



October 3, 2022

Alyson Stewart
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County of Los Angeles Department of Regional Planning
320 W Temple St
Los Angeles, CA 90012

Re: LA County Residential Parking Study
Recommendations Report
37-009377.00

Dear Ms. Stewart:

The County of Los Angeles has hired Walker Consultants to prepare the following report that supports the County's efforts to update the parking requirements in Title 22 with the primary goal of facilitating the production of housing.

We appreciate the opportunity to be of service to you on this project. If you have any questions or comments, please do not hesitate to call.

Sincerely,

WALKER CONSULTANTS

A handwritten signature in blue ink, appearing to read "Steffen Turoff", written in a cursive style.

Steffen Turoff

Principal, Director of Planning

A handwritten signature in black ink, appearing to read "Tania Schleck", written in a cursive style.

Tania Schleck

Consultant



County of Los Angeles Residential Parking Study Recommendations Report

County of Los Angeles

October 3, 2022



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Introduction

Recommendations Background

Los Angeles County initiated a study of its minimum parking requirements to inform an update of Title 22 (Planning and Zoning) of the County Code for multifamily housing. The express goal of this effort is to facilitate the construction of much-needed housing units to help ameliorate the housing crisis in unincorporated areas of the County, in part to meet the County's Regional Housing Needs Assessment (RHNA) requirement to construct over 90,000 new housing units in this decade. An additional goal identified by the County has been the facilitation of a "greener" transportation system for County residents.

The urgency of this effort has only increased over the course of the study. Rent increases in Los Angeles County in the second quarter of 2022 was 14%.¹ Reform of the zoning ordinance to facilitate production of housing units cannot come too soon.

The findings of the multiple analyses undertaken as part of this study all conclude that minimum parking requirements significantly discourage the construction of new housing units, which leads to fewer housing units constructed and a resulting increase in the cost of housing.

Additionally, minimum parking requirements incentivize people to drive instead of using other modes of transportation, including transit, bicycling and walking, with all the associated traffic and emissions implications harms associated with that behavior.

Once again, the need for improvements to our transportation system has only been made clearer over the course of our study. Gasoline prices have increased to record levels, currently averaging over six dollars per gallon. Pedestrian deaths and other automobile related fatalities continue to increase as well. Parking represents the overlap between land uses and the transportation network. Reform for the sake of constructing new housing cannot be delayed but the need to create a more user-friendly, comprehensive transportation network cannot be ignored when reforming the parking ordinance.

As we have documented, our findings are consistent with numerous other studies of the topic nationwide, including many which have been conducted by experts in the field of parking and transportation in the Los Angeles area, including UCLA's Dr. Michael Manville and Dr. Donald Shoup.

As parking policy is situated at the intersection of transportation, land uses, and the use, management, and enforcement of the street, our study also brought to light other important considerations, that we identified as important for crafting meaningful recommendations:

- In most cases the elimination of minimum parking requirements typically does not reduce the amount of parking that is constructed for new housing because most developers seek to build parking spaces for their product (apartments) to be marketable. The benefits to housing production from lower parking

¹ Source: <https://www.ocregister.com/2022/08/05/southern-california-rents-still-surging-amid-booming-tenant-demand/>

requirements therefore comes primarily from the flexibility and predictability that a reduction in onerous requirements reduces risk for developers and spurs a greater willingness to pursue housing development.

- The public is experiencing parking congestion at the curb currently, and is therefore concerned that new multifamily housing will exacerbate on-street parking conditions, particularly if parking requirements are reduced.
- Our research and feedback from stakeholders communicated a desire for improved transportation options and dissatisfaction with the alternatives that exist to driving in much of the County currently, albeit with a few notable exceptions. The public is eager for alternatives to reliance on a car, including improved walkability and bikeability in their neighborhoods, and better transit service but also safe connections to the transit service. This could range from safer neighborhoods to better sidewalks and bike routes.
- The County in fact has numerous plans, policies, and capital improvements underway for the purpose of increasing and improving transportation options and service for residents of the unincorporated County. Yet parking and other transportation improvement efforts are spread across multiple County departments, making the coordination of solutions, including comprehensive parking and transportation ordinance challenging to implement. Therefore, the recommended amendments to the parking ordinance for multifamily housing in Title 22 may, of necessity, be limited in scope compared to a more comprehensive effort to address combined parking and transportation needs that all parties, within County government and the communities throughout the County, desire.

Summary of Study Findings Supporting Recommendations

The recommendations contained in this report were developed based on Walker's findings from the research and analyses conducted over multiple tasks and analyses performed since the inception of this study. We briefly summarize the findings by Task and subject matter below:

The Task 2.1 and 2.2 memorandum for this study explored Background Studies on Parking Requirements, and the studies of parking requirements' impacts on Development and Housing Costs. As part of this effort, Walker found abundant research and data demonstrating that minimum parking requirements present an obstacle to the construction of multifamily housing. The reduction or removal of minimum parking requirements was found to play a concomitant and important role in spurring the production of housing in jurisdictions across the country. In recent efforts related to zoning ordinance reform to produce housing units, the reduction or elimination of minimum parking requirements was found to play an outsized role in terms of its ability to spur more housing construction compared to other zoning reforms.

In the Task 2.3 memorandum, Demographic and Socioeconomic Data, we identified variations in car-ownership² between residents of multifamily and single-family housing units in Los Angeles, which demonstrated that residents of multifamily housing tended to own fewer cars than residents of single-family homes. The finding was counter to

² Throughout this document, we refer to parking demand and car ownership, to some extent interchangeably. We note that, in the case of residential parking demand, by far the greatest factor influencing parking needs is car ownership. For this reason, car ownership and parking demand are both referenced in the context of the need they generate for residential parking spaces.

the minimum parking requirement contained in Title 22 for residential uses, which requires more parking for multifamily housing (for two- and three-bedroom units) than for single family homes.

The Task 2.4 memoranda summarized the findings from the Walker team's data collection for parking demand, which we collected and quantified at over 30 multifamily properties across the County. We found that, on average, parking demand at market rate properties was 0.47 cars, 25% less than the typical parking requirement for market-rate, multifamily residential units.

As part of Task 2.4, we found that, on average, the parking requirement for Affordable housing properties was substantially lower than the actual parking demand observed and quantified. We noted that the parking requirement for Affordable housing in California is linked to the State's density bonus law, which in some instances may require jurisdictions to lower their parking requirements for Affordable housing units.

In the Task 3.3 memorandum we shared findings from interviews and surveys with housing developers and County staff to understand if and how minimum parking requirements present an obstacle to the construction of multifamily housing. A sample of the many findings from this effort included the following:

- Parking requirements increase the amount of land needed to build development projects. Small development projects can become economically infeasible if a parking deck or multi-story configuration is needed.
- A major cost impact is when requirements necessitate the construction of multiple levels of parking. The need for one additional parking space can result in the need to build an additional parking level, resulting in an increase of millions of dollars to the project budget.
- Project site constraints, especially on infill sites, have a significant impact on the extent to which projects can meet the parking requirements on-site and the cost of meeting the requirements on-site.
- Parking requirements impact affordability because they often result in the need to charge higher rents to justify costs.
- Parking requirements can lengthen the amount of time projects are reviewed in the development process. Zoning-related parking issues can result in lengthy reviews and more staff time to conduct the reviews.
- Developers rated the County's minimum parking requirements level of burden at 3.5, on a scale of 1 to 5, with 5 being the most burdensome.
- Satisfying minimum parking requirements is costly, often requiring an additional layer of financing, making a project more costly and complex to complete.
- The time, financial resources, and overall effort needed to satisfy or receive an exemption from minimum parking requirements can extend the time of the approval process materially, exacting a financial cost and adding risk to the project, sometimes to such an extent a project is unable to receive approvals. The precise nexus can be vague, but the impact is real. Obtaining project financing and navigating political opposition to projects represent real obstacles to projects. To the extent, minimum parking requirements can be lowered or removed, the construction of housing units will be facilitated.
- Developers stated that in most cases the preferences of potential tenants, their financing partners, or both, would force them to build parking for residential units, in some cases with the number being at the level of the current requirement. However, the *flexibility* in determining how much parking to build would facilitate the approval and financing process dramatically.
- Developers would welcome a landscape that offered more transportation options for their future tenants, so that less parking could be built. However, a lack of travel modes other than driving results in a market that requires reliance on car ownership and therefore parking. Several developers welcomed an in-lieu fee or parking district program that would create an environment that facilitated multimodal transportation access. However, such a program and policies do not exist.

In Tasks 4.1 through 4.4, we researched the experience of jurisdictions that had reduced or removed their parking requirements for multifamily housing and subsequently interviewed city staff members. Findings included:

- A variety of policy goals were cited as the basis for removing parking requirements. In several cases, these goals included a desire to facilitate housing construction.
- Most parking reforms were made recently enough so that studies on the impacts on housing construction were not available. However, research from San Diego and Minneapolis indicated that parking reforms had resulted in increased housing production.
- In many cases, the experience of each jurisdiction was incremental. Parking requirements were reduced or removed first near transit facilities or in dense downtown areas. By default, locations where parking requirements were removed tended to have on-street parking management policies, programs, and enforcement in place.
- Some cities, such as San Diego, required that developers put Transportation Demand Management (TDM) improvements and measures in place as part of the City's removal of minimum parking requirements. Unbundling the cost of parking spaces from rents and other policy measures were incorporated into most of the city codes that relaxed minimum parking requirements.
- Some cities undertook data collection efforts to understand and quantify residential parking ratios. Other cities were primarily policy driven, focusing on the policy goals and not the level of parking demand currently generated.

In Task 4.6, Walker performed a multi-faceted financial analysis of the impacts of parking requirements on the cost of building market rate and Affordable housing. We identified typical lot sizes for development in unincorporated areas of the County and ran a range of parking requirement scenarios to determine the financial impact of minimum parking requirements on the financial feasibility of several multifamily development scenarios.

- Lower parking ratios significantly improve the financial feasibility of market-rate development on both the smaller, transit-proximate urban infill site analyzed in Florence Firestone, and on a larger parcel in the more suburban unincorporated area of La Puente.
- Reduced parking ratios also improve feasibility by allowing more units on parking-constrained sites, which can be particularly important for achieving financial feasibility on small sites. The number of units that each site can accommodate is somewhat constrained by the number of parking spaces that will fit on the site.
- Reductions in parking requirements would significantly improve the financial feasibility of both market-rate and Affordable residential development on both sites.
 - Higher parking ratios drive up the cost of development. In our scenarios we found market-rate rents approached 20% premiums compared to no on-site parking, or 10% premiums compared to more limited parking of one space per unit.
 - Higher parking ratios result in fewer market-rate units developed with fewer than 50% developed on the Florence-Firestone site when comparing high versus low parking ratio scenarios. While the La Puente area site was modeled with similar unit counts, the medium and high parking scenarios required a second level of parking, reducing financial feasibility and the likelihood of such a project being built.
 - Reduced parking requirements improve the feasibility of Affordable housing development, requiring 5% less in financing from other sources, when comparing a project with no parking required to one with 0.5 spaces per unit.

In the Task 6 memorandum, Walker summarized the results of its outreach efforts to “core community voices,” representatives of communities throughout the County. Key feedback we obtained from our meetings was the following, which we considered and incorporated into the development of our recommendations:

- **Attention to Local Context** and the uniqueness of the various communities throughout the County and that the study must address local issues and factors.
- **Relationship with Other Studies and Efforts:** Participants emphasized the importance of active and intentional coordination with other planning efforts undertaken by the County, such as active transportation plans and community plans like the East San Gabriel Valley Area Plan, the Florence-Firestone Community Plan, and others.
- **Multimodal Network:** In keeping with comments to address and appreciate local context, participants discussed the vast differences in the multimodal network, including bicycle, pedestrian, and transit access, across unincorporated Los Angeles County. Participants also referenced feelings of insecurity related to first mile/last mile efforts to access transit.
- **Parking Management:** Participants shared their personal experience of crowded, overused on-street parking resources in their neighborhoods and concerns over lack of on-street parking availability as a limiting factor for the ordinance work.

Key feedback from our community questionnaire was the following:

- **Housing Affordability:** Housing affordability is a critical issue in all five supervisorial districts, demonstrated by several findings:
 - 60% of respondents spent more than three months searching for a home within their budget last time they’d looked.
 - Over 70% of respondents who reported making \$25,000 or less each year also reported spending at least 50% of their annual income on rent. 47% of respondents making less than \$50,000 per year reported spending at least 50% of their annual income on rent, and 18% of respondents making less than \$100,000 per year reported spending at least 50% of their annual income on rent.
 - **Parking Offerings:** 74% of respondents living in multifamily apartment buildings reported that parking is offered for free as part of their housing; however, some respondents shared that only one parking space per unit is allocated and reported using on-street parking for their other vehicles. Only 6% reported no on-site parking offering at all, and 18% reported paying a separate fee for parking.
 - **Parking Usage:** The street is an integral parking resource for many respondents—whether they live in a single-family home or a large apartment building. About one-fourth of respondents reported using the street as their primary parking option.
 - **Mode Split:** Single-occupancy vehicles ranked highest as the primary travel choice for all five Supervisorial Districts. Supervisorial Districts 4 and 5 generally showed a higher willingness to telecommute for work or school, and use travel choices like transit, walking, biking and carpooling, although this willingness did not appear to have any impact on car ownership.
- Car Ownership:** 16% of respondents reported owning one car or fewer. 37% reported owning two vehicles, and 46% reported owning more than two vehicles. Among multifamily residents, 35% reported owning one car or fewer. 44% reported owning two vehicles, and 19% reported owning more than two vehicles.

Finally, in our Task 7.0 memorandum regarding considerations around transportation demand management (TDM) and the relationship of those considerations to Title 22 parking ordinance, we looked at current TDM-related policy efforts across County government and communities to identify significant efforts undertaken and planned, albeit not always closely interconnected. We looked at the TDM policies of other jurisdictions and how those jurisdictions incorporated TDM measures in their parking policies. We particularly considered opportunities for capital or

“physical” TDM measures to incorporate into the ordinance that can be implemented and enforced by LA County Planning.

Goals of Recommendations

Section 22.112.010 (Purpose) in Title 22 explicitly states the purpose of minimum parking requirements, and this purpose statement was incorporated as part of a comprehensive update to the Parking Ordinance in Title 22 that was adopted in 1983. Recent research conducted since parking requirements for multifamily were established demonstrates that the current parking requirements in many respects do not achieve the rationale for parking requirements, and are now obsolete. The purpose, as defined in the code, shown in *italics*:

- *Establishes comprehensive parking provisions to effectively regulate the design of parking facilities and equitably establish the number of parking spaces required for various uses;*
 - The ordinance fails to establish the number of parking spaces equitably in that in some cases it requires more parking than is typically needed for many multifamily residents, effectively passing on the cost of the required parking to the tenants. Further, the ordinance impedes residents from utilizing as much or as little parking as they need by establishing a rigid number of spaces per dwelling unit and creating challenges to residents’ ability to utilize as much parking as they need.
- *Promotes vehicular and pedestrian safety and efficient land use;*
 - The parking requirements do not promote efficient land use, but rather require that a disproportionately high amount of land, financial, and capital resources be devoted to the construction of parking.
 - Whether the purpose defined in the code is intended for internal circulation of vehicles on the site of the land use or the broader transportation network is unclear. However, by over-requiring parking in a manner that is inflexible, we suggest the current parking ordinance does not promote vehicle and pedestrian safety. Instead, the ordinance generates more single occupancy vehicle (SOV) trips than would a reduced number of required parking spaces. The parking requirements also contribute to a transportation network that discourages walking. We found this both in our literature review and meetings with the public.³
- *Promotes compatibility between parking facilities and surrounding neighborhoods and to protect property values by providing such amenities as landscaping, walls, and setbacks; and*
- *Establishes parking requirements to assure that an adequate number of spaces be made available to accommodate anticipated demand in order to lessen traffic congestion and adverse impacts on surrounding properties.*
 - Research shows that building parking to accommodate anticipated parking demand, particularly when not empirically determined, is more likely to generate additional traffic rather than lessen traffic. On a County-wide or network wide level, this creates a self-perpetuating cycle of reliance on the automobile.

³ Note the Shoup articles and research and from our outreach.

Our recommendations are intended to remedy this portion of Title 22 Parking Ordinance to align with the policy goals of Los Angeles County.

To understand the basis of the recommendations set forth, we identify the following goals to craft the recommendations:

- Facilitate more housing production through changes to Title 22 Parking Ordinance, in an effort to increase the supply of units to meet the County's RHNA requirement that approximately 90,000 housing units be constructed by 2029, to address issues of housing affordability and availability.
- Flexibility in the parking requirement and approval process.
- Provide the public with modes of transportation other than SOV driving to:
 - Reduce parking demand:
 - To reduce parking spillover on to streets near multifamily housing; and
 - To lower the need to construct costly parking spaces that inhibit housing production;
 - Encourage more environmentally friendly means of mobility for County residents; and
 - Increase the availability of modes of travel for County residents that are less expensive than car ownership.
- Ease of understanding and implementation of Title 22 Parking Ordinance. The code requirements should not be complex for developers to understand and County planning staff to administer.
- Incorporate elements into Title 22 Parking Ordinance that facilitate improvements, flexibility and growth with changes that occur to the County's transportation network over time, because the network is growing and policies are improving, which could facilitate the creation of more housing.

With these goals in mind, we make the following recommendations for incorporation into Title 22 Parking Ordinance for multifamily housing.

Strategy Analysis and Recommendations

Walker's analysis has demonstrated that fewer required parking spaces will lead to the construction of more housing units, even if developers ultimately choose to construct more parking spaces than is required. At the same time, we have heard from the community about a desire and need for measures to make life easier without the need for LA County residents to own a car. This section of the report summarizes the strategies that Walker recommends to achieve the County's goals, which are described in the Introduction. Table 1, on the following page summarizes the strategies that Walker evaluated, and Walker's recommendations which fall into three categories:

- **Short-term recommendations:** measures that Walker recommends can and should be implemented in Title 22. These measures reflect physical (such as locational) aspects of the development being planned, which also include capital investments in the project that can be demonstrated on plans submitted to the County for the project.
- **Long-term recommendations:** measures that Walker recommends long-term that are either programmatic in nature and therefore require staff oversight and/or fall beyond the purview of Title 22 and LA County Planning to implement. These recommendations may also be characterized as operational in nature, in that they reflect ongoing activities rather than capital investments or physical aspects of the project. We recommend these measures to address the intent and goals of this study but recognize they cannot practically be included in Title 22 Parking Ordinance at this time.
- **Not recommended at this time:** recommendations that Walker evaluated, but do not believe are appropriate for LA County given existing conditions.

Table 1: Strategy Recommendations for LA County

	Short-Term Recommendation	Long-Term Recommendation	Not Recommended at this Time	Strategy
Strategies to reduce the number of required parking spaces per Title 22	X			1a. Eliminate the minimum parking requirements for Apartments with fewer than 10 units
	X			1b. Reduce the number of parking spaces required per dwelling unit in Title 22
				1c. Reduce parking requirements when sharing parking within mixed-use developments
	X			1d. Reduce parking requirements when sharing parking across properties
	X			1e. Reduce parking requirements when providing physical on-site TDM measures
		X		1f. Eliminate the number of parking spaces required per dwelling unit in Title 22
		X		1g. Reduce parking requirements when providing physical TDM measures off-site, and programmatic TDM measures
		X		1h. Implement a fee in-lieu of providing the minimum required parking spaces that can be used for transportation improvements
		X		1i. Establish TDM monitoring and reporting requirements
Other strategies to effectively increase the parking supply operationally, reduce parking demand, and manage parking spillover on the street	X			2a. Remove the requirement for covered parking spaces in Title 22
	X			2b. Eliminate any requirement that residential and commercial parking must be provided separately
	X			2c. Adjust the parking design standards in Title 22
		X		2d. Implement on-street parking management policies
		X		2e. Unbundle the cost of parking from the cost of the housing unit
			X	2f. Implement requirements for a maximum number of parking spaces allowed per dwelling unit.

Source: Walker Consultants, 2022.

1. Strategies to reduce the number of required parking spaces per Title 22

Walker recommends strategies to reduce the number of required parking spaces (per Title 22) based on our analysis, summarized as follows:

- From the responses to the Community Questionnaire, we found that housing affordability is a critical issue in all five Supervisorial Districts. As we found in our literature review, minimum parking requirements increase the cost of housing, roughly concomitant with the amount of parking required.
- In Walker's data collection effort, in which we surveyed 37 multifamily properties across unincorporated Los Angeles County, we found that Title 22 requires 0.47 more parking spaces per unit than observed parking demand (including those parked on-street that were assumed to live at the residential development). Based on this finding, Title 22 typically requires more parking per unit than is being used or needed.
- The Urban Land Institute's (ULI) empirically supported research for establishing parking ratios by land use predates the current movement to revise parking requirements taking place across the country. ULI's Shared Parking publication and model consists of parking ratios per residential unit established through parking data collection at hundreds of locations throughout suburban, auto-centric locations across the country. We emphasize that the ULI data was collected, and intended to be applied, in auto-centric, suburban locations. Yet, regarding parking demand for multifamily developments, the ULI parking ratios are generally lower than the parking standards required in Title 22.
- Walker reviewed numerous sources and studies that demonstrated minimum parking requirements have a substantial and negative impact on housing affordability and construction, which ultimately impacts housing affordability and availability.
- In Walker's financial feasibility analysis, we determined that lower parking ratios significantly improve the financial feasibility of market-rate developments in the sites that we evaluated. We also saw that reduced parking ratios improve the feasibility of building multifamily housing by allowing more units on parking-constrained sites, which can be particularly important for achieving financial feasibility on small sites. Further, we saw that reduced parking ratios may enable the construction of market-rate units at lower rents than would be possible with higher parking ratios. This finding was affirmed by our conversations with developers, where we found that minimum parking requirements can have a significant impact on project budgets, which again can affect the number of residential units constructed and even the decision whether or not to build a multifamily building.
- In our review of parking policies of cities around the country, many have reduced or eliminated minimum parking requirements for multifamily development to promote housing development and reduce transportation related greenhouse gas emissions.

This section includes an overview of each strategy that would reduce the number of parking spaces per Title 22 and Walker's recommendation for each strategy.

1a. Eliminate the parking requirement for Apartments with 10 or fewer units

Short-Term Recommendation

“Missing Middle” housing types provide diverse housing options, with smaller unit sizes, such as duplexes, fourplexes, cottage courts, and multiplexes. These smaller scale developments can be better scaled with existing residential neighborhoods. They are often more affordable than larger scale developments as they have fewer luxury amenities such as swimming pools, lobbies, and structured parking.

Through Walker’s economic analysis (Task 4.6), we saw many vacant parcels in the County are smaller in size, making providing parking difficult to provide financially. Many of these smaller developments may not be able to provide transportation demand management amenities to qualify for a reduction in parking described in Strategy 1e on page 33. Further, given the small unit count, parking spillover onto residential streets is likely not to be as significant of an issue with developments with a greater number of units. Because of these reasons, Walker recommends that the minimum parking requirement is eliminated for Apartments with fewer than 10 units.

1b. Reduce the number of parking spaces required per dwelling unit in Title 22

Short-Term Recommendation

Walker recommends that the minimum number of parking spaces for Apartments as defined in Title 22 be reduced by 25 percent. Table 2 on the following page summarizes Walker’s recommendations for minimum parking requirement reductions for Apartments. In mixed-use developments, this recommendation would only apply to the residential portion of the development. Commercial developments would still be required to provide parking as currently required in Title 22.

Table 2: Los Angeles County Minimum Parking Requirement Recommendations - Apartments

Land Use Type	Current Parking Requirement ¹	Proposed Parking Requirement
Apartments		
Bachelor	1 space/unit	0.75 space/unit
Efficiency and 1-bedroom	1.5 spaces/unit	1.125 spaces/unit
2+ bedrooms	2 spaces/unit	1.5 spaces/unit
Guest Parking for Apartment Houses with 10+ units	0.25 space/unit	0 space/unit

¹ Requirement per Title 22 Sec. 22.112.070

Source: Walker Consultants, 2022.

Walker also evaluated the parking demand at Affordable housing developments, including Affordable senior housing developments and mixed market-rate and Affordable housing developments. Affordable housing developments qualify for lower parking requirements per the Density Bonus Ordinance (Section 22.120.080) in Title 22. In comparing the current parking requirements (per Title 22) for Affordable housing developments to the ratios that we collected at the survey sites, we found the parking requirements are lower than actual parking demand. However, for both senior Affordable and mixed market-rate and Affordable housing developments, we found that the parking requirements are almost identical to observed parking demand. Therefore, Walker does not recommended changes to the Density Bonus Ordinance required parking ratios.

1c. Reduce parking requirements when sharing parking in mixed-use developments

Short-Term Recommendation

Shared parking allows for the sharing of parking spaces among uses in a mixed-use environment, in-lieu of providing the minimum number of required parking spaces for each individual use. In this way, it typically increases overall parking capacity; fewer parking spaces need to be built to accommodate the same number of cars. Each land use is able to fully satisfy its need for parking, but because they needs occur at different times fewer overall parking spaces are provided, resulting in lower costs to build parking and a more human scale design. For this reason, shared parking commonly results in a reduction of required parking spaces. This reduction, which is sometimes significant, depends on the quantity and mix of uses. Shared parking reduction can be most significant when uses have differing periods of peak parking demand. For example, a residential use is typically busiest overnight when residents are home and a retail use is busiest during the day during store hours. For mixed-use developments, allowing

developers to reduce their parking requirement due to their proposed mix of uses provides the developer with flexibility and reduces overbuilding of parking spaces.

Walker recommends adding a provision to Title 22 that allows for a parking reduction due to shared parking for mixed-use multifamily residential and commercial developments. Parking facilities should be able to be shared if multiple uses cooperatively establish and operate parking facilities and if these uses generate parking demand primarily during hours when the remaining uses are not in operation. The applicant should be required to prepare a parking study demonstrating the number of parking spaces recommended for the development based on the proposed mix of land uses, which takes into account the efficiencies from sharing parking spaces among uses.

1d. Reduce parking requirements when sharing parking across properties

Short-Term Recommendation

Sharing parking between properties can increase overall parking capacity for the same reason that sharing parking increases effective parking capacity on-site. For example, a retail parking lot may be underutilized overnight, while residential parking demand is high. The residential property owner and the retail property owner could establish a shared parking agreement such that residents can park in the commercial parking facility during certain hours of the day (likely overnight). Allowing properties to enter into shared parking agreements can improve the overall efficiency of the parking system. Further, allowing a portion of the parking requirement for a multifamily development to be met off-site can promote shared parking between land uses.

Title 22 already has provisions for allowing for off-site shared parking in certain specific plans and districts in unincorporated LA County. However, these shared parking provisions are primarily for commercial uses, not multifamily uses. It is typical for commercial land uses to have parking availability during periods of peak residential parking demand (late evenings) and at times during the day. Walker recommends that Title 22 include a provision that allows, if not facilitates, off-site shared parking between multifamily residential uses and commercial uses. Walker recommends establishing the following parameters for off-site shared parking:

- The off-site shared parking facility must be located within 1,320 feet (0.25 mile) from the multifamily property.
- The off-site shared parking facility should be clearly marked through signage demonstrating that parking for the multifamily use is permitted at certain times of day.
- The applicant must demonstrate, through a lease agreement or other arrangement, that both parties have agreed to the shared parking arrangement.

1e. Reduce parking requirements when designated physical on-site TDM measures are provided

Short-Term Recommendation

Some cities allow developers to earn a reduction in parking requirements with the provision of certain transportation demand management (TDM) measures. Because TDM reduces reliance of single occupancy vehicle (SOV) travel and promotes the use of travel other than SOVs, the overall need to own and park a car is reduced, which justifies a reduced parking requirement.

TDM measures typically fall into three categories, including:

- *On-site physical measures* – These are physical measures that the applicant would construct on-site on private property. Examples of on-site physical measures, often characterized as capital investments, include bicycle parking and car share parking spaces. The on-site physical elements discussed in this memo deliberately focus on elements that could be shown on site plans submitted as part of an approval, such as a building permit.
- *Off-site physical measures, or capital investments* – These are measures that the applicant would construct off-site, often in the public right-of-way. Examples of off-site physical measures include public sidewalk widening or provision of street furniture in the public right-of-way.
- *Programmatic measures, which can be characterized as operational measures* - These are programmatic measures designed to promote alternative modes of transportation, which are provided on an ongoing basis. Examples of programmatic measures include provision of transit passes or running a shuttle service to key destinations.

Because the purpose of the LA County parking study is to provide recommendations for changes to Title 22, off-site physical measures and programmatic measures are included later in this chapter as long-term recommendations that should be considered as part of a complete program, but fall outside of the purview of Title 22.

Over the course of outreach and communications efforts conducted for this engagement, Walker has heard from stakeholders both a desire for access to modes of transportation other than their personal vehicles and that this lack of access is an obstacle to reducing reliance on SOVs and the associated reduction in parking requirements.

Walker also heard from County staff and interested stakeholders about myriad efforts the County has undertaken to approve this effort; LA County has already made significant strides to establish a policy framework to support modes of transportation other than SOVs. Part of our goal for this recommendation is to ensure that the LA County Residential Parking Study acknowledges both the feedback provided and the efforts to enhance multimodal transportation that is currently being undertaken or planned.

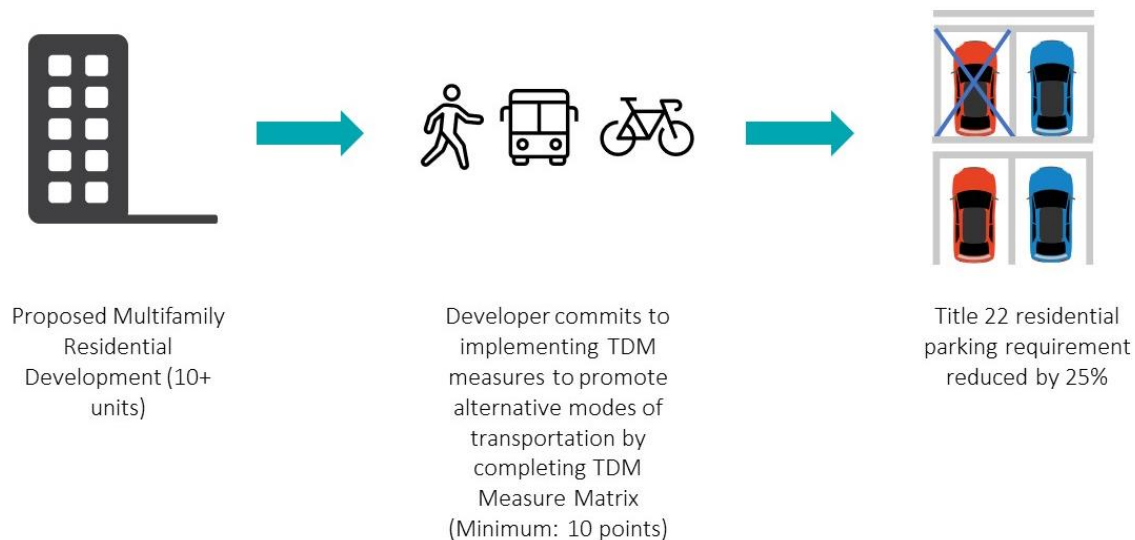
Walker recommends that for LA County, a further reduction in parking requirements (in addition to the reductions recommended in Strategy 1b) be permitted if the applicant implements TDM measures. This would establish a direct nexus between the provision of TDM measures and reduction in the minimum required parking spaces. One of the major concerns that emerged from the Core Community Voices outreach process was that reduced or eliminated parking requirements will result in more cars parked on the street in already parking-impacted neighborhoods. Community leaders also expressed a shared concern that there is a lack of viable driving

alternatives in LA County. Tying a further reduction in parking requirements directly to strategies to reduce reliance on SOVs will help reduce the need for parking and to address these concerns.

One of the major findings from the outreach that Walker conducted with developers and County staff was that an unpredictable discretionary approval process can inhibit the production of multifamily development. Therefore, Walker’s recommended TDM approach is designed to be predictable, straight forward, easy to implement by LA County staff, and also flexible.

Walker recommends that if applicants are planning to construct 10 or more new dwelling units and satisfy the identified TDM requirements (by completing the TDM Matrix discussed later in this section and earning a minimum of 10 points), they will qualify for additional reduced residential parking requirement (25% reduction). If the development is a mix of residential and commercial uses, the reduction in the parking requirement would only apply to the residential portion of the development. Figure 1 illustrates the recommended TDM approach.

Figure 1: Illustrative Graphic of Recommended TDM Approach



Source: Walker Consultants, 2022.

Allowing flexibility is key to facilitating the production of housing units. Since every development and project is different, Walker recommends offering a menu of TDM measures (listed in Table 3 starting on the following page) that applicants can choose from. TDM measures are typically most successful when multiple complementary measures are implemented in tandem, in order to “move the needle” toward lower reliance on SOVs. Therefore, Walker recommends that multiple measures (a minimum of 10 points) be required to earn the parking requirement reduction. Table 3 summarizes the recommended TDM measures for LA County. The recommended measures were selected from a combination of the case study research Walker conducted and industry best-practices, combined with an understanding of the constraints and opportunities of transportation access within LA County. Each TDM measure has a point value. The owners of a multifamily property must ensure that a list of the TDM measures being offered is posted in a common area, that can be easily seen by residents. As occurs in many other cities, residents then provide a measure of oversight and compliance of the measures.

One of the findings from the discussions with developers and LA County staff is that the location of the project has a significant impact on how likely residents are to use modes of transportation other than SOVs. Therefore, points are awarded for proximity to transit, commercial establishments, and bike facilities.

Table 3: Recommended TDM Measures (TDM Measure Matrix) for LA County

TDM Measure	Metric	Points Value	Rationale	Method of Demonstration
Development Location				
Proximity to Transit	Any portion of the development is within one mile of a major transit stop, as defined by Section 21064.3 of the California Public Resources Code, and there is unobstructed access to the major transit stop from the development. “Unobstructed access to the major transit stop” means a resident is able to access the major transit stop without encountering natural or constructed impediments, including but not limited to, freeways, rivers, mountains, and bodies of water, but not including residential structures, shopping centers, parking lots, or rails used for transit.	3	Reliable high-frequency transit service in walking distance from residential uses promotes transit usage in lieu of SOVs.	Confirm the site is located in the required location as defined.
Proximity to Commercial Uses	Less than 0.5 miles from: <ol style="list-style-type: none"> 1. A commercial or retail development consisting of three or more retail or service uses, or 2. Three separate retail/restaurant/service/public park/school/fitness center uses. 	1	Commercial uses in walking distance from residential uses promotes traveling via walking and biking	List the shopping center or retail/restaurant/service/recreational uses address(es) and distance from the project site in the project application.

TDM Measure	Metric	Points Value	Rationale	Method of Demonstration
	Less than 0.5 miles from a supermarket or general merchandise retailer of at least 8,000 square feet that sells fresh food.	2	versus traveling in a SOV.	
Proximity to Bicycle Facilities	Less than 0.5 miles from existing or proposed bicycle path, lane, route, or boulevard designated in the County of Los Angeles Bicycle Master Plan.	2	Proximity to bicycle facilities facilitates resident use of bicycling as opposed to driving.	Confirm the site is located in the required location as defined.
Development Design				
Provision of Affordable Housing Units	Provide a minimum 20% of the total units as affordable housing set-aside as defined in Section 22.14.010	2	Income has a significant effect on probability that a resident or commuter will use a commute mode other than SOV.	Demonstrate the Affordable units provided in the project application.
Unreserved Resident and Guest Parking	Set aside at least 50% of parking spaces as unreserved. Unreserved parking spaces are defined as those not for the sole use of individual residents but can be available to residents of more than one residential unit.	3	Assigning all parking spaces to specific units can reduce parking efficiency dramatically, resulting in the need to construct more parking spaces. Conversely, not assigning parking spaces allows for fewer parking	Display the unreserved parking spaces on the site plans.
	Set aside at least 25% of parking spaces as unreserved.	1		

TDM Measure	Metric	Points Value	Rationale	Method of Demonstration
			spaces to be constructed and for less parking spillover on the street.	
Pedestrian Entrance	Orient the building such that the main building entrance faces the street/sidewalk and is at or within four feet of ground-level.	2	Orienting the building toward the street promotes a more walkable environment.	Show the pedestrian entrance on the site plans.
Location of Parking	Locate the parking spaces such that they are away from the street or highway with the greatest right-of-way width, such as behind the building or underneath the building, or are obscured by landscaping.	1	Orienting parking behind or underneath the building, away from the public right-of-way prioritizes pedestrian access first and automobile access second.	Show the location of the parking in relation to the right-of-way on the site plans.
Pedestrian-Scale Lighting	Install and maintain ground-mounted ornamental light fixtures of no more than three feet in height for pedestrian paths and entrances to the property. Ensure that pedestrian walkways are illuminated. Lighting affixed to the building exterior should illuminate the sidewalk along the main building façade oriented toward the street or highway with the greatest width, with an average of one foot candle along	3	Low-level lighting helps to provide security for pedestrians to navigate in and around the development.	Show the lighting on the site plans.

TDM Measure	Metric	Points Value	Rationale	Method of Demonstration
	the sidewalk for the length of the property along said street.			
Pedestrian-Scale Amenities	Install and maintain pedestrian scale amenities on or adjacent the property consisting of no less than 3 benches of at least five feet in length and no less than 3 structures for the purpose of providing shade to pedestrians or seated individuals of no less than 8 feet in diameter or 64 square feet per structure.	2	Providing benches and shade structures promotes a walkable, more pedestrian-friendly environment.	Show the pedestrian-scale amenities on the site plans.
Transparent Windows and Doors on the Ground Level	Provide transparent windows and doors on at least 50 percent of the building's ground floor facade oriented towards the street or highway with the greatest right-of-way width shall be composed of entrances.	1	Clear glass maintains a visual connection between the interior and exterior and maximizes the visual connection to the street.	Show the transparent windows and doors on the site plans.
Public Art	Install and maintain a static public art piece, such as a mural or sculpture that is visible to the public.	1	Public art enhances the pedestrian-scale experience.	Show the public art on the site plans.
Preferred Land Uses				
Healthy Food Retail	Construct and maintain a commercial space (minimum of 1,000 square feet) that can be readily occupied and is reserved for a healthy food facility within the	5	Provision of on-site healthy food allows on-site residents to access healthy food without the	Show the designated commercial space for healthy food retail on the site plans.

TDM Measure	Metric	Points Value	Rationale	Method of Demonstration
	development. A healthy food facility includes a facility that provides for daily needs and can include fresh fruits, vegetables, whole grains, and dairy products, as is identified as a bodega, in some communities, to remain open for at least eight hours per day, six days per week. The additional commercial square footage shall be exempt from any requirement for parking, as it will be considered an auxiliary use of the residential property.		need to drive via an SOV. The healthy food establishment would also benefit the surrounding community.	
On-Site Childcare Provider	Construct and maintain a commercial space that can be readily occupied, and is reserved for, a licensed childcare center within the development. Preference should be made for the children of building residents. The additional square footage will be exempt from any requirement for parking, as it will be considered an auxiliary use of the residential property.	5	Providing on-site childcare reduces the need for residents to drive for childcare needs.	Show the designated childcare facility location on the site plans.
Fitness Center (resident-only)	Construct and maintain an indoor or outdoor fitness center at the property. The fitness center shall be available to residents at least 12 hours/day and 7 days/week and provide a minimum of 4 workout stations. The additional square footage will be exempt from any requirement for parking,	2	Providing an on-site fitness center reduces the need for residents to drive to a gym or fitness center.	Show the fitness center location on the site plans.

TDM Measure	Metric	Points Value	Rationale	Method of Demonstration
	as it will be considered an auxiliary use of the residential property.			
Fitness Center (public)	Construct and maintain an indoor or outdoor fitness center at the property. The fitness center shall be available to the public at least 12 hours/day and 7 days/week and provide a minimum of 4 workout stations.	3	Providing an on-site fitness center open to the public provides a fitness opportunity for neighborhood residents, reducing the need to drive to a gym or fitness center.	Show the fitness center location on the site plans.
Public Art and Cultural Spaces	Construct and maintain an indoor or outdoor space dedicated to public art and culture, such as, but not limited to, gallery, museum, theater studio, and community workshop spaces. Hard art such as a sculpture or mural is not eligible.	3	Public art enhances the pedestrian-scale experience.	Show the public art on the site plans.
Car Share				
Car share parking	Designate spaces for car share parking according to the number of residential units and offer the spaces to a car share company at no cost. A car share is defined as a service provided through which licensed drivers may rent a vehicle for personal transportation and return the vehicle to the same location at the end of	2	Designating some spaces for carsharing vehicle parking supports a car-free or car-lite lifestyle for residents of the development. It can reduce vehicle ownership if provided	Show the car share parking spaces on the building plans. Car share spaces must be offered to a car share company at no cost.

TDM Measure	Metric	Points Value	Rationale	Method of Demonstration
	<p>the trip. Car share space requirements shall be as follows:</p> <p>5-100 units – 1 car share space</p> <p>101-300 units – 2 car share spaces</p> <p>Each additional 200 units – 1 additional car share space</p> <p>A parking permit is not required to attain TDM points for providing car share parking.</p>		with abundant and reliable car sharing service.	
Bicycle Amenities				
Provision of electric bicycle docking and charging stations	Provide and maintain an LA Metro or other shared electric bicycle docking and charging station on-site with a minimum of 5 publicly available electric bicycles.	2	Providing a fleet of shared electric bicycles provides residents with the opportunity to use a bicycle without the need to own a bicycle.	Show the electric bicycle docking station on the site plans.
	Provide electrical charging outlets within the parking facility or common area for at least ten percent of the required long-term bicycle parking spaces.	2		Show the electrical charging outlets on the site plans.
Provision of required bicycle parking spaces	Provide the required bicycle parking spaces (per Title 22):	1	Secured bike parking facilities allow employees to commute on bicycles with peace of	Show the bicycle parking spaces on the site plans.

TDM Measure	Metric	Points Value	Rationale	Method of Demonstration
	<p>Short-term bicycle parking – 1 spaces/10 units (minimum 2 spaces)</p> <p>Long-term bicycle parking – 1 spaces/2 units</p>		mind that the bicycles will be safe and available at the start and end of the workday.	
Provision of bicycle parking spaces beyond the requirements	Provide at least 25 percent more bicycle parking spaces (long-term or short-term) than the minimum required (per Title 22).	1	Secured bike parking facilities allow employees to commute on bicycles with peace of mind that the bicycles will be safe and available at the start end of the workday.	Show the bicycle parking spaces on the site building plans.
Provision of an on-site bicycle repair station	Provide and maintain in working order a bicycle repair station that includes tools and supplies designed to maintain bicycles, at a minimum those necessary for fixing a flat tire, adjusting a chain, and performing other basic bicycle maintenance.	1	Bicycles often need minor repair and maintenance. One way of easing the use of bicycles is to provide a repair station or space to work on bikes and the tools necessary to do the work. Providing access to a room or facility would provide would-be cyclists with confidence to ride their bicycles and	Show the bicycle repair station on the site plans

TDM Measure	Metric	Points Value	Rationale	Method of Demonstration
			be sure they can resolve any mechanical problems that may arise.	
Transportation Information Provision				
Display TDM measures provided in common area	Post a list of the available TDM elements in an accessible and common area where it can easily be seen by residents.	Required for all projects that earn the minimum number of points to qualify for the parking reduction	For TDM measures to be effective, it is critical that residents know of all of their TDM options.	Show the location of the TDM measure list on the site plans.
Transportation information center or screen	Install and maintain an on-site kiosk or information center with multi-modal wayfinding information and transit information on a display with dimensions no smaller than 18 inches by 24 inches. The kiosk or information center shall be located in a prominent location that will easily be seen by residents entering or exiting the development.	1	Providing users with information about all mobility options that are available near the development helps make residents aware of their transportation options and how to access/use those options.	Show the transportation information center or screen on the site plans

TDM Measure	Metric	Points Value	Rationale	Method of Demonstration
Real-time transportation information displays	Maintain a real-time information display (e.g., large television screens or computer monitors) in a prominent location that will easily be seen by residents entering or exiting the development. The displays should include real-time information which may include, but is not limited to: transit arrivals and departures for nearby transit routes, walking times to transit stations/bus stops, and the availability of car share vehicles, shared bicycles, electric bicycles, and shared scooters or comparable modes, as determined by Planning staff.	2	A “Transit Screen” that aggregates information in real time for all modes including rail, bus, and shuttle, as well as ride-hailing, car sharing, bike and scooter sharing services. Providing real-time data helps provide up-to-date information for residents so they can feel confident using an alternative mode.	Show the real-time transportation information displays on the site plans
Storage and Delivery				
Child Transportation and Sports Equipment Storage	<p>Provide and maintain in working order on-site lockers or another secure storage facility for personal car seats, strollers, child bicycle seats, and sports equipment according to the following:</p> <ol style="list-style-type: none"> One secure storage location per every twenty dwelling units, with a minimum of two secure storage spaces. The secure storage spaces shall each have useable interior space that is at 	2	Providing a storage area for child transportation equipment helps families utilize alternative transportation services such as ride hailing services and car share services.	Show the child transportation storages areas on the site plans

TDM Measure	Metric	Points Value	Rationale	Method of Demonstration
	least 35 inches high, 25 inches wide and 30 inches deep.			
Delivery Support	Provide a secure area for receipt of deliveries that offers at least one (1) of the following: <ol style="list-style-type: none"> 1) Closed lockers 2) Temporary storage for packages, laundry, and other deliveries 3) Temporary refrigeration for groceries 	2	Encouraging use of delivery services reduces reliance on SOVs to run errands.	Show the secure delivery receipt area on the site plans.

In Strategy 1b, Walker recommended a reduction in parking requirements for Apartments. The proposed 25 percent TDM reduction would be in addition to the reductions recommended in Strategy 1b.

For multifamily projects that already qualify for reduced parking requirements per Title 22, the 25 percent reduction would be in addition to the permitted reduction. Examples of existing reductions permitted per Title 22 include:

- Density bonus projects that qualify for parking reductions per Title 22 Sec. 22.120.080.
- Reductions allowed for in TOD Specific Plans.
- Reductions allowed for in the MXD zone.

Table 4 includes the recommendations for a TDM process for multifamily housing development projects for LA County, as described above.

Table 4: Recommended LA County TDM Process

Step Number	Step	Responsible Party
1	Applicant determines whether they are eligible for the reduced parking requirements.	Applicant
2	Applicants completes the TDM Measure Matrix and demonstrates a minimum of 10 points.	Applicant
3	Applicants submit the required method of demonstration for each TDM measure as specified in the TDM Measure Matrix with the project application.	Applicant
4	Planning staff reviews the TDM Measure Matrix and verifies that the applicant has provided the necessary method of demonstration for each measure with the project application.	Los Angeles County Department of Regional Planning
5	If the development project is approved, all TDM measures identified in the TDM Measure Matrix are included as Conditions of Approval for Conditional Use Permits or discretionary housing permits or Statements of Approval for ministerial site plans.	Los Angeles County Department of Regional Planning
6	Upon project approval, the applicant constructs all TDM measures to which they have committed and maintains a list of TDM measures offered at the building in a common area that residents can easily see.	Applicant

Source: Walker Consultants, 2022.

1f. Eliminate the number of required spaces per dwelling unit in Title 22

Long-Term Recommendation

As noted in our literature review, voluminous research demonstrating the benefits of eliminating minimum parking requirements, including the facilitation of multifamily housing production, has led to an increasing number of cities eliminating parking requirements for multifamily housing and other land uses. That trend continues, with cities continuing to eliminate parking requirements over the course of our study.

With some exceptions, cities that have eliminated parking requirements have typically done so gradually over time, often starting with dense downtown areas or other locations near high-quality transit. These cities also typically have higher density of development, more transit and mobility options (including robust pedestrian and in some cases bicycle networks), and more on-street parking management (permit districts, time limited, or paid parking) than much of unincorporated LA County.

The community (residents, county staff, even many developers) has expressed the need for more viable alternative transportation options that could replace the need to drive and ultimately car ownership altogether. In most cases, these alternatives would not replace someone's reliance on their own car altogether (although it could), but in many cases would encourage a resident to forego a second or third vehicle. Reductions in parking demand have wide ranging policy benefits but typically occur at the margin.

The lack of access to viable transportation other than owning one's own automobile creates an obstacle to reducing reliance on SOVs. While this need not preclude the elimination of parking requirements (our study has found that developers tend to build parking based on what they think tenants will demand, not only the requirement), it may make justification to the public for eliminating parking requirements more challenging.

Relatedly, Walker believes that two other considerations should be recognized, which is the reason we have incorporated TDM components into the ordinance:

- The County has a number of efforts and initiatives underway to provide transportation alternatives to residents of unincorporated LA County, ranging from an expanding transit network (for instance the West Santa Ana Line), the creation of transit-oriented districts, an updated bicycle plan, and an upcoming County-wide TDM plan, to assist in remedying the lack of transportation options we have noted. We suggest it would behoove the County to include supportive transportation measures within the parking ordinance for Title 22, to the extent reasonable, rather than simply eliminating parking requirements.
- Required parking represents an important and costly capital investment (terminal capacity for automobiles) through which the private sector contributes to the public roadway network. The reduction in that requirement, for those developers who take advantage of it, represents a tangible "windfall." While we hope some of that windfall gets captured in the production of more housing units, we believe it is reasonable that developers be asked to support other components of the transportation system that further the County's broader transportation and housing goals. The TDM recommendations are intended to capture a portion of this windfall for the identified purpose.

Beyond the ordinance, there are other considerations as well. Parking requirements are related to parking demand on the street. When eliminating parking requirements, on-street parking management, an effort that is less robust

in unincorporated parts of the County than in many cities and districts that have eliminated parking requirements, becomes more critical. Our understanding is that the County is making efforts to perform more robust on-street parking management efforts. The housing crisis is sufficiently severe that reducing parking requirements cannot wait for a fully formed, district-by-district, or county-wide parking management program to be implemented. Yet, arguably a full elimination of parking requirements cannot occur until that parking management program is in place.

Finally, TDM implementation requires an active effort and feedback to occur based on the policies implemented. Walker recommends that LA County monitor the impact of the proposed reductions recommended in this report and consider eliminating parking requirements for multifamily housing near transit in the future. The County should embark on an effort to monitor TDM efforts at the same time it puts in place formal incentives for programmatic TDM elements.

To reiterate, the elimination of parking requirements is good policy, as it would result in the production of more housing and, in the long run, support the County's goals with regard to transportation, lower emissions, and equity. The County should move toward, and eventually eliminate parking requirements. Our recommendation to both reduce parking requirements and use TDM measures to reach parking requirements significantly lower than the current requirements, particularly in locations near transit and walkable locations, is intended to provide a nuanced and pragmatic approach to lowering, and eventually eliminating, parking requirements that is sensitive to the context and diverse transportation needs of the County.

1g. Reduce parking requirements when providing physical off-site and programmatic TDM measures

Long-Term Recommendation

In addition to physical on-site TDM measures, there are also physical off-site measures and programmatic TDM measures that can be very beneficial in facilitating the use of alternative modes of transportation (other than a SOV), to the point that they enable some residents to be able to give up the ownership of a vehicle and need for the parking space.

Examples of programmatic TDM measures that could be applied to multifamily development include:

- Provide residents with transit passes or transit pass subsidies.
- Provide an on-site bicycle or electric bicycle fleet for resident use.
- Implement a car share program by partnering with a car share provider or managing a car share program.
- Require that the developer provide an on-site TDM Coordinator (can be a property manager) to provide multi-modal and wayfinding information, carpool matching, and walking/bicycle group coordination. The TDM Coordinator may also interface with the County on TDM program monitoring and reporting.
- Unbundle the cost of parking from the cost of the residential unit, a program to be run by and as part of the building's property management.
- Provide residents with an orientation package with information about non-SOV transportation options.

Improving the bicycle and pedestrian infrastructure surrounding the multifamily development is helpful to connect residents with surrounding land uses without reliance on a car. Some key off-site TDM measures that apply to multifamily properties include:

- Improve sidewalks around the property, including widening to allow for ADA-required widths and curb cuts.
- Install transit shelters, benches, and other street furniture.
- Introduce traffic calming measures on the streets.
- Implement safe pedestrian crossings around the development.
- Bicycle, pedestrian and/or transit access improvements.

The majority of cities that Walker surveyed have both physical on-site TDM measures and also programmatic measures as part of their TDM ordinances. Many cities also have off-site physical TDM measures as part of their menu of TDM options. Walker recommends that in the long-term, as LA County's TDM Plan gets further established, LA County include both physical off-site TDM measure as well as programmatic TDM measures in the options of the TDM Measure Matrix. Including these measures will provide developers more options to reach the required 10 points and provide tenants with alternatives to car ownership and the associated parking. LA County should also consider increasing the percentage of parking reduction as a result of implementing TDM measures if developers implement additional measures with a combination of physical and programmatic TDM measures.

1h. Implement a fee in-lieu of providing the minimum required parking spaces

Long-Term Recommendation



Allowing developers to pay a fee in-lieu of providing a portion or all of the minimum number of required parking spaces can provide benefits to developers similar to a reduction in parking requirements. The benefits to tenants, the public, and County government depends on the uses to which fees are directed, and the amount at which fees are set.

Developers gain flexibility in meeting minimum parking requirements and can save money on building expensive structured or surface parking spaces. The space and resources saved on-site that would otherwise have been allocated to parking can be used for more people-centric uses, including more housing units. By giving developers options other than physical parking space to satisfy minimum parking requirements, the County can ensure that parking is provided in the most efficient way possible. In-lieu fees can also facilitate the development of constrained sites, such as those near transit stops, that may otherwise not be developed due to the need to provide the required parking.

The other side of the in-lieu fee equation is to what uses the fees are allocated. Those uses and the amount of the fee are a policy decision. In-lieu fee revenue has historically been used to fund the construction of parking spaces in a commercial district that can be shared between multiple uses. But depending on policies and interpretations, in-lieu fee revenue can also be used to fund access equivalent to what parking spaces provide. This access can include infrastructure improvements or operational programs that improve access for drivers, but also cyclists, transit riders, and pedestrians. Examples of improvements that can be funded by in-lieu fee revenue that promotes greater access and more walkable areas include:

- Bicycle and scooter parking, a bike or scooter share program, or bicycle valet program.
- Pedestrian-related improvements, including lighting and street amenities, that increase safety.
- Transit-related improvements, such as transit passes for residents or employees, as well as expanded service or new bus shelters.

- Creation of a “shared mobility hub” or central location in neighborhoods and areas of high parking demand that provide a single access point to a range of transportation options and services.
- A transportation demand management (TDM) program for employees in a community or district to provide amenities that encourage people to walk, bike, ride transit, or carshare instead of drive.
- Wayfinding systems to help facilitate the use of existing parking resources, rather than building more spaces.
- A shared parking program, where cities lease existing parking spaces from commercial and other private parking owners and incorporate the spaces into the public parking supply.
- Payment into an established neighborhood fund or parking benefit district that manages on-street parking through parking permits, paid parking, and increased parking enforcement.
- A car sharing program establishing a network of shared cars throughout LA County.
- A neighborhoods electric vehicle program, operated with speed-limited battery power electric vehicles, which provide locally serving trips.

A parking in-lieu fee can be a useful tool in providing developers with the flexibility in meeting their minimum parking requirements without having to construct parking spaces which, particularly at the margin, may not prove to be cost effective. As we heard from the Core Community Voices outreach effort and through discussions with developers and LA County staff, providing alternative modes of transportation, other than a SOV, is critical to lowering the demand for parking. The in-lieu fee revenue can be used to support transportation alternatives such as those discussed in the “Strategy Overview” section.

Walker recommends that the fee is charged on an ongoing basis for at least a 10-year period to establish a consistent revenue stream to support the programs established with the fund revenue.

Walker recommends that a parking in-lieu fee be established by the County but as a long-term recommendation, as an in-lieu fee program requires staff to oversee the program and manage the in-lieu fee fund. We recommend that an in-lieu fee program be established once a clear use of funds for access, transportation, and parking-management improvements, including improved parking enforcement, have been identified and established.

1i. Establish TDM monitoring and reporting requirements

Long-Term Recommendation



In the long-term, if LA County expands the TDM ordinance to include programmatic TDM measures and physical off-site TDM measures, Walker recommends implementing TDM monitoring and reporting requirements. Ongoing TDM performance monitoring helps to ensure that the TDM measures that a committed at effectively implemented. Some best practices for TDM program administration and performance monitoring include:

- Prior to issuing the Certificate of Occupancy, County staff should physically inspect the property to ensure that physical on-site TDM elements have been installed.
- Require developers to submit an annual TDM monitoring report, and conduct a staff review of the report.
- Issue an annual transportation survey to residents that captures data on how residents travel to and from the site and their attitudes toward alternative commute modes and satisfaction with available mobility options.

2. Other strategies to effectively increase the parking supply operationally, reduce parking demand, and manage parking spillover on the street

There are a variety of policy strategies that would not reduce the number of required parking spaces per Title 22, but can increase parking efficiency at multifamily properties and/or reduce the need for parking spaces to be constructed at multifamily properties. This section includes an overview of each strategy that could improve parking efficiency and/or reduce parking demand and Walker's recommendation for each strategy.

2a. Remove the requirement for covered parking spaces

Short-Term Recommendation 

As discussed in Strategy 1b, Walker recommends reducing parking requirements per Title 22, which requires multifamily developments to provide both covered and uncovered parking spaces. Covered parking spaces in the form of single or double garages can be more space intensive and limit the ability to share parking. Therefore, eliminating the number of required covered parking spaces can improve the efficiency of the parking system. Walker recommends that the requirement for covered parking spaces for Apartments (as defined in Title 22) is removed from Title 22.

2b. Eliminate any requirement that residential and commercial parking must be provided separately

Short-Term Recommendation 

In Title 22, in several zones, including the MXD zone and C-MJ zone, parking for commercial and residential uses must be separately designated by posting, pavement marking, or physical separation. Parking is most efficient when it is shared between uses and not reserved for specific uses. Therefore, Walker recommends that all references to separately designating parking for commercial and residential uses are removed from Title 22.

2c. Adjust the parking design standards in Title 22

Short-Term Recommendation 

Walker reviewed the parking design standards in Title 22 to determine opportunities for increased efficiency and reduced land and resources (financial and materials) devoted to parking. Through Walker's financial feasibility analysis, Walker determined that the County's requirements for drive aisle width and parking space length are

unnecessarily generous for residential land uses, and that reducing each would be acceptable and yield cost and spatial efficiencies, potentially yielding more spaces or area that could be devoted to other uses.

Walker's recommended drive aisle width and parking stall length are based on parking standards Walker has developed over decades of ongoing research, including average vehicle sizes. The research is incorporated into the publication *Parking Structures: Planning, Design, Construction Maintenance and Repair* Third Edition, and internal updates Walker makes. This publication represents industry standards for parking structure design and provides the only single-source guide to planning, designing, and maintaining parking structures. For this recommendation, Walker utilized Level of Service C standards, which is efficient and reasonable for residential development. Level of Service A standards are typically applied to land uses such parking for restaurants where customers are not as familiar with the parking facility and park in the location infrequently. Residential parking facilities are typically used by residents who park on a daily basis and are familiar with the parking facility, and therefore able to navigate the facility more effectively than, for example a customer parking at a shopping mall.

Table 5 includes Walker's recommendations for drive aisle width reductions in Title 22. The drive aisle width requirements vary based on the angle of the parking space the aisle serves.

Table 5: Los Angeles County Title 22 Recommended Drive Aisle Width Adjustments

Angle of Parking (Degrees)	Current Title 22 Aisle Width Requirement	Proposed Title 22 Aisle Width Requirement	Aisle Configuration
90	26 feet	24 feet	Two-Way Aisle
60	20 feet	14 feet, 7 inches	One-way aisle, double-loaded parking
45	14 feet	12 feet, 8 inches	One-way aisle, double-loaded parking
30	12 feet	12 feet	One-way aisle, double-loaded parking

¹Requirement per Title 22 Sec. 22.112.080

Source: Walker Consultants, 2022.

Table 6 summarizes Walker's recommended stall length requirement. Walker recommends that the Title 22 stall length required is reduced by six inches.

Table 6: Los Angeles County Title 22 Recommended Parking Stall Length Adjustments

Angle of Parking (Degrees)	Current Title 22 Stall Length Requirement ¹	Proposed Title 22 Stall Length Requirement
90	18 feet	17 feet, 6 inches

60	18 feet	17 feet, 6 inches
45	18 feet	17 feet, 6 inches
30	18 feet	17 feet, 6 inches

¹Requirement per Title 22 Sec. 22.112.080
Source: Walker Consultants, 2022.

Walker performed a calculation of the approximate amount of land that could be gained by using Walker's recommended parking geometrics. Table 7 summarizes Walker's calculations of the amount of land that could be saved. According to Walker's calculations, developers could use approximately 14 percent less space for parking with Walker's parking geometric recommendations.

Table 7: Estimated Space Saved with Walker's Parking Geometrics Recommendations

Angle of Parking (Degrees)	Approximate Space Saved	Approximate Percentage of Space Saved
90	25.5 square feet	5%
60	82 square feet	14%
45	58 square feet	10%
30	27 square feet	4%

Source: Walker Consultants, 2022.

2d. Implement on-street parking management

Long-Term Recommendation

As Walker learned through the Core Community Voices outreach effort, management of on-street parking was an issue of great interest for many participants. Participants shared their challenges with on-street parking availability in their neighborhoods and the tendency to use on-street parking for long-term vehicle storage. They also stressed the importance of expanding enforcement regulations and capabilities in tandem with changes to the parking ordinance. Many suggested that parking management and concerns over lack of on-street parking availability as a limiting factor for the ordinance to work, based on their concerns regarding parking spillover.

On-street parking management is outside of the scope of Title 22. A study and recommendations for parking management in East Los Angeles was finalized for the County's Chief Operating Officer in 2021, the recommendations for which may have relevance to this study. With the reductions in minimum parking requirements, on-street parking management is a consideration. At the same time, we note that the nexus is not always clear or direct. More parking spaces may be required for a building, yet drivers are sometimes inclined to use on-street parking spaces regardless of off-street parking space availability. With these considerations, we raise the following policy considerations and recommendations for the County to implement outside of Title 22:

On-street Parking Regulations and Enforcement

Establishing parking regulations that meet the needs of the land uses lining a street are necessary for on-street parking spaces to play a productive role in the community. For starters, actively enforcing the existing or typical parking regulations can ensure parking availability for the intended parkers, and that on-street parking spaces be used actively, by drivers in the community, and not for long-term storage of vehicles, which is typically not a desired or efficient use.

Properly enforcing on-street also encourages those drivers who have available off-street parking to use their off-street parking spaces and not overly rely on street parking when they have other options. Active enforcement can include enforcement of violations including but not limited to:

- Prohibition against parking for greater than 72 hours.
- Planned non-operation of vehicles (PNO).
- Other restrictions on street parking

Residential Parking Permit Districts

Implementation of residential parking permit districts is an on-street parking management tool for parking enforcement, to ensure parking availability for the intended parking users. Limiting or restricting parking on residential streets can improve parking availability for residents and enhance quality of life and safety in neighborhoods. The following should be considered if establishing residential parking permit districts:

- The number of parking permits issued to each household requires a strategy for allocation of permits. This typically includes a limit on the number of residential parking permits per dwelling unit. In primarily residential areas with few commercial uses, the parking demand on residential streets is largely derived from vehicles that belong to residents themselves. Particularly in areas with high housing costs, including unincorporated LA County, there may be more vehicles per dwelling unit anticipated, or residents may

choose to use their garages as living or storage space, resulting in more vehicles parked on the street. In these cases, providing unlimited permits for residents would not necessarily improve parking availability. A priority for allocation is key.

- It is a best practice for parking permits to have a fee, ideally which is graduated based on the number of permits issued per household (i.e the cost for the second permit is higher than the cost of the first permit, the cost of the third permit is higher than the cost of the second permit, etc.). Charging a fee is important to provide funding for LA County to enforce the permit program. A fee also helps to manage on-street demand by encouraging only residents who need a parking permit to get one.

Parking Benefit Districts

Parking benefit districts (PBDs) are geographically defined areas, in which the parking supply and revenue it may generate are focused on managing parking supply and demand to ensure that the parking serves the district.

Revenue generated within a PBD is returned to the district to pay for neighborhood improvements that are prioritized by local stakeholders. Revenues may fund improvements such as operational or capital improvements to the parking supply, sidewalk cleaning, installing of planters or street trees, and store front beautification projects, among others. It can also fund parking and access improvements. A focus of PBDs is therefore to return revenues to the local community such that it can maintain an attractive and thriving commercial district, the broader goal of an effective parking system.

Funds for a PBD can potentially come from a number of sources, including parking permits, paid on-street parking, and in lieu fees, where a parking and access nexus can be identified. Sidewalk improvements are an example of a benefit that improves transportation and the general ambience of a district. One advantage of PBDs is that business owners and residents of the nearby district see where parking generated locally is directed in their community, and therefore may be more supportive of parking permits, in lieu fees, and paid parking as well, when they see the possibilities of local benefits. The appeal of PBDs over simply charging for parking in some respect is that PBDs ensure that some parking revenue generated locally benefits the district.

One of the most recognized examples of a successful parking benefit district is in Pasadena, in the City's Old Pasadena historic core. Old Pasadena is characterized by historic buildings with little to no off-street parking. During the 1980s, Old Pasadena had high commercial vacancies, unkept and deteriorating buildings, and crime. The low supply of on-street parking, combined with the free parking on-street, resulted in high on-street parking demand and little turnover, limiting the parking opportunities for customers. To reinvigorate the area, the City of Pasadena implemented paid parking with the promise that all parking meter revenue generated within Old Pasadena would be returned to the neighborhood. As paid parking increased turnover of on-street spaces, more customers were able to patronize local businesses, resulting in increased sales tax revenue for the City. The parking benefit district funded public improvements, which made the area more attractive to customers in the area and further increased business.

2e. Unbundle the cost of parking from the cost of the housing unit

Long-Term Recommendation



At multifamily properties, the cost to provide parking is material, but typically included with the cost of the residential unit as “bundled parking.” For example, if a resident rents a two-bedroom apartment, they may receive

two parking spaces as part of their lease, regardless of whether they have one, two, or three cars. “Unbundling” refers to separating the cost of parking from the total rent, which does not recognize variations in preference for the number of parking spaces.

The goal of parking unbundling is to allow residents to choose whether they want to purchase a parking space. The cost of the housing unit should be less if parking is unbundled than if parking is bundled. Unbundling can lower demand for parking at multifamily properties, as only those who choose to pay for parking receive a parking space. Using the previous example, a family renting a two-bedroom apartment may choose to only have one car to lower their monthly rent. Otherwise, parking becomes a sunk cost for car ownership, encouraging the owning and storage of more cars. Unbundling can have the added benefit of lowering housing costs for residents who choose not to purchase parking.

Unbundling can be an effective TDM strategy and can potentially lower the cost of housing, and Walker recommends unbundling in the long-term. One of the major concerns expressed during the Core Community Voices outreach session and from respondents who took the Community Questionnaire is the issue of parking spilling over from residential uses onto residential streets. If parking is required to be unbundled, instead of paying for parking on-site, a resident may choose to park on the street where parking is free. Walker recommends unbundling when LA County implements a pilot parking permit programs in areas with multifamily development.

2f. Implement parking maximums

Not recommended at this time



Some cities have implemented “parking maximums,” which cap the number of parking spaces that can be provided at multifamily properties. Parking maximums are designed to limit the construction of parking facilities that are larger than necessary, thereby limiting the number of resources devoted to parking. Reducing the land devoted to parking increases the opportunity for more people-centric uses, including the development of housing. Since the cost of building parking spaces is often passed onto the resident, parking maximums can also reduce the cost of housing by limiting the amount of parking that can be built.

Parking maximum requirements are implemented to achieve a number of policy objectives, including to limit traffic by encouraging the use of other modes of transportation as well as preventing lender requirements from dictating the construction of parking spaces above what the maximum requirement has established.

Through Walker’s outreach with developers, we learned that parking maximums can present challenges with obtaining financing on certain projects, especially if the maximum parking ratio is significantly lower than what a lender desires to finance. Imposing parking maximums may not promote the County’s goal of increasing housing production, and is therefore, not recommended at this time.

Further, in an article he wrote for the American Planning Association, parking expert Donald Shoup, FAICP cites research conducted in London (which shifted from minimum parking requirements with no maximum requirement to maximum parking limits with no minimums) that concludes removing the parking minimum caused 98 percent of the reduction in parking spaces, while imposing the maximum caused only two percent of the reduction. Therefore, removing the parking minimum was far more impactful in achieving policy objectives than imposing a parking maximum requirement.

Future Considerations

The State of California is considering or has already passed legislation that can impact minimum parking requirements for California jurisdictions, including Los Angeles County. This section includes an overview of the key legislation.

AB 2097 (Friedman)

AB 2097 prohibits a public agency from imposing a minimum parking requirement on residential development if the development is located within one-half mile of public transit. Public transit means a major transit stop, which is defined as a site containing an existing rail transit, a ferry terminal served by either a bus or rail transit service, or the intersection of two or more major bus routes with a service frequency of 15 minutes or less during the morning and afternoon peak weekday commute periods and offering weekend service. Public transit also refers to a major transit stop that is included in an applicable regional transportation plan. The bill provides exceptions for local agencies to impose parking minima if the agency makes written findings establishing that removing parking minimums would have a “substantially negative impact” on the jurisdictions’ ability to meet its state-mandated affordable housing obligations.

State Density Bonus Law

The State Density Bonus Law limits the minimum parking requirements for Affordable housing developments that offer units at a certain level of affordability within one-half mile of a major transit stop. The minimum parking requirements limitations varies based on the level of affordability of the units provided, project type, and proximity to transit. Any changes to that law will have impacts on minimum parking requirements for Affordable housing development projects.

