SUSTAINABILITY & CLIMATE ACTION PLAN

November 18, 2020

Getting to 80 x 30 - Your Transportation Vision for Palo Alto

57 attendees, 86 registered

Questions and Answers

- 1. Since 50% of traffic usage is inbound from out of city, what do you suggest that could be done to reduce this inbound traffic?
 - A. We will need a combination of strategies to reduce inbound traffic. One proposed 2020 Sustainability and Climate Action Plan (S/CAP) strategy is to make it easier for commuters to telecommute more, for example, by making telecommuting a norm or a requirement through Transportation Demand Management measures if possible, so that fewer people need to drive here on a daily basis. This may become a <u>regional effort led by the</u> <u>Metropolitan Transportation Commission (MTC)</u>. Another strategy is to improve transit operations relative to driving so that Caltrain and buses are faster or more convenient than driving from out of town. The upcoming electrification of Caltrain will make that service faster and more reliable. In a similar vein, making Palo Alto easier to bike to will also remove cars from the roads, particularly for shorter-distance commute trips from neighboring jurisdictions. Finally, land use changes that reduce the need for in-commuting and improve our jobs/housing balance could reduce driving distances, making biking, walking, and transit attractive options for the commute to work.
- 2. What about land-use as a way to reduce incoming traffic and GHGs?
 - A. Land use is an important strategy in the Sustainability and Climate Action Plan (S/CAP) for reducing inbound traffic and GHGs, as noted in the answer to #1 above. Land use changes tend to happen slowly, so a focus on transportation modes will be needed along with land use changes to make it possible for more people to live in walkable, bikeable neighborhoods where they can access work and their essential needs more easily without a car. Land use changes will be important for expanding traditional transit like the Santa Clara Valley Transportation Authority (VTA) buses, as lower density corridors are inefficient for transit operators to serve. Creating more transit-friendly corridors in town is a GHG-reducing land use strategy.

- 3. Any discussion with VTA / Samtrans or neighboring communities (e.g. Mountainview) to see if there can be greater tie-ins with existing public transit?
 - A. VTA and local agencies including Palo Alto have coordination meetings to ensure there are regional tie-ins. Staff also reach out to our neighboring cities as appropriate on other transportation programs and projects. VTA staff have been clear that while local-serving intown community shuttles are not efficient for them to provide, VTA is looking for transit-friendly markets with land uses that support frequent service.
- 4. How viable is a model from Old Europe, when bicycles ruled (circa 1950)? Indeed, which mode do you use for which activity? Isn't it about schlepping stuff, stocking up, accumulating surplus...A change of mindset is needed you cannot (in this part of the world) carry your goods on your head, or in a basket on your bike...we need a major mind shift, no?
 - A. It's not the Old Europe model, it's today's Europe! European cities are moving towards more bikeable, walkable city forms for the same reasons discussed in the webinar. Many Europeans live locally, and every year, many Americans visit Europe to experience this lifestyle. It turns out that there are many ways to live locally, i.e. make the majority of trips 10 miles or less via walking, biking, e-bikes, or transit. Many households in Palo Alto incorporated biking and walking into their pre-pandemic lives for short in-town trips. Because of the pandemic, more people are finding that living locally is possible. While our youth have embraced biking with the support of the education, encouragement, engineering, and other elements of our Safe Routes to School program (SRTS), the City has not yet invested in the programmatic aspects of biking and walking to the same degree for adults. While the SRTS program has made it easier for all residents to walk and bike, we hope to continue this trajectory by supporting additional road users via programs like Safe Routes to Parks and Safe Routes for Older Adults. The 2020 S/CAP will include a Safe Routes for Older Adults program as a potential strategy for Council to select. Adults have different physical abilities, cargo-carrying needs, and destinations, and they may need different kinds of bikes and an expanded, protected bicycle network, including additional bicycle parking. A Safe Routes for Older Adults program could advance the mindset you reference. Such a program could provide adult education on walking, biking, and transit use in town, while also helping residents match the right mode for their in-town trips.
- 5. A powerful reason for walking / biking is to cope with coronavirus. Benefits include automatic social distancing, getting out of the house, keeping sane, and improves general health which helps if you get coronavirus. Other cities are making changes to their traffic infrastructure in response to coronavirus (Paris, London for example). Is Palo Alto going to use coronavirus concerns to speed up changes?
 - A. Staff concur that walking and biking are supporting community physical and mental wellness during the pandemic, as attested to by the increased numbers of those seen walking and biking in town. Even before the pandemic, Office of Transportation staff were supporting community wellness through the promotion of bicycling and walking via our <u>Safe Routes to</u> <u>School program</u> and via <u>bicycle and pedestrian infrastructure projects</u>. At the onset of the pandemic, creating more space to walk, bike, scooter, rollerblade, or engage in other modes

of exercise was the rationale for the <u>Shared Streets program</u> initiated by the City on Ross Road, Park Blvd, and Bryant Street. Staff will continue to look for ways to support community wellness via expanding walking and biking opportunities. To that end, webinars like this one that engage the community will help staff to align the 2020 S/CAP, our Capital Improvement Program, and our upcoming Bicycle and Pedestrian Plan update so the City can make investments in appropriate supportive infrastructure and programming. The pandemic has shown that our orientation toward active transportation is even more vital now.

- 6. My husband and I are senior citizens, 76 years old. We use electric bikes within Palo Alto. However, in order to enjoy hiking, say in Foothills Park, we use our car to get to the park. A town shuttle to the park would be a great service, or what alternative can you suggest/provide?
 - A. Great to hear you're using e-bikes around town! They are a great option. One Office of Transportation staffer uses an e-bike to get to Foothills Park quite often from South Palo Alto and sometimes even takes it bike camping. There is a great low-traffic route off Purissima Road that makes getting to Foothills via bike quite accessible. (Here's the route in case you want to try it! Arastradero Road, Purissima Road, Elena Road, Natoma Road, Black Mountain Road, Altamont Road, Page Mill Road.) Staff agree that from an accessibility standpoint it could be worth looking into whether a shuttle could be used. We know other parks in the Bay Area, such as Chabot, offer shuttles from the Bart Station.
- 7. Is there an updated site for access to parks? I haven't seen one of late
 - A. A prospective <u>Safe Routes to Parks program</u> was mentioned during the webinar and is something that Transportation staff could pursue jointly with the Community Services Department pending available resources. The Open Space and Parks website is <u>here</u>.
- 8. What are you doing to stop stealing of bicycles??
 - A. Properly locked bicycles with high-quality locks or locking skewers are the first line of defense against preventing bike theft. Follow these <u>tips</u> to ensure your bike is not vulnerable. The City helps prevent bike theft by placing racks in visible areas and by encouraging Palo Alto residents to register their bikes with the free Bike Index bike registry, even if they registered with a previous system. The Bike Index has a greater potential to help victims of bike theft recover their bikes through its worldwide network of cyclists, police departments, universities, and other groups. For more information on the Bike Index and how it works, please read this <u>City information sheet</u>.
- 9. Can the city encourage/assist employers to hire within biking distance? Can the city encourage/assist residents to pick jobs within biking distance?
 - A. Via Transportation Demand Management (TDM) plans, the City requires new development to reduce employee trips by up to 45%, depending on where the employer is located in Palo Alto. Many of these TDM plans provide incentives for bicycling and taking transit to work. A contributing factor to the mismatch between where employees live and where the employers are is the cost and location of housing. <u>Recent changes to the California</u> <u>Environmental Quality Act</u> (CEQA) are aimed at shortening commute distances statewide

over time by encouraging development that reduces the amount of vehicle miles needed to travel to that development. This CEQA change supports land uses that locate more people closer to available jobs.

- 10. Some of us cannot bicycle. Can electric vehicles (EVs) help those of us who cannot bicycle?
 - A. The EV you are looking for may be an e-bike! The bicycle market is changing rapidly with the explosion of e-bikes, including electric-assist three-wheeled bikes. One of these bikes will likely fit the bill if most of your travel is in town. If you have a physical limitation that prevents use of an e-bike or e-trike, on-demand transit could be an option soon. The City is applying for a grant to bring an on-demand transit model to Palo Alto, and this service could be a mobility solution for in-town trips.

As we lay the foundation for a sustainable future, EVs will most definitely be part of the multifaceted solution. Not driving and choosing to walk, bike, or use transit to help reduce congestion is ideal, however if one needs to drive longer distances than these modes can accommodate, a zero emissions EV is the significantly cleaner option than a gas car.

- 11. What are the options of having electric vehicle (EV) chargers for those living in an apartment?
 - A. We understand that it is most convenient to be able to charge at home. As a result, we have an <u>EV charging rebate program</u> offering up to \$80,000 per site, for multifamily properties to install EV chargers, as well as free <u>technical assistance</u> to help property owners wrap their heads around the technical aspects of installing charging infrastructure. Both programs are also available to non-profits. Each project at any commercial site poses its own set of challenges, but over the next couple of years we expect to see hundreds of chargers installed at multifamily properties throughout Palo Alto. We are also currently working with multiple places of worship, schools, and other neighborhood centers where residents and visitors can go to charge an EV. The City is also working with various external stakeholders to facilitate the access of grants and other funding sources to build out charging infrastructure throughout the City. Lastly, the City is continuing to expand charging infrastructure at Cityowned properties and has just completed installation of 26 more chargers at City garages, with more to come, using funds from State and regional grants.
- 12. Is the city giving incentives to homeowners who need to upgrade their electrical panel to accommodate an electric vehicle (EV)?
 - A. Not currently, but we are exploring this and other potential programs to encourage the switch to EVs and electrification of homes. We do have a <u>\$10,000 Utility Service Capacity</u> <u>Rebate</u> for residents who trigger a transformer upgrade when upgrading their electrical panel. For more information on upgrading electric panels, <u>click here.</u>
- 13. Comment on panel upgrades just saw this from the electrification meeting if you are electrifying the household, the new appliance can be selected to reduce panel load, freeing capacity for the EV. A single 16 A 240 circuit will give about 12 miles per hour of charging 120 miles over a 10 hour overnight. Chargers should be networked and grid responsive. Tom Kabat, MenloSpark & Dylan

Anderson, RE: Techniques for Living Large on Existing Electrical Panel https://www.youtube.com/watch?v=XQJzoP2br1Y

- A. There are also new developments including commercially available bidirectional chargers (vehicle to grid, vehicle to home) as well as smart panels, both of which have the potential to significantly shift the way we use electricity.
- 14. How will you balance mandating electric vehicles (EVs) for Palo Alto residents and the potential impacts on residents with their large number of vehicles driving into Palo Alto each day that don't face a similar mandate?
 - A. Good question. The City may have to consider some corresponding measure, in partnership with our business community, to discourage Internal Combustion Engine (ICE) vehicles driving into Palo Alto. The goal is to reduce the number of cars on the road. Currently, the City is working with various external stakeholders to facilitate the access of grants and other funding sources to build out charging infrastructure throughout the City, including at workplaces and other businesses. Reduction of inbound commuter traffic is ideal, but for those driving into the City from longer distances, the goal is to make it easy for these vehicles to be EV. To date, the largest program we are participating in is <u>CALeVIP (California Electric Vehicle Infrastructure Project)</u>, partnering with agencies up and down the Peninsula. This opportunity will offer Palo Alto businesses rebates for installing EV charging infrastructure. Emissions from road transportation is not just a Palo Alto problem but a region wide issue, and collaborating with neighboring cities on active transportation modes and EVs will help reduce the number of fossil fuel vehicles on the road.
- 15. Is there a role in Palo Alto's strategy for hydrogen powered vehicles?
 - A. The hydrogen fuel cell vehicle is an intriguing technology that promises environmental benefits over gasoline cars. To date however, the bottom line is that fuel cells are highly inefficient. Hydrogen sounds clean, but energy is required to make the hydrogen (most commonly using natural gas) and then converted into electricity. Even if clean electricity from renewables is used, a battery electric vehicle can go about 2.5 times farther than a hydrogen vehicle on the same amount of renewable electricity. Hydrogen vehicles have a lot in common with battery electric vehicles. Hydrogen isn't a raw source of energy that can be dug out of the earth, like oil. Just like electricity, hydrogen must be produced from another energy source (sometimes even from electricity), which can be renewable, or fossil based. When driving, the hydrogen is converted to electricity, which is stored in a battery and drives an electric powertrain. Even if sustainable hydrogen is used (produced from clean electricity), the process of using electricity to produce hydrogen and then converting it back to electricity creates about 65% energy loss even at the starting point. Then there is the challenge of transporting hydrogen to fueling stations. Also, building a hydrogen station is complex and expensive – therefore hydrogen fueling stations are very limited in number. However, there is a hydrogen fueling station in Palo Alto with avid adopters of this technology. In previous years, discounts on fuel cell vehicles such as the Toyota Mirai have been offered through the City's annual participation in the SunShares - solar and ZEV bulk buy discount program. Ultimately, it will be up to the consumer to decide - which provides the better way to deliver electricity to your car?

- 16. How can you ban registration of gasoline cars? Shouldn't you simply allow those cars to slowly phase out due to age?
 - A. Given that average car ownership is about 12 years, there is a high likelihood that many of the gas cars on the road today will naturally phase out. However, we are proposing that natural retirement, combined with a higher intervention model such as a carbon tax, or a ban on new gas car purchases, could accelerate the transition from gas cars to zeroemission vehicles (ZEVs) such as EVs. With the climate crisis becoming more urgent and technology evolving so rapidly in the field of transportation, it is vital for us to navigate the City's strategy together with the community. Over a decade ago, Norway imposed high taxes on fossil-fuel cars, and offered various tax breaks and incentives on EVs and today over 60% of all Norwegian car sales are 100% electric. Governor Gavin Newsom's executive order to ban the sale of gas cars in 15 years may be the first in the United States, but several European countries and provinces in China and Canada have set similar deadlines. Last week, the UK also announced a ban on the sale of new gasoline and diesel cars by 2030, a decade earlier than its previous commitment. In the meantime, the Governor's executive order could shift consumer behavior when a new car purchase is under consideration. Over the next decade we expect prices for electric cars to come down, but we also expect to see more incentives to help Californians purchase clean cars.
- 17. How would a local ban of registration of Internal Combustion Engine (ICE) vehicles be implemented, since registration is done at DMV?
 - A. Staff is exploring options if and how this could be implemented.
- 18. Banning registration of existing Internal Combustion Engine (ICE) cars by date X is more impactful than banning sales of ICE cars by date X, as Gov. Newsom ordered. They are not the same impact. Did your action mean banning the registration of ONLY NEW vehicles by date X? If so, it is equivalent to the Governor's, corrected for effective dates. In that case you still allow registration of pre-Date X ICE vehicles.
 - A. We do not have a definitive proposal on this. The initial thought was to explore options to ban the registration of all ICE vehicles after a date certain.
- 19. As Hiromi indicated, disincentivizing Internal Combustion Engine (ICE) vehicle OWNERSHIP and USE are two different measures. The top proposals presented here (vehicle fee/tax and registration ban) are both targeted at OWNERSHIP—and can potentially: 1) penalize those who choose alternative transport modes yet still own their current ICE vehicles, and 2) simply push Palo Alto ICE vehicles into the used vehicle market just outside the city. As such, other than parking fees, what proposals are aimed at reducing actual USE? To Bart's great point about leading innovative thinking, is Palo Alto bold enough to consider options like carbon pricing, being sure to have a basis in both science and equity?
 - A. Excellent point. We are prioritizing mobility solutions to get people out of cars and could make sure any proposals to create disincentives for *ownership* do not unduly penalize people who use cars as little as possible. And yes, we are considering carbon pricing options, with an emphasis on equity.

- 20. So is the recommended registration ban only applicable to new gasoline car purchases in 2030?
 - A. At this time, we do not have a definitive proposal, but yes, the initial thought is to explore the ban of new Internal Combustion Engine (ICE) vehicles after a certain date. Getting a chance to read through attendee questions and feedback is extremely insightful "equitable carbon pricing, not penalizing those who choose non-driving modes of transportation but still own an ICE vehicle, focus on reducing driving, banning registration of existing ICE vehicles". We appreciate all of your thought-provoking ideas, all of which we will consider.
- 21. My employer offered free car parking as an employee driving perk. I could not get them to neutralize that driving incentive by offering cash and then charging me an equal amount if I wanted to drive and purchase parking. Could the city find a way to demonstrate that for other employers?
 - A. Staff agree that this type of incentive only encourages driving. There are currently tax incentives involved that need to be updated to fix this sort of problematic incentive. At the local level, we will be working toward improving Transportation Demand Management approaches to at least provide alternative incentives to carpool, utilize transit, and walk/bike instead.
- 22. Sounds like you have set measurable goals for increasing e-car use. What measured goals are being set for other alternatives that are LESS impactful, like walking, biking, e-biking? The city works to accomplish its measured goals and objectives. Will these other modes be measured and tracked as e-cars will be?
 - A. Yes, metrics will be included in the 2020 S/CAP, including tracking the mode of travel to work and mode of travel for non-work trips. In order to determine whether active modes of travel for non-work trips are possible for all residents, the webinar included a description of two potential metrics, the 10-minute milk test and the 20-minute walk/bike/transit test. The first test asks, "Can you purchase a pint of milk within a 10-minute walk?" The second test asks, "Can you access all the services you need within a 20-minute walk, bike ride, or transit trip?" These metrics could be calculated for all neighborhoods in town and tracked over time. Staff are interested in resident feedback about these metrics and are open to considering other metrics to track active transportation for all trip types.