## 5.4.3 Discussion

## **Land Area and Value**

A typical parking space is 8-10 feet (2.4-3.0 meters) wide and 18-20 feet (5.5-6.0 meter) long, totaling 144-200 square feet (13-19 sq. meters). Off-street parking typically requires 250-350 square feet (25-35 square meters) per space, including access lanes and landscaping, allowing 125-175 spaces per acre (250-450 per hectare), depending on design. Land costs can vary from thousands of dollars per acre in rural areas to millions of dollars per acre in central business districts (CBDs). Because parking must be located near destinations, it often requires relatively high-value land. Parking facility land is sometimes considered to have little or no value. For example, building or campus managers sometimes consider land as free, and so only consider operating and maintenance expenses when calculating parking costs. But there is usually an opportunity cost to devoting land to parking, since it could be used for buildings, landscaping, leased or sold. Similarly, parking lanes can be converted to traffic lanes, busways, bike lanes, landscaping, or additional sidewalk space. Some cities even convert parking spaces to "parklets" (small sidewalk parks).

## **Construction Costs**

Parking facility construction costs are affected by size per space, size and shape of site (small and irregular shaped sites increase unit costs), number of levels (more levels increase unit costs), topography (slopes and poor soil conditions increase costs), design (exterior aesthetic treatments can increase costs), and geographic location. Structured parking involves a trade-off between construction and land costs. Structured parking typically becomes cost effective when land prices exceed about \$1 million per acre.

Table 5.4.3-1 Parking Structure Construction Costs<sup>3</sup>

City	Cost Per Space	City	Cost Per Space
Atlanta	\$14,028	Los Angeles	\$16,842
Baltimore	\$14,479	Miami	\$14,043
Boston	\$17,947	Minneapolis	\$17,079
Charlotte	\$12,441	New Orleans	\$13,825
Chicago	\$17,869	New York	\$20,326
Cleveland	\$15,474	Philadelphia	\$17,604
Denver	\$14,774	St Louis	\$15,178
Dallas	\$13,281	San Francisco	\$19,253
Detroit	\$16,049	Seattle	\$16,158
Kansas City	\$15,878	National Average	\$15,552

<sup>&</sup>lt;sup>1</sup> James Hunnicutt (1982), "Parking, Loading, and Terminal Facilities," in *Transportation and Traffic Engineering Handbook*, Institute of Transportation Engineering/Prentice Hall, 1982, p. 651.

<sup>&</sup>lt;sup>2</sup> Pavement to Parks (http://sfpavementtoparks.sfplanning.org) San Francico Parks Department.

<sup>&</sup>lt;sup>3</sup> Carl Walker (2009), "Parking Structure Cost Outlook for 2009," *Industry Insightes*, Carl Walker, First Qr.; at <a href="www.carlwalker.com/press/newsletters">www.carlwalker.com/press/newsletters</a>.