

South Bay Cities Council of Governments

February 25, 2021

TO: SBCCOG Board of Directors
FROM: Steve Lantz, SBCCOG Transportation Director
RE: SBCCOG Transportation Update Covering January 2021

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

New Administration Unveils Transformative “Build Back Better” Infrastructure Plan

President Biden unveiled a nearly \$2 trillion economic recovery plan on January 21st focused on addressing climate change, adoption of autonomous vehicles, expanded rural access to broadband, safe drinking water, and modernizing highways, bridges and tunnels. The president also called for a public / private partnership between the federal and state governments and the private sector and he is supporting a \$20 billion relief program for the “hardest hit” public transit agencies.

The President signed an executive order mandating mask wearing on federal lands, in airports and stations, in trains, airplanes, and in other public transportation modes. Federal transportation officials are considering a range of options to enforce President Biden's new face mask requirement for interstate travelers, including the possibility of fines in the thousands of dollars. Rather than spending months in the normal rule-making process, federal officials are considering emergency actions that could take effect much sooner to reduce the spread of COVID 19.

New Transportation Secretary Pete Buttigieg during his Senate Confirmation hearing defended the new administration’s climate change priorities, supported improved pedestrian safety street improvement initiatives, and committed to work with Congress to identify specific long-term funding solutions including potential adjustments to existing user fees, or shifting toward a national program that would charge drivers for the miles they travel.

State

COVID-19 May Prompt Changes In California’s Transportation Revenue Sources

Significant changes to travel behavior during the pandemic have decreased fuel tax revenue in California and many other states. In response, the Mineta Transportation Institute at UC Berkeley has researched six scenarios for funding California transportation programs through 2040.

The six scenarios evaluated the effects of several variables on projected SB 1 tax and fee revenues, including the length of the economic downturn and differences in transportation trends such as vehicle miles traveled (VMT), light-duty fleet size, and the mix of internal-combustion engine (ICE) vs. zero-emission vehicles (ZEV). The study's revenue projections under these six scenarios found that the projected cumulative revenue raised between 2020 and 2040 varies across the scenarios by more than \$40 billion. In 2020, taxes on fuels generated roughly three-quarters of state generated transportation revenue, but in four of the six scenarios, they generate less than a quarter of revenues.

Researchers suggest that in order to achieve its policy goals of reducing carbon emissions from the transportation sector, California's policymakers may wish to change the structure of taxes to replace the revenue lost from fuel taxes. For instance, the research team suggests supplementing the existing tax structure with a new road-user charge of one cent per mile of vehicle miles travelled.

Governor's Proposed FY 21-22 Budget Includes \$1.5 billion for Clean Fuel Vehicles

Governor Gavin Newsom yesterday unveiled his Equitable Recovery for California's Businesses and Jobs Plan with his proposed FY 21-22 state budget on January 22nd. The plan aims to boost the state's recovery from COVID-19 in the coming year.

The plan also includes \$1.5 billion for the purchase of clean-fuel vehicles to provide support for lower-income residents to purchase cleaner vehicles and to support purchases of clean trucks, buses and off-road freight equipment. The funds will also support the construction of electric charging and hydrogen fueling stations, which are a crucial part of low-emissions infrastructure. Metro supports increased funding for the purchase of clean vehicles through our state legislative goal #6: Coordinate with our local and state partners to incorporate the region's needs in emerging climate change and sustainability programs.

Region

Android Phones Can Now Be Used As Metro TAP Cards

L. A. Metro launched the regional TAP transit smartcard on Apple iPhones last September. On January 25th, Metro introduced its TAP application for Android phones. The TAP app provides a secure, contactless way to pay transit fare on Metro and 25 additional TAP transit agencies in L.A. County.

Users can now pay their fare with their Android phone, iPhone, or Apple Watch by holding their device *near* the TAP reader for quick fare validation. There is no need to use Face ID, Touch ID or wake the device. Riders can also download the TAP app to purchase reduced fare and low income passes as well as Stored Value options and Metro Bike Share. Fare payment is available immediately after purchase on your phone. For more information, visit taptogo.net.

COVID Absences Mean Missed Metro Trips, Construction Delays: Metro Funds More Service

In September 2020, Metro responded to projected reductions in sales tax and fare revenue due to COVID 19 stay at home orders by cutting Metro service 20% without implementing staff furloughs or layoffs. In the past month, trips have been missed as about 30% of L.A. Metro's bus operators have been out due to either being quarantined, caring for family members, or having COVID-19. The absences are also affecting progress on five Metro rail construction projects. As a result, approximately 10% of bus and rail trips have been canceled each day resulting in crowding on subsequent trips.

In response to higher-than-anticipated sales tax revenues, the Metro Board on January 28th considered a staff recommendation to focus on improving the state of repair of its bus and rail fleet rather than funding additional service. Instead, the Metro Board instructed staff to spend all of the \$58.6 million in new revenue that is eligible for transit operations to hire and train replacement bus operators and to be able to fund additional service when riders return to the system before the end of the agency's current fiscal year in June 2021. The Board also set as its top priority restoring service to its pre-COVID levels in anticipation of widespread immunizations allowing riders safely to return Metro.

On the construction side, although Metro reported that construction contractors have reported 80 absences per day, the agency has yet to determine how much effect the absentee rate will have on construction completion schedule projections. In example, Metro staff reported at the January 28th Board Meeting that substantial completion of construction on the Crenshaw/LAX line, which initially was scheduled for this month, has been postponed to at least September 2021. However, there was no transparency to the effects of COVID 19 absences versus other reasons for the delayed opening date. Once the contractors complete their work, it will take at least 5 months before the line opens for riders.

COVID 19's Silver Lining: Dramatic Reduction in Pedestrian-Vehicle Collisions in L. A. Total pedestrian-vehicle collisions in L. A. City in 2020 fell by 70%, to 1,135, down from the 3,733 collisions reported in 2019.

John Yi, the executive director of Los Angeles Walks, is glad that the numbers have gone down, but notes that relying on a pandemic is not a long-term solution. With less traffic and more people out on the roads, Yi and other active transportation advocates believe the pandemic has presented Los Angeles with an opportunity to focus on improving its infrastructure by fully implementing the city's Slow Streets Program. The program aims to limit street traffic in order to improve street safety for pedestrians and cyclists.

Inglewood Issues DEIR For Proposed Elevated Automated People Mover Light Rail Line

On January 8th Inglewood unveiled its draft environmental impact report (DEIR) for the proposed Inglewood Transit Connector (ITC) project, a 1.6-mile, fully elevated and electrically powered automated light-rail system. The city is soliciting public review and comment of the document through February 8, 2021. Upon completion, the \$1 billion project — which includes construction of three stations — would close the last-mile gap between the Crenshaw/LAX light rail line and the emerging Inglewood Entertainment District on the site of the former Hollywood Park. The project area is bounded by the Crenshaw/LAX Line to the north, Century Boulevard to the south; the SoFi Stadium, The Forum and a new Clippers Arena to the east; and La Brea Avenue to the west. Ridership on the elevated train is projected to range from 3,098 daily passengers on nonevent days to 25,056 on National Football League game days.

Los Angeles Applies Recycled Plastic Asphalt On First Major City Street

As part of a new sustainability pilot project, a portion of 1st Street between Grand Avenue and Hope Street in downtown Los Angeles was resurfaced with recycled plastic asphalt. This application of recycled plastic asphalt is the first of its kind on a major city street.

According to TechniSoil, its Neo binder infused with recycled PET plastic from water bottles has the potential to reduce the use of petroleum in asphalt. Approximately 150,000 plastic water bottles could be reused per lane mile. The company says additional benefits include reduced energy-input, fewer truck

trips, zero use of virgin aggregate, increased recycling of existing roadway and the associated reductions of greenhouse gas emissions.

Lab tests have indicated the plastic road surface may be five-to-six times the strength of a traditional asphalt road and will last two-to-three times longer, generating 50 percent life-cycle savings. As part of the project, the city is expected to evaluate the durability and performance of the product, under conditions of heavy vehicle weight use, where deep rutting and deformation of the roadway has resulted.

Trends

Fiat Chrysler/Archer Partnership Plans To Offer Mass-Produced Flying Cars By 2024

On Jan. 12th, the electric aviation company Archer announced it is partnering with Fiat Chrysler Automobiles to mass-produce its aircraft starting in 2023. Archer, Joby and Beta are competing to roll out vertical take-off and landing aircraft intended to provide faster, sustainable, and affordable urban transportation.

These electric aircraft straddle the line between airplane and helicopter: Multiple electric rotors allow aircraft to take off or land similar to a helicopter, and rotate for airplane-like horizontal flight. Archer's vehicle is expected to carry up to four passengers at speeds of 150 mph for 60 miles. Future battery technology could extend that range significantly.

Pricing for urban flights between 20 to 100 miles is expected to be competitive with UberX, about \$3 to \$6 per passenger mile. However, one of electric aviation's greatest challenges (beyond safety certification) is mass production. To solve this problem, Archer turned to Fiat Chrysler Automobiles (FCA), which already helped design the aircraft's cockpit and will enable production of thousands of aircraft per year. The first aircraft is scheduled to be revealed in early 2021 with the first public flights in 2024.

All EVs by 2035? California Energy Commission Report Shows Challenges

A new California Energy Commission study of the state's EV charging infrastructure predicts that more than 1.5 million EV chargers will be needed by 2030 in California alone, which is three times the 500,000 charging stations that President Biden has promised to build throughout the nation by 2030.

Furthermore, a massive 15% surge of electricity demand could arrive each midnight, out of sync with daytime solar generation.

Today, the state has 67,000 chargers available to the public and the CEC doesn't know where the additional 62,000 chargers needed five years from now will come from. And that doesn't include the 157,000 fast-charging stations needed for an estimated 180,000 electric delivery vans, box trucks and tractor-trailers that are also on the way. On top of the number of chargers, trucks offer an additional challenge since they operate all day on rigid schedules and start charging after 5 p. m. during the evening peak.

The CEC assumed that the state would continue to use its existing time-of-use electricity rates. To steer users toward the quiet times, those rates drop precipitously at midnight. Why midnight? That's when current electricity rates drop significantly. By 2030 —five years short of the state's all-electric sales goal — the state would need an additional 3,600 megawatts of power during a new peak charging period starting at midnight. That would mean absorbing an increase in electricity demand at a normally sleepy hour by up to 15% on weekdays and 16% on weekends. Expensive grid upgrades are likely needed to supply that much juice.

Another curveball for the grid is demand from big trucks and vans. Unless a new paradigm is found, that fleet could add another 5,000 MW of power demand at 5 p.m., which is an hour when demand is already high as people arrive home at the end of the day.

One reason for the charging station shortfall is that a major source of state funding for charging infrastructure — fees on state vehicle licensing and smog checks — is heavily oversubscribed. Only one-third of proposed projects have received funds.

The report said that better vehicle-to-grid integration is needed, including new rate structures and incentives that could shift large blocks of power to different times of day.

There are a few potential solutions. First, the state may have to change its time-of-day rate structure. Another emerging solution is bidirectional charging — adding the ability for a car to not just receive power from the grid but deliver it to the grid or to power a home when it is idle. This capability is expected in several soon-to-be-released EV models, including the Lucid Air, the Ford F-150, and a truck and SUV from new automaker Rivian.

In rural areas, where the electric grid isn't made for big new power loads, a solar canopy with a battery and charger could work independent of power lines. In urban parking garages, a roving battery on wheels could charge almost a dozen vehicles a day.

Everyone agrees that expanding the EV charging network is feasible by 2035. But, as usual, it all boils to money. Public sector energy providers are looking for vehicle manufacturers to help fund expansion of the charging infrastructure. But the electric vehicle manufacturers are counting on the Biden administration to pay to triple the infrastructure.