

Focus on Short-Duration Parking

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Analysis of short-duration parking allows opportunities for:

- Increasing parking revenues while NOT increasing daily rates (those that critics focus upon)
- Increasing parking revenues without adjusting any rates
- Improving curbside operations and air quality

Typical parking “rules”

- Long-duration customers
 - Occupy 70-80% of the spaces
 - Generate 70-80% of revenues
 - Represent only 20-30% of all customers
 - Tend to occupy the “best” spaces
- Short-duration customers
 - Represent 70-80% of all customers
 - Want convenient spaces
 - If convenient spaces are not reliably available, will use curbsides
 - If on curbs, generate little or no revenues

Common challenges related to short-duration parking

1. How much additional revenue could be produced by adjusting short-duration parking rates?
2. How much capacity should be reserved for pickup/drop-off parking?
3. What is the impact of changing grace period and other time allowances?

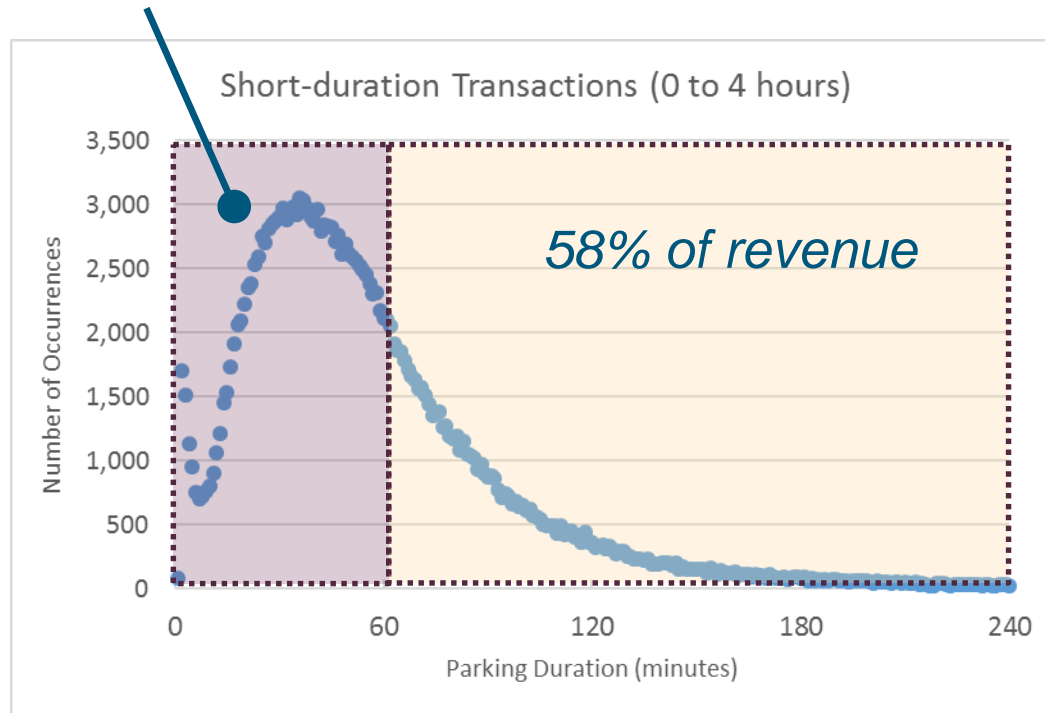
1. Short-duration increments

- Typically 15 minutes, 30 minutes, or 1 hour
- Usually remain constant until reaching the daily maximum
- Many airports prefer to use whole dollar amounts (avoids coins), despite increasing use of credit cards

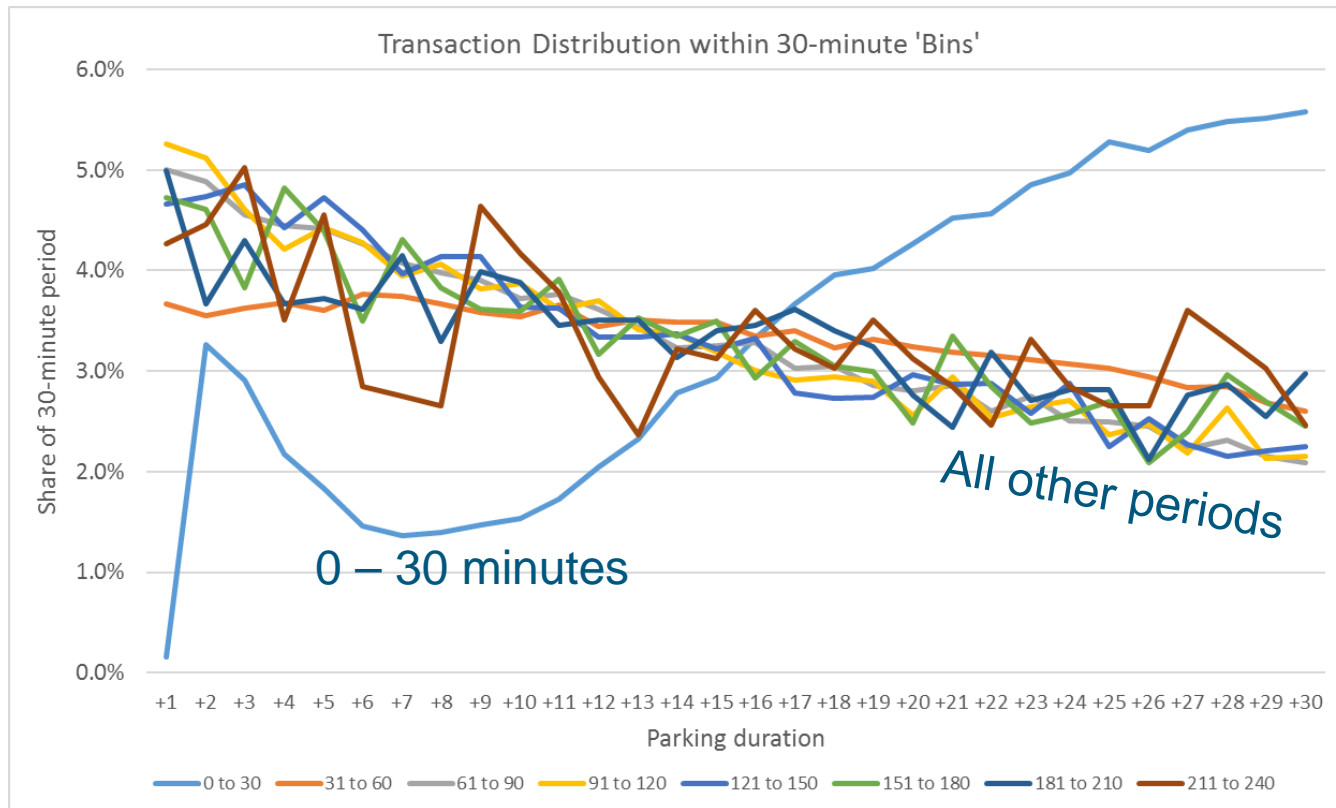


Most short-duration revenue is from customers who may be less price-sensitive

64% of transactions



After the first 30 minutes, distribution of durations across each period is consistent



Varying short-duration increments and rates can be profitable...

	Existing (\$2.00 / 30 min)	\$2.00 / 20 min	\$1.50 / 15 min
Hourly price	\$4.00	\$6.00	\$6.00
Revenue	\$970,000	\$1,350,000 (+39%)	\$1,300,000 (+34%)

Varying short-duration increments and rates can be profitable...

	Existing (\$2.00 / 30 min)	\$2.00 / 20 min	\$1.50 / 15 min	\$1.00 / 12 min	\$1.00 / 10 min	\$0.50 / 5 min	\$0.10 / 1 min
Hourly price	\$4.00	\$6.00	\$6.00	\$5.00	\$6.00	\$6.00	\$6.00
Revenue	\$970,000	\$1,350,000 (+39%)	\$1,300,000 (+34%)	\$1,060,000 (+9%)	\$1,250,000 (+29%)	\$1,190,000 (+23%)	\$1,150,000 (+19%)

...while providing opportunity to *reduce* parking rates for some customers

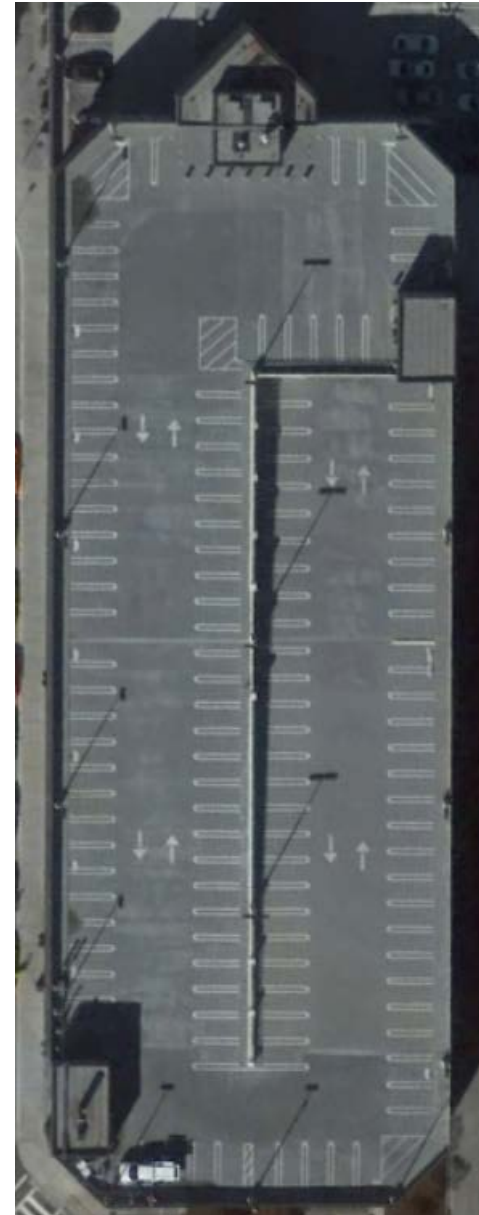
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Customers paying <i>less</i>		0%	8%	14%	5%	12%	24%
Customers paying <i>same</i>		27%	0%	41%	22%	15%	3%
Customers paying <i>more</i>		73%	92%	45%	73%	73%	73%

2. Grace Periods and Allowances

- **Grace period:** a very-short stay (e.g., 10 minutes) that incurs no charge
 - *Drivers who entered wrong facility*
 - *Drivers who can't quickly find an empty space*
 - *Passengers who forgot something*
- **Allowance:** a quantity of time deducted when calculating parking fees (e.g., a 32-minute stay is charged as a 30-minute stay)
 - *Provides for time required to exit a facility*
 - *Intended to reduce potential customer complaints*

Example

- Multi-level, sloped-floor garage (no speed ramps)
- Approximately 1 mile from garage roof to toll plaza
- At least 6 minutes to reach the toll plaza



Example

- Typical grace period
- 10-minute allowance

	ORIGINAL POLICY
Initial grace period	10 min
Additional allowance	10 min
Estimated net new revenue	-
Annual revenue	\$38 million

Example

- Reduce initial grace period to 5 minutes
- Eliminate allowance

	ORIGINAL POLICY	Alternative
Initial grace period	10 min	5 minutes
Additional allowance	10 min	None
Estimated net new revenue	-	\$1.0 million
Annual revenue	\$38 million	\$39 million (+2.5%)

Results

- 2.5% increase in gross revenues, *without changing prices*
- Airports taking similar actions reported no complaints from public parking customers

3. Importance of accurately estimating short-duration parking needs

To be effective, short-duration parking must

Must be in the right location (i.e., close-in)

Must be reliably available

Must be easy to enter and exit

Because if not...

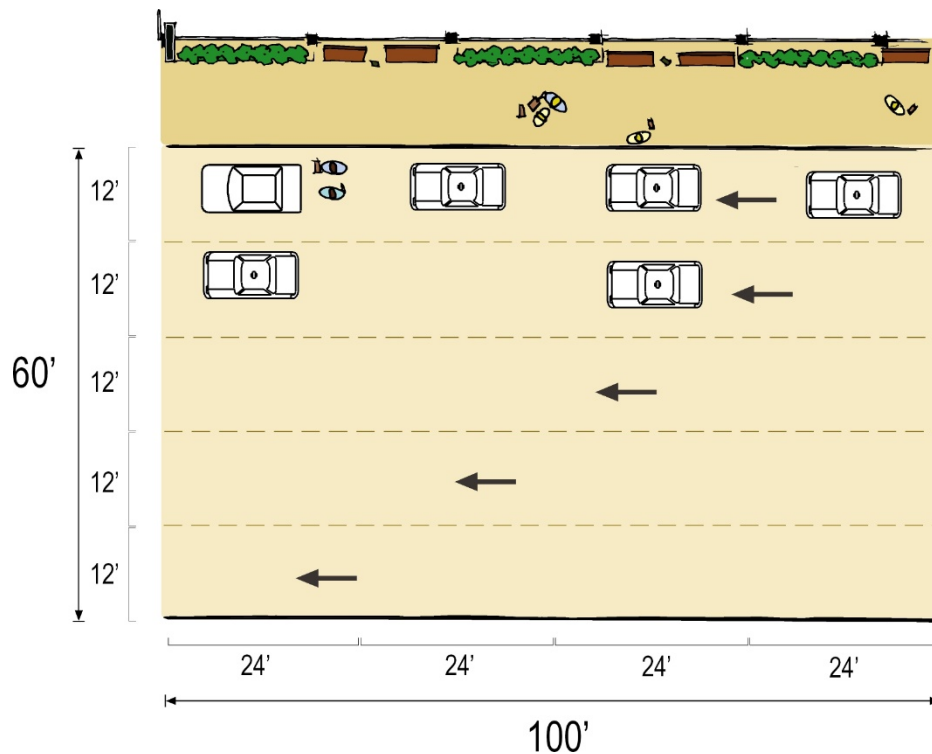
Customers will use the curbs instead

So...

Right-sizing the short-duration area provides a good level-of-service for meeters/greeters while preserving spaces for high-revenue (long-duration) parking customers

Curbside parking is relatively inefficient...

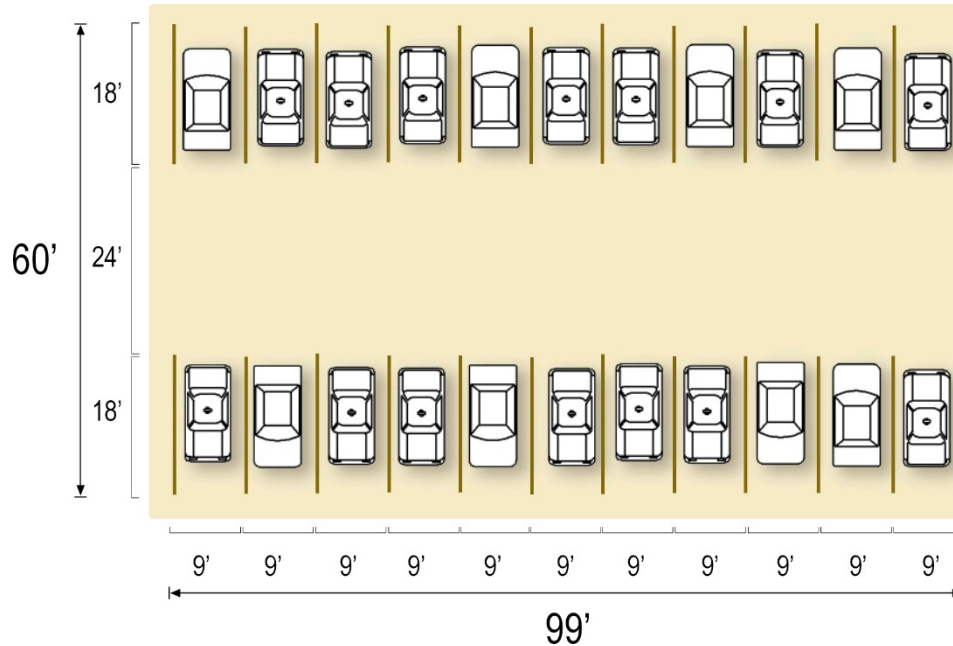
Area = 6,000 sq. ft. (4 lanes = 4,800 sq. ft.)
Area/space = 6,000/6 spaces,
= **1,000 sq. ft./space**



...compared with parking

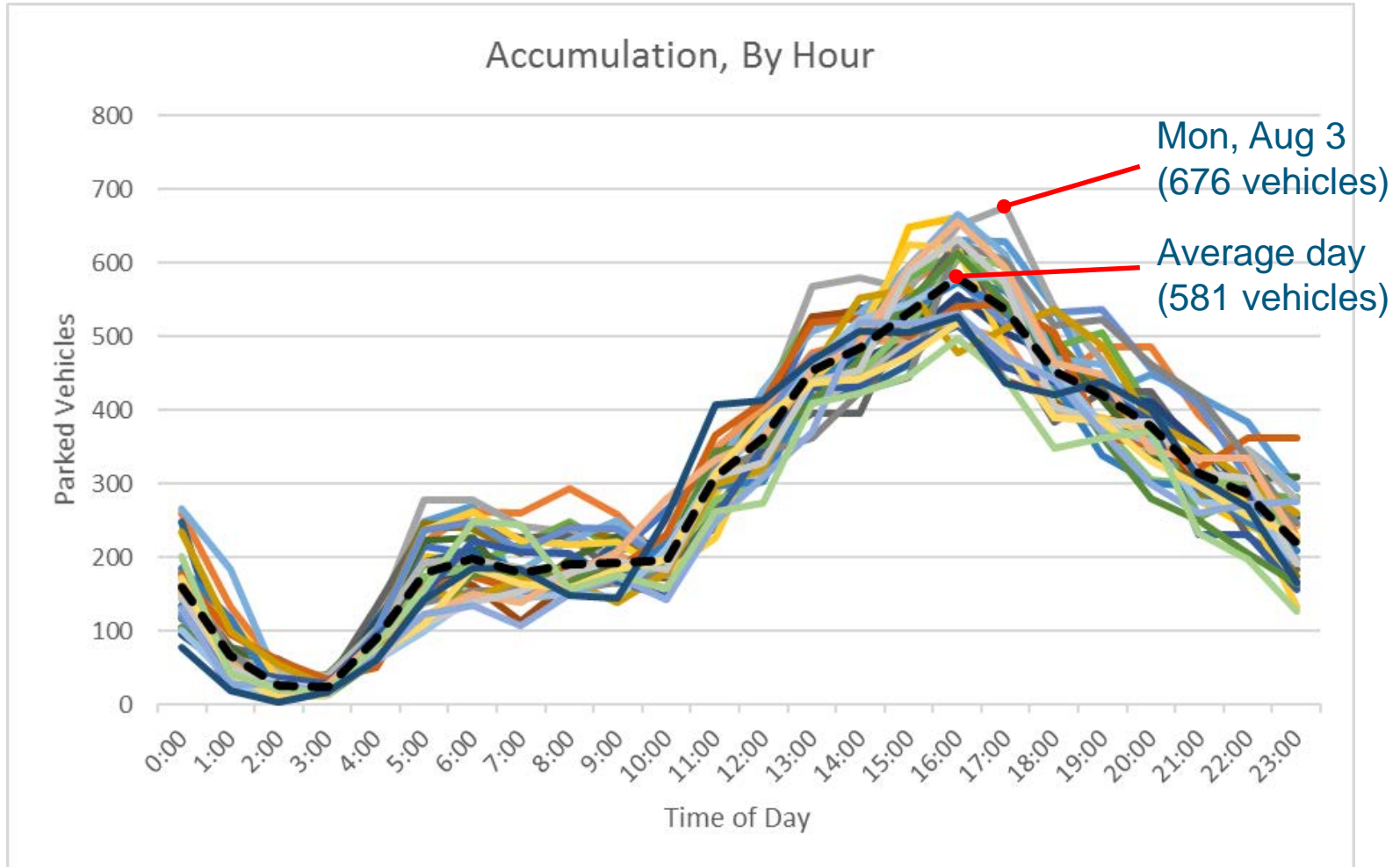
Area = 6,000 sq. ft.

**Area/space = 6,000/22 spaces,
= 273 sq. ft./space**

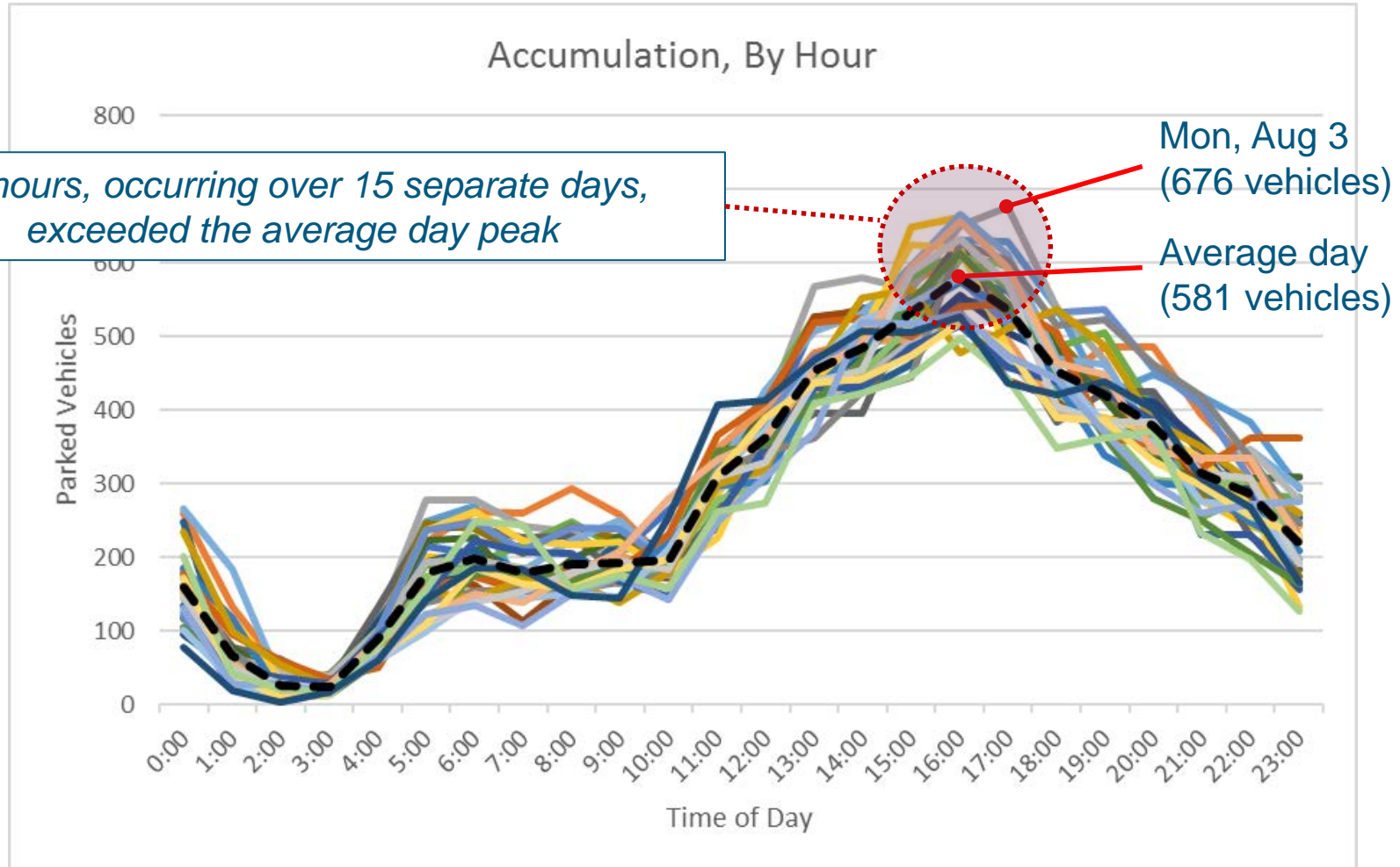


***Provides 3x to 4x as
many spaces per sq. ft.***

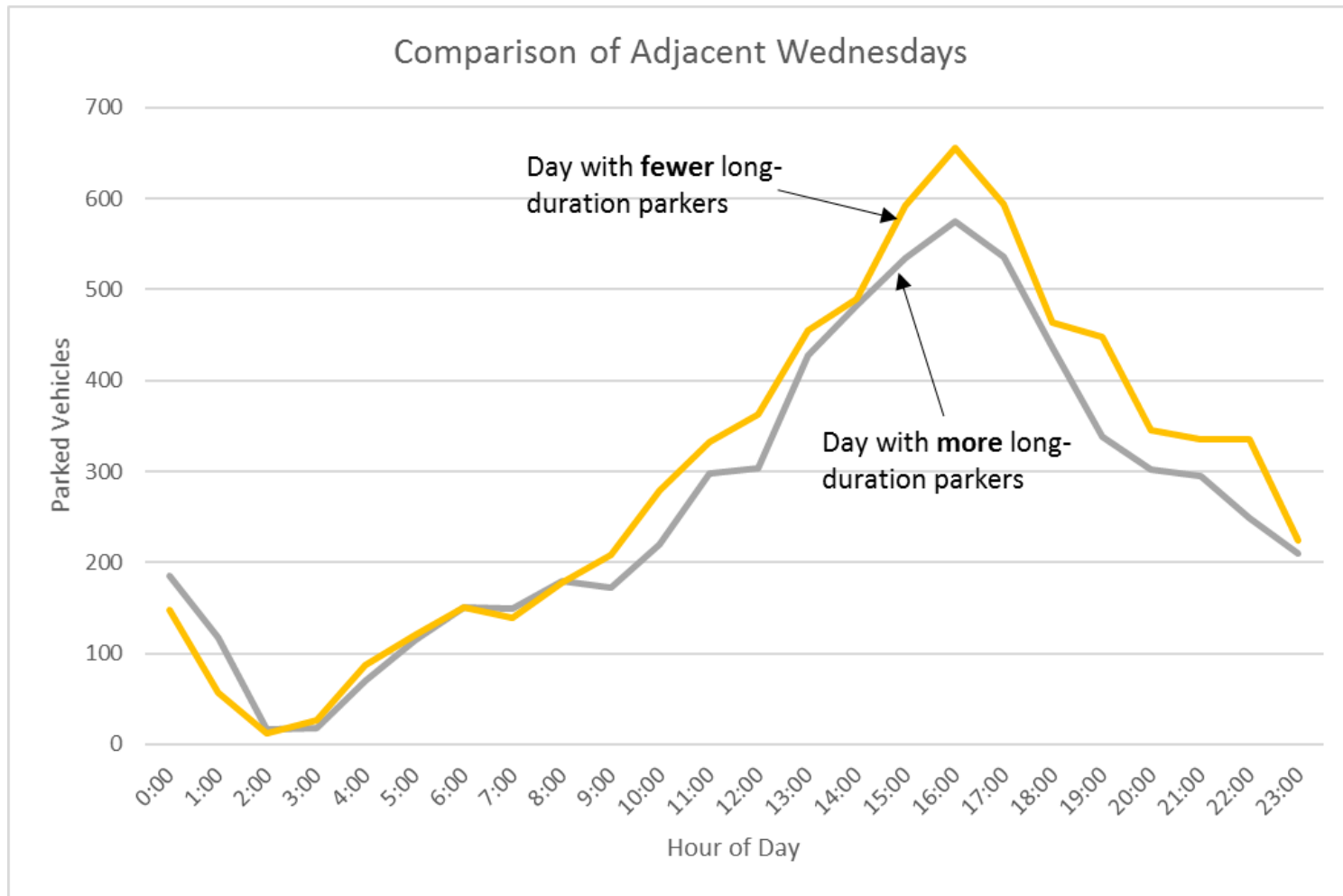
Isolating the 0 – 4 hour transactions reveals the number of vehicles parked at any time...



... can provide informed estimates of space needs and frequency of those needs



... and can identify potential latent demand for short-duration parking...



Which means...

- Improved ability to “right-size” short-term parking area
- Increased attractiveness of parking versus curbsides
- Reduced curbside volumes
- Higher revenues

Analysis of individual transaction data can inform other parking analyses

Analysis	Purpose
Parking duration, by day and time of entry <ul style="list-style-type: none">• Short-duration• Long-duration	Estimate impact of variable pricing
Form of payment <ul style="list-style-type: none">• Cash• Credit cards• Toll tags	Evaluate potential for cashless system
Accumulation by access type <ul style="list-style-type: none">• Employees• Reserved parking programs	Evaluate employee and other parking policies

THANK YOU!

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