

# Parking Utilization Study — Sample Report

Sample report demonstrating format, metrics, and QA gates.

**Prepared for** Sample Client    **Study area** West Lot    **Study period** Weekday and weekend operating hours

## Executive finding

The west lot reaches practical capacity during the weekday late-morning peak while weekend demand remains low. The primary decision is weekday peak management: allocation, overflow planning, and time-window rules during the 10:00–12:00 constraint.

|                                                                      |                                                                            |                                                                                                      |                                           |
|----------------------------------------------------------------------|----------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------|-------------------------------------------|
| <b>96.3%</b><br>Average occupancy during<br>weekday 10:00–12:00 peak | <b>5.0 hrs/day</b><br>Average weekday time above<br>85% practical capacity | <b>6.2</b><br>Average open spaces across 165<br>PASS-camera marked spaces<br>during 10:00–12:00 peak | <b>8.1%</b><br>Weekend occupancy baseline |
|----------------------------------------------------------------------|----------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------|-------------------------------------------|

Lot capacity: 320 marked spaces · PASS-camera reportable area: 165 marked spaces · Study window: weekday and weekend operating hours from sample benchmark footage · counts summarized hourly after camera-level validation

## Recommended use of this finding

- The 10:00–12:00 window averages 6.2 open spaces across 165 PASS-camera marked spaces — allocation or time-limit changes should target this window first.
- The site averages 5.0 weekday hours above 85% practical capacity — overflow planning should cover more than the lunch-hour peak.
- Weekend occupancy averages 8.1% — weekend demand should be reported separately from weekday peak conditions.

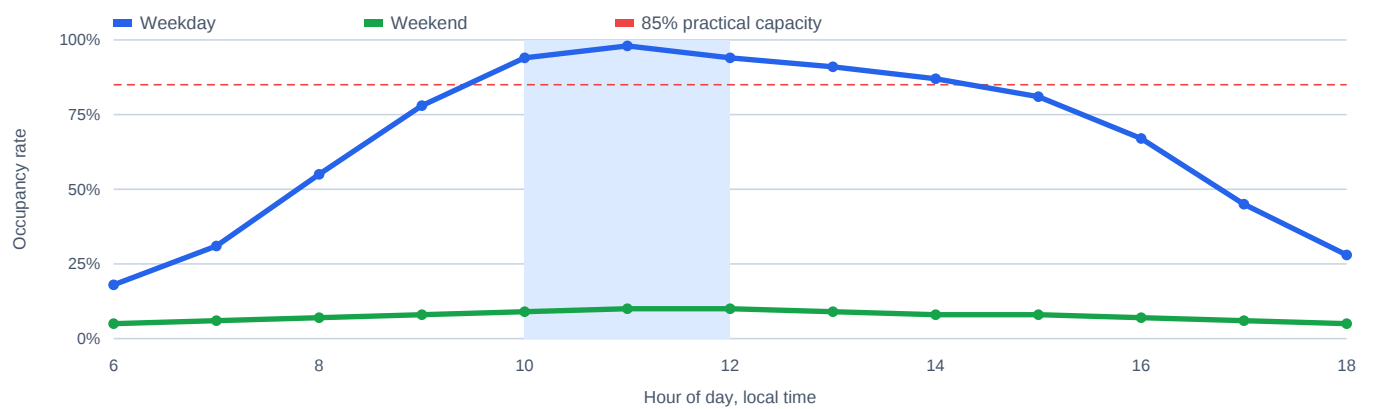
## Methodology at a glance

- Each camera is validated against hand-reviewed counts before its counts are reported.
- Camera views receive PASS, WATCH, or FAIL grades.
- PASS views feed reported precision figures. WATCH views are trend-labeled. FAIL views are marked not-reportable.

# Hourly Occupancy Pattern

Weekday demand reaches practical capacity during the 10:00–12:00 peak window. Weekend demand remains low and should remain separate from weekday peak analysis.

## Weekday demand reaches practical capacity; weekend demand remains low



Blue shaded band: 10:00–12:00 peak window. At ~85% occupancy a lot is effectively full — remaining spaces are scattered and search time rises sharply.

### Interpretation

The 10:00–12:00 period is the tightest operating window, averaging 96.3% occupancy with 6.2 open spaces across 165 PASS-camera marked spaces. Occupancy remains above the practical-capacity threshold for 5.0 weekday hours, so the operating issue extends beyond a single hour.

### Decision implication

If the property is evaluating allocation changes, enforcement windows, visitor/tenant rules, or overflow planning, the weekday peak window should be evaluated separately from weekend conditions.

## Zone-level snapshot

| Zone      | Peak occupancy | Avg open spaces at peak | Camera grade |
|-----------|----------------|-------------------------|--------------|
| Camera 02 | 96.3%          | 0.6                     | PASS         |
| Camera 03 | 99.9%          | 0.3                     | PASS         |
| Camera 04 | 99.8%          | 0.5                     | PASS         |
| Camera 06 | 99.6%          | 1.3                     | PASS         |
| Camera 08 | 98.2%          | 3.5                     | PASS         |

# Every camera is graded before its counts are reported

Views that support reliable counts are reported. Views that cannot support reliable counts are graded not-reportable rather than reported anyway.

| Camera    | Verified count | Reported count | MAE                                          | Bias                                          |
|-----------|----------------|----------------|----------------------------------------------|-----------------------------------------------|
| Camera 02 | 6.74 avg       | 6.35 avg       | 0.52 spaces on this site's validation window | -0.39 spaces on this site's validation window |
| Camera 03 | 14.44 avg      | 13.79 avg      | 0.87 spaces on this site's validation window | -0.65 spaces on this site's validation window |
| Camera 04 | 24.73 avg      | 23.65 avg      | 1.13 spaces on this site's validation window | -1.07 spaces on this site's validation window |
| Camera 06 | 27.29 avg      | 26.33 avg      | 1.30 spaces on this site's validation window | -0.96 spaces on this site's validation window |
| Camera 08 | 34.72 avg      | 33.81 avg      | 1.65 spaces on this site's validation window | -0.92 spaces on this site's validation window |

**Validation frame:** marked parking spaces with occupied/free status checked against a hand-reviewed count.

**PASS — 5 views**  
Used for hourly and zone-level utilization figures.

**WATCH — 3 views**  
Used for directional trend review only; uncertainty is clearly flagged.

**FAIL — 1 view**  
Excluded from precise figures because the view cannot support reliable counts.

| Standard deliverables               | Next step                                                                                                                                                                       |
|-------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| • Executive decision memo           | Discuss your study before sending files. Northline will confirm the question, authorization, scope, and a secure transfer method first.                                         |
| • Hourly utilization summary        | Email subject: Parking Utilization Study                                                                                                                                        |
| • Weekday/weekend segmentation      | Do not send footage, screenshots, or credentials yet.                                                                                                                           |
| • Zone-level occupancy review       | <b>Optional add-on:</b> duration and turnover analysis for lots where camera coverage supports it.                                                                              |
| • Annotated validation frames       | <b>Fine print:</b> This study is an operational data analysis. It is not a sealed/stamped engineering study, a traffic impact analysis, or legal, safety, or compliance advice. |
| • Camera reliability scorecard      |                                                                                                                                                                                 |
| • CSV appendix available on request |                                                                                                                                                                                 |