

THE SYNTHESIS — THREE BINDING CONSTRAINTS, ONE
DEFENDED ORDERING

THREE LOCKS, ONE ORDERING.

Three documents in this knowledge base each promote a different constraint to primary: HAP-02 says the rules are prose, HAP-04 says the evidence points at valuation, HAP-03 says the politics is structural.

All three are right about their lock and wrong about "primary" — because the binding constraint is not a fact about housing. It is a function of which stage you are standing in.

THREE DOCUMENTS, THREE CANDIDATE CAUSES

Each document was written at a different point in the research and each quietly generalized from what it had just learned. Stating that history is the first step to resolving it.

INFORMATION

THE RULES ARE PROSE

~20,000 forked rulesets, humanly interpreted, per-instance review. Compliance cannot be computed, so nothing certifies in advance and nothing carries forward.

CHAMPION: HAP-02 · Written before the competitive finding – before we knew compiled screening already exists and moved 2 of 32 months.

CAPITAL

VALUATION BLOCKS NEW TYPES

Comparables-based appraisal means a new housing type cannot be financed. The best-evidenced cluster in the register: it killed the one cheap product America ever produced.

CHAMPION: HAP-04 · Written before the principal-agent map – ranks evidence but not sequence.

POLITICS

THE PRINCIPAL OPPOSES SUPPLY

Officials are agents of incumbent homeowners, whose dominant asset dilutes with nearby supply. Fifty years of reform asked the agent to defect from the principal.

CHAMPION: HAP-03 r0.3 · The newest frame – and notably, most of its five moves need no compiler at all.

The three are not rival explanations of one failure. They are the three locks from the original thesis — approval, valuation, demand-and-politics — **and every prior document made the same error in a different direction: it promoted the lock it had most recently understood to "the" constraint.** This document argues the ordering instead of assuming it.

BINDING IS A FUNCTION OF STAGE, NOT A PROPERTY OF THE SYSTEM

Ask "what is the binding constraint on American housing?" and the honest answer is: **at which stage, in which segment?** The three locks bind in a strict sequence, and confusing the sequence is precisely how every prior attempt chose the wrong first move.

STAGE	QUESTION IT ANSWERS	WHAT BINDS THERE	CONFIRMED EVIDENCE
ENTRY	Can this be built here at all — legally, politically?	POLITICS. The principal-agent structure decides which segments are even permitted to exist.	Starter Homes died twice; casita preemption passed twice — the split runs exactly along whose land the building sits on (E-027/028).
THROUGHPUT	Given permission, how fast and how certainly does a unit move through?	INFORMATION. Prose rules force per-instance review; nothing carries forward.	By-right permits 28% faster with lower variance (E-007); Oakland 6mo vs SF 25+mo (E-008); Singapore's compiled pipeline runs 7 agencies in 20 days (E-021).
SURVIVAL	Given throughput, does the product survive at scale?	CAPITAL. Comparables-based valuation kills anything without neighbours.	The HUD Code product: <30% approval, 5.61% spreads, 4% refi, shipments halved (E-009–014). Solved entry and throughput; died at survival.

Why this resolves the disagreement

Each document was describing a real stage. HAP-03 is right that politics binds *first* — it decides where you may stand at all. HAP-02 is right that information binds *next* — it governs speed and certainty once you are permitted to stand there. HAP-04 is right that capital binds *last and hardest* — it is the lock that killed the only attempt that cleared the other two, which is why its evidence is the strongest: it is the only lock America has ever actually reached.

That last point deserves weight. The reason the valuation evidence is so good is grim: valuation is the only lock the country has ever gotten far enough to fail at. The information lock's evidence is thinner not because it matters less but because nobody has cleared politics-plus-information at scale to test it. Evidence strength here tracks how far each attempt got, not how much each lock matters.

TEST THE ORDERING BY RUNNING THE ALTERNATIVES

A defended ordering must show why the other sequences lose. Each alternative below has actually been run, which is what makes this arguable now rather than after Gate 1.

SEQUENCE	WHO RAN IT	WHY IT FAILS
Capital first	Katerra — billions deployed against production and integration before approval standing or valuation pathway existed.	Capital cannot buy its way past entry and throughput: money waited in a manual queue, utilization never closed, and there was no certified type for finance to attach to anyway. Bankruptcy with no capital constraint (E-023 diagnosis).
Information first	The screening market — Symbium, Buildability, Canibuild. Compiled rules across thousands of counties.	Compiled information without political standing is advisory. Cycle time moved 2 of 32 months. The market has already run this experiment at commercial scale and published the answer (E-040–042).
Politics only	Arizona — statewide by-right casita rights, with automatic loss of local control on missed deadlines.	A granted right with no plan library, no shared record, no type-based finance. Throughput unpublished and plausibly negligible: every unit still needs bespoke design, review, and lending. The right exists; nothing exercises it (E-027, E-037).
Politics + capital, skip information	The HUD Code, partially — federal preemption plus a national product, with chattel finance bolted on badly.	Closest anyone came. But without a shared information layer there was no type-based valuation record to lend against, so finance defaulted to personal-property lending and strangled the product (E-009–014). The middle lock is what connects the other two.

WHAT THE FAILURES JOINTLY PROVE

Politics decides whether you may enter. Information decides whether anything moves. Capital decides whether it survives. Skip any one and the system reverts — and the failures are not symmetric: skipping politics wastes a company (Katerra), skipping information wastes a statute (Arizona), skipping capital wastes an industry (manufactured housing).

POLITICS CHOOSES THE GROUND. INFORMATION IS THE WEDGE. CAPITAL IS THE THESIS.

1 — Politics first, but as segment selection, not as advocacy

The principal-agent map is not an obstacle to route around; it is the selection function for where to begin. Build where the incumbent is the builder — casitas, conversions, owner splits — because that is the only ground where entry is already granted. This costs nothing and is already true in Arizona. **Politics first does not mean lobbying first. It means letting the map pick the segment.**

2 — Information second, but as authority, not as screening

Within the permitted segment, the binding constraint becomes throughput, and the screening market proves compiled rules alone do not move it. The wedge is the conformance authority: compiled determination plus professional of record plus insurance, accepted in lieu of first-pass review. This is the first commercially buildable move — and it is also what generates the telemetry (cycle times, accuracy records, envelope data) that every later step runs on.

3 — Capital last in sequence, first in importance

Type-based valuation is the endgame because it is the lock that kills at scale, the best-evidenced failure in the register, and the position with zero identified competitors. It cannot come first — there is nothing to value until a certified type exists with an accepted approval pathway and an accumulating performance record. But every earlier step must be built so its output feeds this one: **the determination engine's real product, three years out, is the valuation record.**

Sequence by politics, wedge with information, win on capital. Prior attempts each picked one and called it the answer.

THE ORDERING IS FALSIFIABLE, AND HERE IS HOW

PENDING EVIDENCE	RESULT	EFFECT ON THE ORDERING
Gate 1 – Arizona throughput (E-037)	Permit volume rose sharply after preemption despite no infrastructure	Politics alone suffices for the small segment → information demotes to convenience; the wedge business shrinks; advocacy rises.
Gate 1 – gate map interviews	Builders name utility capacity or fire districts, not approval, as the critical path	The throughput stage is misdiagnosed → information lock is aimed at the wrong gate; the rail's middle row is rewritten.
Gate 0 – compilability (E-039)	Binding provisions are predominantly discretionary	Information lock cannot be engineered → the sequence collapses to politics + capital, which is the HUD Code path plus modern finance. A different, harder company.
Gates 3–4 – acceptance & insurability	No jurisdiction accepts; no carrier writes it	The wedge is permanently advisory → ceiling is the screening market; the valuation thesis needs a different vehicle (portfolio lender, insurer, GSE pilot).
Firm-size reconciliation (E-016/017)	Project scale, not approval mechanics, drives productivity	Type certification behaves as entry regulation → consolidation is the mechanism; the small-builder framing is dropped and the ordering survives with a different beneficiary.

STANDING RULE

This synthesis supersedes the implicit orderings in HAP-02, HAP-03, and HAP-04 wherever they conflict — but it is written before Gates 0 and 1, and any of the five rows above can rewrite it. When one does, this document gets a revision, not a defense.

WHAT CHANGES NOW THAT THE ORDERING IS EXPLICIT

For HAP-02: compilation is demoted from thesis to wedge. The document remains the public argument, but its Sheet 00 overstates Layer 1's role and should say, in one added sentence, that the compiled ruleset is the instrument and type-based valuation is the destination.

For HAP-03: unchanged — r0.3 already runs this sequence in its four steps. This document is the argument for why those steps are in that order.

For HAP-04: confirmed in its ranking, corrected in its implication. Valuation is the strongest evidence and the endgame; it is not the first move, because there is nothing to value until the earlier stages exist. Evidence-first ordering and action-first ordering are different orderings, and the register supports both without contradiction.

For the next dollar and the next week: nothing changes — Gates 0 and 1 were already first, and this document adds a third reason they are: they are the only pending evidence that can rewrite the ordering itself.

HAP-06 · THREE LOCKS, ONE ORDERING · REV 1.0 · AUGUST 2026

SYNTHESIZES HAP-02 R3.1, HAP-03 R0.3, HAP-04 R1.0 · WRITTEN BEFORE GATES 0-1; REVISABLE BY FIVE NAMED RESULTS.