

Thursday Beats the Weekend: A Day-of-Week Demand Rhythm in a Transit-Adjacent Format

Indivd Analytics — Research

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Abstract

Weekend peaking is a foundational assumption of retail planning: staff harder on Saturday, restock for Sunday. This paper describes a large-format, transit-adjacent retail location where that assumption does not hold. The site belongs to a case study selected because its traffic pattern departs furthest from the conventional curve, so the paper describes one such location, not other sites. Across the 27 complete local days in August 2026 (canonical per-hour totals over 17 functional zones), the day of the week with the highest total footfall is **Thursday**, with a mean of approximately 2,762 location-visits per clock hour — 16.1% above Sunday (2,379) and 18.1% above Saturday (2,339, one fewer occurrence in the window). Monday is the trough (2,305). The three strongest individual days of the window are all Thursdays. The rhythm is the reverse of the high-street pattern. The mechanism the literature supports is that scheduled air service concentrates demand into timetable-structured waves; that the waves land hardest on Thursday here is our measurement, and the flight-schedule reading is interpretation, not an established causal chain. For planning, the implication is that a format whose measured curve peaks mid-week should staff and stock to that curve rather than to the generic weekend assumption. All figures are observed, aggregated at format level and anonymized; the single-location, single-month scope is stated honestly as the paper’s principal limitation.

1 Problem and motivation

“The weekend is the peak” is a durable heuristic of retail planning — common practice rather than a cited benchmark — and it drives labour scheduling, stock rotation, replenishment cycles and promotion timing. Like all heuristics it silently imports an assumption about *which* retail: a high-street or shopping-centre format serving leisure shoppers. A format whose demand is anchored to a flight schedule has no obligation to obey it.

This paper measures the day-of-week demand curve at one large-format transit-adjacent location from continuous entrance-line counting, and asks a narrow question: *which day of the week carries the most demand, and by how much does the calendar assumption miss it?* The answer rewrites the local retail calendar: Thursday, not Saturday. In this window the gap is large enough that it would matter operationally if it persisted — and whether it persists is exactly what longer history must show.

2 Data

The analysis uses the canonical per-hour visitation total (`location_visits`) recorded by entrance-line counters at the location, summed across 17 functional zones [1]. The same recording and selection conventions apply as in the companion paper on hour-of-day concentration [2]:

- **How the location was selected.** The site was chosen for study *because* its hourly profile departs furthest from the conventional daytime curve; this paper inherits that case-study framing, and its figures describe this location rather than other sites.

Table 1: Mean hourly volume by day of week (complete local days; pooled clock hours), computed from the canonical hourly series.

Day	Mean location-visits/hr	Days in window
Mon (trough)	2305	4
Tue	2310	4
Wed	2307	4
Thu (peak)	2762	4
Fri	2502	4
Sat	2339	3
Sun	2379	4

- **Canonical metric.** Figures are computed on the canonical per-hour total; earlier figures published elsewhere used a zone-line sum and are about $2.19\times$ larger [1].
- **Window and completeness.** The fixed analysis window is August 2026 (local days). Two calendar days are partial (21 and 3 of 24 hours) and are excluded, leaving 27 complete days, August 2–28 — four occurrences of every weekday except Saturday, which appears three times. No partial day is imputed.
- **Anonymity.** Data are aggregated to hourly totals before analysis; no individual, store, brand or regional information is used, and the location is described only at format level.

3 Method

Let $v_{d,h}$ be the canonical visitation total for local clock hour h on local day d . Fix a day-of-week class ω (Monday–Sunday) and let Ω be the set of complete local days in that class, with $n_\omega = |\Omega|$ its day count. The class’s mean hourly volume pools all complete days and clock hours in the class:

$$\mu_\omega = \frac{1}{24 n_\omega} \sum_{d \in \Omega} \sum_{h=0}^{23} v_{d,h}, \quad (1)$$

where the denominator $24 n_\omega$ is the class’s pooled clock-hour count (96 hours for a four-day class). Weekday means are therefore computed as pooled means over the same clock-hour support for every class, so the comparison is apples-to-apples. Percentage gaps are reported as $\mu_{\text{Thu}}/\mu_\omega - 1$ for the peak Thursday against each other day. The three strongest single days are identified by total daily volume. Every figure in this paper — and in Figure 1 and Table 1 — is recomputed from the raw hourly series by a single deterministic analysis that accompanies the paper.

Because the window contains one fewer Saturday than the other weekday classes, and because a one-month window cannot exclude a slow trend, the Saturday comparison is the estimate most exposed to schedule drift; the limitations section discusses this exposure openly rather than hiding it: the three complete Saturdays in the window have mean hourly volumes of roughly 2,414, 2,415 and 2,188, so the Saturday class mean (2,339) averages days that differ by more than 200 visits per hour.

4 Results

Thursday is the highest-demand day of the week. The weekday curve peaks at Thursday, with a mean of approximately 2,762 location-visits per clock hour — 18.1% above Saturday (2,339) and 16.1% above Sunday (2,379). Friday is the second-strongest day (2,502), also ahead of both weekend days. Monday is the trough (2,305).

The weekend is below average, not above it. Both weekend days sit at or below the Monday–Friday mean (2,437): the weekend mean (2,359) is 3.2% *below* the weekday mean. The

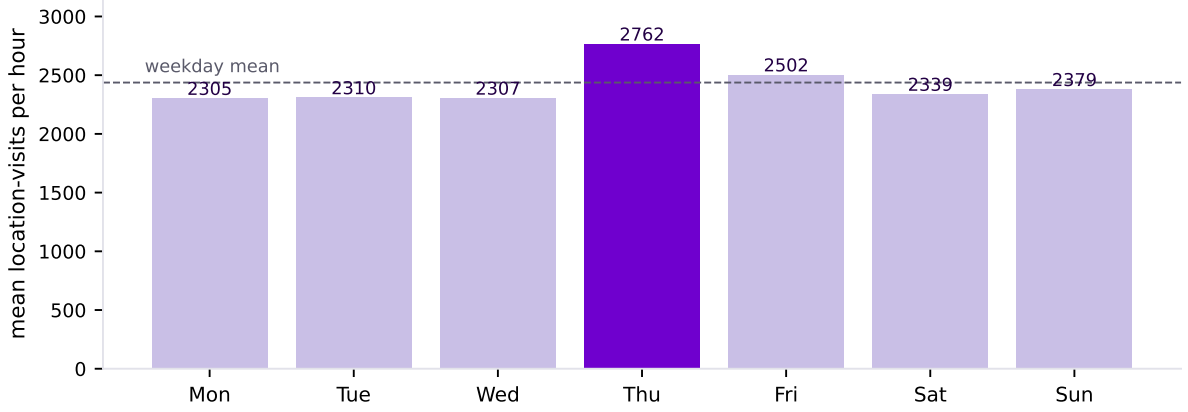


Figure 1: Mean hourly location-visits by day of week over the 27 complete days of the window (pooled clock hours). The dashed line marks the weekday (Mon–Fri) mean, which includes Thursday. Thursday is the peak; Monday the trough. Weekend days sit *below* the weekday mean.

generic assumption does not merely miss by a little here — the weekend sits below the weekday mean.

The month’s strongest days are Thursdays. The three strongest single days of the window are Thursday August 6 ($\approx 69,532$ visits), Thursday August 13 ($\approx 67,281$) and Thursday August 20 ($\approx 65,607$). Thursday leads the class average and the month’s three strongest days.

5 Validation and quality

All reported numbers are recomputed from the raw hourly series by a single deterministic analysis over the fixed analysis window. All seven weekday means are computed over the same clock-hour support (24 clock hours per complete day), so no class is favoured by trading-hour definitions. The completeness rule (27 complete days; two partial days excluded, none imputed) is applied uniformly across weekday classes. Day-to-day variability around the class means is not characterized; the figures are one-month descriptions of one location.

Where the evidence stands

This paper is explicit about what is and is not anchored in the wider literature. There is no strong peer-reviewed estimate for “which weekday peaks” in transit-adjacent duty-free-style formats — no comparable published dataset exists, as far as we can establish — so the measured Thursday peak and its size rest entirely on our own measurement of one location, and we state that openly rather than presenting them as benchmarks. What the literature supports is the mechanism at the level of waves and timetables: hub-airport operation is organized in waves of arrivals and departures [4]; scheduled air service carries strong calendar rhythms [6]; airport passengers’ dwell time and spending track their flight times [5]; and the underlying observation that airline timetables dictate when passenger traffic arrives at airport facilities goes back decades [3]. What no cited paper establishes is that the waves land hardest on a Thursday in any general sense: that the Thursday landing holds here is our measurement, and the flight-schedule reading of it is interpretation, offered as such. For the conventional-format side of the contrast (the weekend-peak default this format breaks), we are not aware of a single citable industry dataset that quantifies it, so that half is stated as common planning practice, not as measured evidence. The reader gets both halves: what the literature establishes (mechanism), and what only this dataset can establish (the measured Thursday peak and its size).

6 Discussion

The finding reads best as a question every operator of this format should ask of their own data: if your weekday curve peaks mid-week, are your rosters and stock cycles calibrated to it, or to a generic weekend peak? For the measured location the practical calendar is Thursday first, Friday second, Monday the trough — the weekend *below* average. Labour rosters, stock rotation and replenishment cycles calibrated to a generic weekend peak would be mis-phased relative to that curve; in this window the peak day out-runs Saturday by roughly a fifth, so a persistent gap of this size would be operationally material. Whether it holds beyond this location and month is exactly what accumulating history can answer.

Limitations

The scope is one large-format transit-adjacent location over one month — selected because it departs furthest from the conventional curve — so the *shape* of the rhythm, not the absolute level, is the transferable finding; the figures describe this case, not other sites. The window yields three complete Saturdays against four of every other weekday, and the Saturday comparison is therefore the most exposed to week-to-week variation: the three Saturdays’ own means (about 2,414, 2,415 and 2,188) spread by more than 200 visits per hour, so the 18.1% headline gap over Saturday carries the widest uncertainty of any comparison here; a longer window could shift it by several percentage points in either direction. The precise gap sizes should be re-estimated as history accumulates. All figures are descriptive; no significance testing is implied; and the data are aggregated and anonymized at format level.

References

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