



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

Frequently Asked Questions about Clean Transportation

Learn more at SDForward.com/webinars

Where can I learn more about the MTS Zero Emissions Bus Pilot Program?

More information is available at sdmts.com/inside-mts-current-projects/zero-emissions-bus-pilot-program.

Where can I learn more about the SANDAG Regional Electric Vehicle Charging Program?

More information is available at sandag.org/EVChargingProgram.

How are connected and autonomous vehicle technologies being applied to transit?

Connected and autonomous technology has the potential to make transit faster, safer, and less expensive. These technologies also may change the form of transit in the future. Connected vehicle technology – such as enabling a bus to communicate with traffic signals or provide enhanced safety features – is already partly deployed on buses in our region. While fully autonomous mass-transportation vehicles might be used in the future, smaller autonomous shuttles also could serve routes to neighborhood Mobility Hubs and provide connections to mass transportation options.

Emerging technologies are enabling our systems to get faster, smarter, and more integrated. The goal of the 5 Big Moves is to leverage these technologies to create a seamlessly integrated network orchestrated by the Next Operating System (OS). The Next OS is a digital platform that will connect transportation infrastructure to provide a real-time view of how the system is being used. This coordinated transportation network will enable people to move around the region with more sustainable and lower cost travel options.

How do you incentivize development patterns and land use change to complement transportation investments?

Since 2005, SANDAG has offered competitive grants through the *TransNet* Smart Growth Incentive Program. Grantees include comprehensive public infrastructure projects and planning activities that facilitate compact, mixed-use, transit-oriented development and increase housing near public transit. Throughout development of the 2021 Regional Plan, SANDAG will consider ways to build upon this work, including the development of Mobility Hubs. Electric vehicle (EV) infrastructure also is a feature of Mobility Hubs and the types and quantities of EV charging stations at Mobility Hubs will vary depending on the community context and types of Flexible Fleets that operate there.

How do electric vehicles complement other strategies to reduce GHG emissions?

The greenhouse gas (GHG) reduction targets assigned to SANDAG by the California Air Resources Board require us to reduce GHG emissions by 19% per capita by 2035 compared to 2005 levels. The 2021 Regional Plan must demonstrate how we reach these targets primarily by reducing vehicle-miles traveled, not through changes in vehicle technology. This means projects that promote a switch from solo driving to transit, shared rides, and active transportation will be needed alongside efforts to increase use of electric vehicles.

Where does the electricity come from that supports electric vehicle charging stations?

The electricity source for charging stations varies depending on how the property owner gets electricity. San Diego Gas & Electric's electrical grid is comprised of more than 40% renewable energy. Property owners who use onsite solar or battery storage would have even cleaner energy for their chargers.

If future shared vehicles are electric vehicles, how will the vehicles stay charged if they are heavily used?

Advancements in electric vehicle technology are leading to longer battery life and faster charging times. This allows vehicles to travel farther between charging sessions. SANDAG envisions a robust charging network so that electric vehicles have plenty of places to recharge.

What happens to electric vehicle batteries at their end of life?

A secondary market for used electric vehicle batteries is developing. Potential uses include stationary applications, like home energy storage or other grid management systems.

What is the role of hydrogen in fueling passenger vehicles, trucks, or buses?

California has set a goal for 5 million zero emission vehicles (ZEVs) by 2030. ZEVs include both plug-in electric and hydrogen fuel cell electric vehicles. The technologies are complementary and the state is committed to both technologies in order to reach all segments of the vehicle market.

What is renewable natural gas?

Renewable natural gas is methane gas derived from naturally-occurring organic waste material, typically from wastewater treatment plants or landfills. Renewable natural gas can be used in place of pipeline natural gas, which comes from deep underground wells.