Solving Palo Alto's parking and congestion problems

The city of Palo Alto is looking at ways to reduce parking and congestion problems caused, in part, by office workers.

One proposal is to cap the growth of office space to between 10k and 45k square feet. However, we believe that this will not address the city's current problems with parking and congestion. Why not?

- New office square footage each year has averaged less than one percent of Palo Alto's 11.2 million square feet of office space, so the near-term effects of reducing new construction will be small.
- This measure will further raise rents in existing buildings, encouraging companies to put more employees into the same amount of space. These employees will increase trips and parking demand from existing buildings.
- To reduce congestion, a proposal must reduce car usage in existing buildings, and this proposal provides no mechanism or funding to do so.
- In addition, an office cap will also continue to make Palo Alto a less viable location for both retail and other small businesses, by raising rents while depriving these businesses of customers.

We believe that a better proposal would address the problem at its root by requiring companies to reduce their workers' use of cars and providing a mechanism to fund alternatives.

We suggest that the city study three approaches that we believe are more likely to address parking and congestion problems in Palo Alto:

1. Require new construction to meet a target SOV rate.
2. Require development fees to be spent on trip reduction, rather than merely on building additional parking.
3. Levy a modest fee on commute trips or square footage for existing buildings, and require tenants to use these fees to fund trip reduction.

These proposals strengthen the existing mechanisms that the city is relying on to address traffic and parking problems in the downtown area - namely, the TMA and RPP programs - by encouraging participation for both tenants of both new and existing buildings and providing funding.

Under these proposals, the city will verifiably limit trips from new construction while requiring tenants of both new and existing buildings to fund trip reduction measures. Fees comparable to the costs imposed by an office cap would raise enough money to make Caltrain rides free for all employees and build an entire fleet of Google-quality commuter buses, bootstrapping a transition among all workers and residents in Palo Alto to less car-dependent modes of transportation.

Trip reduction for new construction

Building uses differ tremendously in the number of car trips that they generate given the same number of square feet. Studies of downtown tech companies in 2015 show that fewer than 40% of these employees drive to work. For Palo Alto workers as a whole in 2006, the figure was nearly double at 75%. Affecting the number of people who drive alone – the Single-Occupancy Vehicle rate, or *SOV rate* – is the single most effective lever that Palo Alto can use to reduce the number of trips and parking demand generated by new buildings.

We suggest that the city study requiring new buildings to meet a target SOV rate:

- By requiring a low SOV rate, the city can directly affect the number of trips generated by a building and the parking space used.
- By contrast, a city-wide cap on square footage will likely result in even higher rents and more intensive use of both existing and new development, resulting in more trips and additional need for parking.
- There are several approaches to setting a maximum SOV rate, from requiring a Conditional Use Permit to simply controlling the number of parking spaces that are allowed to be built and used by a building's tenants.
- Similar approaches have been used in Mountain View and San Mateo.

To make these maximum SOV rates practicable for tenants, they will need help from the city's existing programs, such as the Transportation Management Association (TMA). However, these programs do not currently have a dedicated source of funds beyond voluntary contributions from businesses.

We suggest that the city study requiring development fees to be spent on trip reduction, rather than merely on building additional parking:

- Downtown businesses are currently part of the Parking Assessment District, which requires one parking spot for each 250 sq. ft of commercial space. For each parking spot that is not provided onsite, projects must pay a $60,000 fee. This money is set aside for the building of additional parking lots and garages.
- Under an SOV maximum, fewer spots would be required to fully park the allowed trips to the building.
- Projects could be required to dedicate the remaining fees to trip reduction:
  - A majority of the fees would be available to fund alternative transportation programs for the building's tenants.
  - A portion of the fees would be allocated to fund TMA programs for low-wage workers.
- Although the Parking Assessment District only applies to downtown, this approach of reducing parking requirements by the required SOV rate and diverting development fees to the TMA can be applied in any area.
- Similar approaches have been used in cities including San Mateo, Austin, Boulder, and Portland.

Note that this will allow the city to reduce the building of new garages in the downtown area, which is both an aesthetic benefit and a way to avoid trip increases in the long-term.

Enforcement is always a concern with restrictions on development. One approach would be to require verifiable reporting while also controlling parking space usage:

- Tenants of new buildings could be responsible for reporting their commuter trip counts quarterly, subject to review and enforcement by the city.
- Companies would pay a penalty for any trips over the cap, which could be divided between enforcement costs and investment in the TMA general fund.
- In order to prevent companies from cheating the SOV rate through overflow into neighborhoods, the RPP process employed downtown and in College Terrace should be scaled up citywide for any residential neighborhood that requests it.

Trip reduction for existing businesses

The TMA is currently the city's program aimed at addressing congestion and parking issues caused by commute trips to and from existing office space. However, it is a voluntary program by businesses and therefore may not fully internalize the cost of congestion and parking programs on residents.

We suggest that the city study fees on existing businesses that could be returned to fund trip reduction:

- A fee could be based on the number of trips generated by the building, as suggested by the Chief Sustainability Officer Gil Friend, or based on the square footage of the building.
- A fee on trips would have the double impact of raising revenue for trip reduction, while disincentivizing driving.
- These fees would be directed for use to fund trip reduction efforts:
  - A majority of fees would be returned to fund alternative transportation programs for the building's tenants.
  - A portion of fees would be allocated to fund TMA programs for low-wage workers.
- It would be useful to study whether the fees should be waived for low-wage workers or for existing small businesses.
- A similar approach has been used in Emeryville.

Detailed analysis of impacts

Tenants of new construction:
Mandating that each new building achieve a target SOV rate is a way of guaranteeing a limit on parking and congestion effects of new construction - one that can clearly be set to be as or more effective to an approach based on capping space.

Dynamically, however, this approach sets up Palo Alto for success in reducing car trips by commuters, addressing Palo Alto's goals for climate change and freeing up roads for use by residents. Companies occupying new space will find their expansion plans contingent on finding alternatives to cars, while the development fees will have given them the resources to do so.

This approach should be clearly preferred to an office cap for both developers and tenants of new buildings, since many of those new buildings would not be allowed to exist under the office space cap.

Tenants of existing buildings:

Caltrain GoPasses cost less than $200 per year at scale. Commuter shuttles, the most expensive alternative transportation option, cost between $1000 and $2500 per worker per year. Raising roughly $500/employee through trip fees or office space fees would provide enough money to fund trains for all employees or shuttles for a significant fraction.

Compared to the rent increases implied by an office space cap, this approach is clearly more favorable to existing businesses. At an office space density of 250 sq. ft./employee, a $500 fee is equivalent to an increase in rent of $2/square foot, which is less than 5% of the yearly cost of any office space available in Palo Alto. Given the current rate of rent increases in Palo Alto, a 5% rent increase seems a conservative estimate of the effect of a cap.

In effect, a trip reduction fee increases business costs but provides them services from the TMA. An office space cap increases business costs and sends the increase to existing property owners.

Residents:
Residents should face fewer parking and congestion issues under this combined approach than under an office space cap, as trips and parking from new buildings are completely controlled, while existing businesses have a strong incentive to reduce trips.

Careful work is required to make sure that businesses or employees do not cheat this policy. However, for areas where parking and congestion are currently problematic, such as downtown, we need to impose those policies anyway. This structure makes those policies more likely to work rather than less.

Sustainability and climate change mitigation:
Finally, this approach is by far the most effective option in reducing carbon footprint and mitigating climate change.

First, it redirects development that would occur elsewhere in the Bay Area to locations near the train station or existing employment centers such as Stanford Research Park where alternative transportation can be provided at an efficient cost. Second, it encourages both new and existing businesses to invest heavily in trip reduction.