

South Bay Cities Council of Governments

July 26, 2018

TO: SBCCOG Board of Directors
FROM: Steve Lantz, SBCCOG Transportation Director
RE: SBCCOG Transportation Update –July 2018

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

Congress Increases Bus Capital Funding; Applications Due August 6th

The U.S. Department of Transportation's Federal Transit Administration announced on June 21st that it is making \$366.3 million available in its 2018 Grants for Buses and Bus Facilities program (49 U.S.C. 5339). The 2018 Grants for Buses and Bus Facilities Infrastructure Investment Program is allocating \$161 million more than was awarded in 2017.

The program awards discretionary grants to states, transit operators and local jurisdictions to replace, rehabilitate and purchase buses and related equipment and to construct bus-related facilities including technological changes or innovations to modify low or no emission vehicles or facilities. The application period will close on August 6, 2018.

OMB Proposes Significant Federal Reorganization That Includes USDOT Changes

In case you are looking for some light summer reading, the Federal Office of Management and Budget (OMB) in June released its far-reaching federal-government-wide reorganization plan that includes 50 proposals related to 11 federal departments, agencies and administrations.

OMB has proposed the following six significant structural changes at US Department of Transportation that would see duties added as well as deleted from its portfolio:

1. Army Corps of Engineer commercial navigation functions would move to USDOT, while all of the other activities of the Corps – including flood and storm damage reduction, aquatic ecosystem restoration, hydropower, regulatory, and other duties – would shift to the Department of the Interior.
2. Federal responsibility for the air traffic control system would be spun-off to a "non-profit entity" as would control of the Saint Lawrence.
3. Two security-related surface transportation functions would be transferred from the Department of Homeland Security to USDOT. As a result, transit security grants currently administered by the Federal Emergency Management Agency (FEMA) and Transportation Security Administration (TSA) surface transportation inspection and guidance activities would come under USDOT oversight.

4. A "re-examination" of programmatic responsibilities tucked into the Office of the Secretary of Transportation – such as the Build America Bureau, which, among other responsibilities, administers transportation credit programs, awards INFRA grants, allocates private activity bonds, and communicates best practices and funding opportunities to project sponsors, as well as the BUILD grant program – could result in a shift to "alternative" governance structures.
5. To better support the USDOT's operating administrations or "OAs," offices and positions would be consolidated in areas such as research and development.
6. USDOT workforce development grants would be transferred to the new Department of Education and the Workforce to centralize workforce development policy and to deliver more efficient and effective outcomes.

The OMB report does not contain implementation recommendations or next steps. However the report includes details on OMB's proposal-generation mandate, the proposal development process, and OMB's justifications for each of the 50 proposals. The report is available at: <https://www.whitehouse.gov/wp-content/uploads/2018/06/Government-Reform-and-Reorg-Plan.pdf>.

STATE

California's Gas Tax Repeal Initiative Qualifies for November 2018 Ballot

A ballot measure to repeal Senate Bill 1 officially qualified on June 25th for the November ballot. The SB 1 taxes and fees are expected to generate roughly \$54 billion over the next 10 years to chip away at the state's deferred maintenance backlog and help pay for upgrades to public transit.

SB 1 raised the tax on gasoline by 12 cents per gallon and increased the tax on diesel by 20 cents per gallon last January 1st. It raised registration fees by \$25 to \$175, depending on the value of the vehicle, and imposed a \$100 registration fee for zero-emission vehicles, which will go into effect in 2020. The Legislative Analyst's Office estimates that by adding the new taxes and fees, the average driver will pay \$750 per year in taxes and fees. SB 1 supporters note that the last time the gas tax was raised was in 1994, when it increased from 9 cents to 18 cents.

A USC and Los Angeles Times poll of registered and likely voters conducted from April 18th to May 18th found scrapping the higher tax and fees was supported by 51% in the state. The poll also showed the statewide battlegrounds. Although 72 percent of likely Bay Area voters would keep the tax, only 38 percent of Los Angeles-area voters, 29 percent of voters elsewhere in Southern California, and 30 percent of Central Valley voters in the poll support retaining the new gas tax and fees.

The initiative faces a bruising and expensive battle before the November election in which its fate may affect the outcome of the governor's race. The campaign to place the repeal initiative on the ballot cost \$1.7 million, financed by national Republican leaders including House Speaker Paul Ryan, House Majority Leader Kevin McCarthy of Bakersfield, the California Republican Party, GOP gubernatorial candidate John Cox, and the Howard Jarvis Taxpayers Association who immediately voiced support for the repeal initiative. Republicans are hoping the initiative will attract conservative voters to the November General Election polls.

Governor Jerry Brown and an unusual coalition of chambers of commerce, law enforcement, unions, firefighters, local transportation agencies and cities and counties immediately vowed to fight the repeal initiative. Transportation agencies were urged by state officials to quickly implement their SB 1 projects to provide tangible improvements before the election and to publicly tout the benefits of the new transportation revenues. More than 5,000 state and local transportation projects are underway, according to the California Transportation Commission. State transportation

officials are claiming roughly half of those projects would be delayed or indefinitely deferred if the repeal succeeds.

Repeal supporters say the state has poorly managed the transportation money it already has. A 2016 UCLA report cited at least three times in the mid-1990s and 2000s when the state used money to balance the budget that was supposed to repair highways and roads or upgrade public transit. Repeal opponents claim the borrowed funds have mostly been repaid and point to the passage of Proposition 69 in June that changes to the state constitution to prohibit the use of most state transportation taxes and fees for non-transportation uses.

State Bill Would Share E-Scooter Regulation With Local Agencies

A.B. 2989, would define stand-up electric scooters and safety regulations that apply to a new category of state-regulated vehicles with a maximum speed of 20 miles per hour. But, consistent with current electric bicycle regulations, the bill would leave to local jurisdictions other regulatory issues related to rental or shared e-scooter business permits.

The speed limit for “motorized scooters,” under which stand-up scooters are currently included, is set at 15 mph and motorized scooters are not allowed on sidewalks. A.B. 2989 would change the speed limit to 20 mph to match the state law for e-bicycles. For consistency with the e-bicycle law, local jurisdictions also would decide whether and where the e-scooters can be ridden on sidewalks.

AB 2989 is being opposed by pedestrian advocates who do not want the scooters to be allowed to operate on sidewalks. Opponents also worry it will require cities to rewrite current ordinances that apply to e bikes, because it creates a new category of vehicle that would not be covered by existing regulations.

More information on e-bikes can be found in the Trends section below.

REGION

Paper Transfers Between Metro and Muni Operators To Shift To Paperless TAP Cards

Beginning Sunday, July 15th, the paper Interagency Transfer Ticket (IAT) will be eliminated and all transfers to Metro or any other LA County transit agency will need to be paid for with a TAP card. The transfer fare will be deducted automatically from the stored value (e-cash) loaded on the TAP card. When a rider boards their second ride – bus or train – and taps their card, the transfer fare will be automatically deducted and the expiration time of the transfer will be electronically set.

The TAP Transfer validity period will be extended from the current two hours IAT limit to two and a half hours from your first boarding. However, the transfer expiration time will not be visible to the rider unless it is displayed in the TAP card reader.

Metro claims the transition to TAP transfers should make boarding the bus a lot faster, because no one has to ask for a transfer or wait for a paper transfer to be punched by the driver to indicate the transfer’s expiration time. In addition to improving sustainability by transitioning to paperless transfers, Metro will save the procurement and administrative costs of issuing, stamping, collecting, sorting and accounting for the paper transfers.

This TAP transfer transition only applies to LA County agencies. This change will not affect transfers to OCTA or Omnitrans.

LADOT Jumps Into Autonomous Vehicle and Transportation Technology Development

The Los Angeles Department of Transportation (LADOT) released its Urban Mobility in a Digital Age Strategic Implementation Plan (SIP) on June 14th to reposition LADOT as an active partner in the arrival of autonomous vehicles and ongoing explosion of technology in transportation.

The Strategic Implementation Plan and a related Mobility Data Specification describes a set of products and services that LADOT deems necessary to ensure that as autonomous fleets arrive in the sky and on the ground, they are first and foremost safe. The strategy includes the development and deployment of actively managed electric, shared, and autonomous mobility options, including concepts such as dockless bike sharing and air taxis. All new modes of transport are aimed at tackling congestion, enabling economic development, driving racial and socioeconomic equality, and saving lives.

One of the interesting elements of the SIP is its approach to drones. The document calls for the city to examine how municipal airspace will be managed in the future. The L.A. Fire Department already uses drone aircraft for wildfires, where aerial technology can be used to monitor a blaze and help better predict where a fire is headed and how to get it under control. But it has detailed operating procedures that require all firefighting-related aircraft to be grounded to ensure a drone being used for reconnaissance has clear and open airspace in which to operate. However, drone hobbyists may not be aware of rules about operating their devices in off-limits airspace. And with the potential introduction of flying taxis envisioned by Uber, there's a dynamic regulatory discussion needed around how local airspace should and shouldn't be used.

LADOT selected a partnership led by Ellis and Associates as product manager. The team is tasked with overseeing all of SIP implementation efforts and identifying and creating new partnerships between LADOT and public, private, academic, and nonprofit organizations.

TRENDS

Cities Are Struggling To Manage Public Space During The Shared-Mobility Tsunami

With billions of dollars in start-up investment capital and aggressive marketing / expansion strategies, start up shared mobility companies are deploying their dockless fleets throughout unprepared cities across the globe.

In response to the 2018 Shared Mobility tsunami of scooters and bikes, Santa Monica and other Southern California cities have adopted, and most South Bay cities are considering, emergency interim ordinances and permitting regulations to restrict and regulate shared mobility devices. For example, the Santa Monica City Council Item is available at:

http://santamonicacityca.iqm2.com/Citizens/Detail_LegiFile.aspx?Frame=&MeetingID=1142&MediaPosition=&ID=3006&CssClass= .

Buried in the details of the Santa Monica Council item is a new commitment by the city to control its sidewalks and curbs which are quickly becoming contested urban real estate. Santa Monica wants these mobility startups to be better partners, since city officials have embraced scooters as part of its overall transportation plan. The plan notes that scooters can help the city reduce congestion and emissions. A Bird spokesman noted that since the company launched nine months ago, riders have taken 577,930 rides. If just half of those Bird rides replaced a one-mile car trip, then according EPA data, Santa Monica riders have saved 257,372 pounds of carbon emissions.

Cities are beginning to grasp the potential future of urban transportation which will need to accommodate a greater share of trips being made via shared mobility services. Scooters and dockless bikes are competing for the curb space with ridehailing, transit, liveable/complete streets, parking and deliveries. Cities are struggling to maintain travel speeds, person throughput and capacity while safely operating their public spaces. The new statewide environmental planning focus on reducing vehicle miles travelled, rather than reducing vehicle delays and intersection congestion, has opened the floodgates of public policy discourse on the future use and regulation of public streets, curbs and sidewalks.

By regulating how the new transportation options will use public rights of way, cities can assert their public authority to bring about a more sustainable, multimodal, and less car-centric mobility future by better balancing public use of the contested space where companies, citizens, and the government are jockeying for space for transportation, commerce, and delivery.

Most of the shared mobility companies have introduced their services without permission from the city. Their business models don't include the cost of public fees or permits to pay for street maintenance, enforce safety rules, or share the ridership data that cities could use to plan better and more efficient transportation systems. As a result, cities are paying for and providing the public infrastructure—roads, sidewalks, and curbs and underpinning this private gain.

But with the widespread adoption of mobile technology and GPS, cities and the private sector operators have an opportunity to implement innovative management strategies like a “self-adjusting curb” with new laws and safety regulations. These concepts, referred to as “flex-zones” by the National Association of City Transportation Officials (NACTO) or Shared-Use Mobility Zones by the Eno Transportation Foundation, envision cities using rules and technology to give different transit options priority.

Washington, D.C., launched a successful trial in 2017 to regulate pick-up and drop-offs around the busy DuPont Circle area. San Francisco has used geo-fencing tools to “nudge” riders of Uber and Lyft to request pick-ups and drop-offs in designated zones to reduce congestion. Seattle has adopted proposed design guidelines that follow a flex zone framework. First, designate transit stops, transit lanes, and bikeways. Then, find spaces for bike share stations, commercial loading, perhaps geo-fenced areas for dockless vehicles. Then, fill in the blanks with parklets and pick-up and drop-off spaces for ridehailing and private vehicles. Finally, include an array of short-term car storage options via parking regulations.

Santa Monica is pursuing public private partnerships with the shared mobility companies. The city wants an “open and productive partnership,” recognizing that scooters and other dockless vehicles can help the city achieve sustainability goals and offer a highly desired option for shorter trips. Companies vying for a spot in Santa Monica's 16-month pilot program for shared mobility devices are evaluated on seven criteria, including safety, operations requirements, and data sharing. Each of the seven categories has minimum and recommended benchmarks. Operators are encouraged to offer low-income and multilingual options, create a system that recognizes geo-fenced parking areas dedicated to decreasing vehicle clutter, and provide real-time fleet info to the city. After some debate, the city approved a dynamic model for capping scooters based on vehicle utilization; both Bird and Lime issued statements praising the new framework.

Other cities, looking to control traffic and fund the infrastructure used by these companies, have started to levy fees and rules on tech companies. A new fee Chicago officials added to Uber and

Lyft rides will direct millions of dollars towards public transit investment, while designated drop-off spots are being tested in other cities to help avoid congestion.

As these new mobility companies invest in larger fleets—and make private car ownership less attractive—cities will find more and more financial reasons to take control of the curb. Cities need to prepare for the shift, and figure out how to price curb use to both control traffic, adequately maintain and enforce use of the public space, and make up for any lost parking revenue,

Many companies seem interested in working with cities toward these goals. Uber, Lyft, and many dockless bike companies signed a Livable Cities Pledge, promising to support the shared and efficient use of “vehicles, lanes, curbed, and land,” as well as push for open data and fair user fees. Bird promoted a Save Our Sidewalks pledge which suggests that these companies pay cities \$1 per vehicle per day for infrastructure improvements. A recent app redesign from Lyft seeks to promote shared rides, and the company’s new goal to have shared rides account for half of all trips on the platform by 2020.

Will Little Vehicles Conquer the City?

Call them Little Vehicles—not just bikes and scooters, but e-bikes, velomobiles, motorized skateboards, unicycles, “hoverboards,” and other small, battery-powered low-speed not-a-cars. Some futurists predict Little Vehicles (LVs) could significantly erode private car and ride-hail use, and play a key role in helping cities achieve their environmental and road safety goals.

SBCCOG and South Bay cities have been in the forefront of evaluating the vehicles and their potential for short trips with our NEV study, South Bay Slow Speed Network development, the current Bike Share Working Group and the June 28th SB Cities Bicycle + E-Mobility Expo.

Getting to mass adoption will require Little Vehicles for all seasons, for all sorts of trips, and for all types of people. Have a Go, which aspires to be the *Consumer Reports* of LVs, categorizes these electric powered vehicles into three categories based on size, ranging from unicycles and motorized skateboards, to folding bikes and scooters, to enclosed velomobiles and featherweight cars.

Just as electrification is important for air quality, LVs are important to urban mobility. The National Association of City Transportation Officials (NACTO) estimates that 7,500 bikes can pass through a single 10-foot lane in an hour, compared to between 600 and 1,600 cars. (Presumably, even more scooters could fit through that lane.) And even on shared streets, when traffic piles up at an intersection, many Little Vehicles can filter their way to the front of the queue.

Despite the industry’s efforts to encourage more pooled rides, ride-hailing services have been shown to increase vehicle miles traveled (i.e., traffic) in major American cities. Adding self-driving to this mix likely won’t change the math much, and autonomous for-hire cars also won’t be able to solve the problem of moving a lot of people through dense cities. That’s the rationale behind Uber’s recent purchase of JUMP, the dockless electric bikeshare company.

This new focus for the former ride-hailing—now “mobility”—giants is in part a response to problems they helped create. In San Francisco, Sacramento, and Washington, D.C., where Uber users can access JUMP bikes directly from the Uber app, the company has seen people switching over and increasing their share of rides they're doing on JUMP versus Uber. What Uber, Lyft, and venture capital firms are really excited about is the potential for the Little Vehicle sector to have a similar growth trajectory as the ride-hailing industry.

Lime found that battery-boosted bikes and scooters are able to attract more riders per day than traditional bikes, but they also found that when scooters are introduced to a market, bike usage also increases. Additionally, a recent [survey](#) found that 75 percent of dockless bikeshare riders in Seattle used the service to access transit.

Adding protected bike lanes and designated Little Vehicle parking areas can be accomplished quickly and relatively cheaply, as infrastructure investment goes—if voters and city leaders are all on the same page. The well-capitalized Little Vehicle industry can also help pay for these changes, as evidenced by Bird’s [Save Our Sidewalks](#) pledge. Future city permits could offer expanded fleet sizes in exchange for infrastructure contributions. And congestion pricing strategies will make Little Vehicles more attractive to users and planners alike.

New Coalitions Want To Electrify Southern California Transportation

A new partnership of transportation agencies, state clean air regulators, cities, water and power utilities and business innovators formed on June 1st to get electric cars, buses and trucks in service by the arrival of the Los Angeles Olympic games in 2028. A second coalition, known as Veloz is organizing key stakeholders to develop and launch a public outreach and education campaign aimed at increasing awareness of electric vehicles.

The Los Angeles Cleantech Incubator has organized a new group to develop a plan for transitioning the transportation sector in Southern California from gas and diesel to clean technologies. The group plans to release its road map to zero emissions in September, setting short and long-term goals for transportation in Los Angeles County and region-wide.

The plan will look at what levels of electric power will be needed and how to advance the movement of electric trucks into warehouses and the ports of Los Angeles and Long Beach, where 40 percent of the goods into the United States originate.

The group includes: LACI, based in the Arts District of Los Angeles; the city of Los Angeles; CARB, Southern California Edison; Pacific Gas & Electric; Los Angeles Department of Water and Power; Los Angeles County Metropolitan Transportation Authority (Metro). The group is chaired by Matt Petersen, president and CEO of the LACI.

Veloz is a statewide California nonprofit organization made up of a high-powered, diverse board and members from key sector companies, agencies and nonprofits, Veloz is undertaking an education and awareness initiative to address the challenge that more than half of California’s population still doesn’t consider an electric car for their driving needs. And, although electric car sales in California have grown in recent years, sales need to grow significantly to meet the state’s goals.

To increase consumer awareness, understanding, and acceptance of electric cars in California, the Veloz initiative, branded as The Electric For All campaign, seeks to promote energy security, improve air quality, reduce climate change emissions and advance California’s public health.

Veloz signed a first-of-its kind transportation electrification education and outreach accord in mid-June, joining dozens of other companies and organizations committed to an electrified future. Veloz member organizations that have also joined the accord include General Motors, Honda, Southern California Edison, Pacific Gas and Electric, San Diego Gas & Electric Proterra, Greenlots, CALSTART and Sierra Club.

China Is Testing Roads Paved With Solar Panels

Chinese scientists are testing use of plastic-coated solar panels to pave roads. Solar panel prices have fallen drastically in recent years thanks in large part to soaring Chinese production. A solar panel costs a tenth of what it did a decade ago. Road builders in China even want to design solar roads that can wirelessly recharge electric cars running on them, emulating a recent experiment in which Qualcomm Technologies, Inc. demonstrated dynamic electric vehicle charging, which allows vehicles to charge while driving.

The potential appeal of solar roads — modified solar panels that are installed in place of asphalt — is clear. Generating electricity from highways and streets, rather than in fields and deserts packed with solar panels, could conserve a lot of land and bring consumption closer to generation. The land is essentially free and implementation can occur in relatively short timeframes.

Solar roads could also change the driving experience. The surface of the solar panels, made of a complex polymer that resembles plastic, has slightly more friction than a conventional road surface. Electric heating strips can melt snow that falls on them. Light-emitting diodes embedded in the surface can provide illuminated signage to direct drivers to exits and alert them to construction and other traffic hazards.

Still, significant challenges have yet to be overcome. For one, solar panels on a road produce only around half the power that rooftop ones tilted toward the sun do. Solar roads are also three-to-four times more expensive than asphalt although designers claim the panels would last longer than asphalt and costs would be recovered over their 15 years of useful life.

Because roads must be resurfaced every few years at great cost, the installation of durable solar panels in most areas around the globe could reduce the price of maintenance. However, U. S. roads are built with more asphalt and a less-thick concrete base underneath. The problem with asphalt is that it compresses slightly under the weight of trucks. The blue silicon of solar cells snap when bent.

So additional development is needed before U. S. streets are paved with solar cells.