

# Structured PARKING

## for Transit-Oriented Development

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**Federal stimulus money could be used to bridge the financial gap associated with the cost of structured parking in transit-oriented development projects and provide a meaningful strategy to advance such projects and smart growth.**

IN THIS CHALLENGING REAL ESTATE market, almost all real estate sectors have seen significant declines in property value. However, say most analysts, the areas and properties that have best maintained value are those near mass transit stations.

Transit-oriented developments (TODs)—mixed-use communities that include residential, retail, and office development within a five- to ten-minute walk of commuter rail stations—have rated as the best real estate investment over the past several years, according to *Emerging Trends in Real Estate*® 2009, recently published by the Urban Land Institute and PricewaterhouseCoopers. Demographic trends, fluctuating and increasing fuel costs, roadway congestion, public smart growth policy, and people's increasing desire to live, work, shop, and dine in a mixed-use environment—without relying on a car—can be expected to make TOD an even stronger focus of the post-recession real estate market.

Developers, mass transit agencies, and municipalities that promote, plan, and implement TOD understand the significant challenges that confront these projects: difficult property acquisition and assembly, local opposition to higher density, and the cost, mass, and effective integration of structured parking.

Given their relatively small sites, higher densities, and mix of uses, TOD projects commonly have structured parking as a necessary component—and it often presents the biggest challenge. The cost of structured park-

ing, which has increased significantly over the past several years, can financially strain a project. The mass of a parking structure, which can approach 50 percent of the built square footage of the development program, can overwhelm the scale of a community and arouse local opposition. The parking challenge can be magnified if commuter parking is incorporated into the project, which is often the case when a municipal or transit-agency property—typically commuter surface lots—is included. Where transit ridership is high, commuter parking often needs to be replaced or even expanded to ensure that local and area residents have access to the transit system.

The first step in meeting the parking challenge for TOD projects is to ensure that the parking facilities are the proper size and in accordance with TOD parking principles. TOD planners employ various strategies to measure the amount of parking required to support the development program so as not to overbuild. The mix of land uses typical in TOD projects provides opportunities for shared parking. Use of the same parking space by multiple user groups—for instance, commuters during the day, and residents or retail patrons in the evening and on weekends—maximizes the use of the parking structure, reduces the amount of parking needed, and, if parking fees are charged, supports the facility's capital and operating expenses.

TOD planners should also maximize incorporation of on-street parking to satisfy TOD

parking requirements, reducing the amount of structured parking needed. On-street parking is credited with adding vibrancy, convenience, and a buffer to street-level activity while contributing to the viability of a TOD project. It also can be designed to integrate with a transit station so that it serves as short-term, drop-off parking during the commuter rush period while remaining available for shopper parking during off-peak hours. On-street parking areas adjacent to a transit plaza, civic space, or open space—often a planned component of a TOD—can be used to expand the area available for public events without having to permanently dedicate the land for a non-revenue-producing use.

Applying appropriate parking ratios and requirements, or implementing parking maximums for each land use, is seen as an element critical to determining the right amount of parking for TOD projects. Depending on the proximity and level of service at the transit station, standard parking ratios can be significantly reduced, especially in suburban areas. While suburban communities may question such reductions, it is important to recognize that many people choose to live and work in a TOD because they seek an environment that is walkable, that provides amenities, and that offers transit options. Households with access to transit likely will at least avoid the cost of owning a second car, which can result in savings of several thousand dollars per year—savings that can be dedicated to rent

**The Highlands at Morristown project in Morristown, New Jersey, is a mixed-use, transit-oriented development located within walking distance of Morristown Station. It will include offices, retail space, apartments, condominiums, a hotel, and parking for commuters.**



or a mortgage payment, making TOD housing more affordable.

Another factor eliminating or reducing the need for a primary or secondary car in a TOD environment is car-sharing services such as Zipcar, which provide residents, employees, and commuters access to an auto when it is needed. Accordingly, data from built TOD projects increasingly support reduction of parking ratios and requirements for most land uses in such projects. Last, unbundling the cost of parking from commercial, retail, and residential rents or projects will also limit the inclination to construct excess parking. When the fee for parking is incorporated into the cost of the commercial lease or residential rent, tenants, employees, and residents are, in essence, given an incentive to bring cars, thereby increasing the amount of parking needed.

The design of integrated, convenient structured parking requires attention to the

details of sound TOD planning principles. These parking facilities can leave an impression of the TOD project on the user groups they serve—residents, visitors, restaurant patrons, and commuters—so their components should be planned and designed as *places* rather than as warehouses for cars. Retail and mixed-use development should be integrated at the ground level of the garage to enliven the streetscape and maintain the connectivity between the land uses adjacent to the garage.

For example, the facade and pedestrian and vehicle entries can be adorned with architectural elements that enhance the community's aesthetics. The entry areas should be planned as public spaces with adjacent shops and high-quality pavement, water, and landscaping elements. Stair and elevator towers can serve as architectural features and be designed using glass to provide visual access and exposure to the streetscape to

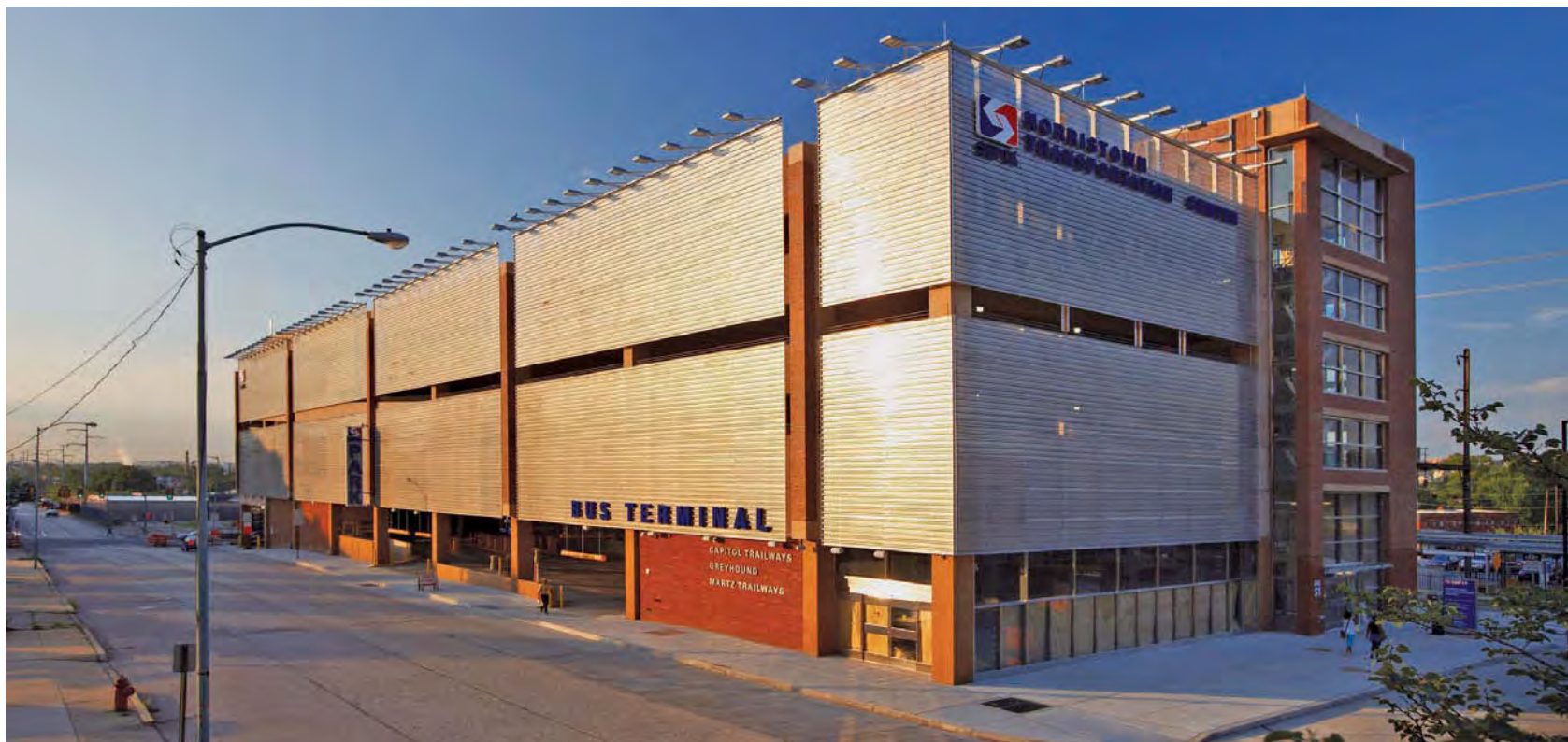
enhance user comfort and security. Lighting levels can be raised and structure components can be painted or stained to enhance brightness. Passive security measures, including elimination of dark areas and provision of bright and effective lighting and long, clear sight lines, can be incorporated to make people feel safe. Interior elevator and stair vestibules can be made more attractive to reflect the quality and design of the TOD project. Paint, graphics, and wall and floor treatments can project the design sense of the entire community.

Often in large-scale TODs, planners include individual parking structures for each building or land use component and wrap the structure with that component to hide the parking structure. While these plans and designs are aesthetically pleasing, development of multiple structures is often economically unfeasible. To reduce structured parking

costs, the facilities can be consolidated and shared. For-sale condominiums often require adjacent dedicated parking, but other uses such as residential rentals, offices, and retail space often do not require adjacent parking. The short walk from the parking structure can also add life to the street and support retailers. Likewise, commuter parking can be placed so that commuters will have a short walk to the transit station past retail, dining, and public amenities.

Often a parking structure in a TOD community can serve as a gateway to that community. The facility should be clean, well-secured, and convenient to use. Signs and graphics should be well-designed and easy to understand for new visitors. The parking access and payment system should be able to accommodate users conveniently and efficiently, especially commuters who time their trip to the transit system to the minute. It should accept various payment options and allow quick entry and exit. Security cameras and personnel should be deployed so as to discourage crime and make residents, commuters, and visitors feel safe. The parking facility should reflect the ambience, comfort, and security of the entire TOD community. A

**The Golden Triangle redevelopment project in East Brunswick, New Jersey, will integrate transit, residences, parking, and retail space. Multiple linkages will exist on the site, allowing residents, visitors, and commuters to partake of amenities and services, including the parking structure (below). The Southeastern Pennsylvania Transportation Authority (SEPTA) augmented its bus and rail transit and associated facilities at the Norristown Transportation Center in Norristown, Pennsylvania. The new intermodal facility (bottom) includes a 522-space parking garage and an intercity bus terminal, linking commuters to Center City Philadelphia and the surrounding suburbs.**



well-managed parking operation is critical to the success of the development as a whole, and not merely to bottom-line revenue.

Transit agencies and state and local governments increasingly are encouraging smart growth and TOD as a development strategy. As such, the federal stimulus package may provide opportunities to promote TOD by financially assisting the parking infrastructure critical to these projects. Transit agencies, local governments, and developers can form partnerships to develop parking that accommodates both the mixed-use development program and commuter parking. In addition to parking shared among the various users, the transit agency, state, or local government may be able to fund additional commuter parking to support regional access to the transit station, thereby increasing ridership and reducing reliance on cars. The appropriate allocation of land, capital, and soft capital costs of the parking structure between the developer and public sector partner can enhance the financial feasibility of the TOD project and provide commuter parking at a significantly lower cost than if it is built independently.

The promotion, planning, and development of TODs, especially in the present economic climate, will require creative solutions, partnerships, and financing strategies to meet the challenge of structured parking. However, economic adversity may provide the ideal opportunity for the public and private sectors to structure funding and development deals to build such facilities. In addition to existing mechanisms such as revenue financing, general obligation bonds, tax increment financing, and sale of development rights, federal stimulus money could be used to bridge the financial gap associated with the cost of structured parking in TOD projects.

New Jersey Transit has been a major advocate of smart growth and TOD since the mid-1990s. At its Morristown station, the agency entered into a public/private partnership with Roseland and Woodmont Properties to convert an adjacent 300-space, commuter surface parking lot into a mixed-use residential project. Highlands at Morristown, which began construction in January 2008, consists of 218 apartments, 8,000 square feet (740 sq m) of retail space, and a 722-space parking garage to support both the development

**As part of an effort to plan and promote mixed-use, transit-oriented development, the Rahway, New Jersey, Parking Authority reprogrammed numerous parking lots throughout the city as development sites for residential and mixed-use projects. The plan resulted in the construction of the Rahway Transportation Center, providing parking for commuters and supporting current and future development.**

program and growing demand for commuter parking. The project is expected to increase transit ridership, increase commuter parking, and serve as a major redevelopment project for downtown Morristown. The project incorporates parking shared among commuters, residents, and retail patrons.

In Atlanta, Lindbergh City Center at Lindbergh Station, a Metropolitan Atlanta Rapid Transit Authority (MARTA) stop, is a mixed-use, transit-oriented development on 47 acres (19 ha). The project, which will be designed and constructed in two phases, will include offices, retail space, apartments, condominiums, and a hotel. Completed components include more than 1 million square feet (93,000 sq m) of office space, 208,000 square feet (19,300 sq m) of retail space, and 718 residential units. The project uses shared parking strategies and parking maximums, which lowered parking ratios and the accompanying construction expense, allowing the developer to build and operate additional structured parking. MARTA, like New Jersey Transit, has adopted a progressive approach to development and parking at its rail stations, furthering development along station lines to increase ridership and provide vibrant communities.

As in any type of development, planners, architects, developers, government officials, and owners need to plan for infrastructure requirements. Parking plays a particularly important role in transit-oriented development by shaping pedestrian and vehicle patterns. It has the ability to enliven a plaza or streetscape, creating a positive impression and contributing to the development. On the other hand, parking is an area of planning that is often overlooked, with detrimental effects.

In helping owners to cut expenses by avoiding overbuilding, determining the proper amount of parking can be critical to the economic feasibility of a project. Designing and



integrating parking correctly will help parking structures complement the character of the surrounding area, creating a place that people will want to visit again. Even more important, the design, integration, and sizing of parking within a TOD community can contribute to the principles and best practices of smart growth and sustainable development. **U**

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*The Parking Garage: Design and Evolution of a Modern Form* is available at [www.uli.org/bookstore](http://www.uli.org/bookstore), or call 800-321-5011.