Parking demand and zoning requirements for suburban multifamily housing

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Abstract

Parking requirements for suburban multifamily housing should be based on solid data and clear policy logic. This paper reports on a comparison of three data sources that can be used to estimate residential parking demand: 1) overnight field counts, 2) household surveys of residents, and 3) household vehicle availability data drawn from the American Community Survey (ACS). The area of study is the Inland Empire subregion of Southern California. The parking demand implied by the ACS data is similar to field counts and household surveys, making it a useful supplemental tool for understanding parking demand. The analysis confirms the positive relationship between household income and parking demand, and it supports rate structures based on the number of bedrooms in the unit. Comparison of field counts with ordinance requirements reveals that required parking exceeds demand by a modest degree, even when parking is free. The paper proposes that local government generate additional data on parking demand to better calibrate their ordinance requirements. The paper concludes by suggesting that cities link their parking requirements to broader land use and transportation goals. Should current requirements be not supportive of these goals, a three step process for ordinance reform is suggested: 1) set requirements to average local demand levels, 2) set requirements at average demand with unbundling in place, and 3) selectively eliminate multifamily parking requirements while managing on-street parking.

INTRODUCTION

Minimum parking requirements are traditionally seen as a formula-based element of development regulation. Their roots are found in a desire to ensure an adequate amount of parking spaces as cities grow, supported by a desire to remove cars from streets when they reach their destination (*1*), and in some cases, a view that minimum parking requirements support economic success (*2*). Rather than directly intervening in markets to achieve this, parking requirements operate indirectly by mandating developer compliance, disguising the true cost of the intervention (*3*).

In fact, parking requirements are a *policy* choice that should build on solid empirical evidence about demand and the policies of local jurisdictions and transportation agencies. In support of smart growth concepts, some cities are reconsidering parking requirements in a broader context that includes community development, sustainability, and social equity considerations. Yet Kavage et al. (*4*) found that parking is the weakest area of regulatory reform in a review of regulations in the Puget Sound region, and Hananouchi and Nuworsoo (*5*) found that Miami's form-based code did not treat parking differently than conventional ordinances. Furthermore, most recent parking innovation concerns non-residential uses, such reforms for commercial uses, pricing and management strategies, and shared parking.

With exceptions (*6*) (*7*) (*8*), residential parking requirements are seldom studied. While there have been changes in residential parking requirements for urban and transit-oriented areas, parking requirements for suburban multifamily housing is an inactive area. Generally, local zoning ordinances require that a generous quantity of parking be provided. In addition, conventional development and management practice is that residential parking is unbundled (provided free with rent) and not shared with other uses.

Two propositions inform this paper. First, the residential parking requirements should be based on up-to-date, local data on parking demand. Parking demand data sources are often highly aggregated, such as the national averages provided by the Institute of Transportation Engineers (*9*). This paper compares alternative data sources for multifamily residential parking demand, using the Inland Empire (IE) as a case. The IE is a fast-growing suburban environment in the eastern portion of Southern California. Three residential parking demand information sources are considered: 1) overnight field counts of parking occupancy in seven developments, 2) resident responses to a household-level telephone and mail survey (n=301), and 3) household vehicle availability data from the U.S. Census Bureau (*10*). The focus is rental housing.

The second element of the paper provides suggestions for reforming parking requirements, should local jurisdictions find that their ordinance requirements not reflective of actual demand levels or policy intentions. This section introduces the notion that existing demand levels, while a relevant consideration, should *not* be the sole basis for requiring parking. Existing demand levels reflect past practices such as excessive parking supply and lack of parking pricing (which encourages vehicle ownership), as well as automobile-oriented transportation services and land use patterns that make driving more practical than alternative modes. Local jurisdictions should explicitly consider the implications of their community vision for parking requirements.

STUDIES OF RESIDENTIAL PARKING DEMAND

The idea behind parking requirements is to ensure that the parking supply meets or exceeds the demand, so spillover does not occur onto local streets. Demand can be determined by conducting local counts, usually in the overnight period, but Willson (*11*) found local counts to be the exception in setting parking requirements. There is a dearth of local data on residential parking demand.

An alternative source on parking demand is the national summary of demand studies provided by the Institute of Transportation Engineers' (ITE) *Parking Generation* informational report (*9*). For example, Land Use 221: Low/Mid-Rise Apartment for suburban contexts averages 19 studies in calculating a peak overnight parking demand of 1.2 vehicles per dwelling. These studies tended to be of large complexes with an average size of 320 units, studied in the period 1964 through 2002.

ITE rates have been criticized because of small sample sizes, a bias toward sites with free parking and little transit, and insufficient consideration of influences on demand (*10*). Recent editions of the rates have addressed some of those issues. For example, residential rates distinguish between suburban and urban locations, but ITE rates remain based on a single independent variable, project size (number of units).

Project size is not the only influence on parking demand. Table 1 summarizes other factors (*8*). A proper understanding of residential parking demand, then, requires the consideration of resident's demographic characteristics, the development's land use and transportation context, and parking policy (pricing and management).

TABLE 1 Factors Influencing Residential Parking Demand

Factor	Relationship to auto ownership (and parking demand)
Household income	+
Tenure – own versus rent	+
Household size	+
Population density and alternative transportation	-
Policy (pricing)	-

Source: Litman 2010

The implication of Table 1 is that minimum parking requirements should be tailored to future resident profiles and local conditions, yet the most common zoning code approach is a single set of rates, applied on a per bedroom basis, city-wide. Variations are often made for tenure (rental versus condominium), transit proximity, senior and affordable housing, and other factors.

Weant and Levison (*1*) provide a guideline that is replicated in many ordinances – a requirement of 1 space per studio, 1.5 spaces per one-bedroom unit, and 2 spaces for two or more bedrooms. Some cities require more, some a little less. Some require visitor spaces using a separate, per-unit formula. Another typical source for requirements is Planning Advisory Service (PAS) reports on parking. Finally, the most recent Urban Land Institute (ULI) shared parking model is a third widely used source. It recommends a base rate for housing, which in the case of rental housing is 1.65 spaces per unit, including visitor parking (*13*).

In many cases, ordinance requirements are greater than the average overnight occupancy reported by ITE. For example, a 500-unit complex with 50 studio units, 300 one bedroom units and 150 two bedroom units would be required to supply an average rate of 1.6 spaces per unit under the Weant and Levison's suggested rates; the ITE average rate for Low/Mid Rise apartment is 1.2 vehicles per dwelling unit. This is 33% more parking than is predicted to be occupied.

Requiring a more parking than is occupied makes the development self-sufficient from a parking standpoint and may reduce the chance of parking demand spilling onto the street or adjacent properties. Yet there are many problems (*14*). If parking requirements are excessive, first-order effects include increasing development costs and/or lowering density, increasing rents, decreasing return on investment and land value, and skewing unit size to larger units (*6*) (*8*). Excessive parking decreases the likelihood of parking charges, which in turn encourages vehicle ownership and use. Greater vehicle use has negative traffic and environmental impacts, and reinforces automobile-oriented policies (*15*).

Gathering data on actual peak parking occupancies is challenging, which may be why there is a dearth of local studies. Counts are made during the overnight period, a labor intensive process that generally requires property managers' permission and presents further challenges in accessing private garages.

An example of a recent empirical study of parking occupancy is Cervero et al. (*16*), which examines parking occupancy at 31 non-CBD housing complexes near rail stops in the San Francisco Bay area and Portland, Oregon. That study found a 1.15 space per unit peak demand in 31 projects studied, 27% below the supply. The demand was similar to ITE's Land Use Category 221. In other words, despite the criticism received by ITE for overstating demand, the peak occupancy in those transit-oriented developments was close to the level predicted by ITE if minimal transit was available. This simply reinforces the need for richer local data to inform parking requirement choices.

METHODOLOGY

This study employs multiple methods to understand peak residential parking demand in multifamily rental units in the Inland Empire. The methods include 1) peak occupancy counts conducted in seven residential projects in the cities of Ontario and Rancho Cucamonga (*17*), 2) analysis of responses to an Inland Empire household transportation survey conducted in 2010 (using telephone and mail back instruments), and 3) an analysis of vehicle availability data from the U.S. Census Bureau 2006-08 American Community Survey (ACS) (*10*). The ACS is essentially the replacement for the former census long-form that asked questions about household vehicle availability.

Each data source has strengths and weaknesses. Table 2 summarizes key strengths and weaknesses of each method.

TABLE 2 Strengths and Weaknesses of Alternative Data Collection Methods

Method	Strengths	Weaknesses
Overnight parking facility occupancy counts	• On-the-ground data. • Coverage of all units (no survey response problems). • Accounts for overnight visitor parking, resident vacations, overnight trips, etc.	• Data collection costs limit number of buildings studied. • No ability to analyze unit- or person-level characteristics. • Does not measure off-site parking activity by residents. • Hard to determine occupancy in private garages. • Property manager must be willing to provide site access share project occupancy data. • One-time measurement could be affected by local conditions, % occupancy, etc.
Household survey	• Provides individual- and household-level data suitable for disaggregate modeling. • Addresses total vehicle availability, not just vehicles parked at a point in time. • Can include attitudinal questions. • Can be integrated with travel modeling.	• High survey cost. • Possibility of low response rates and non-response bias. • No measurement of visitor parking.
American Community Survey data	• Easy for city officials to access; free. • Up to date (2006-08 average). • Addresses total vehicle availability, not just vehicles parked at a point in time. • Good response rates.	• Aggregated to the city level (until census track level data becomes available in early 2011). • Cannot support individual-level modeling unless PUMS files are used. • No measurement of visitor parking. • No measurement of off-site parking.

Comparing the results of these multiple methods allows us to explore the degree to which one source can substitute for another. For example, if census-based methods are accurate, or can be made accurate with appropriate adjustment measures, data collection costs could be reduced.

The IE study area is the portion of San Bernardino and Riverside counties lying south of the San Bernardino mountains, contiguous to the Los Angeles metropolitan area. The Inland Empire is of interest because it represents a fast-growing suburban area that is experiencing a transition toward greater density, mixed-use development, and employment. A transit backbone of commuter rail and bus is being developed.

The IE's population growth outpaces the region and California, fueled by migrants from the Greater Los Angeles area seeking lower cost housing. On the economic side, major employment categories include manufacturing, construction, and transportation and distribution. Recently, the area has been hit hard by the housing bubble and recent economic slowdown.

Table 3 summarizes the demographic and transportation characteristics of the two parking occupancy-count cities: Ontario and Rancho Cucamonga. These data show relatively affluent populations with a median age that reflect the presence of young families.

TABLE 3 Demographic Characteristics

2006 - 2008 (Estimate)	Ontario	Rancho Cucamonga
Population	162,630	160,349
Occupied Housing Units	44,697	52,121
Renter-occupied	18,770	16,918
Average Household Size	3.62	3.01
Median Household Income	$61,438	$79,455
Median Age	29.7	32.2
% journey to work drive alone	78%	81%

The 2006-08 American Community Survey (ACS) includes aggregated vehicle availability for occupied renter households and a series of variables that influence vehicle availability, such as income of renter households. The ACS sample includes the cities of Chino, Chino Hills, Colton, Fontana, Highland, Loma Linda, Montclair, Ontario, Rancho Cucamonga, Redlands, Rialto, San Bernardino, Upland, and Yucaipa.

The household survey information is drawn from a 2010 household travel survey supported by the Leonard Transportation Institute at California State University, San Bernardino. It includes data from the cities mentioned above, plus the Riverside County cities of Moreno Valley and Riverside.

The method used in the second component of the paper – issues related to developing parking requirements– is qualitative, relying on the literature and the authors' experience in working with property owners and local jurisdictions on parking issues.

ANALYSIS

This section explores four questions related to the consistency between estimation methods, variables that predict differences in parking demand, reasons for differences from ITE rates, and comparisons with code requirements.

Question #1: Is ACS data a useful source for local parking demand studies?

If ACS provides a reasonable basis for understanding parking demand, cities could avoid or reduce expensive local occupancy counts and/or using national averages. Table 4 compares the results from the different sources. A comparison of the different data sources over identical projects was not possible; the following summarizes differences between the data sources.

- While the unit of measurement is consistent – vehicles per unit - the mean values shown are calculated based on three different aggregations - individual households, building-level occupancy counts of complexes, and city-wide averages report in the ACS.
- The comparison covers different, but nested, geographic areas (the occupancy counts of complexes are in the cities of Ontario and Rancho Cucamonga, which in turn are within the 14-city ACS sample and the larger household survey area).
- Household vehicle availability is not the same as per-unit parking occupancy counts. Household vehicle availability represents the greatest possible resident vehicle accumulation, but without overnight visitor parking. Occupancy counts present actual

accumulation at a specific moment, which is reduced by overnight trips, night work-shifts, and off-site parking. It is likely that household vehicle availability exceeds overnight counts by a small degree because of these factors.
- Vehicle availability in existing rental housing could be different than newly constructed housing (e.g., if the income or household size profiles are different).

Table 4 compares the three data sources.[1] At a descriptive level, it shows agreement between the occupancy, ACS, and household survey results. The data sources for the IE study area exceed ITE Land Use 221 by between 21% and 38%.

TABLE 4 Comparison of Parking Demand/Vehicle Availability per Occupied Dwelling

Data source	Unit of analysis	Mean peak demand/vehicle availability per occupied dwelling	% of ITE	Minimum/ maximum	Standard deviation
Occupancy counts (7 sites, Ontario and Rancho Cucamonga, weighted by size)	Residential complex	1.66	138%	1.01 – 1.94	0.30
ACS vehicle availability, rental housing, Ontario and Rancho Cucamonga	City	1.63	136%	1.62 - 1.63	0.01
ACS vehicle availability, rental housing, 14-city IE sample	City	1.58	132%	1.34 - 2.0	0.16
Vehicle availability, IE household survey, rental units (n=301)	Household	1.45 (1.32 in complex; 0.13 on-street)	121%	0 - 5	0.77
ITE Land use 221 (19 sites across the U.S.)	Residential complex	1.2		0.68 - 1.94	0.32

Statistical tests of differences between the three IE data sources are not possible, because of differences in *n* among the data sources (affecting the standard deviation), the small *n* of the occupancy counts, and different geographic scales. At a descriptive level, the ACS data tracks occupancy count data quite closely (mean of 1.63 for the ACS versus 1.66 in the occupancy counts). Statistical tests of difference between the household survey and the ACS data will be possible when census tract and block-level ACS date becomes available in 2011. Increasing the

[1] Vehicle availability varies significantly between rental and ownership housing. For example, the 1.63 vehicles per household rate for rental housing units in the cities of Ontario and Ranch Cucamonga is 67% of the rate for ownership housing (2.43 vehicles per unit).

number of occupancy counts available will support statistical tests of the relationship between occupancy counts and ACS data.

Question #2: what predicts variation in parking demand?

The 14-city ACS analysis and the household survey are used to test for factors that explain variation in vehicle availability. The 14-city ACS sample explores city-level relationships. Correlations were calculated between vehicle availability per occupied unit and household income, household size (size and number of bedrooms), the year housing was built (the notion that new buildings may have greater supply), the presence of a Metrolink station (the effect of a stronger transit orientation), and percent of population over 65 (expected lower ownership among seniors). Table 5 summarizes the results.

TABLE 5 Correlation Coefficients for ACS Household Vehicle Availability, 14-City Sample

	Household income	Household size	# bedrooms	Year built	Metrolink station (1 = yes)	Over 65 years
Mean value	$43,309	3.14	2.13	1978	0.5	9.9%
Pearson Correlation	.802**	.055	.383	.562*	-.113	-.180
Sig. (2-tailed)	.001	.853	.176	.037	.700	.537

All correlations show the expect sign, but only household income and year built are statistically significant. Household income and year built are themselves correlated (0.75), as new housing has higher income residents. The main conclusion from this analysis is that city-wide income is positively associated with vehicle availability rates.

Figure 1 plots the observations and regression line for household income, showing a positive relationship with an R^2 of 0.64. Income is a clear influence on household vehicle availability. If cities base parking requirements on ACS vehicle availability data, this income effect will be built into the rates. The implication of this finding is that using a national or even regional standard for parking requirements may force an oversupply of parking in lower income communities, worsening housing affordability.

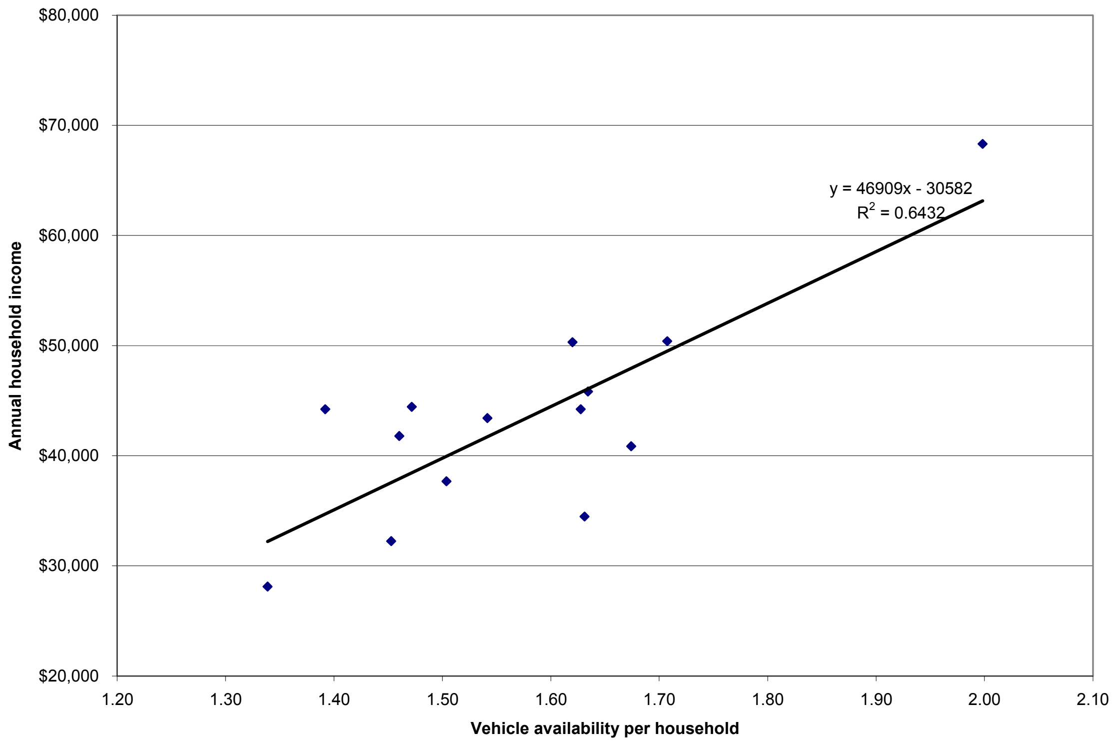

FIGURE 1 Vehicle availability and income, city level.

Most ordinances set parking requirements based on the number of bedrooms, using the logic that larger units will house more people who own vehicles. In the aggregate analysis, there was no significant association between these factors, but city-level data are not appropriate for exploring this household-level relationship. The household survey, on the other hand, provides information for an analysis of vehicle availability per bedroom size. Figure 2 shows the relationships.

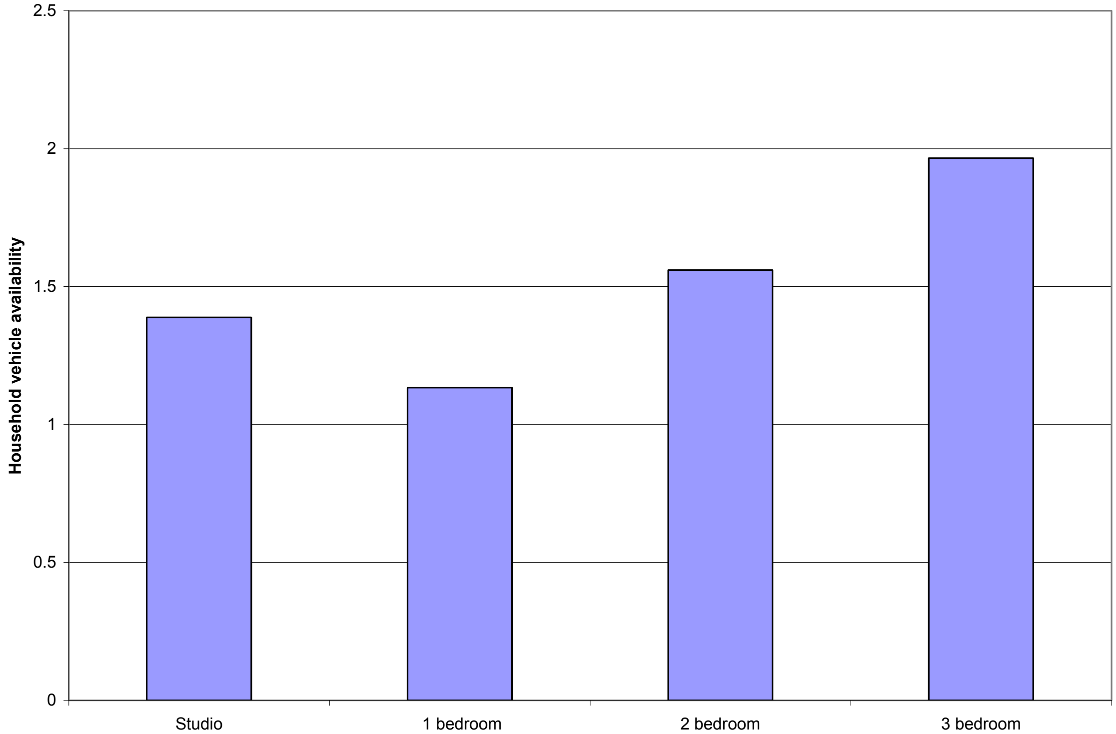

FIGURE 2 Vehicle availability by number of bedrooms.

The patterns shown in Figure 2 are generally consistent with city standards that apply requirements on a per unit basis, albeit at lower levels. Many ordinances use a 0.5 space stepped progression in linking requirements to bedrooms; this analysis support such a practice.

Question #3: What factors might explain difference between the IE data results and ITE rates?

The analysis of three data IE sources – occupancy counts, household survey, and ACS data - indicates descriptively similar results. The most direct comparison is between the ITE rate 221 and the methods described here is the rate based on the occupancy counts conducted at seven residential complexes. In this regard, the average of the seven IE study sites is 132% of the ITE rate (1.66 compared to 1.2 occupied spaces per unit). The following discusses some possible explanations that should be explored in future research.

- The IE survey rate reported assumed 100% occupancy of any assigned garage that could not be accessed by the surveyors, based on advice provided by property managers. It is possible that this could have overstated the actual rate; for example, if only 70% of those garages were full, the unit rate would be 1.54.
- The ITE rates include studies that date between 1964 and 2002. Auto ownership has risen since those earlier study periods.
- The IE is known for its automobile dependency and therefore may have higher rates than other cities included in the ITE suburban group, which included places with urban qualities such as Portland, Oregon and Glendale, California.

The IE household survey information provides additional insight into the difference in the rates. As shown in Table 4, not all of the 1.45 vehicles per unit are parked at the housing complex—the *on-site* rate is 1.32, somewhat closer to the ITE rate. The rest of the vehicles were parked on-street.

Question #4: How do the IE parking demand results compare to ordinance requirements?
Using the seven parking utilization sites studied in the cities of Ontario and Ranch Cucamonga as a case study, the following compares measured parking demand with parking requirements and the amount of parking supplied. Table 6 summarizes the minimum residential parking requirements for the two cities.

TABLE 6 Parking Requirements

Requirement	Ontario	Rancho Cucamonga
One bedroom unit	1.75	1.5
Two bedroom unit	2	1.8
Three or more bedroom unit	2.5	2
Visitor Parking	1 space per 4-6 units, depending on size	1 space per 4 units

Code requirements are calculated for the seven projects where occupancy was counted, taking into account the distribution of unit sizes (*17*).

- The average code requirement for the projects is 1.97 spaces per unit.
- The actual parking supplied is 1.88 per unit (cities allow minor adjustments to supply in the development process)
- The measured peak demand per unit is 1.66 (assuming 100% garage occupancy).

The supply of parking exceeded demand by 16%. This is less of a difference than found in other studies (*16*), suggesting that the codes in these cities are close to actual demand, if somewhat higher. The question of whether local jurisdictions should *mandate* that developers meet or exceed demand is an entirely different matter, based on local policy objectives. The next section outlines a process that local jurisdictions could use to revise their parking requirements if they do not reflect policy goals about how much of the demand should be mandated in codes.

CONSIDERATIONS IN DEVELOPING RESIDENTIAL PARKING REQUIREMENTS

Following the first theme of improving local data, this section considers how local cities might approach revising multifamily residential parking requirements. In California, a number of policies intend to reduce VMT, such as California's SB 375. Reforming parking can be part of that agenda as parking policy affects vehicle ownership and use.

The starting point for parking policy is whether minimum parking requirements are required at all. Shoup (*14*) articulates a view that cities should eliminate minimum parking requirements, allowing developers, via the market, to determine supply of parking. Such a strategy requires proper pricing and control of on-street and off-street parking to avoid spillover of project parking demand. In the absence of minimum requirements, there is economic incentive to match supply closely to demand to use parking pricing. This approach has been adopted in numerous urban city centers and is likely to become more common in the future.

While supporting the elimination of parking requirements in principle, the authors observe that many suburban cities found in the IE are not ready for such an approach. Proposals to eliminate parking requirements encounter resistance from planners, community members, and local elected officials. Some developers, project investors, and lenders are also reluctant to accept the responsibility of getting the parking right themselves (*15*). Community members and elected officials often cite apartments built in the 1970s that were underparked, have high resident occupancy, and cause neighborhood parking problems. Avoiding such a condition is prominent in thinking of many stakeholders, who are reluctant to consider multifamily housing with less than 2 spaces per unit. In addition, if negative perceptions exist about rental housing in general, excessive parking requirements are a subtle way of discouraging that type of development.

Some property managers spoken with in the course of conducting the occupancy counts were under the impression that the developments had insufficient parking (*17*). Many reported receiving complaints about parking. IE planning directors also mentioned concerns about a lack of parking in multifamily developments (J. Blum, personal communication, unpublished data). Because of this attention, there is little awareness of parking oversupply as a potential problem. This awareness gap stems from visitor parking problems in evening hours or weekends. For example, if parking rules are not enforced, a resident may park in a visitor space, visitors in designated resident spaces, causing a host of problems. There could also be a visitor demand peak in the early evening hours or on weekends. Also, in certain complexes, parking was 100% occupied in a certain sections while other sections are only 50% occupied. This might be the result of poor design or a lack of property and parking management, creating a situation where issues in parking location or management are confused with a parking shortage. A common response to these situations is to insist on high requirements rather than institute better parking management.

Given these factors, a phased approach to reforming residential parking requirements is appropriate, one that recognizes local attitudes and experiences. The suggested approach includes:

Step 1: Establish minimum requirements in line with average local demand (assuming bundled parking). This means setting requirements close to local demand estimates (from counts, ACS vehicle availability rates, and household surveys) for renters in that city. The rate would make necessary adjustments for unit size (bedrooms), intended market segment (the income profile of residents), and special housing types such as affordable, senior, and transit-oriented housing. Cities should condition project approval on the implementation of parking management schemes to address visitor parking. Step 1 helps avoid an inadvertent or deliberate oversupply parking, with benefits to housing affordability.

Step 2: Require unbundling of parking as part of project approval (parking is charged separately from rent). Establish the minimum code requirements at the expected average demand when parking is unbundled. Establishing this demand level requires either measurement or model-based prediction of the sensitivity of demand for parking using an elasticity of parking demand with respect to price to adjust the level of demand when parking is bundled. Step 2 also requires the adoption of on-street parking pricing or time limitations to prevent residential parking spillover into other areas. Step 2 reduces parking demand to the degree that parkers are sensitive to price and lowers development costs.

Step 3: Eliminate minimum parking requirements in transit-oriented developments for transit-oriented developments, and extend citywide once unbundling and on-street parking pricing becomes widespread. Step 3 reduces demand further and encourages neighborhood-level shared parking arrangements.

A number of other policies support such an approach. First, ordinances could allow new projects to fulfill a portion of their requirement in nearby existing housing complexes that are oversupplied with parking. Second, ordinance and development conditions should discourage the practice of assigning specific spaces parking to units, to help increase the utilization of parking. For example, if any space beyond the first space per unit is not assigned, it could be used by visitors and other tenants whenever it is vacant. Parking information technology and management can be used to enhance efficient utilization. And finally, the project approval process should encourage property managers to be involved in decisions about design and development in a more integrated design/operation approach.

More broadly, city policies and ordinances should make it possible for households to reduce vehicle ownership, by providing walkable destinations, better transit, and shuttle and bicycle access, parking pricing at the trip origin and destination, and temporary car rental programs.

CONCLUSIONS

The Inland Empire residential rental parking demand levels reported here exceed ITE rates by between 21% and 38%. These demand levels are based on multiple data sources, and in the case of the occupancy counts, a small sample of seven sites. Firm conclusions about the comparability of these sources require a larger sample of counts. An increased number of occupancy counts, and the availability of tract and block level ACS data in 2011, will allow greater statistical testing of the promise of ACS data in predicting parking demand levels.

Data availability remains a challenge in parking demand studies. It is costly to conduct parking occupancy counts; absent property owner cooperation, there is no practical way for researchers to obtain data on the private garages found in some multi-family housing complexes. Property managers are most able to collect parking occupancy data, as their security and maintenance staff can integrate parking counts into their normal activities. Local cities may wish to condition development approvals on the property owner-provided counts when the project has reached stabilized occupancy. This will build local data bases on residential parking demand. Regional entities, professional organizations such as the American Planning Association and Urban Land Institute, and ITE can support this activity. Such data can also enrich ITE's data set for upcoming editions of *Parking Generation* and allow the user to extract more information about context factors such as type of suburban environment, income, and other factors. In addition, ITE could use ACS data as a way of validating count information and developing adjustment factors in moving from ACS data to requirements, such as recommending visitor parking standards.

Should a local jurisdiction find that their parking requirement do not support their broader land use and transportation goals, a three step reform process is suggested: 1) aligning requirements with demand; 2) unbundling parking and setting requirements to the revised demand; and 3) deregulating minimum parking requirements in selected areas. In sum, residential parking requirements need to move from a fixed number in a code book to a local policy issue, empirically based and supportive of the community's land use and transportation goals.

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