

Transit as a Parking Tool

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Parking provides an important asset for a variety of residential, commercial, educational, medical and recreational facilities. The ability to generate the activity that buildings are designed for depends largely on the accessibility of those who use automobiles for transportation.

Growth in automobile alternatives such as biking, walking and transit will continue to see substantial gains with various sustainability initiatives. However, automobile access and parking capacity will continue to be the major driving force in the feasibility, design and configuration of buildings and related parking facilities – even for transit-oriented developments (TODs).

But various constraints related to preservation of green space, maximizing development opportunities for master plans, transportation demand management (TDM) goals, reducing traffic effects of new developments and the cost of new parking garages have resulted in the significant growth in the demand for parking capacity alternative strategies.

A good alternative strategy includes a balance of improving parking utilization, allocation and policies, and integrating transit alternatives.

Transit Links for Parking Alternatives

Transit provides a tool for importing parking capacity to the buildings or campus locations where needed by linking off-site, lower-cost, existing or new surface parking lots to the locations with inadequate on-site parking supply. In fact, unlike an expensive parking garage, a transit shuttle from a park-and-ride lot can provide a more accessible way to distribute parking capacity among several buildings that were intended to share one garage that can be proximate to only one building.

The distribution of parking capacity among several buildings and facilities linked by transit also provides a cost-effective parking alternative to those who need to reserve spaces in multiple parking facilities because they sometimes park in more than one location during the day. Instead, they can park at one location and use transit to access multiple locations.

As a parking capacity strategy, transit also can provide an important link when existing parking capacity is displaced by new construction. During construction, parking shuttles remove automobile traffic from the congested construction zone and create new opportunities to relocate parking capacity to less expensive locations as an alternative to building a parking garage.

As an alternative to building more parking spaces, environmentally friendly transit links also can provide important inducements for the tax incentives and approvals of TOD projects.

Technology Options

Transit as a parking tool includes a number of technology options to make this alternative attractive, reliable and effective for

providing access to alternative parking capacity. The key to using transit successfully as a parking tool is to operate service with “headways” (waiting time between buses) with a waiting time less than the driving time from the park-and-ride lot to the destination.

The technology of the buses should include comfortable seating areas, wheelchair spaces, and low-floor design (to eliminate steps) for easy on/off access for all passengers. This allows the use of wheelchair ramps instead of maintenance-intensive wheelchair lifts. Wheelchair ramps are faster to operate than lifts and have an easy to use manual backup to deploy the ramp.

Another important technology enhancement is to include GPS tracking that provides live updates of next bus arrivals on computers, PDAs and cell-phones. Passengers can see the “real time” location of the next

bus so they can conveniently time the walk from their cars in the parking lot or their building locations to the shuttle stop without wasting time or waiting in adverse weather.

Bus engine technology offers alternative-fuel options that allow the use of bio-diesel, natural gas or hybrid powered vehicles and greatly reduce engine emissions. Reliable heating and air conditioning, lighting and parking lot security systems are important technologies to ensure that transit as a parking tool provides an effective, safe and attractive alternative to the preference of on-site parking.

Sustainability Benefits

The emergence of sustainability goals for many institutions has resulted in the development of master plans and design guidelines to improve the sustainability benefits of buildings and parking facilities. Transit as a parking tool can provide a visible and tangible commitment to sustainable goals in a number of areas, such as reduced traffic congestion, pollution and energy consumption.

Unlike the “behind the scenes” sustainability commitment of LEED-certified buildings and energy systems, transit vehicles carry a tangible, high-profile commitment to sustainability that is seen every day by users, visitors, civic leaders and the communities in which the buildings and parking facilities are located.

These sustainability benefits are enjoyed even by non-users of the parking and transit system because better utilization of resources, including green spaces or developments that occur on sites that formerly were parking spaces or proposed parking garages, benefit all.

Transit as a parking tool can generate these sustainability benefits both as an internal transit system and with the use of the park-and-ride facilities of local and regional transit systems.

Strategic Opportunities for TODs

Transit-oriented developments can utilize the attributes of transit to reduce the parking capacity requirements for various development types. Whereas most zoning requirements stipulate the required parking space ratio based on building use and size,

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lower ratios can be achieved by utilizing existing transit capacity or a dedicated bus to off-site parking

TOD projects that use transit as a parking tool also increase eligibility for various tax incentives and government financing. Many local governments want to reduce the traffic impact on communities, and the combination of using existing transit service on-site and a dedicated transit system to off-site parking is important to minimize the site footprint for parking.

For mixed-use TOD projects, minimizing parking spaces preserves the site to enhance green space or development densities for retail, residential or commercial use. Strategically, transit as a parking tool also increases the prospects for government approvals, because TOD projects are being encouraged as land-use strategies

of many municipalities.

Making parking and buildings more accessible to transit links also provides an important strategic advantage to attract tenants and employees to buildings and facilities that offer this alternative to growing traffic congestion and rising fuel prices.

Parking and transit are not adversaries in the strategies for new development or improvements to existing communities. With good planning, transit as a parking tool can help support many goals of new facility or institutional development.

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