aid service with technicians who assist or remove stranded and disabled vehicles on designated urban freeways and state roadways during weekday morning, midday, and afternoon rush hours and on weekends. Freeway Service Patrol is operated by SANDAG in cooperation with Caltrans and the California Highway Patrol.

freight

See **goods movement**

FTA

See **Federal Transit Administration**

fuel cell electric vehicles

Fuel cell electric vehicles (FCEVs) are zero-emission and run on compressed hydrogen gas fed into a fuel cell "stack" that produces electricity to power the vehicle. FCEVs can be passenger vehicles, trucks and buses.

fuel tax

See **gas tax**.

G**gas tax**

The tax applied to each gallon of fuel sold. Currently, the federal government has imposed a per-gallon tax of 18.4 cents, and the state of California has imposed a per-gallon excise tax of 50.5 cents per gallon (through June 2021).

General Plan

A policy document required of California cities and counties by state law that describes a jurisdiction's future development in general terms. All land use decisions must be derived from this document. The General Plan contains a set of broad policy statements about the goals for the jurisdiction, and it also must contain seven mandatory elements: Land Use, Circulation, Housing, Conservation, Open Space, Noise, Safety, and Environmental Justice.

general purpose lanes

Term used to refer to traditional mixed-flow freeway lanes. Used to distinguish between high-occupancy vehicle (HOV) lanes, Express Lanes, or toll lanes.

geographic information system

A framework for gathering, managing, and analyzing data. Rooted in the science of geography, a geographic information system (GIS) integrates many types of data. It analyzes spatial location and organizes layers of information into visualizations using maps and three-dimensional scenes. With this unique capability, GIS reveals deeper insights into data, such as patterns, relationships, and situations, helping users make smarter decisions.

GHG emissions

See **greenhouse gas emissions**

GIS

see **geographic information system**

goods movement

The flow of goods by land, sea, and air throughout our transportation network. Goods movement includes the flow of raw materials, parts, and finished goods by roadways, border crossings, railroads, seaports, airports, and pipelines.

grade separation

A physical and/or structural separation between intersecting roads and/or railway tracks. One road or railway track typically travels over or under the other via an overpass, tunnel, or other structure.

greenhouse gas emissions

The release of water vapor, ozone, carbon dioxide, methane, nitrous oxide, hydrofluorocarbons, chlorofluorocarbons, perfluorocarbons, and sulfur hexafluoride that influence global climate change.

Guaranteed Ride Home

A program that provides a safety net for people who carpool, vanpool, take transit, walk, or bike to work. Registered participants can get a free ride home by taxi, rideshare service such as Lyft or Uber, rental car, car share, or transit up to three times per year in the event of a personal or family emergency, unexpected overtime, carpool or vanpool ride being unavailable due to unexpected schedule changes or vehicle breakdown, or being stranded at work due to a bike problem, such as a flat tire, mechanical failure, vandalism, or theft.

H**Harbor Drive 2.0**

An ITS project sponsored by the Port of San Diego (Port), Caltrans, and SANDAG to facilitate freight and other multimodal movements along Harbor Drive between the Port's Tenth Avenue Marine Terminal and National City Marine Terminal.

heavy-duty vehicles

A vehicle that is classified as a FHWA vehicle category 8-13 (FHWA definition) or has a gross vehicle weight rating over 8,500 pounds (CARB definition).

heavy rail

Railroad services that operate in a mixed-use environment on conventional railroad tracks. Heavy rail services include freight trains, Amtrak, Commuter Rail, and most conventional rail transit systems.

hexbin

Hexagon-shaped geographic areas used for geospatial analysis. To develop the Vision for the 2021 Regional Plan, 100-acre hexbins were used to represent the San Diego region.

high-occupancy vehicle

A vehicle that carries more than one person, such as a carpool, vanpool, shuttle, or bus.

highway

A general term usually referring to a state or federally designated urban or rural route designed to accommodate longer trips in the region.

historically marginalized communities

Communities or groups that have experienced discrimination and exclusion from economic, social, and political decisions and participation, including, but not limited to, low-income populations, people of color, limited English speakers, people with disabilities, and seniors.

household

All people living in a housing unit, regardless of whether they are related to one another. Housing units include houses, condominiums, apartments, and mobile homes.

housing cost burdened

Housing cost burdened is an indicator used to assess how resilient a household is and what their ability might be to recover from economic setback by measuring how much a household spends on monthly housing costs by calculating the percentage of a household's monthly income that is spent on rent or mortgage.

HOV

see **high-occupancy vehicle**

HOV lane

An exclusive road or traffic lane that typically has a higher operating speed and lower traffic volumes than a general-purpose or mixed-flow lane. In California, vehicles that can use HOV lanes include carpools, vanpools, buses, other multi-passenger vehicles, motorcycles, and emergency vehicles, as well as decaded low-emission vehicles.

human-centered design

A customer-focused approach to solving problems. A human perspective is taken into consideration in every step of the problem-solving process, from determining the true needs of the people who are served to verifying that the solution designed for them is meeting their needs.

I**ICM**

See **Integrated Corridor Management**

iCommute

iCommute is a program managed by SANDAG that provides information to commuters and employers on commute choices, such as carpooling, vanpooling, Schoolpool carpooling programs for parents, public transportation, bicycling, Guaranteed Ride Home program (see **GRH**), and teleworking. iCommute operates a carpool ridematching service, the San Diego Regional Vanpool Program, the San Diego Regional Bike Locker Program, and the Guaranteed Ride Home Program.

Intraregional Tribal Transportation Strategy

The Intraregional Tribal Transportation Strategy (ITTS) was developed in 2016 to identify key multimodal transportation projects for improving tribal mobility while meeting regional, state, and federal goals. The ITTS includes projects, criteria, cost estimates, potential partners, and funding opportunities.

integrated corridor management

This concept includes the connection and integration of the region's local and regional transportation management systems and centers to enable agencies to cooperatively manage the overall performance and operations of the local and regional transportation systems as unified multimodal network. This concept is a key element under the Multimodal Integration and Performance-Based Management TSM investment area.

intelligent transportation systems

A general classification of transportation technologies, management tools, and services made possible through advances in computer and communication technologies. ITS is used to make transportation systems safer and more efficient.

interactive wayfinding

Touchscreen kiosks that provide transit schedules, shared mobility service availability, maps, and directions to key destinations including transit stations, civic and community buildings, parks, and more. This amenity can exist throughout the mobility hub and be customized based on user type and available travel modes.

intercity rail

Railroad passenger service that primarily serves longer trips, such as those between major cities or regions.

intermodal

Passenger or freight transportation services which involve or use more than one type of transportation facility (or mode). Aviation, maritime, automobile and truck, rail, and transit are travel modes.

Interregional Transportation Strategic Plan

The purpose of the ITSP is to demonstrate consistency with implement the interregional portion of the California Transportation Plan by providing guidance and prioritization through interregional corridor analysis for projects focused on improving travel access for people and goods on the State's Interregional Transportation System in a safe, equitable, sustainable, multi-modal manner.

ITS

See **Intelligent Transportation Systems**

ITSP

See **Interregional Transportation Strategic Plan**

J

K

kernel analysis

see **density analysis**

L

last-mile delivery

The delivery of goods (e.g., small packages or food) by a person or by using semi- or fully automated vehicles, ebikes, drones, and bots to make deliveries from the distribution center to a user's home or smart lockers at Mobility Hubs. Shared vehicles can make efficient trips by carrying passengers and goods at the same time.

LEP

Limited English Proficiency

Level of Travel Time Reliability

A measure of observed travel time established by FHWA that reviews the length of time it takes to travel along a roadway and the consistency of that travel time. Roadways that have more consistent travel times are considered more reliable.

light-duty vehicles

Include vehicles that have a gross vehicle weight less than 8,500 pounds and are comprised of passenger cars, light-duty-trucks, and medium-duty passenger cars.

light rail transit

Light rail transit (LRT) is a dedicated rail service that serves longer commute trips and shorter local trips (e.g., the MTS San Diego Trolley and NCTD SPRINTER rail service). Light rail is generally integrated into the street network much more than commuter rail but still operates on a dedicated guideway with stations averaging one mile apart

Local Agency Formation Commission (LAFCO)

A government agency responsible for assisting the state legislature with promoting orderly development and growth while fulfilling many regional priorities such as accommodating growth within or through expansion of local agency boundaries, extending necessary government services, preserving open space and agricultural lands, and promoting the provision of housing for residents of all incomes.

LOSSAN

Los Angeles-San Diego-San Luis Obispo: The LOSSAN Rail Corridor Agency coordinates planning and programming on the coastal rail line. SANDAG, Metropolitan Transit System, and North County Transit District are voting members of LOSSAN, along with regional transportation planning agencies in Orange, Los Angeles, Ventura, Santa Barbara, and San Luis Obispo counties. LOSSAN sets priorities for improvements in the corridor that will increase the capacity of the rail line and the reliability of service.

Low Carbon Fuel Standard (LCFS)

Established by the California Air Resources Board in 2009, the LCFS is a policy designed to reduce greenhouse gas emissions and other smog-forming and toxic air pollutants from transportation fuels in California by 2030. The policy encourages the use of low carbon fuels such as electricity, hydrogen and biofuels through a performance-based program.

low-income

Low-income is defined as an individual/household having an income that is 200% of the Federal Poverty Limit.

LRT

See **light rail transit**

M

MaaS app

The MaaS app, or integrated application, acts as an umbrella over the various booking and payment systems that participating companies in the MaaS market are making available.

major transit stop

A site containing an existing rail or bus rapid transit station, a ferry terminal served by either a bus or rail transit service, or the intersection of two or more major bus routes with a frequency of service interval of 15 minutes or less during the morning and afternoon peak commute periods.

majority minority county

A county where no single race or ethnic group comprises more than 50% of the region's total population.

Managed Lanes

Managed Lanes, such as those along the Interstate 15 corridor, offer priority access to people using transit, carpooling, or vanpooling. People driving alone can access these lanes for a fee.

Managed Lane Connectors (MLCs)

Freeway connectors that provide direct access between one high-occupancy vehicle lanes or Managed Lanes facility with another.

master geographic reference area

The basic geographic unit in SANDAG's Master Geographic Reference File system for storing demographic, economic, and other information. MGRAs are small—comparable to census blocks in size. Currently, there are more than 23,000 MGRAs used to represent the San Diego region.

megaregion

Megaregions are interdependent groups of metropolitan areas in a single geographic area bound by interdependent relationships on several levels: environmental, economic, shared border infrastructure, a linked transportation system, related land use policies, history, and culture.

metropolitan planning organization

A federally designated agency that is responsible for regional transportation planning in each metropolitan area. SANDAG is the MPO for the San Diego region.

MGRA

see **master geographic reference area**

micromobility

Small, low-speed, low-occupancy vehicles that fulfill short trips, such as bikes, scooters, or other rideables that may be part of a shared fleet or personally owned.

microtransit

Microtransit services use smaller vehicles that carry 5–12 passengers. Riders can typically request service through a mobile app that directs them to common locations along the service route for pick-up.

mitigation

Strategies, policies, programs, actions, and activities that, over time, will serve to avoid, minimize, or compensate for the impacts to or disruption of elements of the human and natural environment.

mixed traffic

Mixed traffic environments are where bicyclists and motor traffic operate in the same road space.

mixed-use

The combining of commercial, office, and residential land uses to provide easy pedestrian access and reduce the public's dependence on driving. It can be implemented in multi-story buildings containing businesses and retail stores on the lower floors, and homes on the upper floors.

ML

see **Managed Lanes**

mobility

The ability to move freely from one place to another

Mobility as a Service (MaaS)

This is an umbrella term that refers to the ability access all modes of transportation in one trip planning and payment app. MaaS has been brought into the public eye with large car companies marketing a service for customers to access any kind of vehicle (bike, scooter, car, pickup, small van, etc.) to serve their needs. MaaS allows people to either pre-pay for transportation as part of a monthly mobility subscription (like Netflix), or pay as they go using a payment account linked to the MaaS app. The goal is to make it so convenient for users to get around with shared mobility and transit so that some they can give up their personal vehicles.

Mobility Hubs

Mobility Hubs are communities with a high concentration of people, destinations, and travel choices. They provide an integrated suite of mobility services, safe roads, and supporting amenities and technology to help people reach high-frequency transit or make short trips around a community. Mobility Hubs can span one, two, or few miles, and each hub is uniquely designed to fulfill a variety of travel needs while strengthening sense of place.

Mobility Hub network

Comprising “right-sized” Mobility Hubs that are situated close to major residential, job, and activity centers across the region. Each mobility hub enhances connections to and from Transit Leap services by offering an array of on demand Flexible Fleet choices throughout a community. Mobility Hubs also integrate with Complete Corridors to ensure walking and biking are safe experiences while prioritizing the movement of shared mobility options over single-occupant vehicles.

mode

One of the various forms of transportation, including automobile, transit, bike, walking, or other means. Intermodal refers to the connection between modes; multimodal refers to the availability and/or use of multiple transportation modes. Mode choice is the process where the means of traveling is determined.

mode split or mode share

The percentage of trips that use each of the various travel modes.

MPO

See **Metropolitan Planning Organization**

MTS

See **San Diego Metropolitan Transit System**

Multimodal

Having or using multiple modes of transportation (driving, transit, biking, walking, etc.)

N

NAAQS

See **National Ambient Air Quality Standards**

NAFTA

See **North American Free Trade Agreement**

National Ambient Air Quality Standards

Measures of air quality related to health impacts established by the Clean Air Act and periodically updated by U.S. Environmental Protection Agency. The San Diego air basin is classified as a non-attainment area for two Ozone NAAQS.

National Highway Freight Network

A network of highways, including:

- the Primary Highway Freight System (PHFS), a network of highways identified as the most critical highway portions of the U.S. freight transportation system
- non-PHFS Interstate highway routes that provide important continuity and access to freight transportation facilities
- Critical Rural Freight Corridors (CRFCs), public rural roads that provide access and connection to the PHFS and the Interstate with other important ports, public transportation facilities, or other intermodal freight facilities
- Critical Urban Freight Corridors (CUFCs), urbanized public roads that provide access and connection to the PHFS and the Interstate with other ports, public transportation facilities, or other intermodal transportation facilities

National Highway System

An interconnected system of principal arterial routes that serve major population centers, international border crossings, ports, airports, public transportation facilities, and other intermodal transportation facilities and major travel destinations; meet national defense requirements; and serve interstate and interregional travel.

Nature-based Solutions

Planning, design, environmental management, and engineering practices that weave natural features or processes into the built environment to build more resilient communities.

NCTD

See **North County Transit District**

Neighborhood Electric Vehicles

A low-speed, zero-emission motorized travel option that typically accommodates one to six people while travelling on local roads with posted speed limits of 35 mph or less. Polaris GEM is a common NEV manufacturer, and Circuit (formerly FRED, Free Ride Everywhere Downtown) is an example of a local on-demand NEV shuttle service.

NEV

See **Neighborhood Electric Vehicle**

Next Generation *Rapid*

Next Generation (Next Gen) *Rapid* bus service features priority lanes, better signal technology, longer spans of services, and shorter times between trips to help riders get where they want to go much faster.

Next Operating System

The proposed digital platform of the regional transportation system that compiles information from sources like passenger vehicles, buses, ridesharing vehicles, delivery trucks, bikes, and scooters into a centralized data hub. Analysis of these data will improve how transportation is planned, operated, and experienced. Transportation operators will be able to better manage supply and demand by modifying how infrastructure and services are used throughout the day.

Next OS

see **Next Operating System**

NHFN

see **National Highway Freight Network**

NHS

see **National Highway System**

Non-Attainment Area

A geographic area identified by the United States EPA and/or CARB as not meeting either the national or California Ambient Air Quality Standards for a given pollutant.

North American Free Trade Agreement

A formal agreement between Canada, Mexico, and the United States that promoted ways to improve and increase free trade among the three countries. See **USMCA**.

North County Transit District

The agency created by the California legislature to operate transit facilities in North San Diego County. Its geographical boundary encompasses 1,020 square miles of North San Diego County extending from Del Mar in the south, northeasterly to Escondido, north to the Riverside County line, and west to the Orange County line.

O

off-peak period

The time of day when the lowest concentration of vehicles or transit riders is on the road or on another transit facility. These times are generally before 6 a.m., between 9 a.m. and 3 p.m., and after 6 p.m.

on-demand transportation services

A form of transportation where services are requested in real time by the traveler and fulfilled by services providers based on location and availability. On-demand rideshare services, for example, allow someone to request a ride in real time using a mobile app. Services match drivers and passengers traveling in the same direction based on their origin and destination while identifying the quickest route.

P

package delivery lockers

Secure locations from which online orders including groceries and other cold storage items can be held for pick up at any time of day (e.g., Amazon Locker, Click & Collect). These 'smart lockers' help automate package delivery and notification, and they can be conveniently situated at transit stations or retail centers. Offering package delivery and return services within a Mobility Hub can save people an extra trip by car to pick up or return a package.

paratransit

A specialized, door-to-door transport service for people with disabilities who are unable to use standard bus or commuter rail services.

park & ride

A travel option in which commuters park their personal vehicles in a public lot or other location, and continue their trip via carpool, vanpool, or transit.

parking management

Collecting and analyzing local data to identify current parking issues and evaluate solutions that seek to continuously balance parking supply and demand to create a parking system that serves the needs of businesses, residents, and visitors alike.

Parking Management Toolbox

A range of parking management strategies for addressing specific challenges in varied community types and special uses.

Particulate Matter PM_{2.5}

Particulate Matter PM_{2.5} is a mixture of solid particles and liquid droplets found in the air, such as dust, dirt, soot, or smoke. PM_{2.5} are fine inhalable particles, with diameters that are generally 2.5 micrometers and smaller.

passenger cars

Motor vehicles designed for transporting people; usually a maximum of eight passengers plus the driver. Examples include sedans, sport utility vehicles, and minivans. Passenger cars are considered **light-duty vehicles**.

passenger fares

Payment for rides on public transit.

passenger miles

The total number of passengers carried by a transit system, multiplied by the number of miles each passenger travels. Passenger miles are normally measured on a daily or annual basis.

passenger revenue

The value of cash, tickets, and pass receipts given by passengers for payment for rides on public transit.

peak period

The time of day when the highest concentrations of vehicles or transit riders are on the road or on another transit facility. The morning peak period is generally considered to be from 6 to 9 a.m.; the afternoon peak period is from 3 to 6 p.m.

Performance Measurement System

The PeMS program uses urban freeway data collected through freeway loop detectors to provide current, ongoing data on freeway volumes and speeds that can be displayed graphically and exported to other monitoring applications.

PeMS

see **Performance Measurement System**

person trip

Any person's one-way travel to any destination for any purpose. More specifically, a trip is the one-way movement from an origin to a destination. A chain of trips made up of a tour.

PIP

See **Public Involvement Plan**

port of entry

Trans-border facilities that process conveyances, passengers, and goods entering and exiting the United States.

POE

See **Port of Entry**

pooled rides

A rideshare service that matches multiple passengers with similar origins and destinations with the same driver. These rides tend to have reduced pricing to encourage increased vehicle occupancy. Pooled rides are also known as pooled ridehailing or shared rides offered by TNC companies such as uberPOOL and Lyft Shared.

predictive maintenance

Predictive maintenance is a proactive way to monitor a system's performance and schedule necessary maintenance. Predictive maintenance uses asset management data (warranty, useful life) and specific data measurements and calculations to inform future maintenance schedule needs of the system.

predictive traveler information

Use of a combination of real-time and historical transportation data to predict upcoming travel conditions and convey that information to travelers pre-trip and en route (such as in advance of strategic route choice locations) in an effort to influence travel behavior. In an ATDM approach, predictive traveler information is incorporated into a variety of traveler information mechanisms (e.g., multimodal trip planning systems, 511 systems, dynamic message signs) to allow travelers to make better informed choices.

priority treatments

Improvements, modifications, or design features of either the operations or the environment in which selected transportation systems or modes operate that improve performance. The most prevalent priority treatment is for transit priority, which attempts to increase speeds, reduce delays, or otherwise benefit bus operations by improving reliability or attractiveness to patrons.

PRONTO

The region's Fare Collection system that allows passengers to pay the fare to ride transit services using a PRONTO card or through the PRONTO mobile app.

propensity analysis

A process in which observed data is used to predict the likelihood of a certain outcome. For example, transit propensity may assume that there are certain physical, locational, and socioeconomic factors that can potentially serve as predictors of where transit service may be successful. By assessing those factors in relationship to existing or future transit services, propensity models may be used to plan future transit routes.

protected bikeways

Protected bikeways are dedicated biking facilities that are adjacent to the roadway, but physically separated with a continuous vertical element. The level of horizontal separation from the roadway should increase proportionately with increases in traffic volumes and vehicle speeds. These facilities preferably accommodate uni-directional bike traffic, however mitigating factors such as a high density of destinations along one side of the roadway or the presence of significantly fewer conflict points may warrant the exploration of a bi-directional facility. These are also known as Class 4 bike facilities.

project study report

A preliminary engineering report that documents agreements on the scope, a set of reasonable and feasible alternatives, the schedule, and the estimated cost of a project so that the project can be included in a future State Transportation Improvement Program (STIP).

Positive Train Control

Positive Train Control is a state-of-the-art train signaling and communication system that improves the efficiency of operations and enhances safety.

public-private partnership (P3)

Any formal collaboration between a public agency and a private company to deliver a public service or facility.

public transit

See **public transportation**

public transportation

Travel by bus, rail, or other vehicle, either publicly or privately owned, that provides general or specialized service on a regular or continuing basis.

Q**queue warning**

Informs travelers of upcoming incidents, congestion, or stop-and-go traffic. The information is based on realtime traffic data. Queue warning systems can alert drivers through dynamic message signs on overhead gantries or in-vehicle alert systems.

R

ramp metering

Electronic traffic control devices located at freeway access points to meter the entry of vehicles onto the freeway. The goal is to help optimize the movement of persons and vehicles.

Rapid

Provides rapid and frequent transit service along arterials and express lanes. Arterial *Rapid* bus services use signal priority and queue-jumper lanes at major intersections, while freeway *Rapid* services use express lanes to maintain reliable, high-speed service (e.g., Mid-City *Rapid* transit service). All day, all-stop trunk *Rapid* services can be complemented with peak-period commuter express services designed to provide very limited stop connections to major employment centers (e.g., Interstate 15 *Rapid* transit).

RAQS

See **Regional Air Quality Strategy**

RBMS

See **Regional Border Management System**

RCP

See **Regional Comprehensive Plan**

ReCAP

See **Regional Climate Action Planning Framework**

ReCAP Snapshot

A ReCAP Snapshot is resource provided to SANDAG member agencies to help jurisdictions monitor communitywide GHG emissions and/or CAP implementation over time.

Regional Air Quality Strategy

The San Diego County Air Pollution Control District developed the Regional Air Quality Strategy (RAQS) pursuant to California Clean Air Act requirements. It identifies emission control measures to provide expeditious progress toward attaining the state ozone standard.

Regional Bike Network

A regionwide connected system of bikeways and bike facilities intended to be safe and comfortable for people of all ages and abilities throughout the San Diego region.

Regional Border Management System

A regional management transportation system that applies advance and smart technologies to help improve transportation options and manage traffic accessing the border crossings in the San Diego-Tijuana region. The RBMS will be one of the first projects in the region to support the development and implement the Next OS concept.

Regional Climate Action Planning Framework

ReCAP identifies best practices and guidance for preparing CAPs and monitoring implementation over time.

Regional Comprehensive Plan

A plan that serves as the foundation for integrating land uses, transportation systems, infrastructure needs, and public investment strategies within a regional smart growth framework. The RCP was adopted by SANDAG in 2004. San Diego Forward: The 2015 Regional Plan combined the RCP with the RTP/SCS. San Diego Forward: The 2021 Regional Plan is a combined update of the RCP, RTP, and SCS.

Regional Growth Forecast

The Regional Growth Forecast is long-range forecast of population, jobs, and housing units for the San Diego region and its neighborhoods. It extends to the year 2050 and is based on the general plans of each of the region's 19 jurisdictions. Forecasts are developed through collaborative effort with experts in demography, housing, economics, and other disciplines, along with close cooperation of the local planning directors and their staff.

Regional Housing Needs Assessment

The Regional Housing Needs Assessment (RHNA), mandated by state law, quantifies the need for housing and informs land use planning in addressing identified existing and future housing needs resulting from population, employment, and household growth. The RHNA process is reassessed every eight years, SANDAG is currently in its 6th cycle covering April 15, 2021 – April 15, 2029.

Regional Resilience Framework

A Framework intended to identify best practices and guidance to prepare the Region for changing conditions and withstand, respond to, and recover rapidly from disruptions.

Regional Transit Management System

A management tool used to monitor and report on the performance of the transit system in real time, used for more than 50% of the region's fixed route services.

Regional Transportation Improvement Program

A five-year listing of major highway, transit, and active transportation projects including project costs, funding sources, and development schedules. Compiled from priority lists submitted by local jurisdictions and transportation agencies.

Regional Transportation Planning Agency

A state-designated agency responsible for preparing the RTP and the RTIP, and for administering state transportation funds. SANDAG is the San Diego region's Regional Transportation Planning Agency

Regional Transportation Plan

A minimum 20-year plan that is required by state and federal law to guide the development of the region's transportation system. San Diego Forward: The Regional Plan includes all required elements of an RTP.

remote work

See **telework**

resilience

The ability to prepare for changing conditions and withstand, respond to, and recover rapidly from disruptions and hazardous events.

reverse commute

Travel in the direction opposite to the main flow of peak period commute traffic.

RHNA

See **Regional Housing Needs Assessment**

ridehailing

Ridehailing services allow people to request rides in real-time from drivers who provide the ride in their personal vehicle in exchange for payment (e.g., Lyft, Uber).

rideshare/ridesharing

Shared trips for people with a common origin and destination. Technology enabled pooled ridehailing services to thrive in addition to traditional carpools and vanpools.

ridership

The number of transit users, usually reported as a yearly total or as the average for a normal workday.

right-of-way

The land required for the construction and/or operation of transportation infrastructure.

road user charge

A road charge is a "user pays" system where all drivers pay to maintain the roads based on how much they drive, rather than how much gas they purchase. Under a road charge, all drivers share roadway maintenance and repair costs based on what they actually use.

Roadmap Program

A program, primarily funding through a Local Government Partnership with San Diego Gas & Electric through 2020, that provided energy efficiency and climate action planning support to SANDAG member agencies to help mitigate greenhouse gas (GHG) emissions in municipal facilities and in the community.

robotaxis

Driverless vehicles that operate within urban environments, fulfill short or medium distance trips, and can be hailed in real-time through a mobile app.

route miles

The length of a transit route or service multiplied by the number of trips made by transit vehicles or trains each day.

RTIP

See **Regional Transportation Improvement Program**

RTMS

See **Regional Transit Management System**

RTP

See **Regional Transportation Plan**

RTPA

See **Regional Transportation Planning Agency**

S**Safe, Accountable, Flexible, Efficient Transportation Equity Act**

A Legacy for Users: Federal legislation signed into law on August 10, 2005, authorizing \$244.1 billion for Federal surface transportation programs for highways, highway safety, and transit for the five-year period between 2005 and 2009. Congress approved a series of extensions, known as Continuing Resolutions, to keep federal funds flowing until the passage of MAP-21 in 2012.

Safe Routes to School

A state and federal program that funds education, encouragement campaigns, and infrastructure improvements to help decrease traffic congestion around schools, and to make the journey to school on foot or bike safer and more feasible for children.

Safe Routes to Transit

A program that funds strategies to address the challenges of getting to and from a transit stop or station. These strategies include first-mile/last-mile solutions such as enhanced pedestrian crosswalks near transit stations, bike lanes that connect to transit and bike parking at transit stations, feeder-distributor bus/shuttle routes, carsharing/station cars, mobility hubs, and ridesharing.

shared streets

Temporary roadway modifications that create safe and healthy spaces for people of all ages and abilities to bike or use other micromobility options (e.g., scooters, skateboards) while reducing vehicle miles traveled.

SAFETEA-LU

See **Safe, Accountable, Flexible, Efficient Transportation Equity Act**

SANDAG

See **San Diego Association of Governments**

SANDAG State of the Commute

The State of the Commute is a monitoring program that monitors the performance of the transportation network and provides information on freeway, transit, and local roadways use and performance data.

San Diego and Arizona Eastern Railway

The SD&AE Railway straddles the United States – Mexico border, connecting San Diego, Tijuana, Tecate, and the Imperial Valley.

San Diego Association of Governments

SANDAG is responsible for long-range transportation planning and programming under both federal and state laws.

San Diego County Air Pollution Control District (SDAPCD)

See **Air Pollution Control District**

San Diego Metropolitan Transit System

The agency created by the California legislature to operate in 570 square miles of the urbanized areas of San Diego County, as well as in the rural parts of East County. The system covers 3,240 total square miles, providing service to more than 2 million San Diego residents.

scootershare

Scootershare provides low-cost, on-demand, convenient access to a fleet of shared electric scooters for short-term use. Services may include kick scooters or mopeds and are typically dockless and can be accessed by using a smartphone app.

SCS

See **Sustainable Communities Strategy**

SCS Land Use Pattern

Subregional allocation of the Series 14 Regional Growth Forecast reflecting a pattern of growth and development that aligns with the transportation investments proposed in the 2021 Regional Plan.

SCTCA

See **Southern California Tribal Chairmen's Association**

SD&AE

See **San Diego and Arizona Eastern Railway**

seamless transportation

A multimodal trip made without any sudden changes, interruption, or difficulty, and in which people have confidence in the accuracy of the information they are provided.

Secretaría de Infraestructura y Desarrollo Urbano

State of Baja California Secretariat of Infrastructure and Urban Development.

Series 14 Regional Growth Forecast

Population, housing unit, household, and job estimates for the future. The Series 14 Forecast projects several demographic and socioeconomic variables from the base year of 2016 to the horizon year of 2050 using data and assumptions about the region in the future.

shared mobility

Transportation services that are shared among users, either concurrently or one after another. Services may include shared vehicle fleets (e.g., dockless bikes and scooters) or shared ride options (e.g., Lyft and Uber).

shared-use mobility

Shared ownership of a service or program to provide commuters who use alternative transportation with a reliable option to make other trips (e.g., carshare, bikeshare, rideshare).

SHOPP

See **State Highway Operation and Protection Program**

SIDUE

See **Secretaría de Infraestructura y Desarrollo Urbano**

single occupant vehicle

A vehicle with one occupant – the driver. Also referred to as a "drive alone."

SIP

See **State Implementation Plan**

Smart City

Technology and data that enables more efficient operations out of our hard infrastructure. This can include streetlights, roadways, or even buildings, embedded with sensors that communicate with each other and provide real-time conditions.

Smart Growth

A compact, efficient, and environmentally-sensitive pattern of development that provides people with additional travel, housing, and employment choices by focusing future growth away from rural areas and closer to existing and planned job centers and public facilities, while preserving open space and natural resources.

Smart Growth Incentive Program

Competitive grant program funding by the *TransNet* Extension Ordinance that provides funding for transportation-related infrastructure improvements and planning efforts that support smart growth development in **Smart Growth Opportunity Areas**.

Smart Growth Opportunity Areas

Locations of existing, planned, or potential smart growth areas that can support smart growth, transit, walking, and biking. Transportation and planning professionals from all jurisdictions have provided recommendations for these locations.

smart infrastructure

Smart infrastructure is the combination of physical infrastructure with digital infrastructure, using data to provide improved information that enables better decision making and more efficient operations.

smart intersections

Technology focused on improving safety at intersections for all users: personal vehicles, transit, bike riders, and pedestrians. Sensors, connected vehicle technology, and mobility applications facilitate communication among users to improve situational awareness and provide improved signal operations and intersection safety.

smart lockers

See **package delivery lockers**

smart parking

Parking inventory-management system that provides the ability to disseminate real-time parking information and maximize the use of parking facilities.

smart signals

Application of signal timing system technologies that operate in conjunction with transit and freight signal priority treatments and Smart Intersections. Smart signals use advance detection systems to improve signal timing (e.g., turning traffic signals to green sooner or extending the green phase) based on real-time vehicle, bike, and pedestrian demand levels.

social equity

Social equity means ensuring that all people are treated fairly and are given equal opportunity to participate in the planning and decision-making process, with an emphasis on ensuring that traditionally disadvantaged groups are not left behind. Social equity is comprised of procedural, distributional, and structural equity.

social equity focus populations

Identified for the purposes of modeling performance measures include: minority, low-income, and senior populations. The term “minority” is described by the Federal Highway Administration as: Black (having origins in any of the black racial groups of Africa); Hispanic (of Mexican, Puerto Rican, Cuban, Central or South American, or other Spanish culture or origin, regardless of race); Asian American (having origins in any of the original peoples of the Far East, Southeast Asia, or the Indian subcontinent); American Indian and Alaskan Native (having origins in any of the original people of North and South America and who maintains cultural identification through tribal affiliation or community recognition); or Native Hawaiian or Other Pacific Islander (having origins of the original peoples of Hawaii, Guam, Samoa, or other Pacific Islands). Low-income populations are those with income levels below 200% of the Federal Poverty Rate, and senior populations include anyone 75 years old and older.

Social Equity Planning Framework

A framework for how social equity will be approached, incorporated, and prioritized in all SANDAG plans, programs, and projects. Five inter-reliant actions form the basis of this framework: (1) engagement, (2) data accountability, (3) measure impact, (4) prioritize investments, and (5) monitor, report, and evolve. These five actions rely on continuous learning.

Southern California Tribal Chairmen’s Association

The Southern California Tribal Chairmen's Association (SCTCA) is a multi-service non-profit corporation established in 1972 for a consortium of 20 federally recognized Indian tribes in Southern California. The primary mission of SCTCA is to serve the health, welfare, safety, education, cultural, economic and employment needs of its tribal members and descendants in San Diego County. A board of directors comprised of tribal chairpersons from each of its member Tribes governs SCTCA.

SOV

See **Single Occupant Vehicle**

sphere of influence

A plan for the probable physical boundaries and service area of a local government agency, as determined by **LAFCO**.

SPRINTER

The SPRINTER light rail train system, operated by **NCTD**, provides service between Oceanside and Escondido.

state highway

A state-designated roadway. It may be urban or rural.

State Highway Operation and Protection Program

Caltrans' three-year program to address traffic safety, roadway rehabilitation, roadside rehabilitation, or operations needs on the state highway system.

State Implementation Plan

A document that shows the steps planned to meet federal air quality standards (outlined in the Clean Air Act). Each non-attainment area prepares an air quality improvement plan; those are combined to make up the statewide SIP.

State Transportation Improvement Program

A multi-year program of major transportation projects to be funded by the state. The CTC adopts the STIP every two years, based on projects proposed in RTIPs and from Caltrans.

STIP

See **State Transportation Improvement Program**

STP

See **Surface Transportation Program**

streetcar

Designed for short-distance trips with station spacing every few blocks or every quarter-mile on average. Streetcars are designed for dense urban areas, such as downtown areas and operates either in mixed traffic with automobiles or on a dedicated right-of-way.

Surface Transportation Program

A federal program that provides flexible funding allocated by regional agencies such as SANDAG for a wide range of projects including highways, transit, local streets and roads, and bicycles.

Sustainable Communities Strategy

An element of the RTP, as required by SB 375, that demonstrates how development patterns and the transportation network, policies, and programs can work together to achieve the targets set by CARB for reducing regional greenhouse gas emissions from cars and light trucks in a region.

sustainability

Meeting current economic, environmental, and community needs without jeopardizing the ability of future generations to meet their needs.

T**traffic volumes**

see **average daily traffic**

TAZ

See **Traffic Analysis Zone**

TCM

See **Transportation Control Measure**

TDA

See **Transportation Development Act**

TDM

See **Transportation Demand Management**

telework

Teleworkers or e-workers are employees who conduct some or all of their daily work activities from their home or from a remote site other than the normal work site, in order to avoid commuting during peak periods.

Tier 1 employment centers

The region's largest employment centers of Sorrento Valley, Kearny Mesa, and Downtown San Diego that account for more than 325,000 jobs in the San Diego region.

Tier 2 employment centers

The region's medium-sized employment centers of Carlsbad Palomar Airport, El Cajon, Escondido – Palomar, Hillcrest, La Mesa, Mission Valley, National City, Ocean Beach, San Marcos Civic Center, and West Bernardo that account for more than 240,000 jobs in the San Diego region.

Title VI of the Civil Rights Act

Title VI of the Civil Rights Act states that “no person in the United States, shall, on the grounds of race, color or national origin be excluded from participation in, be denied the benefits of, or be subject to discrimination under any program or activity receiving federal financial assistance.”

TNC

See **Transportation Network Company**

TOD

See **transit-oriented development**

tour

A basic modeling unit in an activity based model. It is a journey that begins and ends at home. A tour includes a chain of trips.

traffic analysis zone

a geographic unit used for transportation modeling. A TAZ is smaller than a census tract and a Trip Distribution Zone.

transit leap

A complete network of high-speed, high-capacity, high-frequency transit services that connects major residential areas with employment centers and attractions. High-speed services, covering longer distances with limited stops, are separated from vehicle traffic with bridges, tunnels, or dedicated lanes. Improvements to existing transit services, such as the Trolley, COASTER, SPRINTER, and *Rapid*, may include additional rail tracks, more frequent service, dedicated transit lanes, and traffic signal priority.

transit-oriented development

Residential and employment growth that occurs near existing and planned public transit facilities.

transit priority area

Under SB 743, local jurisdictions can potentially make use of streamlined environmental review for projects within Transit Priority Areas, defined as an area within a half-mile of a “**major transit stop**” that is existing or planned.

Transit Priority Project

Under SB 375, a project is exempt from CEQA if it: (1) qualifies as a “transit priority project” and (2) meets the “sustainable communities project” requirements as declared by the legislative body of the local jurisdiction. A transit priority project needs to meet various environmental, land use, and housing open space criteria as outlined in Public Resources Code § 21155.1.

transit signal priority

Technology that uses GPS along with bus route schedules and real-time performance data to give special treatment to transit vehicles at signalized intersections. This can involve holding or extending a green signal or shortening a red signal in order to minimize or eliminate delays to transit passengers.

Transportation Control Measure

A transportation strategy intended to reduce vehicle miles traveled (VMT) and to make VMT more efficient. TCMs include transportation system management (TSM) and transportation demand management (TDM) elements. Examples include carpooling, transit, and computer-optimized traffic signals.

Transportation Demand Management

Policies and programs to reduce demand by automobiles on the transportation system, by promoting telecommuting, flex-time, bicycling, walking, transit use, staggered work hours, and ridesharing.

Transportation Development Act

TDA funds are generated from a tax of one-quarter of 1% on all retail sales in each county. Funds are used for transit, specialized transit for disabled people, and bike and pedestrian purposes.

transportation network company

Transportation Network Companies (TNCs) is a term used by the California Public Utilities Commission to define companies that provide prearranged transportation services for profit using an online or app-based platform to connect drivers with passengers (such as Lyft and Uber).

Transportation System Management and Operations

A revitalized Federal program that identifies a set of strategies, focusing on operational improvements, to maintain and even restore performance of the existing transportation system before extra capacity is needed.

travel demand

The general phenomenon of the movement of people and goods within a given area. Demand is typically measured in trips, characterized by a trip origin and either single or multiple trip destinations. For the purposes of travel forecasting and analysis, trip purpose, trip mode, time of day, and other travel factors are considered.

trolley

The San Diego Trolley is the urban light rail transit service currently provided in the San Diego region. MTS operates three primary lines.

Truck Travel Time Reliability (TTTR) Index

A measure of travel time for on-road wheeled truck freight that is indexed for comparison purposes. A roadway that has a value of 1.0 does not experience travel time changes, or unreliability. As the TTTR index value increases the reliability of a roadway decreases.

TSMO

See **Transportation System Management and Operations**

TSP

See **transit signal priority**

U**United States Department of Transportation**

The federal cabinet-level agency with responsibility for highways, mass transit, aviation, and ports, and headed by the Secretary of Transportation. The DOT includes the Federal Highway Administration and the Federal Transit Administration, among other agencies.

United States Environmental Protection Agency

The federal agency charged with setting policy and guidelines, and carrying out legal mandates, for the protection of national interests in environmental resources.

United States-Mexico-Canada Trade Agreement

A formal free trade agreement between the United States, Mexico, and Canada that includes provisions for improving and increasing free trade among the three countries. USMCA came into effect in 2020 and builds upon provisions included in NAFTA.

Universal Transportation Account

An access account that combines all forms of public transportation payment into a single user-friendly interface.

U.S. DOT

See **United States Department of Transportation**

U.S. EPA

See **United States Environmental Protection Agency**

USMCA

See **United States-Mexico-Canada Trade Agreement**

V**vacancy rate**

The number of housing units in a given geography that have no one living in them divided by the total number of housing units in that same geography.

vacation rental

A housing unit that is rented out to visitors on a temporary basis usually as an alternative to a hotel.

value pricing

A congestion management strategy that applies a surcharge to users of a transportation roadway or facility to reduce congestion during periods of peak demand. Value pricing is a way of harnessing the power of the market demand to maximize use of the available supply. Concepts include dynamic pricing, static/flat fixed pricing, cordon pricing that charges are either dynamic or fixed within or into an area, and areawide pricing generally applied on a per-mile basis within an area.

vanpool

A vehicle operating as a ridesharing arrangement, providing transportation to a group of individuals typically traveling directly between their homes and employment locations within the same geographic area.

vehicle miles traveled

The total number of miles traveled on all roadways by all vehicles. Reducing vehicle miles traveled (VMT) can help ease traffic congestion and improve air quality.

vehicle operating costs

Costs associated with operating a vehicle such as maintenance and fuel. Vehicle operating costs are calculated on a per-mile basis.

vehicle trip

A single vehicle movement from the beginning of travel to its destination, in a vehicle that is motor-driven (e.g., automobiles, motorcycles, trucks, buses, and vans).

Vision Zero

Vision Zero is a national campaign that uses a variety of strategies to work toward eliminating deaths and severe injuries on our streets by focusing on roadway design and policies that affect people's choices.

VMT

see **vehicle miles traveled**

vulnerability assessment

Identifies and characterizes the climate hazards and other climate effects a community faces.

W**weighted population density**

The average of the population densities of subareas (e.g., block groups) of a larger area (e.g., census tract) weighted by the populations of those subareas. Weighted population density is an alternative to the conventional population density measure—total population divided by total area.

wireless communications

The sending and receiving of data across radio spectrum waves.

wireless electric vehicle charging

Emerging technology that allows vehicles to charge without plugging a chord into the electric vehicle. Also referred to as "inductive charging," this technology can be static or dynamic. Static wireless chargers can be installed in parking spaces where the electric vehicle then drives over it, parks, and charges wirelessly. Dynamic wireless charging is an emerging technology that allows vehicles to recharge while being driven on a road or highway.

work trip

Any "person" or "vehicle" trip whose purpose (on at least one trip end) involves work or work-related business.

X

Y

Z

zero-emission vehicle

ZEVs are vehicles that produces no emissions from the onboard source of power. The only technologies that meet this definition are battery-electric vehicles (BEVs) and hydrogen fuel cell electric vehicles (FCEVs). ZEVs can be passenger vehicles, micro-mobility, buses and trucks.

zero-emission vehicle infrastructure

ZEV infrastructure includes electric vehicle charging stations to support plug-in electric vehicles and hydrogen fueling stations to support fuel cell electric vehicles. Wireless charging (static and dynamic) is an emerging technology for ZEV infrastructure. See **wireless electric vehicle charging**.

ZEV

See **zero-emission vehicle**