The increasing number of non-retail tenants has become a vital force in the shopping center industry. Changes in demography, consumer behavior, technology and real estate development have stimulated the rise of these tenants, and consequently affected the evolution of parking requirements for mixed-use projects in recent years. The Third Edition of Shared Parking becomes even more relevant in this environment, and can help more generally in understanding the mix of uses as well. These transformations occur regionally, by scale, and/or through technological advances that have impacted mobility (e.g., ride sharing, autonomous vehicles and signage). The study first discusses each property use separately (including respective trends), then analyzes it holistically in multi-use projects for design, operations and management, with case studies supporting the examination.

Whether justifying projects’ anticipated needs or planning the most effective use of these spaces, designing with parking in mind has never been more complex. Shared Parking, Third Edition is meant to provide guidance on these and similar issues. Here are some insights:

**Overview**

- Shared parking facilitates serving two or more individual land uses without conflict or encroachment. It balances adequate parking to support a commercial development while minimizing the negative aspects of excessive land area or resources devoted to parking and the potential for declining parking demand in the future.

- Recent changes in society, transportation and mixed-use development trends have raised the question of how extensively past parking recommendations for mixed-use facilities should be revised.

- After extensive review, industry professionals investigating this issue recommend that the underlying concept and methodology are still viable, but that updating the default factors and adding land uses would be appropriate.

- Overall, 44 different parking ratios are recommended, based on an increased number of land uses and more refined land subdivisions from the prior edition.

- Base parking ratios from the Second Edition remain unchanged, while new ratios for malls from 1,000,000 to 2,000,000 sq. ft. and over 2,000,000 sq. ft. have been introduced.

- Rather than developing distinct parking ratios for region and scale, this new edition provides much more guidance on how to make appropriate adjustments to driving ratios, including detailed assistance with using U.S. Census Bureau journey-to-work and vehicle ownership data.

- When planning new shared parking projects, it is helpful to remember that parking capacity is likely to increase even as parking demand goes down, furnishing yet another reason to design a "just enough, no regrets" parking supply today. Perhaps as soon as 2025, building owners wishing to take advantage of the ability to gain spaces could provide special parking areas for autonomous vehicles (AVs) and slowly grow those over time, reducing the area for driver-parked vehicles. At the same time, space for pickup and drop-off will be required, possibly in one location at grade or on each parking floor where autonomous parking occurs.

- To enable better design, management and operation of parking facilities, this new edition provides separate parking ratios and recommended adjustment factors for employees/residents and customers/patrons.

- Case studies in this edition show that mixed-use developments with shared parking, in general, are viable and desirable in today’s market.

- Shared parking facilities are efficient, allowing for each space to be used more hours during the day, week or month.
As the biggest movie season is now the entire month of December rather than the week after Christmas, shared parking in shopping centers with multiplexes actually shows increases rather than decreases for the month.

The Third Edition further reduces fine/casual dining ratios.

This edition does not recommend stratifying retail into subcategories and separating dining and entertainment uses for shared parking analysis unless: a) more than 10 percent of the center is occupied by dining and entertainment uses, or b) tenants are spatially separated, whether they are big-box retailers, restaurant or fast-food stores, on a separated pad or out-lot.

### Autonomous Vehicles and Ride-Hailing

- The maximum impact of AVs will not occur until 2050, even in a high-disruption scenario, and parking in certain markets (e.g., a downtown or a campus with multiple parking facilities) will absorb the changes in demand over time.
- Ride-hailing is just starting to measurably impact shopping center demand, and that effect will vary considerably by the type of center.
- No matter how significant an impact that AVs and ride-hailing may have in the future, a large-scale decline in demand is unlikely to happen, because of demographics and population density.

### Office Space

- Specific analysis of an office tenant’s employee presence should be completed to account for factors such as overlap on multiple shifts.
- Uses that require more visitor parking than general office tenancies include most major medical and dental offices, as well as banks.
- Two provisions for adapting office space for possible future use might include: a) increasing the floor-to-floor heights, and b) using express ramps (without parking lining the ramp) rather than parking ramps.

### Residential Space

- The monthly adjustment for residential space in mixed-use settings is 100% throughout the year, as there have been no significant differences found in seasonality.
- Several factors affect parking behavior at senior housing facilities (e.g., number of dwelling units, average age of residents). While facilities with more affluent residents and more employees will generate higher parking demand, those with older residents and increased transportation services will generate lower parking demands.

### Special Circulation Considerations

- Typically, no special circulation considerations are involved in designing a shared parking facility that would differ from those for a facility involving a single land use, except where there is a requirement for multiple, separate ramps for user groups.

### Walking Distance

- Among the more critical issues for parking design, which in turn affects management and shared uses, is the walking distance from the parking area to the destination—as the “tolerable walking distance” can vary significantly among different uses.
Shared Parking, Third Edition is designed to help readers achieve a greater balance between providing adequate parking to support a development from a commercial viewpoint while minimizing the negative aspects of excessive land area or resources devoted to parking and the potential for declining parking demand in the future.

This study will be available on ICSC’s website under Newsstand on March 5, 2020.

While every effort is made to ensure the accuracy and reliability of the information contained in this report, ICSC does not guarantee and is not responsible for the accuracy, completeness or reliability of the information contained in this report. Use of such information is voluntary, and reliance on it should only be undertaken after an independent review of its accuracy, completeness, efficiency and timeliness. © 2020 by ICSC, 1251 Avenue of the Americas, New York, NY 10020.