South Bay Cities Council of Governments

June 24, 2021

TO: SBCCOG Board of Directors

FROM: Steve Lantz, SBCCOG Transportation Director

RE: SBCCOG Transportation Update Covering May 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

Senate Committee Approves Its Version of the Surface Transportation Reauthorization Bill
On May 26th, the Senate Committee on Environment and Public Works (EPW) unanimously approved its surface transportation bill, the Surface Transportation Reauthorization Act of 2021, that includes a five-year $304 billion highway funding reauthorization, a 34% funding increase relative to the FAST Act for highway programs.

The EPW Committee has jurisdiction over the highway title for the next surface transportation authorization bill – while the Senate Banking, Housing and Urban Development Committee has jurisdiction over the transit title and the Senate Commerce, Science and Transportation Committee has control over the rail/rail safety title. The Senate Finance Committee is charged with how to finance the bill that will ultimately emerge from the U.S. Senate to replace the FAST Act – that expires on September 30, 2021.

Some highlights of the Senate EPW's 2021 Reauthorization Act include:

- Metropolitan Planning Formula Funds – 24% increase in Metropolitan Planning Formula Funds, including incremental increases over the bill's lifetime, equivalent to a 34% increase, and no changes to the distribution formula.

- Strategic Innovation for Revenue Collection – This would reauthorize and rename the Surface Transportation System Funding Alternatives Program and allow MPOs to apply to the Strategic Innovation for Revenue Collection, which funds studies and tests on the feasibility of road usage, vehicle miles travelled, and other user-based alternative revenue-generating mechanisms to replace the federal tax on gasoline.

- Reconnecting Communities Pilot Program – Creates the Reconnecting Communities Pilot Program to fund planning studies and capital projects that would remove, replace, or upgrade transportation facilities that pose barriers to mobility.

- Surface Transportation Block Grant Program – Includes $65 billion over the bill's life for the Surface Transportation Block Grant Program while maintaining the existing sub-allocation percentages between the state departments of transportation and local agencies.

- New Climate Programs – Creates a new Climate Program, including creating a national and ten regional "centers for excellence" to promote resilient transportation infrastructure. In addition, the proposal calls for the creation of the Promoting Resilient Operations for

Transformative, Efficient, and Cost-saving Transportation (PROTECT) grant program, which would establish a formula and competitive grant program to help States improve the resiliency of transportation infrastructure.

- INFRA Grant Program & Freight Formula – Includes $4.8 billion over five years in funding for the INFRA Grant Program and $7.15 billion over five years for the freight formula program.

Biden Pushes For a Bipartisan Infrastructure Deal With GOP
President Biden had originally set a Memorial Day deadline for reaching a deal. But on May 30th, he told GOP leaders that unless consensus is reached before the House of Representatives returns from its Memorial Day break on June 7th, Democrats will move forward with a unilateral bill in time for an early June hearing scheduled on a House transportation bill.

The two sides remained far apart at the end of May. Biden reduced his $2.3-trillion opening bid to $1.7 trillion in earlier negotiations. Republican senators have outlined a $928-billion infrastructure proposal as a counteroffer to Biden's $1.7-trillion proposal, and they said they would not go along with his plans to raise the corporate tax from 21% to 28% to pay for new spending. The GOP plan amounts to about $250 billion in new spending, far from the president's approach.

Republicans also want to shift unspent COVID-19 relief dollars to help cover the infrastructure costs, a nonstarter for many Democrats. Republicans still disagree with Biden on what should be considered "infrastructure," saying it should focus on the "physical core idea" such as roads, bridges, ports and even newer things such as broadband, but not elder care as Biden proposes.

Build America Bond Revival Draws Bipartisan Support in Congress
There appears to be bi-partisan support for reviving the 2007 Build America Bonds program for states and cities to help spur increased spending on infrastructure projects.

The securities were a taxable alternative to traditional tax-exempt bonds, which both took the pressure off the municipal-debt market and allowed underwriters to market them to overseas investors and others who don't typically buy state and local government debt. The Build America Bonds program unleashed a wave of debt sales by municipalities, with more than $180 billion of the securities sold before the program lapsed at the end of 2010. The federal government paid some of the interest for the securities under a temporary program enacted after the last recession.

Two Senior Senate Democrats Propose Funding For A 100% EV Transit Bus Fleet
Senate Majority Leader Chuck Schumer and Senate Banking Chairman Sherrod Brown have proposed spending $73 billion to electrify the nation's 70,000 transit buses and public transit vans as part of a push to move the United States toward zero-emission transportation. The Senators' plan also would fund a charging network and would require that all vehicles purchased using the funds be made in the United States.

The senators cited a study from the Center for Transportation and the Environment estimating costs to transition to a zero-emission transit bus fleet by 2035 at between $56 billion and $89 billion. Although no deadline was mentioned, the Senators' fact sheet noted that only 2% of U.S. buses are currently zero-emission vehicles and the U.S. government in 2020 spent just $130 million on zero- emission bus grants.

50,000 Comments Received For FHWA MUTCD 11th Edition Update

The Federal Highway Administration (FHWA) received 50,000 comments by the end of the public comment period on May 14th, in a once-in-a-decade opportunity to make key changes to the 11th edition of the agency's Manual on Uniform Traffic Control Devices (MUTCD).

The manual is a regulatory document that dictates the design and implementation of road signs, signals, and markings, and by extension, what nearly every street looks like throughout the United States. The MUTCD has roots in regulations for rural highways that do not reflect how streets are used in the 21st Century.

Active transportation and technology advocates are calling for a total re-write. The manual has not been fully updated in over 50 years. Pedestrian fatalities have risen 50% over the past decade, and U. S. streets are the most dangerous of any peer countries, with over 40,000 people dying every year. In response, cities led by NACTO, transit and active transportation advocates called on FHWA to revise the motor-centric regulatory document to prioritize safety and the accessibility and use of roads by all people, moving by all types of transportation.

The current manual does not address a wide range of issues that have arisen over the past decade, including:

- Digital signaling to enable smart signal applications
- Speed monitoring and control to replace the 85th percentile standard with more flexible speed limit standards
- Updating Active transportation safety for bicyclists and pedestrians
- Accommodating electric scooters and other personal mobility devices
- Implementing Smart Delivery and Smart Parking apps
- Anticipating Autonomous vehicles
- Geofencing to electronically limit user types from neighborhood zones

California Transit Association Seeks Provisions In Biden's American Jobs Plan

The California Transit Association, which represents more than 85 transit agencies, has submitted a series of recommendations to Senate and House transportation leaders outlining the association's recommendations for The American Jobs Plan. The association's recommendations include:

- Using the core transit and rail funding levels included in the House-passed H.R. 2, Moving Forward Act, as a base to fund transit and rail programs;
- Creating a national program to fund the transition to zero-emission buses, as well as zero-emission locomotive and ferry technologies;
- Providing significant new funding to prevent, reduce and withstand the impacts of natural disasters and climate crisis on the nation's transit and rail infrastructure;
- Providing new funding to pilot and study reduced and fare free transit;
- Providing new funding to support the design and delivery of grade-crossing improvements and separations;
- Maintaining and expanding federal funding and financial tools that encourage transit-oriented development; and

- Expanding and streamlining available financing tools such as America Fast Forward Transportation Bonds and Transportation Infrastructure Finance and Innovation Act loans.

State

State Gas Tax Rising On July 1st ; Less Than Half Of Projects Needed Can Be Funded

Four years after the state legislature boosted the state gas tax in order to fix California's crumbling roads and bridges, officials say the SB1 funding will complete less than half of the work needed.

The California excise tax on gas will automatically rise again to 51.1 cents per gallon on July 1 to account for inflation. Under SB 1, the gas tax increased 12 cents per gallon on Nov. 1, 2017, jumped an additional 5.6 cents a gallon on July 1, 2019, and 3.2 cents last July 1 — bringing the total state levy to 50.5 cents per gallon.

SB 1 also increased the excise and sales taxes on diesel fuel and created an annual vehicle fee ranging up to $175 for cars worth $60,000 or more. California's total state taxes and other charges on gasoline are the highest in the country, according to the Tax Foundation, based in Washington.

Caltrans recently reported to the California Transportation Commission it will need $122.9 billion over 10 years "to maintain the existing assets" due in part to increasing costs, the age of the infrastructure, and impacts from climate change and sea level rise. The available funding will address about 45% of the total identified needs, Caltrans reported to the California Transportation Commission.

Governor Newsom has proposed adding $2 billion for road and bridge projects statewide during the next seven years plus an additional $1 billion in state surplus funding for transportation projects needed for Los Angeles to host the 2028 Olympics.

The program to fix roads has been hampered by California's high cost of repairs compared with other states and by the COVID-19 pandemic, which resulted in less driving and therefore hundreds of millions fewer gas-tax dollars than expected.

A report by Los Angeles-based libertarian think tank the Reason Foundation in November estimated that 28.5% of California's urban arterial pavement was in poor condition as of the start of last year, which placed California 48th in the country, where the national average is 12.06%. The report, based on road condition data in 2018. reported by states to the Federal Highway Administration, ranks only Rhode Island and Wyoming lower than California.

California Approves Electric Car Mandate For Ride-Hailing Companies

The California Air Resources Board (CARB) unanimously adopted a rule on May 21st that would require 90% of miles logged by ride-hailing companies to be in electric vehicles by 2030.

Under the new rule, in two years 2% of miles traveled by Uber and Lyft drivers fleetwide must be in electric vehicles, ramping up to 30% in 2026 and 90% in 2030. The rule also calls for cutting the companies' carbon dioxide emissions from miles traveled with passengers to zero by 2030, partially by using credits earned by encouraging public transit and improving walkability and access to biking.

Representatives of Uber and Lyft support the 90% mandate, but are pushing for state funding and flexibility if they encounter delays meeting the targets. Lyft already has pledged to electrify its entire fleet by 2030, and Uber has the same goal for vehicles in the US, Canada, and Europe by 2040. Uber also said it would commit $800 million to help drivers transition. However, in 2018, electric vehicles accounted for less than 1% of miles traveled by Uber and Lyft drivers in California.

CARB staff predicts savings on gasoline and maintenance will more than offset the costs of the electric vehicles. One concern is that 56% of drivers could be from low-income or disadvantaged communities that could not afford to switch to electric vehicles. Environmental groups, labor advocates and drivers called for California regulators to ensure that the companies, not the drivers, cover the costs of electrifying their fleets. CARB says it is up to the companies to determine how to comply.

Region

Metro Launches Pilot Program To Give Unclaimed Bikes To Disadvantaged Communities

Metro launched an Adopt-A-Bike program on May 21st that allows unclaimed bicycles left on Metro trains, buses and Metro property to offered free to L. A county residents and the unhoused.

The Adopt-A-Bike program will be administered through a mini-grant program that pairs Metro with CBOs and other entities that work directly with disadvantaged communities Up to $120,000 annually will be available to assist the selected organizations in distributing these bicycles.

Metro collects approximately 400 to 500 bicycles each month that are left on the Metro system and on Metro property which are subsequently transported to Metro's lost and found facilities. Seventy-five percent of these bicycles are never claimed by their owner. State law currently requires the unclaimed bikes to be held for 90 days then sold at auction.

Trends

Researchers Make Long Lasting, Fast Charging Battery Breakthrough For Electric Cars

Long-lasting, quick-charging batteries are essential to the expansion of the electric vehicle market, but today's lithium-ion batteries fall short of what's needed — they're too heavy, too expensive and take too long to charge.

Harvard University researchers have developed a proof-of-concept design for a new type of solid-state battery that can be charged and discharged at least 10,000 times with a full charge taking only 10-20 minutes. This battery technology could pave the way to making charging more competitive with filling up at the gas station and to increasing the lifespan of electric vehicles to that of the gasoline cars — 10 to 15 years — without the need to replace the battery.

The Harvard team designed a multilayer battery that sandwiches different materials of varying stabilities between the anode and cathode. This multilayer, multi-material battery prevents the penetration of lithium dendrites through the battery, not by stopping them altogether, but rather by controlling and containing them. The battery is also self-healing; its chemistry allows it to backfill holes created by the dendrites.

New Technology Could Put An End To E-Scooter Sidewalk Riding

Sidewalk scooter riding is a major community concern since it increases the risk of e-scooters colliding with pedestrians. A new sidewalk detection technology being implemented by Spin and Bird will detect when they have been driven onto a sidewalk and produce a response.

In the case of Spin, starting in Santa Monica on July 1, their new e-scooters will emit a warning sound and send a push notification to the user. The company could also build a function where their scooters slow to a stop on sidewalks if a city were interested. The scooter has a downward facing camera on the front of each scooter that captures photos of the surface a rider is on. Images are processed onboard to enable real time notifications with 95% accuracy.

Bird's technology does not use cameras, but instead relies on GPS mapping of a City's streets and sidewalks. When Bird 2 scooters ride on a sidewalk they will beep and gradually slow down to a stop. Users will receive a message telling them to return to the road to resume normal speed.

As Pandemic Eases, Luring People Back To Office Isn't Easy

With the L. A. County mask mandates ending June 15th, attention is turning to whether employers will require their employees to return to work or continue to work remotely, at least part time.

A recent poll of 577 San Diego employers published by the San Diego Association of Governments found that 64% said staff won't be allowed to work from home full time post-pandemic. Just 10% of businesses expected that most employees would work remotely three or more days a week.

As of May 5, an average of 27% of office workers in the top 10 metropolitan areas had returned to the office, up slightly from 26.5% a week earlier, according to Kastle Systems, which provides key-card entry systems used by many companies and tracks patterns of worker card swipes. In the Los Angeles metropolitan area, that percentage is 24.4%., up less than 3% from the 21.6% that had returned to the office during the week of April 15, 2020.

One silver lining of coping with the pandemic has been working from home. And employees are pushing back with demands for some workplace flexibility. Nearly half of 1,000 U.S. workers ages 18 and older polled by Robert Half, a staffing firm, said that if they had to return to their offices, they would prefer a hybrid arrangement, dividing their time between the office and another location, such as home. And just over a third of workers surveyed said they would quit if required to return to the office full time.

But the return may be considerably slower than expected due to the need to address the design of the physical work environment and of the work itself, including the introduction of lasting change in new work cultures, new rules, and worker rights for work from home. Some trailblazing employers are responding to the pushback with new workspace protections, higher quality ventilation systems, changing seating plans, mask-wearing policies for those that have been inoculated and those that have not, and balancing in-office face time with remote-work flexibility.

The Biden administration is asking agencies to submit by July 19 finalized plans for returning federal workers to their offices. The White House offices will bring back all employees in person between July 6 and July 23, with some exceptions. But the Executive Office is allowing each agency to develop its plan based on its own mission needs and workplace environment.

The telecommuting change may be dramatically felt in industrial companies. Before the pandemic, fewer than 3% of Lockheed Martin's employees worked remotely. Telecommuting went so well at Lockheed Martin during the pandemic that about 40% of its workers will continue working from home two to three days a week after the pandemic subsides. About half of Lockheed Martin's workforce is in manufacturing, is doing classified work or is deployed with customers, where in-person work remains essential. Now most of the other half — those whose work can be remote — will continue to do so at least part of the week.

Tech companies are finding work-from-home less problematic. Google recently backtracked from an announcement that all employees would be required to be back in their offices three days a week. Google's latest stance is that all of its employees worldwide can continue working remotely until September, when they will be allowed to choose whether to return to their pre-pandemic office or a Google office in a different city, or to work permanently away from the office, if their job description allows it. Microsoft said it will allow employees to work from home up to 50% of the time or work remotely full time if their manager approves. Salesforce, the parent company of Slack, has declared the traditional 9-to-5 workday dead, at least for now, and will allow workers to go to their offices one to three days a week. Facebook and Twitter said they will allow employees to work from home indefinitely.