South Bay Cities Council of Governments

November 19, 2020

TO: SBCCOG Board of Directors

FROM: Steve Lantz, SBCCOG Transportation Director

RE: SBCCOG Transportation Update Covering October 2020

Adherence to Strategic Plan:
Goal A: Environment, Transportation and Economic Development. Facilitate, implement and/or educate members and others about environmental, transportation and economic development programs that benefit the South Bay.

Federal

US DOE Launches $100 Million Green Hydrogen Fuel Cell Plan For Long Haul Trucks
The U. S. Department of Energy on October 8th announced a new five-year, $100 million green hydrogen and fuel cell truck plan aimed at driving down the cost and improving the efficiency of fuel cells in order to replace diesel with hydrogen for long-haul trucking.

To date, the Zero Emission Truck (ZET) initiatives have focused on battery electric trucks. However, Volvo and Daimler have just created a fuel cell partnership and others are considering hydrogen fuel cells for long-haul trucks.

The primary source of hydrogen today is natural gas, but the federal program is focusing on splitting hydrogen from water using electricity by making large scale electric hydrogen production systems more durable, efficient and affordable.

Because hydrogen can be transported by pipeline, vehicle, or watercraft without depending on the construction of major new electricity transmission lines, it raises the possibility of eventually positioning both large-scale and small-scale hydrogen fuel stations throughout the country.

State

California Energy Commission Approves $384 Million For Zero-Emission Transportation
The California Energy Commission (CEC) approved a $384 million plan for clean transportation investments to boost the adoption of zero-emission cars and trucks. The plan focuses on closing gaps in zero-emission fuels and infrastructure to support Governor Gavin Newsom's executive order phasing out the sale of new gasoline-powered passenger vehicles by 2035.

The 2020-2023 Investment Plan Update for the CEC's Clean Transportation Program prioritizes funding for zero-emission vehicle (ZEV) manufacturing, electric and fuel cell charging infrastructure, and related workforce development and manufacturing. The program will also include $10 mil to address COVID-19 recovery efforts and to provide state matches for related federal grants.

The funds will become available over the next three years and will be distributed to projects through a mix of competitive funding solicitations and direct funding agreements. In response to engagement with the program advisory committee and the Disadvantaged Communities Advisory Group, the CEC will seek to provide 50% of funds from this plan to projects that benefit low-income and disadvantaged communities.

Will EVs crash the State's grid?

An executive order signed by Gov. Gavin Newsom on September 23rd aims to ban the sale of new gasoline-powered cars and light trucks in the state by 2035. The new goal compounds an existing state mandate that all retail electric sales be 100% carbon free by 2045. And Southern California expects demand for electricity by its customers to rise by 60% by 2045.

In addition, Californians will still be allowed to drive gasoline-fueled vehicles after 2035, and to buy them in the used-car market or import new vehicles from other states. They just won't be allowed to buy new ones in-state.

Fortunately, in the short term the California Energy Commission has seen less than 2% growth in electric demand since 2009 while the population has grown by almost 7%. Increases in demand at the grid level have been held down by improved efficiency in electric equipment and appliances and the growth of "behind-the-meter" solar residential installations. And demand may ramp up slowly. SCE projects that EV ownership will rise to about 7.5 million vehicles, or about 25% of the state's vehicles, based on expectations that about two-thirds of new-vehicle sales will be EVs by 2030.

Experts believe there is no technical or economic reason the grid can't support full electrification of vehicles in the next decade. However, post 2030, California's current electrical grid capacity today wouldn't be sufficient to provide power for a projected 26 million EV cars and light trucks by 2035.

So what needs to be done in the state to accommodate the policy shifts and consumption growth? Meeting projected increased demand while also weaning California away from natural gas will require several inter-related strategies to be successfully implemented over the next 15-20 years. Improved efficiency of battery storage technology at the grid level and at the consumer products level will need to become significantly more efficient.

Planning must also become more granular. Knowing how much more electrical capacity California will need is a complex calculation of many variables, including the mix of battery-powered, hydrogen, or other technologies, continued growth in solar power (particularly for residential uses), continued increases in efficiency, expanded charging infrastructure, and improved understanding of the time of day that vehicle and grid batteries are being charged.

Because solar is bringing the cost of daytime charging down and changing peak pricing periods, the state's electrical grid will have to be reconfigured to serve workplaces rather than homes and workplace owners and operators will need to provide charging stations for those vehicles. Edison projects that the necessary change would require about $75 billion in transmission and distribution investment at California ISO's level.

The most important element in the state's transition to EVs may well be coordination, to counteract the effect of fragmented responsibilities in the state for electrical generation,

distribution and planning. The various state agencies will need to work together to balance the costs of growing power generating capacity with the pace of growing demand.

CA Program Helps Low-Income Californians Afford Cleaner Cars (and Now, E-Bikes)
The Clean Cars 4 All program — basically California's "cash for clunkers" — gives low-income Californians a chance to trade in their older car for a hybrid or all-electric vehicle. Or, residents can opt to go car free and receive vouchers for transit passes or car sharing programs, and most recently, rebates on electric bikes.

The program is administered by the four air quality districts in the State, locally by the SCAQMD. Across the board, residents can choose to either scrap and replace their car, or scrap and receive a voucher for alternative transportation. All districts have income-based eligibility requirements and require that the car is in running condition and is1995 or older. Grants vary between $4,000 and $9,500, depending on the applicant's household income and preference for vehicle replacement or alternative mobility option.

Last year, Senate Bill 400 expanded the Clean Cars 4 All program to allow electric bikes and bike-sharing to be included as mobility options in the grant program, meaning that participants can choose to trade in their gas-guzzler for an e-bike or public transportation voucher.

Region

Metro Board Approves Microtransit Pilot Areas With $1 Fare; Launches TAPforce App
The fare structure and first service areas for the three-year MicroTransit Pilot Project, a ride-hailing program that will be operated by L, A. Metro, were approved on September 24th by the L. A. Metro Board of Directors. One of the initial zones will include LAX and the core of Inglewood.

Metro Micro will offer on-demand, shared ride service for short trips within designated service zones in Los Angeles County at an introductory rate of $1 per ride (transfer not included) during the six-month pilot projects.

A new fare payment and trip planning technology behind the project will allow riders who have TAP accounts to plan entire trips — both on Metro Micro and other mobility options— using real-time booking and payment through a new cloud-based mobile app on their smart phone or internet browser that Metro has named TAPforce, or by using Metro's call center. Riders will be able to pay by using their TAP card, a TAPforce account on their iPhone (and soon on their Android phone), or with a debit, credit or prepaid credit card.

The TAPforce collaborative payment and trip-planning technology also enables participating agencies and private sector partners to offer a wide range of promotions, discounts, and rewards programs on their individual systems and for interagency mobility programs.

The TAPforce application is already being used for non-transit modes. For example, on the first day of the new program, LA Metro signed up 1,000 new Metro Bike Share customers. Once the six-month pilot programs are completed, Metro staff will return to the Board to consider potential microtransit service area and fare adjustments. Metro is also interested in expanding rider options even further through innovative partnerships.

Publicis Sapient provided LA Metro with TAPforce, a cloud-based Salesforce Community and Commerce application that turns traditional fare cards into digital accounts, giving patrons access to more mobility options more easily through integrated, customized applications accessible through each customer's TAPforce account.

Metro To Off Free Rides, Ballot Drop Off Boxes On Election Day
Metro will offer free service on its rail and bus lines on Election Day, Nov. 3rd. In addition, vote-by-mail ballot drop-off boxes have been placed at 19 rail and bus stations and L. A. Union Station and El Monte Station are being used as official vote centers from Oct. 24 through Nov. 3.

The following Metro rail and bus stations will have vote-by-mail ballot drop-off boxes:
- El Monte Station and Union Station
- North Hollywood
- 7th Street Metro Center
- Hollywood/Western
- Vermont/Santa Monica
- Wilshire/Vermont
- Expo/Vermont
- La Cienega/Jefferson
- Downtown Santa Monica
- Willow
- Willowbrook/Rosa Parks stations
- Mariachi Plaza
- Sierra Madre Villa
- Aviation/LAX
- Harbor Freeway
- Norwalk
- Harbor Gateway Transit Center
- Sepulveda

ALERT! It's Time To Start Following LA City's Parking Rules Again
The bad news: the City of Los Angeles ended its COVID-19 moratorium on issuing parking tickets on October 15th. The good news: LADOT will delay booting and impounding of "scofflaw vehicles" until Jan. 1. And the city will not impound vehicles when someone is living in them. The following city rules are back:

- **72-hour rule:** In the city of L.A., you don't have the license to park in a public spot forever. You have a maximum of 72 hours before your car can get towed. It doesn't matter if you're in a residential street with no signage for miles.
- **Overnight parking:** It's technically allowed in the city of L.A. But in several other cities, including Pasadena, Alhambra, Beverly Hills and Culver City, overnight parking is not allowed unless you have a permit.
- **The street sweeping guardians have no mercy:** Street sweepers came and left? Street sweepers don't even show up? Doesn't matter. In L.A. city, if you're parked in a street sweeping spot during designated "no parking" hours, you're still eligible to get a ticket.

TRENDS

Autonomous Cars Are Slowly But Surely Gaining Momentum In California

Remember the predictions that held 2020 was meant to be the year robot cars went mainstream? Those 2020 hopes dashed in the avalanche of unmet New Year resolutions. The principal reason is that machine learning needed for cars to be autonomous and safely operated without a human backup driver is much more complex than initially thought by optimistic engineers.

Despite the engineering challenges, regulatory progress is being made for paid rides in autonomous cars — with and without backup drivers. However, the 130-page proposal from the California Public Utilities Commission still needs to go through months of comments from the public and the companies.

Two years ago, Waymo was the first company to get a permit to test robot cars without a driver on California roads. But it has never done so. Waymo says the roadblock is adoption of state guidelines for running an autonomous ride service. Waymo won't say when it will do no-driver tests here, but meanwhile it's ramping up city testing in San Francisco, in addition to Mountain View; opening a new facility in the Bayview; and embarking on a hiring spree.

General Motors subsidiary Cruise, the other company that's furthest along in self-driving, received permission in October to operate its Chevy Bolts without humans aboard. It plans to do so by year end — the first company to operate truly driverless cars in San Francisco.

Besides Cruise and Waymo, three other companies — Zoox, AutoX and Nuro — have California's OK to test cars without backup drivers. Lyft, which has centered California testing of its robotaxi pilot around Palo Alto, is now expanding to San Francisco. It also just resumed its robo-taxi rides in Las Vegas after pausing for several months during the pandemic.

Despite the entrepreneurial optimism and investment, some experts think robot cars are more likely first to be used in theme parks and sports venues rather than on public streets.