

MEMORANDUM

TO: Treasury / Bond Credibility Chain Working Group

FROM: Mitchell Vexler

DATE: September 15, 2026

RE: Las Vegas + Retail Margin of Safety / Infection Rate - Sustainable Cash Flow, Capital Structure, Staffing, Tax Burden, and Bond Solvency

EXECUTIVE SUMMARY

Central thesis. Las Vegas provides a useful real-economy example of how household affordability, hospitality cash flow, commercial real-estate valuation, property-tax capacity, and bond debt service can operate as one closed-loop cash-flow system. The retail-center extension shows the same mechanism without resort fees. The expanded analysis adds five additional stress points: (1) the difference between conventional NOI and sustainable owner cash flow after maintaining the asset; (2) the need for a required economic yield above the real weighted cost of capital; (3) tenant-credit and re-tenanting risk; (4) sale-leaseback or "asset-light" fixed-charge risk; and (5) a minimum quality-staffing floor that does not decline in proportion to hotel occupancy. The critical issue is not whether a formula is mathematically correct. The critical issue is whether the cash-flow definition being capitalized still corresponds to the cash that can actually be distributed after preserving the productive asset.

THE BOTTOM LINE

A debt-service, sinking-fund, or guarantee formula can remain mathematically correct while its output becomes economically false if the underlying cash-flow assumptions are wrong.

Why Las Vegas matters. The Summit observations described below are anecdotal and should not be represented as citywide statistics. They are nevertheless useful as a field signal because they occurred against a published backdrop of a 7.5% decline in Las Vegas visitation during 2025, continued softness in airport traffic in July 2026, and a tourism market that is recovering unevenly rather than uniformly. The point of this memorandum is therefore not to declare that Las Vegas has failed, but to identify a measurable question: how much economic margin of safety remains, and what happens to the bond structure when that margin disappears?

I. THE OBSERVATION: A FIELD SIGNAL OF ECONOMIC STRESS

During the September 2026 Storm Summit trip, the following on-the-ground conditions were observed:

- quiet airport conditions on arrival and an unusually light Sunday-evening departure area;
- a departing flight carrying 68 passengers;
- very low visible gaming-machine activity in multiple hotel gaming areas visited;
- dirty sidewalks and visible homelessness in some areas;
- attendee reports of materially lighter Barrett-Jackson auction attendance and weaker-than-expected vehicle pricing; and
- an overall impression that price-sensitive consumers were under significant pressure.

Important limitation. These observations are not a statistical sample and should not be used to claim that Las Vegas hotel occupancy is excessively low, that casino gaming had collapsed, or that the auction market was down by a verified percentage. Their value is different: they provide a contemporaneous field signal that can be compared against published market data.

II. PUBLISHED DATA: STRESS, BUT NOT SYSTEM-WIDE COLLAPSE

Published data support the existence of economic pressure while also showing that Las Vegas remained a large and functioning market:

- 1. 2025 visitor decline:** The Las Vegas Convention and Visitors Authority reported 38.5 million visitors in 2025, down 7.5% from 2024. Annual hotel occupancy averaged 80.3%, ADR averaged \$183.52, and RevPAR averaged \$147.30.
- 2. July 2026 improvement:** LVCVA's July 2026 figures showed approximately 3.17 million visitors, up 2.7% year over year; overall hotel occupancy of 77.2%; Strip occupancy of approximately 80.2%; and convention attendance down 5.6% year over year.
- 3. Airport divergence:** Harry Reid International Airport reported more than 4.4 million passengers in July 2026. Published recaps of the airport data showed traffic down approximately 7.6% from July 2025, illustrating that improvement in some tourism measures can coexist with weakness in other channels.

Interpretation: The relevant question is not whether every Las Vegas metric is falling. It is whether the destination is losing enough price-sensitive demand and economic surplus to compress the cash margin that supports reinvestment, property values, taxes, and debt service.

III. HOUSEHOLD AFFORDABILITY: WHERE THE CLOSED LOOP BEGINS

The system begins with Mom and Pop, because the ultimate source of cash is household income. For a leisure destination, the consumer experiences one all-in price rather than separate accounting categories.

Household Income → Disposable Income → Travel Budget → All-In Las Vegas Cost → Remaining Discretionary Spending

Three cost pressures can reduce the margin available for discretionary travel and on-site spending:

- 1. Property taxes:** Property taxes attack the hotel from the expense side and can reduce NOI or pressure owners to increase prices.
- 2. Resort fees:** A resort fee is hotel revenue, not a tax. Economically, however, a mandatory fee increases the guest's all-in price and can reduce demand among price-sensitive customers, shorten stays, or shift spending away from gaming, dining, entertainment, and retail.
- 3. Inflation:** Inflation attacks both sides: it raises hotel labor, food, maintenance, utility, insurance, and capital-improvement costs while simultaneously reducing the consumer's real discretionary income.

Result. A property can attempt to protect unit revenue through fees or higher prices while simultaneously shrinking the volume of customers able or willing to pay. That tradeoff becomes dangerous when the asset also carries high fixed obligations and recurring capital needs.

IV. HOTEL INVESTMENT MATH: THE DISAPPEARING MARGIN OF SAFETY

The following transaction math is an illustrative underwriting case based on the parameters discussed in connection with the Summit; it is not presented as a claim that every Las Vegas hotel trades at these levels.

Illustrative Variable	Range / Input	Economic Meaning
Going-in capitalization rate	5.0%–6.0%	Initial property yield
Cost of capital (debt + equity)	9.2%+	Required capital return / financing burden
Initial yield gap	–420 to –320 bps	Negative spread before unexpected deterioration
Allow for inflation / CapEx	Worse	Additional pressure on free cash flow

The spread does not automatically make every transaction insolvent. A low going-in cap rate can be justified if NOI grows materially, redevelopment creates value, financing is favorable, or future exit economics compensate for the initial spread. The danger arises when those optimistic assumptions are required merely to make the acquisition economically coherent.

$$\text{Initial Yield Gap} = \text{Going-In Cap Rate} - \text{Cost of Capital}$$

$$5.0\% - 6.0\% - 9.2\% = \text{approximately } -420 \text{ to } -320 \text{ basis points}$$

V. HOTELS ARE CAPITAL-CONSUMPTIVE ASSETS

Hotels cannot indefinitely defer reinvestment without damaging the revenue stream that supports the asset. Guest rooms, HVAC, elevators, kitchens, pools, façades, technology, furniture, fixtures, carpeting, public spaces, and life-safety systems require recurring capital expenditures.

The deterioration sequence is straightforward:

High Purchase Price → Low Initial Yield → High Capital Cost → Compressed Free Cash Flow
→ Deferred CapEx → Functional Obsolescence → Lower Competitiveness → Lower NOI → Lower Asset Value

Economic margin of safety. For purposes of the Bond Credibility Chain, the important measurement is the residual cash remaining after the asset pays the obligations necessary to preserve both solvency and physical competitiveness:

**Adjusted Economic Margin of Safety = Sustainable NOI – Debt Service –
Required CapEx – Other Fixed Obligations**

Property taxes should be included separately only to the extent they are not already embedded in the NOI definition, so that the model does not double-count them.

When this residual approaches zero, the property may still appear operational while its future productive capacity is being consumed. When it becomes negative, the owner must defer reinvestment, inject new capital, refinance, sell, restructure, or eventually abandon economically obsolete improvements.

VI. THE SYNDICATION AND CAPITAL-MARKET PROBLEM

For a syndicator or developer, a 5%–6% initial cap rate combined with a 9%–12% required economic return creates an immediate need for future improvement. Unless the asset can produce meaningful NOI growth or another source of value creation, the investor’s return increasingly depends on assumptions outside current operating cash flow.

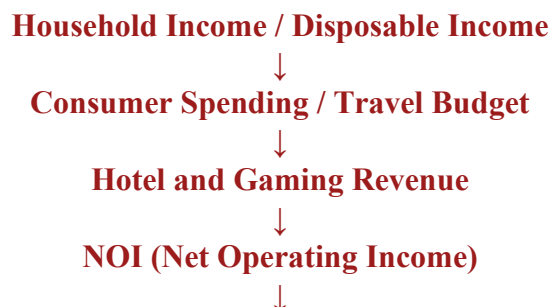
- higher average daily rate or occupancy;
- expense compression;
- refinancing on better terms;
- future cap-rate compression;
- asset appreciation;
- additional capital contributions; or
- sale to another buyer at an aggressive valuation.

Sponsor economics may also diverge from investor economics. Acquisition, financing, management, development, and asset-management fees can provide cash flow to a sponsor even when the residual equity return deteriorates. This is a principal-agent issue and does not, by itself, imply wrongdoing.

For publicly traded hotel companies, a high share price does not increase hotel NOI and cannot be treated as operating revenue. It can, however, preserve access to capital, facilitate equity issuance, support acquisitions, and postpone recognition of underlying economic stress. This distinction is important because the stronger argument concerns capital access and valuation support, not accounting treatment of share price as hotel revenue.

VII. CONNECTION TO THE BOND CREDIBILITY CHAIN

The Las Vegas example becomes important to the broader Bond Credibility Chain because it shows how a household affordability problem can propagate into commercial real estate, tax capacity, and debt-service credibility.



Debt Service + Required CapEx + Fixed Obligations



Feedback loop: If declining asset performance reduces tax-base strength, governments may attempt to preserve revenue through higher rates or valuations. That can further reduce household disposable income and business cash flow, feeding the weakness back into the beginning of the chain.

VIII. WHY CORRECT FORMULAS CAN PRODUCE FALSE ECONOMIC OUTPUTS

The central analytical point can be stated in three propositions:

- 1. A sinking fund can allocate future cash:** but it cannot create cash that the underlying economy does not produce.
- 2. A guarantee can transfer credit risk:** but it cannot manufacture taxable capacity or operating cash flow.
- 3. A debt-service formula can calculate what must be paid:** but it cannot establish that the obligor possesses the sustainable economic capacity to pay it.

Accordingly, the original bond formula, sinking-fund formula, and bond-guarantee formula need not be mathematically defective for the system to fail. If assessed values, growth assumptions, occupancy assumptions, revenue assumptions, refinancing assumptions, or household affordability assumptions are economically false, the resulting bond analysis can also be false.

IX. PROPOSED INTEGRATION INTO TERMINAL FAILURE AND THE BOND CREDIBILITY CHAIN

The Las Vegas example should be added as a discrete “Margin of Safety / Infection Rate” module. The purpose would not be to single out Las Vegas as uniquely impaired, but to provide a comprehensible case study showing how Main Street affordability connects to bond solvency.

The module should track at least the following inputs:

- **Household side:** real disposable income; inflation burden; all-in travel cost; consumer spending mix; frequency and length of stay.
- **Hotel operating side:** occupancy; ADR; RevPAR; gaming and non-gaming revenue; NOI; maintenance expense; required capital reserve.
- **Capital structure:** purchase price; cap rate; weighted cost of capital; debt maturity; refinancing rate; required investor return.

LAS VEGAS + RETAIL MARGIN OF SAFETY / INFECTION RATE

- **Asset side:** replacement cost; deferred maintenance; functional obsolescence; supportable value from sustainable cash flow.
- **Public revenue side:** assessed value; effective property-tax burden; local and school revenue dependence; debt-service requirement.
- **Bond side:** coverage ratio; sinking-fund adequacy; guarantee exposure; rollover dependence; sensitivity to reduced tax capacity.

Proposed output. The model should calculate not only whether scheduled debt service can be paid today, but whether the underlying economic margin of safety remains positive after realistic CapEx, refinancing, inflation, and affordability constraints. That converts a static bond analysis into a dynamic solvency analysis.

X. LAS VEGAS MODULE CONCLUSION

The Las Vegas example makes the Bond Credibility Chain easier to understand because the cash flows are visible. A family has a limited travel budget. A hotel has a limited operating margin. A capital-intensive property must reinvest to remain competitive. A tax authority can collect only from economic capacity that actually exists. A bond can be serviced only from cash that ultimately comes from households and productive businesses.

The systemic risk appears when the chain is analyzed in isolated compartments. A hotel can look solvent if required CapEx is deferred. A municipality can look adequately funded if assessed values are assumed to hold. A bond can look secure if a guarantee is treated as a substitute for underlying cash flow. A sovereign can appear insulated if the local and municipal layers are treated as unrelated to national credit confidence.

The closed-loop conclusion is therefore simple: Main Street affordability → commercial real estate → tax revenue → bond solvency → guarantee capacity → national credit confidence. It is one cash-flow system.

The next analytical task is to quantify the margin of safety at each link and identify the point at which a mathematically correct obligation becomes economically unsupportable. That is the precise role of the Infection Rate Spreadsheet, Terminal Failure analysis, and the Bond Credibility Chain.

XI. RETAIL CENTERS: THE SAME CLOSED-LOOP PROBLEM WITHOUT RESORT FEES

Retail centers remove the resort-fee complication and expose the underlying commercial-real-estate problem in a cleaner form. The source of cash is still the household or business customer. Consumer spending becomes tenant sales; tenant sales support rent and expense reimbursements; landlord cash flow supports required reinvestment and debt service; the resulting sustainable cash flow supports property value; and property value supports the local tax base and the bonds dependent upon it.

Household Disposable Income → Retail Sales → Tenant Sales / Occupancy-Cost Capacity → Rent + Expense Reimbursements → Landlord NOI → Required TI / Leasing Costs / Capital Reserve → Sustainable Pre-Debt Cash Flow → Debt Service → Supportable Property Value → Property-Tax Capacity → Municipal / School Revenue → Bond Debt-Service Capacity

Retail centers are capital-consuming assets even though the capital cycle differs from a hotel. Roof systems, parking lots, HVAC, electrical and plumbing systems, façades, life-safety systems, common areas, signage, drainage, lighting, and structural components deteriorate with age. Tenant turnover creates another recurring capital burden: tenant improvements, leasing commissions, make-ready work, downtime, and concessions may be required simply to preserve occupancy and rent.

Triple-net leasing does not make these costs disappear. Property taxes and common-area expenses may be reimbursed by tenants, but the tenant must still generate enough sales and gross margin to carry the all-in occupancy cost. During vacancy, default, reimbursement caps, exclusions, or collection failure, part of that burden returns to the owner. A tax can therefore be legally imposed on the property while economically being transmitted through the tenant and ultimately to the consumer.

XII. ACCOUNTING NOI IS NOT THE SAME THING AS SUSTAINABLE PRE-DEBT CASH FLOW

The strongest formulation is not to insist that every capital item must be included inside a particular industry definition of NOI. Different appraisal and investment conventions place tenant improvements, leasing commissions, replacement reserves, and major capital expenditures in different locations. The better test is economic: has the valuation model recognized the recurring cash burden somewhere, and has it done so only once?

Stabilized Property NOI – Normalized Replacement Reserve – Normalized Tenant-Improvement / Leasing-Commission Reserve – Recurring Non-Recoverable Property-Tax Administration / Appeal Cost – Other Unavoidable Recurring Capital Outlays = Sustainable Pre-Debt Cash Flow

Economic Margin of Safety = Sustainable Pre-Debt Cash Flow – Debt Service

Property taxes should be deducted in the NOI layer if they have not already been reflected through a net-recovery convention. They should not be deducted twice. Likewise, property-tax protest, consulting, legal, and compliance costs should be included in the economic cash-flow analysis when they are recurring, market-supported costs necessary to preserve the property's tax position; extraordinary owner-specific litigation expense should not automatically be treated as a standard market operating expense.

The reserve does not have to exist as a literal segregated bank account for the economic obligation to exist. It can be modeled as a replacement reserve, a normalized below-NOI capital deduction, a discounted-cash-flow item, or through another market-supported adjustment. But if recurring capital consumption is omitted from both cash flow and the capitalization/discount assumptions, supportable value can be overstated because the model is capitalizing cash that is not actually distributable to debt or equity.

This point is especially important to the existing memorandum, which already defines the adjusted economic margin of safety as sustainable NOI less debt service, required CapEx, and other fixed obligations. The retail extension simply makes the hidden periodic costs explicit rather than allowing a single-year NOI number to stand in for long-run distributable cash flow.

XIII. RESERVE ADEQUACY IS AN AUDITABLE APPRAISAL QUESTION

The broad statement that appraisal districts “ignore reserves” should be converted into a testable audit question rather than stated categorically. Texas appraisal materials themselves recognize the concept. The Texas Comptroller explains that the income approach uses income and expense data to determine the present worth of future benefits, and Tax Code §23.012 requires analysis of comparable operating expenses and reasonably supported future income and expense projections. Dallas Central Appraisal District’s 2025 Mass Appraisal Report specifically states that allowable expenses, inclusive of replacement reserves, are continuously reviewed in its income models.

That makes the issue more powerful, not less powerful. The question for any CAD is: Where is the reserve in the model; what amount is used; how was it calibrated; does it reflect the age and actual capital needs of the property class; are tenant improvements and leasing costs recognized where market participants recognize them; and is the capitalization rate consistent with the cash-flow definition being capitalized?

If the answer is that the reserve, tenant-turnover capital, or recurring non-recoverable expense is excluded from the cash flow, and no compensating adjustment exists in the DCF, cap rate, or other valuation input, then the appraisal can capitalize an artificially enlarged cash stream. That is the precise point to test property by property and model by model.

XIV. EQUAL AND UNIFORM: LEGAL REQUIREMENT VERSUS ECONOMIC COMPARABILITY

Texas law provides a strong but specific framework. Article VIII, §1(a) of the Texas Constitution states that taxation shall be equal and uniform. Article VIII, §18 requires equalization of property valuations. Tax Code §23.01(b) requires generally accepted appraisal methods, USPAP compliance when mass-appraisal standards are used, the same or similar methods for the same or similar kinds of property, and consideration of individual characteristics affecting market value. Tax Code §42.26 provides a judicial remedy for unequal appraisal.

A critical distinction should be maintained: “equal and uniform” does not mean that a hotel and a retail center must have identical tax bills, identical capitalization rates, or identical cash-flow structures. They are different property types. Nor does the existence of a hotel resort fee, which is generally a charge imposed by the hotel rather than an ad valorem tax, by itself establish that a retail property has been taxed unequally.

The apples-and-oranges problem arises when unlike cash-flow streams or unlike property characteristics are compared without appropriate normalization. A credible comparison must account for the differences that a buyer would price: lease structure, expense recoveries, vacancy, tenant-credit risk, required tenant improvements, leasing commissions, recurring capital reserves, property-tax burden, functional obsolescence, and the sustainability of the revenue stream. If those differences are ignored and the resulting appraisal ratios place a property materially above comparable or similarly situated properties, the valuation error can become an equal-and-uniform issue under the applicable legal tests.

The useful concept, therefore, is not a new constitutional doctrine of “cash-flow equality.” It is cash-flow comparability as a valuation discipline supporting the existing legal requirements of market value, consistent appraisal methodology, and equal-and-uniform treatment.

XV. CAPITAL STARVATION: HOW A TAX AND VALUATION ERROR BECOMES PHYSICAL DETERIORATION

The physical condition of the asset is where an abstract valuation error becomes visible. If taxes, financing costs, inflation, tenant turnover costs, and other fixed obligations consume the cash that should fund periodic reinvestment, the owner has only a limited set of choices: inject new equity, borrow additional money, defer improvements, reduce distributions, sell, or allow the asset to deteriorate.

Appraised Value / Tax Burden Rises Faster Than Sustainable Cash Flow → Tenant Occupancy Cost Rises → Tenant Margin and Rent-Coverage Capacity Falls → Vacancy / Default / Concessions Increase → Landlord Cash Flow Falls → TI and Replacement Reserves Are Deferred → Physical and Functional Obsolescence Accelerates → Competitiveness and Rent Fall → True Economic Value Falls → Tax Burden Becomes Still Larger as a Percentage of Cash Flow

That feedback loop is the commercial-real-estate equivalent of capital starvation. The property can remain open and appear occupied while its productive capacity is being consumed. Maintenance becomes cosmetic rather than restorative; roofs, paving, mechanical systems, façades, and tenant spaces age faster than the cash available to replace them. Eventually the gap between book/appraised value and economically supportable value becomes impossible to conceal through deferred maintenance.

The aging multifamily / rent-control analogy is useful as an economic analogy, not as a statement that the legal regimes are identical. In each case, if the cash remaining after imposed or unavoidable obligations is persistently insufficient to fund physical replacement, deterioration is not an accounting choice; it is the predictable physical result of an inadequate reinvestment margin.

XVI. THE RETAIL EXTENSION OF THE BOND CREDIBILITY CHAIN

Retail centers make the Bond Credibility Chain even easier to see because they connect household spending directly to the tax base. A tenant cannot indefinitely pay rent and pass-through charges that its customers do not generate. A landlord cannot indefinitely fund taxes, tenant turnover, capital replacement, and debt service from cash that tenants do not produce. A local government cannot indefinitely rely upon an assessed commercial tax base whose underlying properties cannot reinvest enough to preserve their productive value.

Household Income / Disposable Income → Retail Spending → Tenant Gross Sales → Tenant Rent-Coverage Capacity → Rent + Expense Reimbursements → Landlord NOI → TI / Leasing / Replacement Reserve → Sustainable Pre-Debt Cash Flow → Debt Service → Supportable Property Value → Property-Tax Capacity → Municipal / School Revenue → Bond Coverage → Guarantee Exposure → Sovereign Credit Confidence

The hotel and retail models are therefore not separate stories. They are two versions of the same closed-loop system. Hotels expose the demand-side effect of all-in pricing, including mandatory fees. Retail centers expose the reserve, tenant-turnover, and occupancy-cost problem. Both ultimately ask the same question: after every economically unavoidable cost required to keep the asset productive is recognized, how much cash is actually left to service the debt?

XVII. PROPOSED COMMERCIAL-REAL-ESTATE AUDIT MODULE

The Bond Credibility Chain can test this issue without assuming the conclusion. For each income-producing property class or CAD model, the audit should identify and reconcile:

- potential gross income and the source of market rent assumptions;
- stabilized vacancy, collection loss, concessions, and downtime;
- recoverable versus non-recoverable operating expenses and property taxes;
- replacement reserves and the age/condition assumptions used to size them;
- tenant-improvement and leasing-commission assumptions, including renewal versus new-tenant costs;
- recurring property-tax administration, consulting, and appeal costs where market-supported;
- capitalization and discount rates and whether they are consistent with the cash-flow definition being capitalized;
- deferred maintenance, functional/economic obsolescence, and near-term capital requirements;
- debt service, refinancing terms, and maturity exposure; and
- equal-and-uniform comparisons using appropriately adjusted comparable or similarly situated properties.

The output should be two numbers rather than one: (1) conventional appraised or market-indicated value under the stated methodology; and (2) supportable value after a normalized capital-maintenance and tenant-turnover burden is recognized. The difference between those values is a measurable form of the Reversion Gap already used elsewhere in the Bond Credibility Chain.

XVIII. REQUIRED SUSTAINABLE YIELD: WACC + ECONOMIC RESILIENCE MARGIN

The Leslie/Mitch spreadsheet framework can be stated as a solvency test rather than merely a market-pricing test. Once the numerator has been reduced to sustainable pre-debt cash flow after the economic cost of maintaining the asset, the property must still earn enough to cover the real weighted cost of capital and leave a meaningful resilience margin. A working assumption used in the analysis is a 400-basis-point margin above WACC.

Required Sustainable Yield = WACC + Economic Resilience Margin

Illustration: 9.2% WACC + 4.0% resilience margin = 13.2% required sustainable yield

If the real WACC is approximately 9% to 11%, the same 400-basis-point resilience requirement implies a sustainable economic yield of approximately 13% to 15%. This is not the same thing as asserting that every conventional market capitalization rate should be quoted at 13% to 15%. The numerator and denominator must be internally consistent. A conventional cap rate often capitalizes an NOI definition that excludes some recurring capital requirements; the 13% to 15% concept here is a required yield on sustainable cash flow after capital preservation.

Supportable Property Value = Sustainable Pre-Debt Cash Flow / Required Sustainable Yield

Illustration. If sustainable pre-debt cash flow is \$1.0 million, capitalization at a 5.5% market cap implies a value of approximately \$18.18 million. Applying a 13.2% required sustainable yield implies approximately \$7.58 million. The difference is not proof that the market price is "wrong" in every circumstance; it identifies how much of the purchase price depends on growth, refinancing, terminal value, or other assumptions beyond the currently sustainable cash flow.

Why the 400 basis points matter. The resilience margin is not a duplicate replacement reserve and should not be double-counted. The physical replacement, TI/LC, and sustaining-capital requirements are deducted before the sustainable cash-flow numerator is computed. The additional margin is the shock absorber for forecasting error, inflation surprises, tenant failure, refinancing risk, liquidity risk, economic contraction, and unexpected capital requirements.

XIX. THE NOI ILLUSION: FROM EBITDA TO SUSTAINABLE OWNER CASH YIELD

Warren Buffett has repeatedly criticized EBITDA when it is used as though depreciation were not an economic cost. The real-estate analogue is not that NOI is useless; NOI is a useful operating metric. The error occurs when NOI is treated as though it were the cash economically available to the owner even though the asset must continue to fund tenant turnover, replacement, capital improvements, tax administration, and other recurring ownership costs.

Gross Property Revenue

- True Operating Expenses
- Property Tax (if not already netted)
- Recurring Tax Administration / Protest Cost
- Normalized TI / Leasing-Commission Reserve
- Replacement Reserve / Sustaining Capital
- = Sustainable Pre-Debt Owner Cash Flow

Sustainable Owner Cash Yield = Sustainable Pre-Debt Owner Cash Flow / All-In Invested Capital

Return of capital versus return on capital. An economically sustainable investment must preserve or recover the capital that the productive asset consumes and also provide compensation for committing capital and bearing risk. If all available cash is required merely to keep the property competitive, the investor may have little or no economic return on capital even though reported NOI remains positive. If necessary reinvestment is deferred to preserve the appearance of cash flow, the property may be liquidating its productive capacity while still reporting income.

XX. THE CREDIT-TENANT DURATION TRAP: CONTRACT INCOME IS NOT PERMANENT PROPERTY VALUE

A long lease to a highly rated tenant improves the probability of near-term rent collection, but it does not convert the underlying real estate into a risk-free asset. Tenant credit is not the same thing as property credit, and contract rent is not necessarily the same thing as sustainable market income. The property must survive the entire tenancy cycle, including early default, bankruptcy, rejection, downsizing, non-renewal, and re-leasing.

Credit Tenant -> Apparently Secure NOI -> Lower Cap Rate -> Higher Purchase Price -> Larger Debt / Equity Requirement -> Smaller Cash Cushion -> Inadequate Re-Tenancing Reserve -> Tenant Failure / Departure -> Vacancy + TI + Leasing Commissions + Concessions + Downtime -> NOI Reset -> Refinancing / Capital-Call Risk

Illustration. A property producing \$1.0 million of NOI purchased at a 5.0% cap implies a \$20 million price. At 65% debt and 7% interest-only financing, annual interest would be approximately \$910,000, leaving only about \$90,000 before amortization, capital expenditures, re-tenancing cost, or other unexpected obligations. This is an illustration, not a claim about any specific transaction. It demonstrates how a low initial cap rate can make the capital structure highly dependent on uninterrupted tenancy and favorable refinancing.

Re-tenanting reserve. A credible underwriting model should normalize the expected future cost of vacancy, tenant improvements, leasing commissions, free-rent concessions, reconfiguration, and downtime rather than assuming that a 20-year lease guarantees 20 years of uninterrupted economic performance. All else equal, the lower the going-in cap rate and the thinner the reserve structure, the more sensitive the investment becomes to an early failure of the underwriting assumptions.

Price-to-Supportable-Value Gap = Purchase Price - Value Supported by Sustainable Through-Cycle Cash Flow

XXI. THE ASSET-LIGHT PARADOX: LIQUIDITY TODAY CAN CREATE FIXED-CHARGE RISK TOMORROW

The MGM Grand / Mandalay Bay transaction is a useful real-world illustration. In 2020, MGM and MGM Growth Properties contributed the real-estate assets of MGM Grand Las Vegas and Mandalay Bay to a joint venture in a transaction with total consideration reported at \$4.6 billion. MGM then leased the properties under a 30-year operating lease with two ten-year renewal options. The initial annual base rent was \$292 million, with 2% annual escalators for the first 15 years and thereafter the greater of 2% or CPI, capped at 3%. The lease also requires capital expenditures equal to 3.5% of net revenues over a rolling five-year period.

The transaction is better described as a real-estate monetization and leaseback than as a ground lease. The economic point is the same: an owned hard asset was converted into current liquidity while the operator accepted a long-duration contractual rent obligation and continued capital-spending requirements.

Asset Ownership -> Sale / Monetization -> Day-One Liquidity -> Long-Duration Rent Obligation + Required CapEx -> Higher Fixed-Charge Burden -> Greater Dependence on Future Operating Cash Flow

Liquidity is not solvency. Sale proceeds can improve current liquidity and can be rational for many reasons, but the proceeds are not the same thing as operating earnings. The solvency question is whether future property-level cash generation remains sufficient to absorb escalating rent, required capital expenditures, taxes, labor, inflation-sensitive expenses, and any debt service through an economic downturn. This memorandum does not predict a bankruptcy of MGM; it identifies a fixed-charge stress test that should be measured.

Lease-Adjusted Residual Cash = Sustainable Property Cash Flow - Required CapEx - Property Taxes / Fixed Property Costs - Contractual Lease Rent - Debt Service

XXII. QUALITY SERVICE REQUIRES A MINIMUM STAFFING FLOOR

A quality full-service hotel cannot reduce labor in direct proportion to occupancy without eventually damaging the guest experience and the revenue stream. Some labor is variable, but a substantial service and safety infrastructure must remain in place whether occupancy is 95%, 75%, or materially lower. Front-desk coverage, security, surveillance, engineering, life-safety functions, maintenance, management, casino operations, food-service infrastructure, housekeeping supervision, and other guest-facing functions create a minimum quality-staffing floor.

Quality staff are an asset-preservation cost. A hotel also has to retain and train capable employees. Wage rates, benefits, training, schedule stability, and adequate staffing are part of preserving the service quality that supports ADR, repeat visitation, gaming spend, restaurant traffic, convention demand, and brand reputation. Cutting staff can temporarily protect reported margin while reducing the quality of the product that generates future revenue.

Hotel Revenue

- Variable Operating Costs
- Minimum Quality-Staffing Floor
- Other Fixed / Semi-Fixed Costs
- Property Taxes / Lease Rent
- Required CapEx
- = Sustainable Hotel Cash Flow

The operating-leverage implication is important: when occupancy falls, room revenue, gaming revenue, restaurant revenue, and other guest spending can decline faster than the hotel's minimum service-labor requirement. The resulting margin compression is therefore nonlinear. A hotel may appear capable of "flexing" labor in a spreadsheet while, in practice, the amount of labor that can be removed without degrading the product is limited.

XXIII. THE LOOP OF DOOM: CUMULATIVE CLAIMS CAN GROW FASTER THAN CUSTOMER CAPACITY

The danger is cumulative rather than isolated. A 2% lease escalator, 2% general inflation, a sharp food-cost increase for restaurants, higher insurance, higher wages, higher property taxes, and necessary capital spending do not remain in separate accounting boxes. They converge on one requirement: the property must extract enough additional cash from customers to preserve its margin of safety. The percentages below are illustrative stress assumptions, not forecasts.

Growth in Mandatory Claims > Sustainable Revenue Growth -> Margin of Safety Contracts -> Prices / Fees Rise -> Price-Sensitive Demand Falls -> Occupancy / Gaming / Dining / Retail Revenue Weakens -> Reinvestment Capacity Falls -> Asset Quality Declines -> Sustainable Value Falls -> Tax and Fixed-Charge Burden Becomes Heavier Relative to Cash Flow

Restaurants are economically important to the resort ecosystem. Food inflation can be absorbed only through some combination of higher menu prices, smaller margins, menu changes, or lower service levels. If menu prices rise faster than household discretionary income, Mom and Pop may dine less, spend less on gaming or entertainment, shorten the trip, or choose another destination. If prices do not rise enough, the restaurant and hotel absorb the margin loss. Either path can weaken consolidated hotel economics.

Economic Sustainability Spread = Sustainable Revenue Growth - Growth in Mandatory Claims

Customer Affordability Spread = Real Household Disposable-Income Growth - Growth in the All-In Customer Cost

The demand-side limit. A hotel can raise a room rate, resort fee, restaurant price, parking charge, or entertainment price in an attempt to protect revenue, but those increases eventually confront the customer's finite budget. A revenue-preservation strategy can become a demand-destruction mechanism if the all-in price rises faster than the customer's ability or willingness to pay. In the simplest terms: No Mom and Pop, no revenue. No revenue, no sustainable hotel.

XXIV. POLICY HYPOTHESIS: SHIFT THE PUBLIC TAX CLAIM FROM ASSET OWNERSHIP TOWARD TRANSACTIONS

The economic diagnosis leads to a policy hypothesis that should be modeled separately from the diagnosis itself. The proposal advanced here is to eliminate or phase out recurring ad valorem property taxation and replace the public revenue requirement with a broad, uniform state sales-tax structure, while separately eliminating the mandatory resort-fee model as a customer-pricing practice. Property taxes and resort fees are not the same instrument: property tax is a government-imposed recurring claim on the asset; a resort fee is generally private hotel revenue that raises the customer's all-in price.

The economic rationale for the tax side is that a sales tax arises when a taxable transaction generates cash, whereas an ad valorem property-tax obligation can rise because an assessed value rises even when the property's sustainable cash-producing capacity does not. The proposed objective is therefore to align more of the public revenue claim with actual economic activity and to reduce the recurring lien-like burden on productive property.

Tax the transaction where cash is generated rather than continuously increasing the recurring public claim against the productive asset irrespective of its sustainable cash-producing capacity.

This policy proposal must still pass transition tests before it can be treated as a complete solution: revenue neutrality or an explicitly chosen revenue target; treatment of existing municipal and school bond covenants; cyclical volatility of sales-tax receipts; distributional effects; essential-consumption protections; local-government funding stability; and a credible transition from the existing property-tax base. The Bond Credibility Chain can be used to test those questions rather than assuming the answer.

Durable economic ownership. The policy goal can be stated without claiming that current owners lack legal title: reduce a recurring public cash claim that can grow independently of sustainable property cash flow, thereby increasing the capital available to maintain, improve, and recapitalize productive real estate.

XXV. EXPANDED CONCLUSION

The retail-center extension and the additional hotel-capital analysis reinforce the original Las Vegas conclusion. The central risk is not confined to tourism, and it is not created by a single fee. It appears whenever the claims against an income-producing asset - taxes, rent, debt service, labor, re-tenanting cost, capital replacement, insurance, inflation-sensitive expenses, and investor return requirements - grow faster than the sustainable cash flow available after the asset preserves its productive capacity.

A mathematically correct cap rate applied to an overstated cash-flow definition can still produce an economically overstated value. A long lease can make contract income look permanent when the real estate must survive a future re-tenanting cycle. A sale-leaseback can create immediate liquidity while adding long-duration fixed charges. A hotel can preserve reported margin by cutting staff or deferring capital while simultaneously damaging the service quality and physical asset that support future revenue. In each case, the accounting presentation can remain internally consistent while the economic margin of safety disappears.

The controlling questions are therefore: What sustainable cash flow remains after the asset pays the full economic cost of remaining productive; what yield does that cash produce on the actual capital invested; and is that yield sufficient to cover WACC plus a resilience margin through a full operating and tenancy cycle?

Those questions tie household affordability, hotel and retail operations, quality staffing, capital reserves, tenant rollover, lease obligations, appraisal methodology, equal-and-uniform treatment, property-tax capacity, bond service, guarantee exposure, and national credit confidence into one measurable framework. The closed-loop

summary is: **No Mom and Pop, no revenue. No revenue, no sustainable asset. No sustainable asset, no sustainable tax base. No sustainable tax base, no credible bond.**

SOURCES AND DATA NOTES

- Las Vegas Convention and Visitors Authority, “Las Vegas Welcomes 38.5 Million Visitors in a Complex Year Marked by Shifting Travel Dynamics,” Jan. 29, 2026. Reports 38.5 million visitors in 2025, down 7.5%; 80.3% annual occupancy; \$183.52 ADR; and \$147.30 RevPAR. <https://press.lvcva.com/ad-campaigns/las-vegas-welcomes-38.5-million-visitors-in-a-complex-year-marked-by-shifting-travel-dynamics/>
- Las Vegas Convention and Visitors Authority Research Center, “LVCVA Executive Summary of Southern Nevada Tourism Indicators,” current 2026 monthly data and July 2026 Executive Summary. <https://www.lvcva.com/research/reports/post/lvcva-executive-summary-of-southern-nevada-tourism-indicators/>
- FOX5 Las Vegas, Aug. 28, 2026, recap of LVCVA July 2026 Executive Summary: approximately 3.2 million visitors; 77.2% overall occupancy; 80.2% Strip occupancy; convention attendance down 5.6%. <https://www.fox5vegas.com/2026/08/28/las-vegas-visitor-volume-rises-july-convention-attendance-falls/>
- Harry Reid International Airport, “LAS Serves More Than 4.4 Million Passengers in July 2026,” Aug. 25, 2026. <https://www.harryreidairport.com/newsroom/press-releases/las-serves-more-than-4-4-million-passengers-in-july-2026>
- On-the-ground September 2026 observations and illustrative transaction assumptions in this memorandum were supplied by M. Vexler and Summit attendees. They are expressly identified as observations or illustrative assumptions rather than market-wide verified statistics.
- Texas Constitution, Article VIII, §§1(a) and 18 — equality and uniformity of taxation and equalization of property valuations. <https://statutes.capitol.texas.gov/Docs/CN/pdf/CN.8.pdf>
- Texas Tax Code §23.01(b) — generally accepted appraisal methods; USPAP compliance for mass appraisal; same or similar methods for same or similar kinds of property; consideration of individual characteristics affecting market value. <https://statutes.capitol.texas.gov/Docs/TX/pdf/TX.23.pdf>
- Texas Tax Code §23.012 — income method requires analysis of comparable rents, comparable operating expenses, capitalization/discount data, and reasonably supported future income and expense projections. <https://statutes.capitol.texas.gov/docs/sdocs/taxcode.pdf>
- Texas Tax Code §42.26 — judicial remedy for unequal appraisal, including comparison to similarly situated or comparable properties under the statutory tests. <https://statutes.capitol.texas.gov/docs/sdocs/taxcode.pdf>
- Texas Comptroller, “Valuing Property” — income approach uses income and expense data to determine the present worth of future benefits; same or similar appraisal methods and techniques must be used for the same or similar kinds of property. <https://comptroller.texas.gov/taxes/property-tax/valuing-property.php>
- Dallas Central Appraisal District, 2025 Mass Appraisal Report, p. 26 — income-model review includes potential gross rent, occupancy, secondary income, allowable expenses inclusive of replacement reserves, NOI, and capitalization rates/multipliers. https://dallascad.org/webForms/MASSAPPRAISAL/Mass_Appraisal_Report.pdf
- Texas Comptroller-hosted county reappraisal-plan materials provide examples in which income-approach operating expenses include taxes, insurance, reserves for replacement, and, where appropriate, non-recoverable leasing costs and tenant improvements. These examples are cited as appraisal-methodology illustrations, not as a single statewide expense schedule.
- Berkshire Hathaway Inc., 2002 Annual Report, Chairman’s Letter - Buffett criticizes the use of EBITDA when it implies that depreciation is not a real economic cost. <https://www.berkshirehathaway.com/2002ar/2002ar.pdf>
- MGM Resorts International, 2019 Form 10-K / 2020 transaction disclosure - MGM Grand Las Vegas and Mandalay Bay real-estate transaction: \$4.6 billion total consideration; 30-year lease; \$292 million initial annual rent; 2% annual escalator for the first 15 years; thereafter greater of 2% or CPI capped at 3%. https://www.sec.gov/Archives/edgar/data/789570/000156459020007393/mgm-10k_20191231.htm

LAS VEGAS + RETAIL MARGIN OF SAFETY / INFECTION RATE

- MGM Growth Properties, 2020 Form 10-Q - the MGM Grand / Mandalay Bay lease requires capital expenditures equal to 3.5% of net revenues over a rolling five-year period and includes related financial covenants. <https://www.sec.gov/Archives/edgar/data/1691299/000165693620000032/mgp03312020q110-q.htm>

APPENDIX A — LAS VEGAS MARGIN OF SAFETY / INFECTION RATE SCHEMATIC

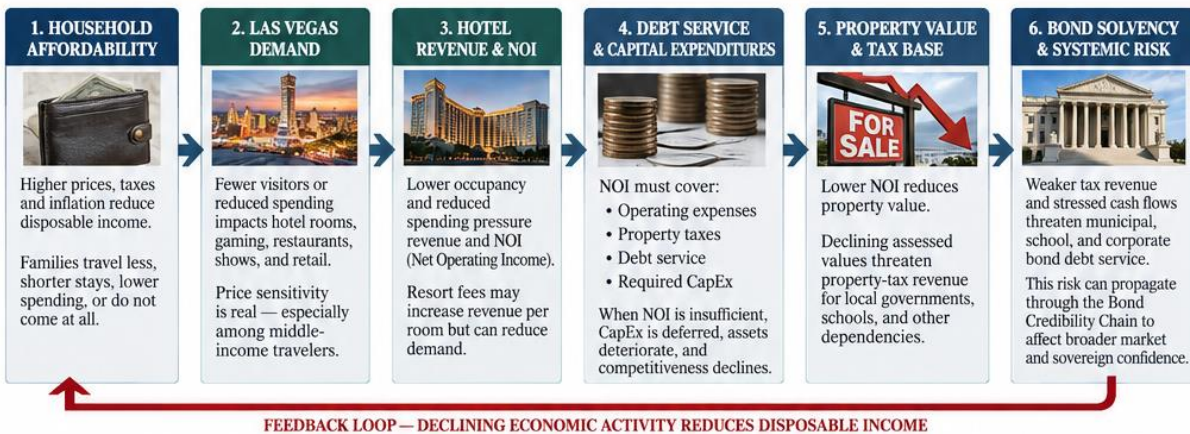
The schematic below summarizes the closed-loop cash-flow logic discussed in this memorandum. Published market data and anecdotal observations are deliberately separated.

Las Vegas Margin of Safety / Infection Rate

From Main Street to Bond Solvency — A Closed-Loop Cash Flow System

"When the economic margin of safety disappears, the formulas may still be mathematically correct, but their outputs become economically false."

A REAL ECONOMY EXAMPLE
OF TERMINAL FAILURE AND
THE BOND CREDIBILITY CHAIN



LAS VEGAS INDICATORS: OBSERVATIONS AND DATA	
ON-THE-GROUND OBSERVATIONS (September 2026) - Noticeably fewer people in casinos (many gaming areas with very low activity) - Hotels appeared significantly below capacity (subjective observation) - Sidewalks in poorer condition, visible homelessness - Quiet airport upon arrival; very light Sunday evening departure (Gate D7) - Flight with 68 passengers - Barrett-Jackson auction attendance appeared down ~35% (subjective) and lower-than-expected prices - High property taxes and "resort fees" making Las Vegas unaffordable for many families	LATEST AVAILABLE MARKET DATA (July 2026 and recent reports) - Overall Las Vegas occupancy: 77.2% - Las Vegas Strip occupancy: 80.2% - Strip gaming revenue: up 3.6% year over year - Airport passenger traffic: down 7.6% - Las Vegas visitation in 2025: down 7.5% (steepest non-pandemic annual decline in historical series) - Weakness concentrated among middle-income travelers, while higher-income consumers continue spending Sources: FOX5 Vegas (Aug 28, 2026); Reuters (Feb 19, 2026)

HOTEL INVESTMENT MATH: NO MARGIN OF SAFETY	
Typical Transaction Today	
Going-in Cap Rate	5.0% – 6.0%
Cost of Capital (Debt + Equity)	~ 9.2%+
Negative Spread	~ 320 – 420 BPS
Allow for Inflation	Worse
Result	Little or no cash flow for CapEx or investor return
CONSEQUENCES - Deferred capital improvements (CapEx) - Accelerating functional obsolescence - Declining competitiveness - Lower future NOI and property value - Increased risk of default, restructuring, or demolition	
"Hotels are capital-consumptive assets. CapEx is not optional indefinitely."	

THE SYNDICATION PROBLEM
- Syndicators or developers acquire at 5% – 6% cap rates with a 9% – 12% required return, creating an initial negative spread. - Absent significant NOI growth, the investment relies on: - Higher ADR / occupancy - Expense compression - Refinancing - Future cap-rate compression - Asset appreciation - Additional capital - Sale to another buyer at an aggressive valuation - Sponsors can receive acquisition, management, development and asset-management fees. - Investors bear most of the downside. - For publicly traded hotel companies, a high share price does not increase hotel NOI, but it can preserve access to capital, permit equity issuance and postpone recognition of underlying economic stress.

KEY COST PRESSURES
1. PROPERTY TAXES - High and increasing - Directly reduce NOI - Pressure local governments to maintain or raise rates
2. RESORT FEES (Hotel Revenue, Not a Tax) - Raise the all-in consumer price - Can reduce demand, especially among price-sensitive travelers - May shift revenue mix but do not solve affordability
3. INFLATION - Increases operating costs - Increases CapEx costs - Reduces consumer discretionary income - Attacks both supply and demand simultaneously

CONNECTION TO THE BOND CREDIBILITY CHAIN
Household Income / Disposable Income ↓ Consumer Spending (Travel Budget) ↓ Hotel / Gaming Revenue ↓ NOI (Net Operating Income) ↓ Debt Service + Required CapEx + Taxes ↓ Asset Value ↓ Property-Tax Capacity ↓ Municipal / School Revenue ↓ Bond Debt-Service Capacity ↓ Bond Credibility ↓ Guarantee Capacity ↓ Sovereign Credit

THE BOTTOM LINE
The original bond formula, sinking fund formula, and bond guarantee formula are not wrong — but their outputs become economically false when the assumptions feeding them no longer correspond to the cash flows capable of servicing the obligations.

MAIN STREET AFFORDABILITY → COMMERCIAL REAL ESTATE → TAX REVENUE → BOND SOLVENCY → NATIONAL STABILITY

It is one cash-flow system.

September 2026