Planning & Transportation Commission
Staff Report (ID # 10911)

Report Type: Action Items
Meeting Date: 1/29/2020

Summary Title: Parking Reductions to Meet State ADA and EV Parking Requirements and Provisions for Restriping.

Title: Study Session to Review and Consider Amendments to the Palo Alto Municipal Code Chapters 18.52 and 18.54 to Allow a Reduction in the Number of Vehicle Parking Spaces for Existing Buildings/Uses to Meet State-Mandated Parking Requirements Related to the Americans with Disabilities Act and Electric Vehicle Charging Stations, to Provide for Additional Bicycle Parking, and to Comply With Other City Standards Including Stormwater and Waste Management. CEQA: Not a Project. Zone District: Citywide.

From: Jonathan Lait

Recommendation
Staff recommends the Planning and Transportation Commission (PTC) conduct a study session regarding proposed code amendments. The amendments are intended to ensure compliance with State-mandated parking requirements related to the Americans with Disability Act (ADA) and Electric Vehicle Supply Equipment (EVSE) regulations.

Due to recent state law changes that became effective January 1, 2020, staff is now rewriting the draft ordinance. The PTC will have the opportunity to assist staff with approaches now, and review and discuss the draft ordinance at a future PTC meeting.

Report Summary
This report is to support a study session regarding changes to Title 18 (Zoning) of Palo Alto Municipal Code (PAMC). Staff seeks feedback from the PTC on the code section language prior to completing the draft ordinance for the PTC’s consideration and recommendation to Council.

The March 2019 PTC study session on this subject helped define problems and explore solutions. The report (Attachment C) relayed information about the City’s Sustainability and
Climate Action Plan and Sustainability Implementation Plan. It noted the increasing number of electric vehicle (EV) drivers and funding for installing EV charging stations. In that report, staff committed to returning to the PTC with analysis and recommendations for possible amendments to the municipal code.

This effort is primarily to meet State-mandated parking requirements related to the Americans with Disability Act (ADA) and Electric Vehicle Supply Equipment (EVSE). This report notes relevant, recent City actions and issues, including:

- The City’s acceptance of funding for EV chargers
- City Council’s November 18, 2019 approval of use of the funds
- Survey results from 2018 about residents’ interest in EV chargers
- Challenges for (1) mixed-use and low-income housing projects and, (2) small businesses to meet ADA and EVSE installation (with example projects to discuss for each type).
- Increasing state-level legislative support to expedited and expand EV charger, evidenced by recently adopted Assembly Bills (AB1236 & AB 1100).

The proposed ordinance changes include:

- Reduction in the total number of parking spaces for existing buildings and uses,
- Allowances for the provision of extra bicycle parking spaces in lieu of vehicle space(s), and
- Clarification or provision of local standards for parking lot re-striping.

Accommodating ADA parking and EV chargers at existing sites with physical constraints has been challenging, given the existing Zoning Code language. Staff’s approach to the draft ordinance has focused on concepts for allowing a reduction of parking spaces; this report summarizes that approach. Other jurisdictions have been counting EVSE charging spaces as two parking spaces for a percentage of total required parking spaces. This alternative approach is consistent with the State law that went into effect January 1, 2020. The new State law is prompting staff to pivot with revisions to the draft ordinance. Staff is will present this alternative approach for the PTC’s discussion and consideration.

Project Description

There are two primary issues to address in revised code language: (1) ADA and state law regarding EV chargers, and (2) Noncompliance w/parking standards due to (a) ESVE requirements and (b) ADA requirements. Staff will prepare a draft ordinance to present to the PTC at a future PTC hearing, to address these issues. Staff has targeted three sections in PAMC Chapter 18.52 for proposed changes:

- 18.52.030 “Basic Parking Regulations”
- 18.52.040 “Off-Street Parking, Loading and Bicycle Facility Requirements” and
- 18.52.050 “Adjustments by Director”

Staff is exploring two additional sections in PAMC Chapter 18.54 for potential changes:

- 18.54.050 “Miscellaneous Design Standards” and
• 18.54.070 “Parking Design Figures and Tables”

To assist with the study session, staff has included three attachments to this report:
• Assembly Bill 1100 (Attachment A),
• Relevant sections from Chapters 18.52 and 18.54 (Attachment B),
• March 13, 2019 PTC report (Attachment C).

In addition, an earlier code allowed for the substitution of eight extra bike parking lockers for one automobile space by Director Adjustment. Staff proposes reintroducing similar code language into the current code.

Background
Prior PTC Study Session
As noted, the staff report from March 13, 2019 to the PTC is attached (Attachment C). The meeting minutes from the PTC meeting of March 13, 2019 are viewable via this link: https://www.cityofpaloalto.org/civicax/filebank/documents/70120. Commissioner comments found in the March 2019 minutes included these:
• That it would be easier to justify loss of parking spaces if there were information available regarding other noticeable trends related to these topics. Specifically, whether an increase in bicycle commuters, pedestrian commuters or public transit commuters was a trend is consistent across all of our green modes of transport.
• That the Comprehensive Plan sufficiently supports adopting an approach that favors adding EV chargers at the expense of parking spaces.
• A request to come back to [the PTC] with a code language that specifically allows for the loss of parking spaces, even if parking currently is inadequate under our current standards.
• Encouragement to staff to bring [the PTC] language that specifically allowed for the conversion of a parking space to an ADA compliant parking space if that also meant that there was a reduction in the parking. Even if that resulted in further inadequacy in the site’s current parking.
• Suggestion that if a church or an apartment complex has demand for bike parking facilities, the City should consider accommodating if it means losing one space.
• Consider using three separate languages for each of these since there’s general likelihood people will feel differently in terms of how strongly they feel about each one.

Electric Vehicle (EV) Funding and Community Interest
The City has received funding from LCFS (Low Carbon Fuel Standards) and CALeVIP (matching grant opportunity from CEC https://calevip.org/about-calevip) for EV chargers at workplaces, public, MFD (approximately $9.8M over the next 4 years.) The City of Palo Alto Utilities forwarded a report to City Council on November 18, 2019, for approval to use $1 million dollars of the LCFS funds towards the Calevip matching grant. The staff report (ID #10662) is viewable here: https://www.cityofpaloalto.org/civicax/filebank/documents/73962.
According to the 2018 Palo Alto Residential Survey Results, 70% of the respondents are "very to extremely interested in their next vehicle to be an EV if they knew EV charging would be readily available".

**EV Case Studies**
Several project types will benefit from an ordinance update to facilitate EVSE installation.

(1) Mixed use and low-income housing projects are required to meet ADA requirements, where parking spaces are open to the public and/or they receive public funds. These projects have EVSE installation challenges because of ADA and the City's required parking minimums. Recent Palo Alto housing projects have experienced these challenges.

(2) Small businesses are required to meet ADA and have EVSE installation challenges because of ADA and the City's required parking minimums. The Peninsula Conservation Center project experienced these challenges.

**Analysis**
Overall, the Planning & Development Services Department seeks to address issues that hinder the deployment of ESVE across this city. The staff efforts include:

1. ensuring local laws and practice comply with state law;
2. ensuring that an owner’s efforts to comply with the Americans with Disabilities Act are consistent with State law and do not discourage adoption of ESVE; and
3. ensuring that sites are not discouraged from adding ESVE to parking lots nor from bringing parking lots into compliance with modern standards when adding ESVE.

**Consistency with New State Law**
**AB 1100 Section 22511.2: Counting EV and ADA Spaces Related to EV Charging Stations**
The State’s electric vehicle (EV) infrastructure modeling tool determined 250,000 EV charging stations are needed by 2025 to support the 2025 zero-emission vehicle deployment goals. The California Green Building Standards Code specifies the standards for the construction of California’s buildings, including infrastructure necessary for electric vehicle supply equipment. The Green Building Standards Code did not define EV charging stations as parking spaces. The State found local governments required developers of electric vehicle supply equipment (EVSE) to construct additional parking space spaces to comply with local minimum parking requirements. The State found these impositions were counter to State environmental goals and requires cities to reduce unnecessary and barriers to EVSE deployment to support its zero-emission vehicle deployment goals.

State Assembly Bill (AB) No. 1100, signed by the Governor in 2019, finds and declares the State has a goal to deploy 1.5 million zero-emission vehicles by 2025, and 5 million by 2030, respectively. AB 1100 adds Section 22511.2 to the California Vehicle Code which states:

(a) A parking space served by electric vehicle supply equipment or a parking space designated as a future electric vehicle charging space shall count as at least one
standard automobile parking space for the purpose of complying with any applicable minimum parking space requirements established by a local jurisdiction.

(b) An accessible parking space with an access aisle served by electric vehicle supply equipment (EVSE) or an accessible parking space with an aisle designated as a future electric vehicle charging space shall count as at least two standard automobile parking spaces for the purpose of complying with any applicable minimum parking space requirements established by a local jurisdiction.

(c) This section does not modify the approval requirements for an electric vehicle charging station pursuant to Section 65850.7 of the Government Code.

The State Legislature found this action ensures access to EV charging stations, which is a statewide concern, rather than a municipal affair under Section 5 of Article XI of the California Constitution. AB 1100 applies to all cities including charter cities and became effective January 1, 2020. A Municipal Code amendment is required to ensure Palo Alto’s codes are consistent with this State Law. Staff is considering amending PAMC Section 18.52.040 “Off-Street Parking, Loading and Bicycle Facility Requirements, to add a new item (item (b)(7)), as follows:

“A parking space served by electric vehicle supply equipment (EVSE) or a parking space designated as a future electric vehicle charging space (EV Ready) shall count as at least one standard automobile parking space, to comply with State EVSE regulations. An accessible parking space with an access aisle served by EVSE or an accessible parking space with an aisle designated as “EV Ready” shall count as at least two standard automobile parking spaces”

As noted earlier, several jurisdictions have been counting charging spaces as two parking spaces for a percentage of total required parking spaces. These jurisdictions allow this for up to 10% of total required parking spaces. Sacramento County and the City of Stockton are two such jurisdictions. This double-counting approach appears to be consistent with the new State law now in effect.

Accessibility (ADA) Compliance
Staff’s approach to ADA, unrelated to the recent EVSE law, has been to amend ‘Basic Parking Regulations’ PAMC 18.52.030 to codify existing practice for allowing ADA upgrades to existing parking lots and structures resulting in loss in existing parking space(s). State mandates requiring upgrades to parking facilities that are out of compliance with State accessibility requirements. Staff’s current practice, currently un-codified, is to allow a reduction in the number of parking spaces on an existing parking lot to comply with the ADA. Staff approves upgrades to existing spaces, the provision of additional accessible parking spaces, and improved accessible path of travel. These adjustments often result in a minimal loss of parking stalls to accommodate the state-required changes. The code update approach prior to the recent EVSE

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1 California Constitution
https://leginfo.legislature.ca.gov/faces/codesTOCSelected.xhtml?tocCode=CONS&tocTitle=+California+Constitution++CONS
law has been to formalize the loss of parking spaces resulting from minimum required accessibility upgrades. The proposed code change would read:

The code update would formalize the loss of parking spaces resulting from minimum required accessibility upgrades. The proposed code change reads:

“Allowed Reductions in Required Parking Spaces”

“(1) Americans with Disabilities Act (ADA) Compliance: For sites making ADA upgrades to parking facilities, required on-site parking spaces may be reduced to the minimum extent necessary below the code standard or below the number of existing on-site spaces to achieve state-mandated accessibility requirements. This provision applies to minor changes to existing buildings, structures or parking facilities that are intended to remain in substantially the same form after construction”

The State law that considers EVSE ADA spaces as two spaces is causing staff to reconsider this approach to reduction due to the insertion of an ADA space. Considering the ADA space (space and adjacent travel path) as two spaces, even without EVSE, may be a simpler approach than codifying the space reductions as currently practiced. This is the main reason staff settled on a second study session, rather than bringing forward the draft ordinance to codify space reductions. This approach would be consistent with the recent code changes accommodating EVSE charging.

AB1100 became effective as of January 1, 2020, so an ADA parking space with electric vehicle supply equipment can be counted as two parking spaces. The PTC and staff will discuss using this alternative counting approach, even if unrelated to EVSE. That is, to always count the ADA space (space and adjacent travel path) as two spaces, when it is inserted into an existing parking lot.

Zoning Compliance Challenges for EVSE Retrofitting

This section of the report focuses on the compliance issues related to standard parking spaces rather than ADA spaces. When EVSE retrofitting is proposed, compliance with development and parking standards can be problematic. EVSE installations within existing parking facilities often involve conflicts with mature trees. In addition, minimum clearance requirements in the City’s parking facility design standards are hard to meet. Often existing commercial parking facilities barely meet the minimum code-required clearances, while many other facilities do not comply with today’s design standards, parking, and loading requirements. When a property owner proposes new features to an existing parking lot, such as EVSE, compliance issues are often revealed. Existing site conditions and code language do not allow for an increase in noncompliance when modifications are proposed. The following section of this report will provide examples of the Municipal Code compliance barriers for EVSE installations.

Existing Non-Complying Facilities

The Palo Alto Zoning Code is available online: http://www.amlegal.com/codes/client/palo-alto_ca
PAMC Sections 18.70.090 “Noncomplying facility - Maintenance and repair” and 18.70.080 “Noncomplying facility – Enlargement” are applicable in these cases. These noncomplying facility regulations restrict improvements or repair of existing noncomplying facilities if the activities result in any increase in the existing non-compliance(s). The result is that existing, legal noncomplying parking facilities find it challenging to install state-law enabled EVSE.

**Complying Facilities Becoming Non-Complying**

Where a site or facility complies with the City’s development standards, installation of new EVSE can also sometimes result in a new noncompliance. New EVSE installations within existing parking lots often require adjustments to the parking lot design, as shown in the following diagram.

*EVSE Installation Diagram*

When EVSE chargers are installed, the owner may need to adjust the existing parking space wheel stops and install new bollards. As shown in the diagram above, the top row of parking spaces becomes shorter in depth, reduced from 18 feet to 16.7 feet, which is below the minimum 17.5 feet (for 90-degree parking). The EVSE is installed within the area previously*
used as the “vehicle overhang” for the front end of the parked vehicle. The photo below shows how vehicles extend beyond wheel stops. The introduction of the EVSE and the associated bollards shortens the parking stall depth. Vertical barriers eliminate the “vehicle overhang” area, leading to non-complying parking facilities including reduced drive aisle widths.

Proposed EVSE Code Amendments
Staff proposes code changes to enable a small reduction in the number of required parking spaces to address this issue. The new code provisions would allow a single parking space with a width of 8.5 feet to be forfeited. This would allow the other parking stalls along the aisle to benefit from re-distribution of the extra 8.5 feet via restriping. The EVSE and associated, protective bollards would be arranged within the excess width areas, enabling Code-compliant dimensions for the rest of the parking facility. The code revision would allow for minimal parking space loss to facilitate the installation of new EVSE infrastructure within existing parking facilities. The loss of a parking space would be allowed in situations where other compliant adjustments to the existing parking facilities such as drive-aisle narrowing would not be an option.

Transformers for EVSE
The added electrical capacity needed for new EVSE installations often leads to a need for new transformers and electrical switch gears for the site. Electrical utility equipment varies in size based on electrical load requirements. The Utilities Department requires clearances of up to 10 feet around such equipment pads. Below are several examples where this type of equipment was installed in planting areas within existing parking lots.
In the above examples, the site conditions allowed new transformers and switch gears to be placed without clearance issues. However, the equipment was placed near existing trees or in locations where trees could have been planted to meet the City’s tree canopy goals and shading requirements. This equipment often conflicts with existing trees; if new equipment is proposed within a Tree Protection Zone (TPZ)$^3$ the new EVSE is not allowed in that location. If this supportive equipment were allowed to be installed within an existing parking space, conflicts with existing trees could be avoided. Placing such equipment toward the rear of a parking lot could minimize visual impacts of equipment on the streetscape.

Consistency with the Comprehensive Plan$^4$

Several Comprehensive Plan programs and policies directly speak to the expansion of electric vehicle infrastructure. The following table contains these programs and policies.

<table>
<thead>
<tr>
<th>Electric Vehicle Policies/Programs</th>
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<tbody>
<tr>
<td><strong>Program T-1.3.1:</strong> Develop an electric vehicle promotion program that identifies policy and technical issues, barriers and opportunities to the expansion of electric vehicles</td>
</tr>
<tr>
<td><strong>Policy T-1.4:</strong> Ensure that electric vehicle charging infrastructure, including infrastructure for charging e-bikes, is available citywide.</td>
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$^3$ TPZ area are defined in the Palo Alto Tree Technical Manual (TTM) as a radius equal to 10-times the diameter of the tree or 10-feet, whichever is greater and is the restricted activity area for new construction and trenching. TTM Sec 2.15(E) & Sec 2.20(C-D)

**Program T-1.4.1:** Update the Zoning Code to ensure compatibility with the electric vehicle infrastructure requirements.

### Utilities and Infrastructure

**Policy L-9.10** Design public infrastructure, including paving, signs, utility structures, parking garages and parking lots to meet high-quality urban design standards and embrace technological advances. Look for opportunities to use art and artists in the design of public infrastructure. Remove or mitigate elements of existing infrastructure that are unsightly or visually disruptive.

**Program L9.10.2** Encourage the use of compact and well-designed utility elements, such as transformers, switching devices, backflow preventers and telecommunications infrastructure. Place these elements in locations that will minimize their visual intrusion.

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**EV Chargers and Related Equipment**

Consistency with the Comprehensive Plan and the implementation of the listed programs and policies could be achievable with code changes. With both the EVSE and related Utility equipment taking into consideration, the following proposed code language could be inserted into PAMC 18.52.030 “Basic Parking Regulations” under the proposed new item “Allowed Reductions in Required Parking Spaces” as the second item:

(2) **EV Charger Installation:** For property owners or tenants seeking to install EV Chargers and EV Charger related utility equipment, required on-site parking spaces may be reduced to the minimum extent necessary below the minimum number of off-street parking space set forth in Section 18.52.040 (c), or below the number of existing on-site spaces, to achieve state-mandated EVSE parking requirements

Additional municipal code changes may include adding another item (item j) to PAMC section 18.54.050 “Miscellaneous Design Standards.” The item would specifically note EVSE. A change to PAMC 18.54.070 “Parking Design Figures and Tables” could be to provide a new “Figure 7” – a diagram of an EVSE parking stall. The addition of a diagram for EVSE parking stalls would give a clear example of the required clearances involved with the installation of this equipment.

**Substitution of Extra Bicycle Parking Spaces for Vehicle Space**

The 1998 Zoning Code’s Off-Street Parking and Loading Regulations (formerly PAMC Chapter 18.83) allowed the Planning Director to approve substitution of eight extra Class 1 bicycle spaces for one vehicle space. The maximum substitution was five percent of the required vehicle stalls. Specifically, the former Section 18.83.120 stated:

“Automobile and bicycle parking requirements prescribed by this chapter may be adjusted by the Director of Planning and Community Environment [now Planning & Development Services] in the following instances and in accord with the prescribed limitations, when in his/her opinion such adjustment will be in accord with the purposes of this chapter and will not create undue impact on existing or potential uses adjoining the site or in the general vicinity.
(a) Substitution of Bicycle facilities for Required Vehicle Facilities. Eight short term bicycle parking facility spaces in addition to minimum bicycle requirements may be substituted for one required vehicle parking stall, up to a maximum of five percent of the vehicle stalls required.”

This language was removed from the Zoning Code and Staff seeks to re-introduce modified bike space substitution language into today’s parking regulations. The item could be placed within Table 4 of PAMC Section 18.52.050 “Adjustments by the Director”. The new language would allow the Director the discretion to:

“allow for bicycle facilities (inclusive of long-term and short-term facilities) to be placed within vehicle parking spaces up to a maximum of 5% of the vehicle stalls required or at least one vehicle parking space, whichever is greater. The exact number of bicycle facilities would be at minimum four (4) short-term facilities (parking spaces) per single vehicle parking space. The Director may require more than this minimum number if site conditions allow for additional bicycle facilities. This adjustment is exclusive of the minimum bicycle parking requirement for the site.”

Consistency with the Comprehensive Plan Transportation Goals and Policies
Several Comprehensive Plan Goals and Policies are supportive of code revisions to increase personal transportation alternatives to cars and reduce single-occupant vehicle trips. Re-introducing the bike substitution code language would increase bicycle infrastructure. This item would help make it more convenient for cyclists who wish to bike to work, school, and areas where goods and services are provided. The table below provides the Comprehensive Plan support for a change to PAMC Section 18.52.050.

<table>
<thead>
<tr>
<th>Bicycle Policies/Programs</th>
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<tr>
<td><strong>GOAL T-1:</strong> Create a sustainable transportation system, complemented by a mix of land uses, that emphasizes walking, bicycling, use of public transportation and other methods to reduce GHG emissions and the use of single-occupancy motor vehicles.</td>
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<tr>
<td><strong>Policy T-1.1:</strong> Take a comprehensive approach to reducing single-occupant vehicle trips by involving those who live, work and shop in Palo Alto in developing strategies that make it easier and more convenient not to drive.</td>
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<tr>
<td><strong>Policy T-1.16</strong> Promote personal transportation vehicles an alternative to cars (e.g. bicycles, skateboards, roller blades) to get to work, school, shopping, recreational facilities and transit stops</td>
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<tr>
<td><strong>Policy T-1.3:</strong> Reduce GHG and pollutant emissions associated with transportation by reducing VMT and per-mile emissions through increasing transit options, supporting biking and walking, and the use of zero-emission vehicle technologies to meet City and State goals for GHG reductions by 2030.</td>
</tr>
<tr>
<td><strong>Policy T-5.12</strong> To promote bicycle use, increase the number of safe, attractive and well-designed bicycle parking spaces available in the city, including spots for diverse types of bicycle and associated equipment, including bicycle trailers, prioritizing heavily travelled areas such as commercial and retail centers, employment districts, recreational/cultural facilities, multi-modal transit facilities and ride share stops for bicycle parking infrastructure.</td>
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<tr>
<td><strong>Program T-5.12.1</strong> Work with employers, merchants, schools and community service providers, to</td>
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identify ways to provide more bicycle parking, including e-bike parking with charging stations, near existing shops, services and places of employment.

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<tr>
<th>Policy T-5.7</th>
<th>Require new or redesigned parking lots to optimize pedestrian and bicycle safety.</th>
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<tr>
<td>Program T-5.8.2</td>
<td>Identify incentives to encourage the retrofit of privately owned surface parking areas to incorporate best management practices for stormwater management and urban heat island mitigation as well as incentives for the provision of publicly accessible bicycle parking in privately owned lots.</td>
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</table>

**Maintenance of Existing Parking Facilities**

Regular maintenance of parking facilities by resurfacing requires re-striping of parking spaces. There is a need to enable the Director to approve parking lot restriping to create conforming parking stalls and drive aisles, even when the resulting lot contains less than the existing number of parking spaces. The code changes would enable the Director whenever such restriping is needed to achieve compliance with state law, the City’s waste management objectives and/or stormwater policies⁵ (trash enclosures).

Re-striping can often improve on-site circulation and result in compliant parking stall dimensions for previously substandard stalls. This would only apply to changes for sites with existing structures and parking facilities that would remain in the same form after resurfacing and re-striping of the facilities. As previously noted, staff’s concept is to amend PAMC Section 18.52.030 “Basic Parking Regulations” with the new item “Allowed Reductions in Required Parking Spaces”. A sub-item for parking lot restriping would assist the staff and Director’s review of changes to existing parking lots:

(3) Parking Lot Restriping. Existing parking facilities may be restriped in accordance with applicable provisions of the municipal code. The Director may approve a reduction in required on-site parking spaces to achieve compliance with state law, the City’s waste management objectives, improvements to on-site circulation, or to adjust existing substandard parking stall dimensions to meet current code stall dimensions. This provision applies to changes on sites containing existing structures and existing parking facilities that are intended to remain in substantial form after lot resurfacing that requires stall re-stripping.

This concept is still in the conceptual stage and staff will endeavor to understand scenarios under which this code sub-item would be employed. Staff will consider unintended consequences of such proposal and endeavor to reduce and mitigate to the extent feasible negative outcomes. For example, it is possible Director Adjustments might have the effect of overriding prior Council and Director decisions on Architectural Review applications.

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⁵ City Municipal Code 16.09.165 prohibits discharge of any domestic or industrial waste or other polluted waters into City storm drains. To comply with this code section “trash enclosures” are required. Enclosure areas should be covered and enclosed to prevent rain from falling on containers, compactors, or the enclosure floor and carrying contaminants to the stormwater system or wind from distributing any items that may be on the floor of the enclosure.
Director’s Adjustments resulting in a reduction in the total number of parking stalls on an older parking lot may cause some concern when the property is within the Downtown Parking Assessment District. Staff suggests that the ‘lost’ space(s) would not result in a requirement for the property owner to pay in-lieu fees for vehicle parking space(s) no longer provided within Parking Assessment Districts. This exemption from parking in-lieu fees could be added as another sub-item to PAMC Section 18.52.030 “Basic Parking Regulations”, Item “Allowed Reductions in Required Parking Spaces”:

(4) Parking Assessment Districts. The reduction in required parking spaces provided in this subsection shall not require payment of an in-lieu fee for the lost spaces.

CEQA
This item is a study session with no action to be taken by the PTC at this time. Therefore, this is not a project under the California Environmental Quality Act.

Public Notification, Outreach & Comments
The Palo Alto Municipal Code requires notice of this public hearing be published in a local paper and mailed to owners and occupants of property within 600 feet of the subject property at least ten days in advance. Notice of a public hearing for this project was published in the Daily Post on January 17, 2020, which is 13 days in advance of the meeting. Postcard mailing occurred on January 17, 2020, which is 13 days in advance of the meeting.

Public Comments
As of the writing of this report, no project-related, public comments were received.

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Attachments:
- Attachment A: State Assembly Bill No. 1100 (PDF)
- Attachment B: Existing Parking Code Sections (DOCX)
- Attachment C: March 13, 2019 PTC Study Session Report (DOC)

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6 Emails may be sent directly to the PTC using the following address: planning.commission@cityofpaloalto.org
Assembly Bill No. 1100
CHAPTER 819

An act to add Section 22511.2 to the Vehicle Code, relating to electric vehicles.

[Approved by Governor October 12, 2019. Filed with Secretary of State October 12, 2019.]

LEGISLATIVE COUNSEL'S DIGEST

AB 1100, Kamlager-Dove. Electric vehicles: parking requirements.

The Planning and Zoning Law, among other things, requires the legislative body of each county and city to adopt a general plan for the physical development of the county or city and authorizes the adoption and administration of zoning laws, ordinances, rules, and regulations by counties and cities.

Existing law, the Electric Vehicle Charging Stations Open Access Act, prohibits the charging of a subscription fee on persons desiring to use an electric vehicle charging station, as defined, and prohibits a requirement for persons to obtain membership in any club, association, or organization as a condition of using the station, except as specified. Existing law requires a city, county, or city and county to approve an application for the installation of electric vehicle charging stations, as defined, through the issuance of specified permits, unless the city or county makes specified written findings based upon substantial evidence in the record that the proposed installation would have a specific, adverse impact upon the public health or safety, and there is no feasible method to satisfactorily mitigate or avoid the specific, adverse impact. Under existing law, an “electric vehicle charging station” is one or more publicly available parking spaces served by electric vehicle service equipment, which is defined as an electric component assembly or cluster of component assemblies designed specifically to charge batteries within electric vehicles by permitting the transfer of electric energy to a battery or other storage device in an electric vehicle.

Existing law authorizes a local authority, by ordinance or resolution, and a person in lawful possession of an offstreet parking facility to designate stalls or spaces in an offstreet parking facility owned or operated by that local authority or person for the exclusive purpose of charging and parking a vehicle that is connected for electric charging purposes. Existing law additionally authorizes a local authority, by ordinance or resolution, to designate stalls or spaces on a public street within its jurisdiction for the exclusive purpose of charging and parking a vehicle that is connected for electric charging purposes.

This bill would require a parking space served by electric vehicle supply equipment, as defined, and a parking space designated as a future electric
vehicle charging space, as defined, to be counted as at least one standard automobile parking space for the purpose of complying with any applicable minimum parking requirements established by a local jurisdiction. The bill would require an accessible parking space with an access aisle served by electric vehicle supply equipment and accessible parking space with an access aisle intended as a future electric vehicle charging space to be counted as at least 2 standard automobile parking spaces for the purpose of complying with any applicable minimum parking requirements established by a local jurisdiction.

The bill would include findings that changes proposed by this bill address a matter of statewide concern rather than a municipal affair and, therefore, apply to all cities, including charter cities.

The people of the State of California do enact as follows:

SECTION 1. The Legislature finds and declares all of the following:

(a) The state has a goal to deploy 1.5 million zero-emission vehicles by 2025, and 5 million by 2030, respectively.

(b) The California Energy Commission’s Electric Vehicle Infrastructure Projection modeling tool has determined 250,000 electric vehicle charging stations, inclusive of 10,000 DC fast chargers, are needed by 2025 to support the 2025 zero-emission vehicle deployment goal.

(c) To date, approximately 18,000 public charging stations, including approximately 2,700 DC fast chargers, have been installed in the state.

(d) The California Green Building Standards Code specifies the standards for the construction of California’s buildings, including the infrastructure necessary to support the future installation of electric vehicle supply equipment.

(e) The California Green Building Standards Code currently does not define electric vehicle charging stations as parking spaces, despite the fact that these electric vehicles can be parked at a charging space for a lengthy period of time.

(f) Some local governments have required developers of electric vehicle supply equipment to construct additional parking spaces to comply with locally mandated minimum parking requirements.

(g) The requirement to construct additional parking spaces can run counter to state environmental goals, is costly and often technically infeasible, and creates an artificial barrier to electric vehicle charging station deployment.

(h) Some local jurisdictions, including the Counties of Los Angeles, Sonoma, and Sacramento, and the Cities of Stockton, West Hollywood, Santa Barbara, and Pleasanton, have enacted ordinances to count electric vehicle charging spaces as one or more parking spaces for purposes of required parking.

(i) California must reduce unnecessary and arbitrary barriers to electric vehicle charging station deployment to support its 2025 and 2030 zero-emission vehicle deployment goals.
SEC. 2. Section 22511.2 is added to the Vehicle Code, to read:
22511.2. (a) A parking space served by electric vehicle supply equipment or a parking space designated as a future electric vehicle charging space shall count as at least one standard automobile parking space for the purpose of complying with any applicable minimum parking space requirements established by a local jurisdiction.
(b) An accessible parking space with an access aisle served by electric vehicle supply equipment or an accessible parking space with an aisle designated as a future electric vehicle charging space shall count as at least two standard automobile parking spaces for the purpose of complying with any applicable minimum parking space requirements established by a local jurisdiction.
(c) This section does not modify the approval requirements for an electric vehicle charging station pursuant to Section 65850.7 of the Government Code.
(d) The following definitions apply for purposes of this section:
(1) “Electric vehicle supply equipment” has the same definition as that term is used in the latest published version of the California Electrical Code, that is in effect, and applies to any level or capacity of supply equipment installed specifically for the purpose of transferring energy between the premises wiring and the electric vehicle.
(2) “Electric vehicle charging space” means a space designated by a local jurisdiction for charging electric vehicles.
(3) “Local jurisdiction” means a city, including a charter city, county, or city and county.
SEC. 3. The Legislature finds and declares that ensuring access to electric vehicle charging spaces is a matter of statewide concern and is not a municipal affair as that term is used in Section 5 of Article XI of the California Constitution. Therefore, this act applies to all cities, including a charter city.
18.52.030 Basic Parking Regulations

(a) Applicability

The regulations of this chapter apply to all parking areas in all districts established by this title.

(b) Parking Required

Off-street parking, loading and bicycle facilities shall be provided for any new building constructed and for any new use established, for any addition or enlargement of an existing building or use, and for any change in the occupancy of any building or the manner in which any use is conducted that would result in additional spaces being required, subject to the provisions of this chapter.

(c) Non-Conformance Due to Parking Requirements

No use of land lawfully existing on July 20, 1978 is nonconforming solely because of the lack of off-street parking, loading, or bicycle facilities prescribed in this chapter, provided, that facilities being used for off-street parking on July 20, 1978, shall not be reduced in capacity to less than the number of spaces prescribed in this chapter or altered in design or function to less than the minimum standards prescribed in this chapter.

(d) Additions or Changes of Use

For additions or enlargements of any existing building or use, or any change of occupancy or manner of operation that would increase the number of parking, loading or bicycle spaces required, the additional parking shall be required only for such addition, enlargement, or change and not for the entire building or use.

(e) Parking Spaces Exclusive

Parking, loading or bicycle spaces required by this chapter for any building or use shall not be considered to meet the requirement for any other building or use, except where a joint facility serving more than one building or use contains the total number of spaces required for each building or use separately, or where adjusted parking requirements for joint use parking facilities are specifically authorized pursuant to Section 18.52.050.

(f) Design of Parking Spaces

Parking, loading or bicycle facilities required by this chapter, or provided optionally in addition to the minimum requirements prescribed by this chapter, shall conform to the design standards set forth in Chapter 18.54.

(g) Term of Parking Requirement

Parking, loading and bicycle facilities required by this chapter shall be maintained for the duration of the use requiring such facilities, except as authorized pursuant to Section 18.52.050.

(h) Location of Parking Spaces

All off-street parking facilities required by this chapter shall be located on the same site as the use for which such facilities are required, except as authorized pursuant to Section 18.52.050.

(i) Parking Provided in Excess of Requirement

No use shall be provided to provide more spaces than prescribed by this chapter, or prescribed by the director in accord with this chapter, or prescribed by any conditional use permit, variance, or planned community district. Where additional spaces are provided, such spaces may be considered as meeting the requirements for another use, subject to Sections 18.52.020 and 18.52.030.

(1) Requirement for TDM Plan

A Transportation Demand Management (TDM) Plan to reduce and manage the number of single-occupant motor vehicle trips generated by the project shall be prepared and submitted by the applicant in the following circumstances:

A. For all projects that generate 50 or more net new weekday (AM or PM peak hours or weekend peak hour trips);
B. For all projects claiming a reduction in net new trips due to proximity to public transit or the implementation of a TDM plan; and
C. For all projects requesting a parking reduction.

(2) The Director shall have the authority to adopt guidelines for preparing TDM plans and when applicable shall coordinate such guidelines with the Transportation Management Association.

(Ord. 5432 § 13 (part), 2015; Ord. 5406 § 11, 2017; Ord. 4964 § 3 (part), 2007)
18.52.040 Off-street Parking, Loading and Bicycle Facility Requirements

(a) Parking Requirements

In each district, off-street parking, loading and bicycle facilities for each use shall be provided in accordance with Tables 1 and 2, shown in subsection (c) of this Section 18.52.040. The requirement for any use not specifically listed shall be determined by the director on the basis of requirements for similar uses, and on the basis of evidence of actual demand created by similar uses in Palo Alto and elsewhere, and such other traffic engineering or planning data as may be available and appropriate to the establishment of a minimum requirement.

(b) Calculation of Required Parking

Off-street parking, loading and bicycle facility requirements established by subsection (a) shall be applied as follows:

1) Where the application of the schedule results in a fractional requirement, a fraction of 0.5 or greater shall be resolved to the next higher whole number.

2) For purposes of this chapter, gross floor area shall not include enclosed or covered areas used for off-street parking or loading, or bicycle facilities.

3) Where uses or activities subject to differing requirements are located in the same structure or on the same site, or are intended to be served by a common facility, the total requirement shall be the sum of the requirements for each use or activity computed separately, except as adjusted by the director under the provisions of Table 1 or Section 18.52.060. The director, when issuing a permit(s) for multiple uses on a site, may restrict the hours of operation or place other conditions on the multiple uses so that parking needs do not overlap and may then modify the total parking requirement to be based on the most intense combination of uses at any one time.

4) Where requirements are established on the basis of seats or person capacity, the building regulations provisions applicable at the time of determination shall be used to define capacity.

5) Where residential use is conducted together with or accessory to other permitted uses, applicable residential requirements shall apply in addition to other nonresidential requirements, except as provided by Sections 18.52.050 and 18.52.060.

6) In addition to the parking requirements outlined in Tables 1 and 2, parking for handicapped persons shall be provided pursuant to the requirements of Section 10.54.030 (Accessible Parking) and consistent with criteria outlined in Title 16 (Building Code) of the Municipal Code.

(c) Tables 1, 2 and 3: Parking, Bicycle, and Loading Requirements

Tables 1 and 2 below outline vehicle and bicycle parking requirements in general and for Parking Assessment Districts, respectively. Table 3 outlines loading requirements for each land use. For mixed-use projects, the requirements for each land use shall be applied and required for the overall project.

18.52.060 Adjustments by the Director

Automobile parking requirements prescribed by this chapter may be adjusted by the director in the following instances and in accord with the prescribed limitations in Table 4, when in his/her opinion such adjustment will be consistent with the purposes of this chapter, will not create undue impact on existing or potential uses adjoining the site or in the general vicinity, and will be commensurate with the reduced parking demand created by the development, including for visitors and accessory facilities where appropriate. No reductions may be granted that would result in provision of less than ten (10) spaces on a site. The following are adjustments that apply to developments not located within a parking assessment district. Adjustments within the parking assessment districts are contained in Section 18.52.060. The decision of the regarding parking adjustments may be appealed as set forth in Chapter 18.78 (Appeals).

Table 4
Allowable Parking Adjustments
Limited Parking Reduction for EV Chargers, ADA, and Bicycle Lockers

The Planning and Transportation Commission Will Have a Study Session Discussion Concerning Municipal Code Conflicts With the Voluntary Installation of Electric Vehicle Charging Stations and Bicycle Lockers, and State-Mandated Compliance With the Americans With Disabilities Act, Within Existing Parking Facilities.

From: Jonathan Lait

Recommendation
Staff recommends the Planning and Transportation Commission (PTC) discuss and provide comments. No formal action is requested.

Background
The purpose of this study session is to highlight an implementation challenge planner have concerning parking requirements and other City or State-mandated policies. This report is not a comprehensive analysis. It was drafted and agendized with the intent of engaging the Commission in a dialogue to help define a possible problem, and as appropriate, begin to explore potential solutions. It is anticipated the Commission’s feedback will be used to inform a draft policy recommendation that would be discussed at a future noticed public hearing.

Three policies are the focus of this study session and, include:
1. Climate change and reducing carbon emissions
2. Reducing vehicle miles travel and encouraging cycling
3. Compliance with the State-mandated Americans with Disabilities Act (ADA)

These policies intersect with the City’s local parking requirements in many ways, but for the purpose of this study session, the focus is on changes to existing buildings and parking facilities,
not new construction. Some specific examples that have challenged planners and are reported obstacles by some property owners includes the following:

1. EV Chargers. There is no current standard that requires a property owner of an existing building to install EV chargers in their parking lot. However, when electively installed, State law requires the parking dimensions for the first EV charger space meet certain van accessible parking and passenger loading requirements. These requirements are borrowed from the ADA law, but the spaces themselves are not required ADA spaces. To meet this requirement, parking lots need to be restriped. In most cases, restriping the parking lot results in the loss of at least one parking space and often in a building that does not have extra parking spaces to lose. Moreover, associated equipment may require the placement of bollards to protect the charger reducing the required depth or width of a standard parking space.

2. Bicycle Lockers. Similar to the EV charges, there is no requirement for a property owner to install bicycle lockers. From time to time, the City will receive a request to remove a parking space or two for the purpose of providing lockers for the building’s workers. In some instances, planners are able to find a solution, but for under-parked buildings this presents a greater challenge.

3. ADA Parking Spaces. When a property owner authorizes a tenant improvement or other changes to an existing building, there frequently is a requirement that the applicant dedicate a percentage of the costs toward accessibility improvements. For sites with on-site parking spaces, this usually means converting a standard parking spaces to a van accessible parking space with a pedestrian loading area. While the owner has a variety of ways to meet this obligation, when an ADA space is required, the site will necessarily require restriping and the loss of at least one parking space. Because the ADA regulations are State-mandated, the City’s long-standing practice has been to authorize the restriping and loss of the parking space. It is staff’s intent to receive Commission feedback on this practice and as appropriate, memorialize a formal policy in the zoning code.

Discussion
The purpose of this study session is to understand the tension between the City’s goals and efforts to reduce carbon emissions and its current off-street parking requirements. From this discussion staff anticipates returning to the Commission with more analysis and recommendations on possible amendments to the municipal code that support the desired outcomes.

The City Council adopted the Sustainability and Climate Action Plan (S/CAP (Sustainability and Climate Action Plan)) in November 2016. This framework serves as a roadmap for achieving Palo Alto’s 80% of 1990 levels by 2030 greenhouse gas reduction goal (80x30). In December 2017, City Council approved the Sustainability Implementation Plan (SIP) focusing on CO2 and H2O
reduction. Energy, Mobility, EVs and Water are four pillars of the SIP. Two goals of the EV SIP are to (1) Accelerate EV penetration for both PA-based & inbound vehicles and (2) make going “EV” more convenient than using fossil fueled vehicles. Achieving these goals requires both home charging and destination charging. Council also approved the Low Carbon Fuel Standard Credit Program (LCFS) ([Staff Report ID # 7301](#)) on October 24, 2016 to facilitate funding of EV related programs. Financial grants are also available through other programs such as [Bay Area Air Quality Management District (BAAQMD)](#) and [Electrify America](#). These policies, plans, and programs have resulted in an increasing number of property owners trying to add EV charging stations to their property.

The City of Palo Alto’s Utilities (CPAU) Department has a number of initiatives in place to accelerate the adoption of EVs in Palo Alto and to diversify the City’s EV charging infrastructure. These initiatives include programs to facilitate electric vehicle adoption, such as rebates for electric vehicle charger installations, bulk-buy programs, educational events/tools, and rebates on utility connection fees triggered by EV charger installation. Over the next three to five years the department will focus on efforts to facilitate the installation of EV chargers at low-income and multi-family properties and has budgeted three million dollars toward this effort.

California and more specifically, Palo Alto, continues to experience an increase in the number of EV registrations. In 2017, among the top 40 California cities by electric vehicle market share Palo Alto led with 29%, followed by Saratoga at 24% and Los Altos at 22%. The other top eight cities are all in Northern California.¹ Additionally, data received from the California Air Resources Board (CARB) indicates a steady uptake in EV adoption in Palo Alto. In 2014 there were an estimated 1100 EVs registered in Palo Alto, in 2018 there were an estimated 4000 EVs registered in Palo Alto. This trend is expected to continue.

Where private entities have had some success installing EV chargers is on large parcels with ample parking, such as the Stanford Shopping Center. The City is currently reviewing applications for EV chargers on city-owned parking lots. However, when it comes to individual buildings there are not many successful stories. Also, zoning regulations that apply to Downtown properties provide less flexibility than other parts of the City that may be allowed to reduce parking based on a transportation demand management strategy. For Downtown properties that do not have excess parking spaces or off-site parking resources, the only solution is to pay into the parking in-lieu fund and staff is not aware of any EV chargers installed on private property in the Downtown district.

Similarly, there may be opportunities to advance City goals for greenhouse gas reductions, by authorizing one or two parking spaces to be converted to bicycle lockers. Incentivizing cycling not only provides health benefits to the rider, it reduces vehicle trips and supports congestion management strategies.

¹ [The International Council on Clean Transportation](#), “California’s continued electric vehicle market development” page 4.
The City’s efforts to reduce greenhouse gases and promote electric vehicles must also be balanced to the City’s interests to minimizing the intrusion of commercial parking in residential areas and providing sufficient parking to meet a property’s or businesses needs. Staff seeks the Commission’s perspective on how best to navigate these goals while promoting the public health and welfare.

**Environmental Review**

The item has been assessed in accordance with the authority and criteria contained in the California Environmental Quality Act (CEQA), the State CEQA Guidelines, and the environmental regulations of the City. As a discussion item there is no action to be taken. The discussion item is not a project under CEQA and is therefore exempt from CEQA.

**Next Steps**

The next steps are to be determined by the feedback and direction provided at the hearing.

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