

South Bay Cities Council of Governments

March 22, 2018

TO: SBCCOG Board of Directors

FROM: Steve Lantz, SBCCOG Transportation Director

RE: SBCCOG Transportation Update –February 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

President Signs Two-Year Budget; Congress Starts \$1.5 Trillion Infrastructure Bill Debate

President Donald Trump signed a two-year budget deal on February 9th that authorizes \$300 billion in spending over the next two years with \$165 billion for defense, and \$131 billion for non-defense spending (including \$20 billion for infrastructure). The passage also postpones a potential federal government shutdown until March 23rd and clears the way for more substantive debate to begin on the Administration's \$1.5 trillion infrastructure proposal.

Three days later, the President released his \$1.5 trillion infrastructure plan to leverage \$200 billion in federal funds with local and private funding. He also backed a 25-cent federal gasoline tax hike to help pay for the \$1.5 trillion infrastructure package. The gas tax supports the Highway Trust Fund, which has not been raised in more than two decades.

The Administration's "Legislative Outline for Rebuilding Infrastructure in America" framework unveiled three new programs and other changes intended to provide \$200 billion in federal funding which, combined with state and local funds and private capital, could lead to \$1.5 trillion of new infrastructure investment. But his proposal may not be cobbled into a bill by Congress this year because the proposal is aimed at shaking up the federal government's role in infrastructure investment.

The outline's broad objective is to push state and local governments to innovate and explore new funding approaches not only to maximize the multiplier effect of limited federal funding but also to attract private investment. The proposal also pledges to dramatically shorten the time it takes to obtain permits, and outlines a host of other features that could revamp state and local governments' infrastructure investment decisions while opening the door to the private sector.

The Administration's proposal will need to be introduced as a bill debated by six committees in the House and five in the Senate. The legislative process is just beginning as the Senate Environment and Public Works Committee held its first hearing on Trump's outline on March 1st with Transportation Secretary Elaine Chao.

Transportation and Infrastructure Committee Chairman Bill Shuster hopes to pass a bill before Congress leaves Washington for its August recess, and if not, an option may be to vote after the November 2018 election.

Trump Sidelines Reviews Of Transportation Safety Rules

In response to President Trump's intention to reduce regulations the USDOT has withdrawn, repealed, delayed or put on the back burner at least a dozen significant safety rules over the past year. Some of those regulatory changes include:

- Delaying a 2016 proposed rule to require new cars and light trucks be able to communicate wirelessly with each other to avoid collisions.
- Extending the compliance deadline to September 1, 2020 for a rule adopted in 2016 that requires that new hybrid and electric vehicles emit sounds when traveling at low speeds to alert pedestrians and cyclists to their approach.
- Shifting a 2016 proposal to require software in new heavy trucks be set to limit maximum speeds from its list of active rulemakings to its long-term agenda.
- Withdrawing a potential rule in the early stages of writing to require that states annually inspect commercial buses and other passenger-carrying vehicles. Twenty-two states already conduct annual inspections, but some states say they can't afford an inspection program.

The administration has also deferred or withdrawn several proposed safety regulations related to railroads and pipelines.

STATE

State Approves Regulations To Test Driverless Autonomous Vehicles On Streets

Statewide regulations to permit and govern autonomous vehicle deployment — without a driver present — were approved by the California Office of Administrative Law on February 26th.

The move to approve California DMV's regulatory framework will allow deployment and also testing of autonomous vehicles without a driver behind the wheel. The regulations require a "communication link" be maintained between the testing vehicle and remote operators. The companies must also certify the vehicle is capable of operating without the presence of a driver and notify California Highway Patrol of a "law enforcement interaction plan" that will be available for first responders.

During deployment, those remote operators must monitor the status of the vehicle and be prepared to intercede "if the vehicle experiences any failures that would endanger the safety of the vehicle's passengers or other road users" according to the permit application.

The rules will also allow ride-hailing companies such as Uber and Lyft to begin selling rides in driverless cars, removing expensive human drivers from the equation.

The United States suffers nearly 40,000 traffic fatalities a year, with 94% caused by distraction and other human errors, according to the U.S. Department of Transportation

California AV Regulations May Be Preempted By Federal Regulation

Last fall, federal legislation was introduced in the Senate to regulate autonomous vehicle technology (American Vision for Safer Transportation Through Advancement of Revolutionary Technologies Act, S 1885). If enacted, the legislation could preempt state and local regulations pertaining to autonomous vehicles.

As currently worded the federal act would prohibit states and cities from adopting, maintaining, or enforcing “any rules or standards regulating the design, construction, or performance of Autonomous Vehicle (AV) systems with respect to safety, data recording, cybersecurity, human-machine interface, crash-worthiness, post-crash behavior, or automation function.” It would also prohibit states from promulgating any rules on any other issue regarding AVs, including requiring any of them to be electric or subjecting them to VMT fees. It would nullify California S.B. 1298, which in 2012 called for the California Department of Motor Vehicles to create safety rules for testing AVs in the state, and it could potentially nullify the rules that resulted from that law as well as prevent the DMV from updating them—although the DMV is in the process of doing so.

In response, the California Senate Transportation and Housing Committee held a hearing on February 20th to explore how the state legislature should prepare for the autonomous vehicle technology that could be coming as soon as 2019.

The California DMV submitted an update to its regulations on testing AVs to the Office on Administrative Law and is expecting to be able to put the new rules into effect on April 1st. If they are not precluded, the new regulations will cover requirements for testing fully autonomous vehicles, with no driver present, on public roads in California.

In addition to AV vehicle testing, panelists at the hearing called for state regulations that address potential AV impacts such as congestion and greenhouse gas emissions; job loss from increased automation; individual ownership / carsharing / transit serving / fleet deployment; equity; transportation finance; insurance; new infrastructure needed while maintaining current infrastructure; the potential impacts of reduced parking fees both from parking meters and citations; the potential for reduced citations and accompanying fees, and the impact of that on courts and police and fire services; AV driver training for new and used vehicles; updating current state regulations to apply to AVs that don’t need a steering wheel or column, brake pedal, or mirrors; and the need for data and transparency.

State Bill Could Make It Easier For Cities To Lower Speed Limits

Cities in California that want to reduce speed limits to improve safety are hamstrung by a state law that was enacted years ago to prevent local jurisdictions from creating speed traps as a revenue source.

If a town wants to lower a speed limit, for example as part of an effort to make their downtown safer, add a crosswalk bulbout, narrow lanes, or add a bikeway, it must conduct a speed survey of vehicles currently driving on the road. The new speed limit must match the rounded-down speed that 85 percent of the drivers are currently travelling. So, if most surveyed vehicles are speeding in an area, the results of the required speed survey may force the local jurisdiction to raise the speed limit instead of lowering it.

But that obstacle to reducing speed limits may change if A. B. 2363 is signed into law. The bill would allow local jurisdictions to make an exception to the 85% rule and lower the speed limit if an area is found to have a high crash rate. The bill does not yet include the amount of reduction that would be allowable and it is not clear which agency (Caltrans, local jurisdictions?) would have the authority to make such a change. Also, since local jurisdictions are provided design immunity if they comply with the California Manual on Uniform Traffic Control Devices for Streets and Highways (CA MUTCD), local jurisdictions would want the MUTCD to be revised to reflect the new law before they would take action to reduce speeds below the 85% threshold.

SB 1 Is Fast-Tracking Road Repair Projects

Caltrans has spent \$118 million in SB 1 funding since November 2017 on maintenance projects, completing 11 jobs and awarding contracts for 15 others. Another 26 large road and highway improvement projects are in the design and pre-construction stages in Los Angeles County. In addition, planning work has begun on 252 others.

Starting Nov. 1, 2017, SB 1 raised the state excise tax on gasoline by 12 cents, and increased the excise tax on diesel fuel by 20 cents. The sales tax rate on diesel was boosted from 9% to 13%. The SB 1 taxes and fees, when fully implemented, are expected to generate \$5.4 billion annually. For this budget year, which ends June 30, the revenue is estimated to be \$2.8 billion. Next year, that will rise to \$4.6 billion.

In addition to projects on state facilities, some of the money will go to cities and counties. In January, the California Transportation Commission awarded more than \$173 million to 57 local projects that will be allocated in fiscal years 2017-18 and 2018-19.

Trump Infrastructure Plan Being Used To Defend California SB 1 Gas Tax Increase

The California GOP has committed \$200,000 to support the November 2018 ballot measure to repeal SB 1 and the repeal proponents are well on their way to qualifying the initiative for the November 2018 ballot. But, ironically, the Trump administration's plan to rebuild American infrastructure is encouraging supporters of SB 1 to point out that Trump's plan puts the onus on states and local governments to contribute about 80 percent of revenues for major projects (rather than the historic 80% federal share), and focuses incentives for local and private matching funds.

The irony is not being lost on gas tax supporters which have taken aim at House Majority Leader Kevin McCarthy, R-Bakersfield, for supporting the Trump proposal but opposing the state's gas tax hike. McCarthy has donated money toward the "Stop The Gas Tax" petition drive to repeal SB 1.

Although most of California's new SB 1 funds are designated for maintenance and rehabilitation, SB 1 allocates \$5.5 billion, or 10 percent of its total revenues, to major freeway improvements for faster freight movement and to unclog commute corridors. These types of projects would be attractive in the Trump plan because the state funds would leverage \$200 billion in federal funds for road and other infrastructure projects. It's the only way the Infrastructure Plan will achieve its \$1.5 Trillion investment promise.

REGION

Pedestrian Deaths Rose Sharply In Los Angeles In 2017

L. A. City Mayor Garcetti created Vision Zero in 2015 with a goal of reducing traffic deaths by 20% by 2017 and to eliminate traffic deaths by 2025. During 2017, overall traffic deaths fell by 3%. The city also had a decrease in deaths involving cyclists, drunk driving and hit-and-run crashes.

From 2012 to 2016, pedestrians were involved in 8% of the traffic collisions in L.A. but represented 44% of the deaths. In 2015, 74 pedestrians were killed by drivers in Los Angeles. That figure rose to 134 in 2017, the highest number in more than 15 years.

Los Angeles officials spent more than a year studying collision data to pinpoint the city's most dangerous streets for pedestrians and cyclists. In 2017, they worked to make changes along 40 of those corridors. Last year alone, the city made 1,120 changes to streets and intersections.

Transportation officials have added concrete medians, more visible crosswalks, signs alerting drivers to pedestrians at mid-block crossings, and plastic reflectors and posts designed to slow drivers down as they turn right.

Enforcement also was a key strategy last year. State law requires that cities update traffic studies every 10 years on streets with speed limits higher than 25 mph. If the survey of a particular street expires — and many had, along L.A.'s thousands of miles of streets — police officers cannot use laser or radar enforcement to write tickets until the studies are updated.

The city has recently completed its survey updates. On February 28th, Mayor Garcetti announced speed limits on most of the streets will remain the same. There will be increases on 94.32 miles of road, and decreases on 52.63 miles. Some of the streets that will have higher speed limits are among the deadliest in the city. But city officials say they have no choice, because rules about setting speed limits are determined by the state.

They say the silver lining is that increasing the speed limits could make streets safer, because police can resume issuing speeding tickets. California law also says speed citations can only be issued on streets where speed studies have been conducted in the last five to 10 years. Armed with updated speed surveys, the LAPD wrote 27% more speeding tickets last year and plans to actively enforce speed limits along high-injury streets with an additional \$1.5 million for overtime shifts to patrol high-injury routes this fiscal year. In addition, the city will spend more money in 2018 on a campaign to remind Angelenos of the impact of unsafe driving.

Dockless Bikes Raise Community Concerns

Cities around L. A. County are scrambling to cope with the negative impacts of a new mode of transportation known as dockless bikes. The dockless program differentiates itself from other bike sharing programs that require that the bikes be returned to a designated docking station.

Offered by LimeBike and other emerging competitors, the programs allow riders to borrow or rent a bike (or other mobility device), then drop it off at their destination, wherever that might be, once they are done. A smartphone application and a GPS tag on the equipment allows the next rider to locate the devices that are nearest to their location and borrow or rent them for their trip.

But careless users have been leaving the dockless bikes in places they shouldn't be, such as on private property, or "strewn about" on a sidewalk, often blocking pedestrian and wheelchair access.

LimeBike began offering its shareable dockless bikes in San Pedro, Wilmington and Watts last year. Mitch Englander, a Los Angeles councilman from the San Fernando Valley, has received complaints of the bikes being "strewn about" the communities surrounding California State University Northridge. He is seeking an "emergency moratorium" on any future dockless bike-sharing programs and says more regulation should be considered for them. Staff from South Bay cities are also meeting to determine what focus regulations should have. In addition to the safety issues, they are concerned with balancing the potential community sustainability benefits with economic competitive effects the dockless bike and other mobility device rentals may have on long-standing bicycle rental stores, especially in beach communities.

TRENDS

New Uber Express Pool Program launches in LA; Metro's Microtransit Option Next?

Starting February 21st, Uber introduced its Express Pool service in Los Angeles. The service was tested in November in San Francisco and Boston and has found enough ridership to support it 24 hours a day. Round-the-clock service was also rolled out last week in Philadelphia, Washington, Miami, San Diego and Denver, with more cities to follow.

The Express Pool system allows customers to trade the convenience of being picked up wherever they are for a transit-like experience in which Uber instructs users to walk to a set destination so that drivers don't have to go too far out of their way to find them.

Instead of providing door-to-door service, Uber's new Express Pool product asks app users to walk a block or two to a meeting spot. They might be dropped off a block or so away from their destination, too. The point is to save drivers and riders time by eliminating the lengthy, loopy bits of shared rides, those runs around the block to grab a fellow pooler from wherever they're standing when they tap on the app.

In exchange for the walk inconvenience that improves the efficiency of the shared ride trip, Uber estimates that trips with the new system will be around half the price of a Pool ride and up to 75 percent less than the conventional UberX option, in which just one passenger hails a ride to a single destination.

The new option is designed to iron out some of the wrinkles in the Pool system that Uber introduced in 2015, which has been criticized by drivers and riders alike for its unpredictability, which often leads to long detours and circuitous routes to enable a shared ride. Express Pool passengers can expect to wait for 1 to 2 minutes for their pick up location instructions while the app pairs them with other riders traveling along a similar route.

Uber—which lost \$4.5 billion last year—craves consistent, constant riders, who think about opening the app every time they leave to go somewhere else. So the company is going after the people who move from the office to the house and then back again every day, with a product that mimics the public transit systems many already use.

The new system is similar to a “microtransit” program that L. A. Metro is planning to improve first/last mile connectivity for the regional transit system. Metro's program would also rely on smartphone technology and would allow passengers to get picked up along flexible routes that could change depending on rider demand. If Uber (and Lyft) pull off this sort of service the way they'd like, and win the commute, it could be an existential crisis for the urban bus system.

Ride-hailing Companies Taking Big Bite Out Of Parking, Car Rentals and Taxi Revenues

Parking expert Casey Wagner, who hosts a National Parking Association webinar on the rise of the shared economy, said Uber and Lyft are taking a big bite out of the parking, car rental and taxi industries. His analysis of the effects in San Diego may prove instructive for the future of cities' parking and transit investments.

In San Diego, Ace Parking is experiencing as much as 50 percent less traffic at nightclubs, a 25 percent drop at restaurant valets, and a 5% decrease in overnight parking at hotels. In 2017, 68 percent of business travelers chose Uber or Lyft, while 25 percent chose rental cars. Only 7 percent hopped in taxis, according to Certify, which tracks business travel spending. And at San

Diego International Airport, parking revenue has been flat while plane traffic is up 7 percent this fiscal year.

In downtown San Diego, city planners are looking at the decline in parking demand as they update parking guidelines — which could lead to changes in how curb lanes are used, how much off-street public parking is built, and what parking ratios are appropriate for new urban developments.

The city also is experimenting with a designated pick-up, drop-off lane for ride-share cars on Fifth Avenue in the Gaslamp Quarter, after a study determined that a community valet wouldn't be successful.

Parking chains are fighting back with technology that improves convenience with smartphone-available pricing, space availability, reservations and payments. But consultants are predicting that ride-share competition may push down parking prices.

Waymo Announces Driverless Taxi-vans Will Soon Serve Phoenix And Other Markets

Waymo, formerly known as the Google self-driving car project, announced in January it plans to add “thousands” of completely driverless Chrysler Pacifica Hybrid vans that will start serving Phoenix as rideshare vans and taxis and then expand into other U.S. markets.

A study released last December by the Boston Consulting Group predicted as much as 20 percent of the miles Americans clock on the road each year will be in driverless ride-sharing vehicles.

Despite cautionary calls from safety advocates and agencies, Waymo officials insist they are confident the driverless vehicles can operate safely. Its various prototype and pilot vehicles have already clocked more than 4 million miles test driven in the real world in seven states and 25 U.S. cities and Waymo is logging another 10,000 miles daily while continuing to clock “billions of miles” in its computer simulators.

Waymo could sharply undercut its competition on pricing, as drivers make up the biggest line item when it comes to operating costs for ride-sharing and taxi services. That's why it costs about \$1.40 a mile to use a service like Lyft, compared to an average \$0.80 a mile to own and operate a personal car.

Toyota and Ford are working on their own driverless technologies and have expressed interest in entering the “mobility services” field as a way to compensate for that potential decline in traditional sales. General Motors is waiting for federal approval to start testing a completely driverless version of its Chevrolet Bolt battery-electric vehicle. GM could also provide some of the driverless vehicles to Lyft, the ride-sharing service in which it now owns a large stake.

Cisco Makes 7 Internet of Things Predictions For Connected Transportation

Cisco is one of the biggest proponents — and potential beneficiaries — of the Internet of Things (IoT). The networking giant is pushing IoT solutions in a number of areas, not least of which is the transportation sector. So what does their in-house guru predict for transportation technology?

1. Data will be the new oil - In the past, government and transportation agencies have not gone much beyond storing IoT transportation data. But going forward, he expects those agencies to find innovative ways to leverage analytics to create revenue streams, improve quality of life for

citizens, and offset costs of new technologies that provide true situational awareness and eliminate major accidents.

2. More MaaS and TaaS - The growth of Mobility-as-a-Service (MaaS) and Transportation-as-a-Service (TaaS) will enhance the passenger experience. MaaS and TaaS reflect the move away from personally owned transportation (private cars) toward mobility services such as Uber or Lyft. 2018 will see broader use of MaaS across different modes of transportation, providing passengers with a seamless travel experience — from bikeshares, to rideshares, to mass transit systems and everywhere in between.”

3. Artificial intelligence (AI) and machine learning will play key supporting roles - AI and machine learning will become much more widespread in the transportation sector, enabling more automated, predictive analytics and, therefore, better decision making. For example, the technologies could be used to better deploy emergency response vehicles, tow trucks, and snow plows and even “preemptively deploy salt trucks to roadways that often ice over just before they begin to freeze.”

4. IoT in transportation is primarily an infrastructure play - Modern networks and data architectures are essential to enable the myriad IoT connections from smart devices and other consumer technologies. For example, for consumers to use and benefit from a smart parking mobile application that helps them locate and reserve parking spots, we first need a modern network infrastructure in place to ensure secure, reliable connectivity between the app, the vehicle, and sensors within the parking facility.

5. Uncertainty surrounding data privacy and ownership is a big barrier - Determining who owns the data being stored in smart devices is a source of debate. For example, data can come from vehicles owned by private companies, by transportation agencies, or even cities. It can also be collected from sensors on traffic lights, venues, weather agencies, and bridges or roads. But sorting out who is allowed to access, share, and monetize that information will require clear new legislation and policy especially when multiple agencies are involved in managing a transportation facility.

6. IoT will impact the lifespan of vehicles and transportation infrastructures – The IoT data collected and analyzed from connected cars and infrastructures can help extend the life of these vehicles and the transportation system through predictive analytics and preventative maintenance. For example, by aggregating and analyzing traffic data from IoT sensors on streetlights, transportation agencies can determine which roads are most frequently traveled and service and maintain them first. Connected cars also can alert drivers when maintenance is needed to keep the vehicles running smoothly. And with vehicle-to-vehicle (V2V) and vehicle-to-infrastructure (V2I) connections optimizing routes, alleviating congestion and helping drivers avoid road hazards, there will be fewer accidents.

7. We need to choose a standard for V2V and V2I communication – There isn’t universal agreement on the communications protocols needed for vehicles to communicate with one another and with the transportation infrastructure. The impending choice is between Dedicated Short Range Communications (DSRC) or 5G. The mobile carriers support the emerging 5G, carmakers have backed DSRC due to its rigorous testing for automotive safety