South Bay Cities Council of Governments

October 28, 2021

TO: SBCCOG Board of Directors

FROM: Steve Lantz, SBCCOG Transportation Director

RE: SBCCOG Transportation Update Covering September 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

U.S. House Continues Negotiations On Bipartisan Infrastructure Bill and Reconciliation Measure
As of October 1st, House leadership continued to be engaged in negotiations with Senate Democrats, White House officials, and different factions within the House Democratic Caucus to try and forge a framework agreement. President Biden spoke to congressional Democrats for roughly 30 minutes on October 1st. It was his first time traveling to Capitol Hill to push for his agenda since July, when he met with Senate Democrats. Following the meeting, the President said he had no urgent deadline for passing the two bills.

The president's personal involvement came amid calls for him to do more to facilitate the passage of a $1 trillion bipartisan infrastructure bill and a $2+ trillion reconciliation package that contains funding for Democratic "social safety" priorities like health care, climate policy, education and family care which are key elements of President Biden's Build Back Better agenda.

The hope is that if all sides can come together around a reconciliation framework, it would unlock the votes necessary to pass both the bipartisan Infrastructure Investment and Jobs Act and the larger Biden social agenda. This $1 trillion infrastructure bill includes the traditional 5-year surface transportation reauthorization, as well as $548 billion in new funding to address a broad spectrum of infrastructure needs. The broader measure would add up to $2.5 trillion in new social welfare program authorizations.

At midnight on September 30th, spending authority for the Highway Trust Fund was set to expire but Congress passed a continuing resolution into mid-December to ensure surface transportation programs continue while the longer-term reauthorization bill is being debated.

State

California Will Require All New Self-Driving Vehicles To Be Zero-Emission Beginning In 2030
California Gov. Gavin Newsom signed SB 500 on September 23rd that requires all new, light-duty autonomous vehicles emit zero emissions to operate in California beginning with model year 2031. While self-driving cars have the potential to make driving more convenient, safer, and cheaper— especially for industries that currently hire human drivers, new research by the Union of Concerned Scientists shows that those benefits could also result in many more miles driven, increasing both tailpipe emissions and

traffic congestion. Last year, autonomous vehicles traveled almost 2 million miles on California's public roads.

California's Road Usage Charge Pilot Program Stirs Controversy \
Governor Newsom signed Senate Bill 339 on September 24th to extend a road usage charge pilot program until Jan. 1, 2027. The measure is intended to push residents into alternative modes of transit, such as buses and trains and to find alternative revenue sources to combat shrinking gasoline taxes as drivers transition to electric, hybrid and fuel-efficient vehicles.

The state has had RUC and VMT pilot programs in place since 2014. However, SB 339 requires the California Transportation Commission to create a Road Usage Charge (RUC) Technical Advisory Committee and requires the committee to study RUC alternatives, gather public comment, and make recommendations to the state transportation agency regarding the program's design and revenue collection options by July 1, 2023.

One study group will be subject to a fee per mile traveled, while the other study group will be subject to an individually calculated fee per mile traveled equal to the state per-gallon fuel tax divided by the Environmental Protection Agency's estimated fuel economy rating based on the manufacturer, model and year of the vehicle. Those who participate will receive a credit or a refund for fuel taxes or electric vehicle fees.

Opponents to the bill noted that California already has the highest state fuel taxes in the nation.

Freedom To Walk Act To Decriminalize Jaywalking Is On Governor's Desk
The Freedom To Walk Act (AB1238) would decriminalize jaywalking by amending or eliminating parts of the California Vehicle Code. The bill was sent to the Governor on September 20th. If signed, the bill would:

- Prohibit fines for crossing a street outside of a crosswalk when there is no immediate hazard
- Remove the requirement that pedestrians obey traffic signals, meaning pedestrians are allowed to cross on a yellow or red light when safe (aka there's no "immediate hazard")
- Repeal existing law specifying what side of the street pedestrians must walk on when no sidewalks exist
- Prevent local governments from adopting traffic ordinances that negate the new state rules

The bill defines an immediate hazard in the state vehicle code as: "...an immediate hazard exists if the approaching vehicle is so near or is approaching so fast that a reasonably careful person would realize that there is a danger of collision."

Despite the fact that approximately 1,157 people walking in L.A. were killed by drivers between 2010 and 2020 and thousands more were seriously injured in that time period, advocates of the bill argue that eliminating criminal penalties has a social equity benefit. They cite the fact that in L.A., nearly a third of pedestrians issued jaywalking tickets over the last decade were Black — in a city with a 9% Black population. In addition, bill supporters claim that the cost of the citation creates a barrier to walking.

Although the base fine for jaywalking in California is $25, 10 additional penalties and surcharges get tacked on to that fine, bringing a basic jaywalking ticket to just under$200. A few law enforcement associations are opposed to the Freedom To Walk Act, arguing that allowing people to cross streets outside crosswalks and disregard traffic signals will lead to more pedestrian deaths.

The bill would remain in effect until Jan. 1 2029, giving local authorities and legislators several years to analyze how the changes affect public safety in communities across the state.

Status Of Other L. A. Metro-Sponsored Transportation Bills

Assembly Bill 811 - *Governor signed into law 9/29.21* - The bill refines Metro's procurement statute to align it with other transit agencies statewide. This modernization of Metro's procurement statute will help accelerate project delivery to get L.A. County's transportation infrastructure ready for the 2028 Olympic and Paralympic games.

Assembly Bill 917 - *Sent to Governor on 9/9/21* – Would improve the bus riding experience and promote equity by prioritizing communities who utilize transit, while ensuring that low-income drivers who receive parking violations as a result of any bus lane enforcement program are not disparately impacted.

Senate Bill 44 - Se*nt to Governor on 9/11/21* – Would streamline CEQA judicial timeframes to accelerate transit project delivery.

Senate Bill 671 – *Sent to Governor on 9/7/21* - Would establish the Clean Freight Corridor Efficiency Assessment, to be developed by the California Transportation Commission, in coordination with other state agencies to identify freight corridors, or segments of corridors, throughout the state that would be priority candidates for the deployment of zero-emission medium- and heavy-duty vehicles. The bill would require the commission to submit a report containing the assessment's findings and recommendations to certain committees of the Legislature by December 1, 2023. The bill would require the assessment's findings and recommendations to be incorporated into the development of the California Transportation Plan.

Region

L. A. County K-12, Community College Students Can Ride Transit For Free Beginning Nov. 1

Under a 23-month Fareless Service Initiative (FSI), L. A. Metro and participating local transit operators throughout L. A. County will allow K-12 and community college students in participating school districts and schools to ride Metro fare-free beginning on Nov. 1.

Prior to the COVID-10 pandemic, Metro and many municipal transit operators offered fare discounts to people who make $39,450 a year or less, people age 62 and older, veterans, people with disabilities, K-12 students and people in college or vocational school. Fare enforcement was suspended during the pandemic.

The L. A. Metro Board of Directors on September 23rd gave final approval to the FSI program that is envisioned as a transition from the COVID-19 policy in which fare enforcement was suspended to a potentially-broader permanent farless system within Metro and participating municipal transit operators throughout the county.

The FSI pilot is expected to cost about $49.9 million in lost revenue over two years. A majority of the pilot program, $41.5 million, will be funded from L. A. County's allocation of the federal American Rescue Plan. K-12 school districts will pay $3 per year per student and Community Colleges will pay $7 annually per student to participate in the FSI program. As of the September L. A. Metro Board meeting, 41 of L.A. County's 87 school districts were interested in participating in the program.

The Board had previously been considering free transit for all low-income riders, that make up 70% of Metro's users but including low-income riders would raise the lost revenue to nearly $450 million per year. Instead, the Board voted to develop a plan to double the number of participants in its Low-Income Fare is Easy (LIFE) Program, which has since 2019 provided fare assistance to low-income L.A. County residents via free tickets or heavily subsidized weekly or monthly TAP cards specially coded for LIFE Program-eligible riders.

Metro and other transit agencies are seeking a permanent source of federal operating assistance for transit agencies that offer free, or highly discounted fares. However, the Board adopted the limited student pilot with the understanding that continuation after the pilot program would require additional subsidies from state or federal sources. Such as the infrastructure bill currently under consideration by Congress.

Metrics that will evaluate the success of the FSI pilot program may include financial sustainability, program participation, increased boarding by pilot participants, level of service, quality of services, improved operating efficiencies and schedules, increased trips by low-income riders, employee safety, rider safety, system security.

Photo enforcement program On Crenshaw Boulevard began October 1st

L.A. Metro and the L. A. County Sheriff's Department activatee the program along the future Crenshaw/LAX Line to deter motorists from disobeying traffic signals and illegally driving across the train tracks. In October, motorists are receiving warnings. Citations will begin November 1st.

Trends

Taking An Uber Is Worse For The Climate Than Driving In Your Own Car

Trips in ride-share cars are more damaging to the climate, and impose a greater cost to society in terms of traffic congestion and public safety, than journeys in private vehicles, according to a new study from engineering and public policy researchers at Carnegie Mellon University. The researchers gathered public data on rides with Uber, Lyft, and other services in Austin, Chicago, New York, and cities in California. Using a computer model to simulate 100,000 trips, they painted a representative picture of journey lengths, the time spent in between rides (known as "deadheading"), and the types of vehicles used by drivers.

They also drew on existing research to convert impacts like greenhouse gas emissions, air pollutants, traffic, noise, and collisions into dollar figures—the external costs to society that aren't included in the passenger's fee. They found that, on average, any given ride-share trip imposes 30-40% greater social costs than the same trip made in a personal vehicle, a difference of about $0.35.

In terms of carbon footprint, and although ride-share vehicles are typically newer and more fuel-efficient than the average passenger vehicle, per-trip emissions from ride-share vehicles were about 20% higher than those in personal vehicles.

The main reason for the difference is deadheading. On average, deadheading accounted for 43% of total drive time—time spent producing carbon emissions, blocking traffic, and being at risk of accidents that a person driving their own vehicle would avoid. Ride-shares did beat personal vehicles on one key metric: Air pollution. That's because cars produce a burst of pollution every time the engine is started; since Ubers run more or less continuously, they avoid that. Taking any form of public transit is still vastly preferable on all counts.

Local agencies can reduce deadheading by creating more public pickup points in places where many people are likely to be looking for rides. Another is to encourage shared group trips. For example, Chicago taxes Uber Pool at a lower rate than standard Uber trips.

Research Explores Benefits and Limitations of Cool Pavement Treatments As Temperatures Rise

Implementation of cool pavement coatings and related technologies can help lower urban heat island effects locally while also providing a broader climate change benefit according to a September 14th webinar on the City of Phoenix / Arizona State University Cool Pavement Pilot project.

Phoenix is considered the hottest U.S. city. Paved surfaces in Phoenix cover 40% of the city's urban land area, serving as a primary contributor to the urban heat island effect. The idea behind the cool pavement treatment which entails applying a water-based treatment called CoolSeal to asphalt, is to have lighter-colored pavement that reflects more of the incoming sunlight, therefore absorbing less heat. On standard streets, night temperatures can increase when much of that heat is released.

After implementing reflective cool pavement coatings in eight city locations, the team found that the material resulted in lower surface temperatures at all times of the day compared to traditional asphalt counterparts. Most starkly, around noon and in the afternoon cool pavements averaged temperatures nearly 12 degrees Fahrenheit cooler than traditional asphalt. Questions remain on whether people actually feel cooler in the presence of these materials, whether the humans absorb the reflected heat, and the durability of the treatment benefits as the surface ages, darkens, and is covered with dirt, tire dust, and skid marks that are not washed away by frequent rains.

Separately, the Massachusetts Institute of Technology Concrete Sustainability Hub (MIT CSHub) presented its analysis of the potential for cool pavements in Phoenix and Boston during a September 24th webinar. While the MIT study suggested use of cool pavements in these cities could lead to air temperature and greenhouse gas emissions (GHG) reductions, the researchers expressed the importance of considering different neighborhoods' characteristics and other climate impacts from the technology.

Among the lessons from the first year of the program was that optimal locations for implementation include open, unshaded lots and low-rise residential areas where sunlight can be reflected out. Conversely, areas with shade may not benefit as much. Additionally, athletic courts or parks where people are spending time during the middle of the day may not be the best setting, as people may feel that heat. An earlier pilot program in Los Angeles found that while the material led to lower surface temperatures, with pavement doing a better job reflecting heat it's possible humans were then absorbing it.

In a separate webinar on Thursday, MIT noted that cool pavements are a tool that can complement other heat effect mitigation strategies, each of which have shortcomings. Adding trees, for instance, is highly effective but benefits take time to build. Adding cooling centers can also help but come with their own carbon footprint.

The recent MIT research considered different types of pavements and concrete and considered other features besides color such as surface texture that could have climate impact. Rough pavement, for instance, can cause a vehicle to expend more energy as it moves up and down over grooves as opposed to being able to travel more efficiently on smooth pavement.

In future analysis, researchers want to explore how low-carbon concrete mixtures and grid decarbonization may change which cool paving alternative is preferred and longer-term testing to see how pavement properties potentially change as the coating and underlying road ages. More detailed understanding is also needed to determine the optimal range of road lifecycle and condition that justify the installation costs of the cool pavement treatments, which may not stick to freshly applied asphalt or will crack away from deteriorated pavement.

Is Los Angeles Becoming A Battleground For Air Taxis (aka eVTOLss)?

Los Angeles is becoming the first major battleground in the country for the potentially lucrative trillion dollar air taxi market. Los Angelenos could see the first certified eVTOLs above their city by 2024. Industry players, including Hyundai, Archer Aviation, and Volocopter have partnered with Urban Movement Labs (UML), a Los Angeles government-community transportation partnership, to make air taxis ubiquitous by 2040.

Initial air taxi routes could connect LAX with smaller regional airports. Eventually they could use existing heliports, and then, ultimately, serve newly constructed "vertiports." The first flight for Archer's two-seat demonstrator is expected by the end of this year. The company said its larger, commercial model will seat four passengers and enter service as soon as 2024. Hyundai, which also is working with UML, reportedly is making progress on its own eVTOL. In June, the company COO told Reuters it could launch an air taxi service as soon as 2025.

Why L.A.? Overall, the air taxi industry is designed to help solve two growing problems: climate change and urban traffic congestion—exacerbated by urban sprawl and aging infrastructure. L. A. serves both goals for five reasons:

- **Traffic:** L.A. traffic has been among the worst in the U.S. for decades.
- **Air pollution:** Reducing L.A.'s infamous air pollution is important to local leaders.
- **History:** California traditionally leads the way on environmentally friendly technology.
- **Weather:** Southern California's climate often creates ideal flying conditions.
- **Infrastructure:** The region has multiple airports available for takeoff and landing locations.

A recent Georgia Tech survey suggested six Southern California airports as potential waypoints for eVTOL passengers:

- Los Angeles International (KLAX)
- Ontario International Airport (KONT)
- John Wayne Airport (KSNA)
- San Bernardino International Airport (KSBD)
- Hollywood Burbank Airport (KBUR
- Palmdale Regional Airport (KPMD)

L.A. also comes preloaded with existing infrastructure downtown that "could potentially be converted to vertiports," according to the Georgia Tech survey. From the 1970s until 2014, [L.A.] had regulations requiring buildings above a certain height to have a heliport on their roof to assist in evacuations. Initial routes would likely be point-to-point charter trips followed by a gradual scale-up to more widespread regularly-scheduled operations by 2040.

A charter helicopter service between Century City, LAX and Downtown LA was offered for six months in the late ‘70s, but ceased operations due to costs and limited demand. Executives that could afford the fare, were happy to be chauffeured in their company car and talk on their phone or have quiet work time regardless of the time it took to complete the trip.