San Diego FORWARD
A Bold New Transportation Vision

SANDAG

5 BIG MOVES // COMPLETE CORRIDORS / TRANSIT LEAP / MOBILITY HUBS / FLEXIBLE FLEETS / NEXT OS

Frequently Asked Questions about Flexible Fleets

Learn more at SDForward.com/FlexibleFleets

GENERAL – FLEXIBLE FLEETS

How do Flexible Fleets reduce greenhouse gas emissions and vehicle miles traveled?
Flexible Fleets provide convenient and affordable alternatives to driving alone. It is envisioned that motorized Flexible Fleets will eventually be electric. Shifting some single occupant drivers to transit, biking, and shared rides in electric vehicles will lead to fewer vehicle miles traveled and reduce air pollution throughout the San Diego region. Services like micromobility and microtransit provide connections between transit and key destinations, making it easier for some commuters to choose transit. Ridesharing - like carpool, vanpool, and pooled ridehailing services - encourage riders with a common origin or destination to share the trip.

How do various types of Flexible Fleets accommodate persons with disabilities? What about people without a smartphone?
Flexible Fleets are available in different vehicle types and provide a variety of personalized travel options – from vehicles outfitted with wheelchair lifts to accommodations for the visually impaired. Rather than requiring users to head to a nearby pick-up spot, the on-demand nature of rideshare and microtransit services allows people to take a trip from door-to-door at any time of the day. As we start to think about driverless Flexible Fleet services operating in our communities, public agencies and private service providers could enable mobility ambassadors to provide customer service and assistance to passengers. Based on the mobility needs, Flexible Fleets can provide a solution that is suitable for all users. As new services are developed, public agencies can develop policy and incentive programs, such as the SANDAG Specialized Transportation Grant Program, to ensure private services work for everyone.

Public agencies and private mobility operators are working together to ensure Flexible Fleet services work for everyone, including for those who may not have a bank account, credit card, or smartphone. Agencies can work with private mobility operators to ensure that non-card-based payment options are accepted by partnering with local banks, credit unions, or nonprofit organizations to offer prepaid cards or other payment options that do not require credit cards. Agencies and shared mobility operators also can develop partnerships with a call center or install transportation information kiosks at Mobility Hubs to enable people without smartphones to easily access these services. When low-performing bus routes were eliminated in Orange County, the City of San Clemente launched a rideshare program in partnership with Lyft and ButterFLi to offer rideshare services along the eliminated routes. A call center service helps users without a smartphone or in need of wheelchair accessible vehicles.

Are Flexible Fleets privately owned and operated, or run by a public agency?
Flexible Fleets can either be publicly or privately operated. Many new mobility services – like scootershare, bikeshare, ridehailing, and microtransit – are typically owned and operated by private entities. Public agencies may require private service providers to apply for and receive a permit to operate in their communities, helping to ensure services are safe, equitable, and support local climate change initiatives. In other cases, public agencies may choose to partner with a private mobility operator to develop and implement a pilot program or service. Agencies may conduct comprehensive outreach to encourage use of these services and provide operational subsidies or trip incentives.

How do Flexible Fleets serve the "first/last mile" to transit? Is the "first/last mile" more like five miles with Flexible Fleets?
Flexible Fleet services like e-bikes, kick scooters, mopeds, microtransit, ridehailing, and neighborhood electric vehicles (NEVs) are motorized and provide quick and easy connections to transit. The availability of diverse motorized solutions helps extend the reach of transit to areas where people live, work, or visit for that leg of the trip - beyond the last mile. As part of the 2021 Regional Plan, Flexible Fleet service areas will maximize connections to Transit Leap services at Mobility Hubs.

How will Flexible Fleets encourage ridesharing?
By providing services that make it easy for users with a common origin or destination to share the trip and reduce costs, programs like the SANDAG iCommute carpool incentive program encourage commuters to try on-demand carpool services by providing up to ten free trips with Waze Carpool. In the future, people will be able to use their smartphone to hail a ride from a driverless vehicle. These vehicles are expected to operate as "robo-taxis" and encourage ridesharing by using technology to pick up users along the way and fill empty seats in the vehicle. Complete Corridor improvements like dedicated lanes for shared rides and safe pick-up and drop-off zones at Mobility Hubs will help ensure Flexible Fleets are a quick and convenient option to driving alone.

How do you address affordability in Flexible Fleets?
The private sector is playing a big role in the future of transportation and public agencies need to coordinate with the private sector to develop policy and incentive programs to ensure future services work for everyone. Public agencies can partner with private service providers to provide operational subsidies or trip incentives to ensure Flexible Fleet services are affordable. For example, SANDAG offers a $400 monthly subsidy to make vanpooling an affordable option. In Los Angeles, LA Metro partnered with microtransit provider, Via, to provide a shared and low-cost transportation option to and from rail and bus stations in the Compton, El Monte, and North Hollywood communities. Participants in Metro's Low-Income Fare is Easy (LIFE) program can use Via free of charge. Incentives and programs like these can be promoted to all sectors of the population to help reduce the costs of travel.

What would it take to get a demonstration project or pilot more Flexible Fleets in the San Diego region?
Partnerships between the public sector and private agencies are an important mechanism to deploy Flexible Fleet pilots in the region. Private agencies typically consider capital and operating costs and return on investment before deploying a service in a new area. To complement the investment from the private sector, public agencies can make certain transportation investments (e.g., dedicated lanes for shared mobility, signal priority, connected infrastructure) and develop policies (e.g., curb management, travel demand management ordinances) that might attract private mobility providers to operate in the San Diego region.

SANDAG is actively engaging the private sector to deploy pilots in the region. SANDAG, the City of Carlsbad, and the North County Transit District (NCTD) launched the Carlsbad Connector in August 2019, which provides an on-demand shuttle connection between the Carlsbad Poinsettia COASTER Station and nearby business parks. SANDAG also is working closely with NCTD and the cities of Del Mar, Solana Beach, and Encinitas to plan and deploy an electric bikeshare program.

AUTONOMOUS VEHICLE TECHNOLOGY

How is autonomous vehicle technology incorporated into different types of Flexible Fleets?
Self-driving or autonomous vehicles (AV) are computer driven and do not require a human to safely operate the vehicle. Sensors and cameras provide a 360-degree view around the car and collect data about nearby objects (like size and speed). Data collected is used to categorize these objects (e.g., bike riders, pedestrians, other vehicles) to determine how the vehicle should react. It is expected that AVs would eliminate most vehicle accidents and create safer roadways for everyone.

This technology can be outfitted on Flexible Fleets of any size, from small neighborhood shuttles and rideshare vehicles to autonomous buses and trains. In the future, the vehicles in which we travel may look different than what we're used to today. Without the need for a human to drive, traditional vehicle components like a steering wheel and a front-facing dashboard may no longer be required.

How do autonomous vehicles interact with bikes, pedestrians, and human driven vehicles? How do they handle difficult weather?
Autonomous vehicles use sensors and cameras to collect and categorize data about nearby objects to determine how the vehicle should react. Autonomous vehicle technology is expected to greatly improve safety for all roadway users including bikes, pedestrians, and human driven vehicles. The National Highway Traffic Safety Administration indicates that ninety four percent of serious crashes are due to human error. Automated vehicles have the potential to remove human error from the crash equation, which will help protect drivers and passengers, as well as people biking and walking

Companies are testing AVs across the world and, as of early 2019, there are more than 20 active autonomous vehicles pilot projects in the U.S. Testing and pilot projects are taking place to ensure vehicles safely perform under various weather conditions and environmental settings.

ELECTRIC VEHICLES

Will all Flexible Fleets be electric vehicles? How will their batteries stay charged?
To support California's plan and local plans to combat climate change, SANDAG envisions that over time, motorized Flexible Fleet services will become entirely zero-emission vehicles, which includes plug-in electric vehicles (EV) and hydrogen fuel cell vehicles. Zero-emission vehicle innovations are underway across all vehicle types from passenger vehicles and vans to buses and trucks.

Public and private investment is necessary to provide adequate charging infrastructure to maintain all-electric fleet services. Depending on the Flexible Fleet service, vehicles may be able to plug in to charge at workplaces, transit stations, or other public locations. The SANDAG Regional Electric Vehicle Charging Program is an example of how the agency is helping to expand the EV charging network in the region. Beyond the infrastructure needs, technology and mobility providers are working to address issues around battery range and recharging. One technology that may address this issue is wireless charging, where a battery could recharge by placing the vehicle over an in-ground inductive charging system at a Mobility Hub, for example. Wireless electric vehicle charging is based on inductive charging, which involves electricity being transferred between two magnetic coils via the air gap between the ground and the vehicle. Inductive charging would enable automated vehicles that are part of a rideshare fleet, or "robo-taxis," to recharge without the need for a human driver to physically plug-in the vehicle. Initial wireless charging applications are designed for parking spaces, while the technology is being developed to operate on roadways or Complete Corridors.