

Street-Level Retail Occupancy Study: N Mississippi Avenue Corridor

(N Failing St. to N Shaver St., Portland, OR)

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Project Overview & Study Area

The purpose of this study is to evaluate and report on the street level business health of a one block segment of the **N Mississippi Avenue corridor** through a spatial analysis of storefront vacancy, business classification, and operational hours. By examining the relationship between physical infrastructure, such as proximity to TriMet bus stops and street lighting, and neighborhood socioeconomic conditions, this study offers insights into the current conditions of the study area aligned with the City of Portland's goals of mapping ground floor level business health and economic vitality; particularly late night activity.

Study Area Selection

The study area encompasses a one-block segment of N Mississippi Avenue, from N Failing St. to N Shaver St. Located within **District 2**, this block was selected based on the neighborhood's designation by the **City of Portland** as one of a number of priority areas for commercial district revitalization. This segment serves as a critical case study for how historic "Main Street" environments in Portland have adapted to shifting economic climates, post the 2020 Covid Pandemic, in a high-density, mixed-use urban setting.

Justification of Site Selection

The selection of this specific study area was informed by a number of factors including: its municipal priority status, the author's professional familiarity with the district, time constraints on completing fieldwork and analysis at an in-depth level, and the ability to map features in a way that is both data driven and makes aesthetic sense. As a long-term employee at a high-traffic music venue and bar on N Mississippi Ave, the author has firsthand knowledge of consumer activity and business status within the study area. This experiential data allowed for more nuanced verification of field observations and operational hours that static datasets, or Google Maps imagery may not reflect accurately or overlook.

Scope

The scope of this analysis is limited to the ground-floor storefronts on **N Mississippi Avenue** between **N Failing St. (South)** and **N Shaver St. (North)**. This segment includes approximately 34 addresses. The study focuses on street-level use, excluding upper-floor retail and residential, or their entrances, to prioritize the pedestrian experience and "Main Street" vitality. All field data was collected during the **Winter 2026** term, providing a post-pandemic snapshot of the corridor's recovery.

Methodology and GIS Workflow

Field Data Collection & Verification

The primary dataset was generated through a hybrid "ground-truthing" approach. Initial storefront data, including occupancy status, business classification, operating hours, and contact information, was drafted using **Google Street View** and subsequently verified through **direct field observations** in March 2026. This dual-verification process was utilized for two primary reasons:

1. **Temporal Accuracy:** To account for present-day conditions, such as recent business closures or changes in ownership, that are not yet reflected in static Google Street View imagery or municipal business registries.
2. **Granular "Disaggregation":** Early mapping attempts revealed that standard building footprint shapefiles often represent a single large polygon for an entire tax lot. As a historic "Main Street" district, many larger buildings on N Mississippi Ave have been internally subdivided into multiple, independent commercial bays. By conducting a walking survey, the author was able to "disaggregate" these large polygons into individual storefront points, ensuring the analysis reflects the true density of the pedestrian and consumer experience.

GIS Data Processing & Workflow

The spatial analysis was conducted using **ArcGIS Pro**. The workflow consisted of four primary stages:

Stage 1: Data Preparation & Clipping

- **Layer Import:** Gathered shapefiles for City of Portland building footprints, tax lot boundaries (RLIS, 2026), and Oregon Census Block Groups alongside standalone tables for **ACS Income** (U.S. Census Bureau, 2024) and the **Study Area Field Data**.
- **Spatial Clipping:** Utilized the **Clip** tool to isolate all features (buildings, lots, and census data) within the Portland city boundary and created a layer class for the specific **Mississippi Avenue Study Area Polygon** (N Shaver to N Failing).
- **Data Initialization:** Imported the storefront data as a standalone .dbf table (derived from Excel). The **XY Table to Point** tool was used to define the coordinate geometry, followed by the **Export Features** command to permanently store the data as a point feature class within the project's **File Geodatabase**.
- **Table Joins:** Performed an **Add Join** to merge the standalone ACS Median Household Income table with the Census Block Group layer using the unique **GEOID** as the common field.

Stage 2: Geocoding & Symbology

- **Feature Creation:** Business addresses were processed using the **Geocode Addresses** tool, utilizing the ArcGIS World Geocoding Service to convert tabular data into a point feature class.
- **Symbology:** To visualize the Day/Night activity of the street, the layer was symbolized using unique values: **Red Dots** for vacancies, **Blue Triangles** for daytime retail, and **Yellow Squares** for late-night venues.
- **Conflict Resolution:** To resolve spatial overlaps in multi-tenant buildings, the **Select** and **Move** tools within the **Edit tab** were utilized for manual cartographic displacement, ensuring each commercial bay remained distinct and legible.

Stage 3: Spatial Analysis

- **Infrastructure Mapping:** Integrated TriMet bus stop locations and City of Portland street lighting data, symbolized as blue bus icons and star symbols, respectively.
- **Proximity Analysis:** Used **Select Layer By Location** with a "**Within a distance**" query to isolate and analyze all businesses within **250 feet** of a bus stop.
- **Thematic Mapping:** Created a **Choropleth layer** representing Median Household Income at the Census Block Group level (U.S. Census Bureau, 2024), utilizing the **Graduated Colors** symbology with a **Manual Interval** classification method to reflect local economic tiers.

Specific Data Ranges:

- Class 1: \$0 – \$62,000
- Class 2: \$62,001 – \$90,000
- Class 3: \$90,001 – \$125,000
- Class 4: \$125,001 – \$172,000
- Class 5: \$172,001 – \$250,000

Justification: The \$250,000 cap was selected to align with the city-wide median ceiling, preventing outliers from skewing the visualization of the corridor's immediate trade area.

Visual Design: Applied a **Blue color scheme** with **high transparency** to allow underlying building footprints and street-level "Point" data (Dots, Triangles, Squares) to remain legible, ensuring the socioeconomic data acted as a "backdrop" rather than an obstruction.

Stage 4: Cartographic Production

- **Contextual Mapping:** Generated a **Locator Map** to provide regional context within North Portland. A **Red Rectangle Map Extent** was utilized to clearly define the study area's boundaries relative to the broader urban area.
- **Layout Design:** A final layout was produced with standardized map elements (Legend, Scale Bar, North Arrow) to ensure professional clarity and legibility.

Findings and Analysis

The following analysis synthesizes field data with municipal infrastructure and socioeconomic layers to evaluate the economic vitality of the Study Area within the N Mississippi Avenue corridor. By first documenting the 32 occupied storefronts and their operational hours (**Table 1**), this study establishes a baseline for the district's "temporal pulse." This data-first approach reveals that while the corridor maintains a high 97% physical occupancy, its functional "Active Frontage" is highly dependent on a small cluster of late-night anchors and variable performance schedules.

Table 1: Business Category and Closing Schedule for the N Mississippi Study Area (March 2026)

Category	Business Names	Count	Closing Time (Weekdays)	Closing Time (Weekends)	Tier
Specialty Retail	Sunlan Lighting, Mint Gallery, Land Gallery, Flutter, Kook's, Dust Bunny, Black Wagon, Rock Paper Scissors, PDXCHANGE	9	4:00 PM – 7:00 PM	4:00 PM – 10:00 PM	1
Services & Studios	Trailhead Credit Union, Rudy's Barbershop, Blue Sky Wellness, Farewell Tattoo, Soda Pop Piercing, Sage Crystals, Duet PDX	7	5:00 PM – 8:00 PM	5:00 PM – 8:00 PM	1
Early Evening Food	Bicho's, Mee-Sen Thai, UCHU Sushi, Tartuca, Miss Delta, Gravy	6	8:00 PM – 9:00 PM	8:00 PM – 10:00 PM	1/2
The "Bridge"	Stem Wine Bar, Topsy Scoops, Nu Rite Way (Convenience)	3	9:00 PM – 10:00 PM	10:00 PM – 11:00 PM	2
Late-Night Anchors	Bar Bar, Crow Bar, Moloko	3	2:00 AM	2:00 AM	3
Venues	Mississippi Studios, Siren Theater	2	Event Based	Event Based	3
Vacant		1			0

Street Level Business Occupancy

Mississippi Ave Portland, OR 2026

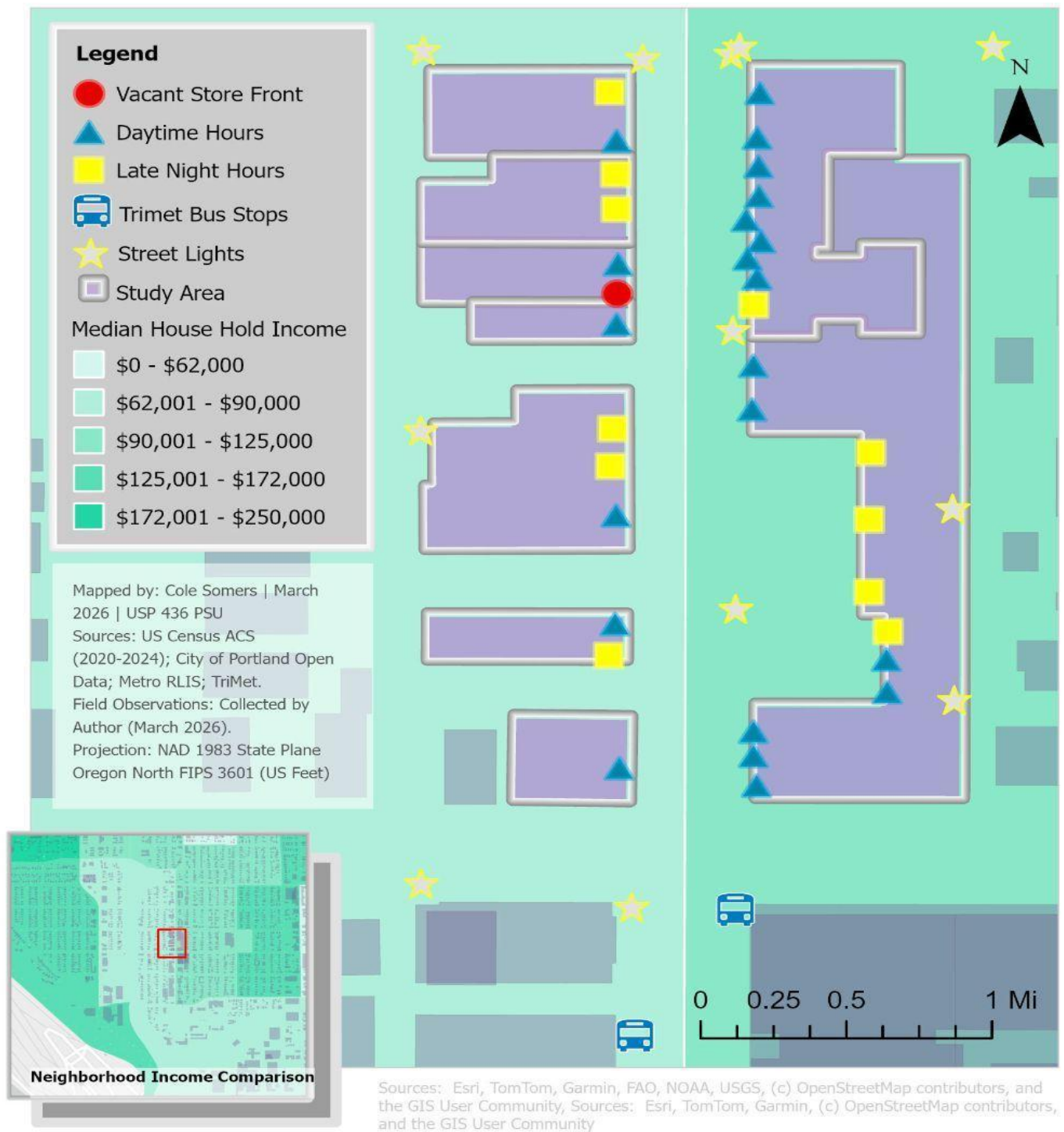


Figure 1: Spatial Analysis of N Mississippi Avenue This visualization identifies the spatial concentration of Tier 3 nightlife anchors on the West side of the corridor, highlighting the infrastructure and socioeconomic disparities between the two Census Block Groups.

Spatial and Temporal Analysis of Storefront Data

While the visual data in Figure 1 highlights the high occupancy of the N Mississippi Avenue corridor, a closer analysis reveals a complex relationship between physical space and operational time. The following sections break down how "Active Frontage" and "Temporal Tiers" dictate the actual experience of the street.

Detailed Occupancy & "Active Frontage"

As detailed in **Table 1: Storefront Inventory**, the N Mississippi Avenue corridor maintains a high level of physical occupancy that masks a varied level of "Active Frontage" (publicly accessible retail). Of the **33 commercial bays** surveyed, the corridor maintains a high physical occupancy but a varied level of "Active Frontage" (publicly accessible):

- **Occupancy:** 32 out of 33 bays are occupied (**97% occupancy**).
- **The "Passive" Element:** Several storefronts function as **Service** or **Private spaces** rather than traditional retail. This includes **Trailhead Credit Union**, **Farewell Tattoo**, **Blue Sky Wellness**, and **Duet PDX** (a private event space with no regular hours). These businesses contribute to the corridor's economic stability but do not provide a consistent window shopping experience or "eyes on the street" during the evening or into the "Late Night".

Temporal Activity & Business Tiers

The operational "pulse" of the N Mississippi Avenue corridor is defined by three distinct tiers. This structure reveals a sharp "10:00 PM Shelf" where the street's character transitions from a neighborhood service hub to a regional nightlife destination.

- **Tier 1: Daytime Retail & Services (66%)** Of the 32 occupied businesses, **21 operate exclusively during daytime hours**, closing at or before **8:00 PM**. This tier includes "Main Street" essentials like **Sunlan Lighting**, **Trailhead Credit Union**, **Rudy's Barbershop**, and **Black Wagon Boutique**. These businesses provide high "Active Frontage" during the day but contribute to "dark zones" after sunset.
- **Tier 2: The "10:00 PM Shelf"** A secondary "shelf" of activity occurs between 8:00 PM and 10:00 PM. This includes **Mee-Sen Thai**, **UCHU Sushi**, **Miss Delta**, and the **Nu Rite Way Food Center**.

- **Bridge: Stem Wine Bar** and **Tipsy Scoops** act as critical "transitional anchors." While the wine bar closes at 9:00 PM on weekdays, its **10:00 PM** weekend close, along with Tipsy Scoops staying open until **11:00 PM everyday**, helps bridge the gap between dinner crowds and late-night patrons.
- **Tier 3: Late-Night Anchors (Nightlife Peak)** The final tier consists of the bars and performance venues. While the **West side** is anchored by two 2:00 AM bars (**Bar Bar** and **Moloko**) and variable-schedule venues (**Mississippi Studios** and **Siren Theater**), the **East side** late-night economy is more fragile, relying almost entirely on **Crow Bar** (2:00 AM) once the surrounding restaurants close.

Weekend Shift & "Variable Vibrancy"

The spatial analysis accounts for a significant **Weekend Expansion**:

- **Extended Hours:** On Friday and Saturday nights, the "10:00 PM Shelf" extends as businesses like the **Stem Wine Bar** and **Kook's** push their closing times, effectively "bridging" the daytime economy to the nightlife peak.
- **Performance Impact:** The music and comedy venues introduce "**Variable Vibrancy.**" On show nights, the West side sees a massive influx of foot traffic that "spills over" into neighboring businesses like the convenience store. On "Dark Nights" (no shows), the West side loses its primary anchors.

Infrastructure & Socioeconomic Correlation

The spatial distribution of business activity reveals a mismatch between municipal infrastructure, local socioeconomic status, and pedestrian safety needs.

- **Income Inversion:** GIS analysis of the Census Block Groups within the Study Area identifies a notable income disparity between the two sides of the corridor. The **East side** block group exhibits a significantly higher Median Household Income (**\$113,769**) (U.S. Census Bureau, 2024), yet its storefronts are primarily "Passive" or early-closing (Services and Restaurants). In contrast, the **West side** block group has a lower Median Household Income (**\$81,745**) (U.S. Census Bureau, 2024) but serves as the corridor's

primary economic engine, housing the 2:00 AM nightlife anchors and high-capacity performance venues.

- **Lighting Deficit:** This income gap is further complicated by infrastructure. The higher-income East side contains **three streetlights**, while the more active West side contains **only one** (City of Portland, 2026). This suggests that municipal lighting is currently aligned with residential wealth rather than the functional needs of pedestrian traffic and nightlife safety along this active commercial corridor.
 - **Regional Income Decoupling:** The 97% occupancy rate across the entirety of the Study Area demonstrates that N Mississippi Ave functions as a **Regional Destination Corridor**. As shown in the **Locator Map**, there is significant income variation in the surrounding block groups beyond the immediate study area (U.S. Census Bureau, 2024). This suggests that the corridor's vitality is decoupled from the immediate neighborhood's purchasing power and instead attracts a diverse consumer base from across the region. Ultimately, the corridor's success is linked to its identity as a city-wide entertainment hub rather than the localized wealth of its immediate residents.
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Limitations and Suggestions for Improvements

Analysis Limitations

- **Temporal Snapshot:** This study represents a single "snapshot" in time (March 2026). It does not account for seasonal shifts in business hours or consumer consumption patterns/behavior.
- **Data Granularity:** While Census Block Groups provide socioeconomic context, they cover a larger area than the immediate storefronts. Future analysis could focus on interesting data beyond the scope of this analysis such as pedestrian counts or surveys for a more precise link between local income, spending, or distance traveled to the study area.

- **Recommended Improvements**

Based on the spatial and temporal patterns identified in this study, the following actions are recommended to bolster the corridor's safety and economic resilience:

- **Targeted Infrastructure Investment:** The City of Portland should prioritize the installation of at least two additional pedestrian-scale streetlights on the West side of the N Mississippi Avenue corridor. This would align municipal infrastructure with actual nightlife activity, mitigating real or perceived safety risks identified in the "Variable Vibrancy" of the performance venues.
- **Support for "Bridge" Businesses:** Economic development initiatives should focus on incentives for businesses that can operate in the **10:00 PM Shelf** (Tier 2). Encouraging more late-evening dining or retail options would reduce the 8:00 PM Cliff and create a more continuous, safe pedestrian experience.
- **Transit Alignment:** Given that the corridor functions as a **Regional Destination**, TriMet should ensure that late-night bus frequency on the No. 4 and No. 44 lines matches the 2:00 AM closing times of the Tier 3 anchors to support safe transportation options for patrons and staff, particularly because Late Night activity centers around bars. If this is feasible in light of Trimet budget cuts, additional research should be done into bolstering options for alternate transportation options along the corridor including distance to bike routes, bike parking, ride share, etc.

Conclusion

The spatial and temporal analysis of the N Mississippi Avenue corridor reveals a highly resilient commercial district, defined by a 97% occupancy rate and a diverse mix of retail, services, and hospitality. However, the identified "**Lighting Deficit**" on the West side and the sharp "**8:00 PM Cliff**" in business activity suggest that the corridor's nighttime safety and vibrancy could be improved upon. By addressing these infrastructure gaps, supporting "**bridge**" businesses that extend the street's active hours, and aligning local transit with the **Late Night** business hours, the

City of Portland can better sustain the corridor's role as a vital, safe, and vibrant destination.

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