Role of Parking Management In Livable Communities

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Redefining Parking Problems

Parking problems are one of the most common complaints businesses and local officials face. They can constrain economic development.
Parking Problem?

[Images of a parking lot and adjacent buildings]
**Cook Street Village Parking Utilization**

**Unoccupied**

- Weekday Noon: 44%
- Friday Night: 50%
- Saturday Morning: 51%
Parking Management Problem

Many areas don’t really have a parking supply problem, they have a parking management problem - parking spaces that are unavailable to the motorists who need them.
Parking Management consists of various strategies that result in more efficient use of existing parking resources.
Why Parking Management?

- Improves motorist convenience.
- Cost savings.
- Supports smart growth.
- Urban redevelopment.
- Greenspace preservation.
- More walkable communities.
- Increased housing affordability.
- Reduced pavement (reduces stormwater management costs, heat island effects).
- Encourages use of alternative modes, reduces traffic problems.
- Creates more attractive streets.
- Is more equitable.
Most people underestimate parking costs and the potential savings from more efficient management.
Shared Parking

Parking spaces are shared by multiple users, increasing efficiency:

- Shared rather than assigned spaces within a lot.
- Shared among destinations (e.g. office and restaurant).
- Rely more on public, on-street rather than private off-street parking.
## Typical Peak Periods

<table>
<thead>
<tr>
<th>Weekday</th>
<th>Evening</th>
<th>Weekend</th>
</tr>
</thead>
<tbody>
<tr>
<td>Banks and public services</td>
<td>Auditoriums</td>
<td>Religious institutions</td>
</tr>
<tr>
<td>Offices and other worksites</td>
<td>Bars and dance halls</td>
<td>Parks</td>
</tr>
<tr>
<td>Park &amp; Ride facilities</td>
<td>Meeting halls</td>
<td>Shops and malls</td>
</tr>
<tr>
<td>Schools and colleges</td>
<td>Restaurants</td>
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<tr>
<td>Daycare centers</td>
<td>Theaters</td>
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<tr>
<td>Transit terminals</td>
<td>Hotels</td>
<td></td>
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<tr>
<td>Distribution centers</td>
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<tr>
<td>Medical clinics</td>
<td></td>
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<tr>
<td>Professional services</td>
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</tr>
</tbody>
</table>

Special places such as Auditoriums, Bars and dance halls, Meeting halls, Restaurants, Theaters, and Hotels are also important during these periods.

Religious institutions, Parks, and Shops and malls are primary places to visit during the weekend.
Regulate Parking

Manage and regulate the most convenient spaces to favor higher-value trips.

- Use (deliveries, taxis)
- User (customers, residents, disabled users).
- Duration (e.g. 60-minute maximum).
- Time (e.g., no parking 9am-5pm).
More Accurate Standards

Conventional Standards are often excessive and can be significantly reduced.

Adjustment Factors:

- Residential and employment density
- Land use mix
- Transit accessibility
- Carsharing
- Walkability
- Cycling facilities
- Population demographics (age, employment, income, etc.)
- Pricing
- Parking & mobility management
- Proximity to overflow parking
<table>
<thead>
<tr>
<th>Factor</th>
<th>Typical Adjustments</th>
</tr>
</thead>
<tbody>
<tr>
<td>Residential Density</td>
<td>Reduce requirements 1% for each resident per acre; e.g., 15% where for 15 residents per acre, and 30% for 30 residents per acre.</td>
</tr>
<tr>
<td>Employment Density</td>
<td>Reduce requirements 10-15% in areas with 50+ employees per gross acre.</td>
</tr>
<tr>
<td>Land Use Mix</td>
<td>Reduce requirements 5-10% in mixed-use areas, and more if parking can be shared.</td>
</tr>
<tr>
<td>Transit Accessibility</td>
<td>Reduce requirements 10% for housing and employment within ¼ mile of frequent bus service, and 20% within ¼ mile of a rail transit station.</td>
</tr>
<tr>
<td>Carsharing</td>
<td>Reduce residential requirements 5-10% if a carsharing service is located nearby, or 4-8 spaces for each carshare vehicle in a residential building.</td>
</tr>
<tr>
<td>Walkability</td>
<td>Reduce requirements 5-15% in walkable communities, and more if walkability allow more shared and off-site parking.</td>
</tr>
<tr>
<td>Income</td>
<td>Reduce requirements 10-20% for the 20% lowest income households, and 20-30% for the lowest 10%.</td>
</tr>
<tr>
<td>Pricing</td>
<td>Reduce requirements 10-30% for cost-recovery pricing (i.e. parking priced to pay the full cost of parking facilities).</td>
</tr>
<tr>
<td>Parking &amp; Mobility Management</td>
<td>Reduce requirements 10-40% at worksites with effective parking and mobility management programs.</td>
</tr>
<tr>
<td>Design Hour</td>
<td>Reduce requirements 10-20% if a 10th annual design hour is replaced by a 30th annual peak hour. Requires overflow plan.</td>
</tr>
<tr>
<td>Contingency-Based Planning</td>
<td>Reduce requirements 10-30%, and more if a comprehensive parking management program is implemented.</td>
</tr>
</tbody>
</table>
Remote Parking

- Encouraging longer-term parkers (e.g., employees) to use less-convenient, off-site parking, so more convenient spaces are available for priority users (e.g. customers).
- Negotiate sharing agreements for offsite, overflow parking.
- Provide directions to offsite parking facilities.
Improve User Information

Provide convenient information on parking availability and price, using maps, signs, brochures and electronic communication.
Improve User Information

Whenever you indicate that parking is prohibited, also indicate where parking is available.
Improve Walkability

Improved walking conditions:

• Expands the range of parking spaces that serves a destination, increasing its functional supply.

• Allows more “park once” trips, so customers leave their vehicle in a central location and walk to various destinations, reducing the total number of parking spaces needed.

• Allows walking and transit trips to substitute for driving, reducing parking demand.
Transport and Land Use Management

- **Smart Growth** (also called New Urbanism) - Encourage more clustered, mixed, multi-modal, infill development. Allows more shared parking and use of alternative modes.

- **Mobility Management** - Various strategies and programs can encourage more efficient travel patterns. Reduces automobile trips and parking demand.
Parking is never really free, consumers either pay directly or indirectly. Paying directly tends to be more fair and efficient. It typically reduces parking demand about 20% and significantly increases transit ridership.
Parking Pricing

- Charge more frequently for on-street parking (e.g., meters on residential streets, with discounts or exemptions for residents).
- Expand when and where parking is priced (e.g., evenings and Sundays, residential streets).
- Use time and location-based prices to encourage more efficient use of parking facilities.
- Reduce long-term discounts and “early bird” specials. Shift to shorter time periods (e.g., hourly rather than daily).
Improve Pricing Methods

- Multiple payment options (coins, bills, credit cards, debt cards, cell phone payments).
- Charge only for the amount of time parked.
- Are easy to understand and use.
- Enforcement is respectful and friendly.
Rent and sell parking spaces separately from building units. For example, rather than renting an apartment with two free parking spaces for $800 per month, rent the unit for $700, and each parking space for $50 per month.
Transportation Management Associations (TMAs) are private, non-profit, member-controlled organizations that provide transportation services in a particular area, such as a commercial district, mall, medical center or industrial park.
Address Negative Impacts

- Develop overflow parking plan to address occasional peaks.
- Address specific spillover problems.
- Improve enforcement.
- Design parking facilities to fit well into their environment.
- Cooperate with neighbors.
<table>
<thead>
<tr>
<th>Strategy</th>
<th>Typical Parking Reduction</th>
<th>Traffic Reduction</th>
</tr>
</thead>
<tbody>
<tr>
<td>Shared Parking</td>
<td>10-30%</td>
<td></td>
</tr>
<tr>
<td>Parking Regulations</td>
<td>10-30%</td>
<td></td>
</tr>
<tr>
<td>More Accurate Standards</td>
<td>10-30%</td>
<td></td>
</tr>
<tr>
<td>Parking Maximums</td>
<td>10-30%</td>
<td></td>
</tr>
<tr>
<td>Remote Parking</td>
<td>10-30%</td>
<td></td>
</tr>
<tr>
<td>Smart Growth/TOD</td>
<td>10-30%</td>
<td>✓</td>
</tr>
<tr>
<td>Walking and cycling Improvements</td>
<td>5-15%</td>
<td>✓</td>
</tr>
<tr>
<td>Increase Existing Facility Capacity</td>
<td>5-15%</td>
<td></td>
</tr>
<tr>
<td>Mobility Management</td>
<td>10-30%</td>
<td>✓</td>
</tr>
<tr>
<td>Parking Pricing</td>
<td>10-30%</td>
<td>✓</td>
</tr>
<tr>
<td>Financial Incentives</td>
<td>10-30%</td>
<td>✓</td>
</tr>
<tr>
<td>Unbundle Parking</td>
<td>10-30%</td>
<td>✓</td>
</tr>
<tr>
<td>Parking Tax Reform</td>
<td>5-15%</td>
<td>✓</td>
</tr>
<tr>
<td>Bicycle Facilities</td>
<td>5-15%</td>
<td>✓</td>
</tr>
<tr>
<td>Improve User Information</td>
<td>5-15%</td>
<td>✓</td>
</tr>
<tr>
<td>Improve Enforcement</td>
<td>Varies</td>
<td></td>
</tr>
<tr>
<td>Parking Facility Design &amp; Operation</td>
<td>Varies</td>
<td></td>
</tr>
<tr>
<td>Contingency-Based Planning</td>
<td>Varies</td>
<td></td>
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Supports TOD

Improved management typically reduces parking requirements 20-40% compared with conventional standards, and even more in transit-oriented locations. It supports and is supported by compact development and transit use.
A transit village has high-density development within 1/4-Mile of a station, and medium density development within 1/2-Mile. Park & Riders usually want to park within 2-3 blocks of their station.
Changes Required

- Change the way we think about and solve parking problems.
- New planning practices and zoning codes.
- New organizational relationships to provide parking management and brokerage services.
“Parking Management Best Practices”
“Parking Management: Strategies, Evaluation and Planning”
“Parking Taxes: Evaluating Options & Impacts”
“Online TDM Encyclopedia”
and more...

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