

OPERATING CASE STUDY / STRATEGY & CAPITAL ALLOCATION

Goal Allocation & Performance Planning

An allocation that adds up can still assign the wrong local burden

An evidence-reconciliation case on translating a network quality target into business-unit commitments. It separates baseline selection, exposure weights, allocation authority and deliverable capacity without claiming an adopted allocation or operating benefit.

NETWORK TARGETS & ALLOCATION GOVERNANCE

BLUF / BOTTOM LINE UP FRONT

Approve the basis. Translate the burden. Test the capacity before committing.

ANALYTICAL FINDING

A unit's allocated network-rate contribution is not its local-rate reduction. Exposure weights connect the two. A cost share can express a legitimate allocation choice without identifying fault, avoidable loss or feasible delivery.

CONTRIBUTION IN THE SOURCE RECORD

Provisional registry-level hoop: analyzed competing bases and proposed a quoting guardrail; goal, allocation and delivery authority remained elsewhere.

EVIDENCE STATUS

Original bridge and acceptance records remain unverified. The selected narrative supports an analytical proposal, not an adopted target or measured result.

BLUF: analytical inference. Source contribution: historical record. Client and internal identities anonymized.

STRUCTURED ABSTRACT

An accountable allocation needs more than a closing total

[AI] A network endpoint can be clear while the baseline explanation, local burden and executable contribution remain unresolved. Different uncertainties need different owners.

Element	Decision-relevant conclusion
Context [HR]	A planning lead reportedly decomposed an upstream network-quality target, compared candidate baselines and allocation bases, and proposed a limit on quoting an unallocated contribution. Acceptance and operating results are unestablished.
Objective [AI]	Separate mathematical reconciliation from the authority to choose an allocation and from evidence that business units can deliver it. Preserve the network target while exposing unsupported local commitments.
Approach [RC/AI]	Recalculate source bridges privately; distinguish local rates from network contributions; inspect positive versus net gaps, candidate-scenario bounds, embedded recovery and metric scope.
Findings [AI]	A raw local-rate share need not equal a defect-count share. An allocated network-rate contribution needs an exposure conversion. A forecast can already contain the recovery that a later bridge tries to subtract again.
Decision value [PD]	The goal owner approves baseline and allocation principles; metric owners reconcile exposure and definitions; operating owners substantiate capacity. Finance validates conversion and value. The analyst preserves the unresolved alternatives.
Implications [PD]	Use the proposed Basis-to-Burden Allocation Contract (BBAC). A synthetic capability-review rule can beat a weak usual allocation while providing little value over a cheap provisional response and retaining nonzero allocation risk.

[PD] The release threshold is a signed basis, a compatible network-to-local bridge and an accepted delivery plan. An owner can authorize a provisional proposal with open conditions; the analyst cannot make it final by averaging conflicting bases. A different business-unit metric is useful on its own terms, but does not automatically discharge the network obligation.

[HR] historical record; [RC] recalculated; [AI] analytical inference; [PD] proposed design. Protected sources S1/S2. Historical raw and indexed coordinates, internal identities and source links remain private.

EXHIBIT 1 / BASELINE MEANING

Keep the endpoint distinct from its percentage explanation

[AI] A stated endpoint does not disappear because its percentage description is approximate. The ambiguity concerns the reference against which effort and progress will be judged.

Reference type	What it can describe	Why it cannot be substituted silently
Observed partial period	Performance of a defined cohort at a named vintage.	Seasonality, maturity and later revisions can change the full-year comparison.
Full-period forecast	Expected continuation under named actions and assumptions.	Already credited recovery is part of the starting point.
Prior approved plan	An earlier commitment or budget benchmark.	It is not necessarily the current outcome or best forecast.
Another network scope	A different eligible population or partition.	A common label does not supply the missing crosswalk.

[HR/AI] The selected record compares candidates drawn from different periods, scopes and statuses. Their spread is a scenario sensitivity, not a statistical confidence interval. It is useful for locating a decision fork, but the alternatives must be made comparable before they become an admissible baseline set.

[AI] Back-solving a percentage tests an exact statement only if the percentage is exact. An approximate description needs a declared rounding or tolerance convention. Failure to equal its algebraic inverse is not, by itself, a contradiction. The owner may still need to specify which baseline the endpoint uses; the arithmetic cannot select that authority decision.

ASK THE OWNER A PRECISE QUESTION

[PD] Confirm the endpoint, the intended baseline version, whether the comparison is actual-versus-target or forecast-versus-target, and the permitted approximation. Recompute the bridge after that ruling. Do not replace the mandate with the most convenient forecast.

[HR/AI] The source documents an analytical challenge and reported open questions. Neither an adopted basis nor a confirmed answer is established by the selected derivative records.

EXHIBIT 2 / BURDEN UNITS

A network contribution becomes a local obligation only through exposure

[AI] Adding business-unit rates treats unlike denominators as though they were the same. The correction can change who appears to carry the largest gap.

Independent fixed-exposure illustration	Unit A	Unit B
Share of original network exposure	20%	80%
Local excess rate	100	25
Network-equivalent excess: weight x rate	20	20
Share of excess counts	50%	50%
Share from unweighted local rates	80%	20%

[PD] These invented rates use a common unit scale and stable exposure. The two units contribute equal excess counts even though one local rate is four times the other. A count-based allocation of a 40-point network reduction gives each a 20-point network contribution. Their local reductions are $20/0.20 = 100$ and $20/0.80 = 25$.

[AI] In general, if w is exposure share, a the assigned share and G the network gap, the assigned network contribution is $a \cdot G$; its local-rate equivalent is $a \cdot G/w$. The shares sum to the network ask only in network units. A future exposure shift, incompatible defect population or changing numerator requires a new bridge.

[PD] Add hypothetical local capacity caps 120/30. Aggregate capacity is 48 network points, above the 40-point ask. Yet the raw-rate allocation needs local cuts 160/10 and breaches A's cap; equal-count shares need 100/25 and fit. Closing the total does not establish deliverability.

LABEL BOTH SIDES OF THE BRIDGE

[PD] Publish the allocated network contribution and the local-rate obligation in separate columns. Retain the original eligible volume, exposure forecast, metric definition and reconciliation check. A correct multiplication does not establish the unit that a manager is being asked to deliver.

[PD] Independent hypothetical counterexample, not an indexed source reconstruction. [AI] Whether source mile-rate entries already share a network denominator remains a question to resolve, not an assumption to impose.

EXHIBIT 3 / ALLOCATION AUTHORITY

Choose the principle explicitly instead of disguising it as arithmetic

[AI] Share of defects, share of cost, equal burden and controllable opportunity answer different questions. None is automatically the morally correct or operationally feasible allocation.

Proposed principle	Decision it encodes	Evidence it does not supply
Share of compatible excess counts	Allocate according to a chosen defect burden.	Causal responsibility or marginal ability to prevent it.
Share of cost	Allocate according to financial exposure or an agreed funding rule.	A matching physical defect share or uniform unit value.
Share of controllable opportunity	Allocate against supported incremental delivery potential.	A target merely because a programme owner is named.
Equal or negotiated share	Apply an explicit governance or fairness choice.	Proof that the chosen unit has adequate capacity.

[HR/AI] The source preserved competing allocation bases and refused an unlabeled average. That is a defensible governance discipline. It does not establish that the cost-based alternative would necessarily allocate effort to the wrong place: costs, feasible interventions and accountability can differ from current recorded defect burden.

[AI] A denominator built only from unfavorable components is a gross-positive quantity. Favorable offsets belong in a net-network reconciliation. Even a verified common denominator does not make a share of gross positives equal a share of the net miss. Nor do selected low and high corners establish full bounds when other baselines or open-ended shares are omitted.

DO NOT LET THE ANALYST INVENT AUTHORITY

[PD] The goal owner should approve the principle and document exceptions. An explicitly negotiated blend can be legitimate; an unexplained average cannot inherit authority from its ingredients. Keep causal capability and price evidence separate from this normative choice.

[HR/AI] Source scenario corners, lower-bound wording and positive-component sums remain private. No public numerical bound is attributed to that incomplete scenario set.

EXHIBIT 4 / CONTINUATION BRIDGE

Do not subtract recovery already included in the forecast

[AI] A programme can matter to the future baseline without creating a second increment available to close the next target gap.

Independent continuation example	Rate points	Interpretation
Current rate	200	Before the assumed recovery.
Recovery already embedded	30	Included once in the continuation forecast.
Continuation forecast	170	Current rate minus embedded recovery.
New target	140	Endpoint for the future comparison.
Additional reduction required	30	170 minus 140, not zero.

[PD] The example assumes compatible cohorts, clocks and stable scope. Subtracting the embedded 30 again would falsely make the new requirement vanish. If recovery were absent from the forecast, uncertain or only partly realized, the bridge would change. Label those cases rather than treating one scenario as a universal identity.

[HR/AI] The source contrasts an observed baseline with a forecast described as including recovery, then also compares in-flight recovery with the future gap. That comparison needs an explicit inclusion ledger before any residual is computed. The sum of named components also need not exhaust a reported programme total; a remainder is unresolved evidence, not automatically an error or additional benefit.

[PD] Record event cohort, forecast inclusion, expected maturity, continuation assumption, action owner and incremental attribution. A programme operated by another unit may influence the common forecast while remaining outside the planning lead's contribution claim. Ownership does not decide whether the effect belongs in the network arithmetic.

ONE INCREMENT, ONE PLACE

[PD] Reconcile the target to the continuation baseline before pricing a new package. Preserve maintenance value if it prevents deterioration, but do not claim the same recovery as both embedded baseline improvement and new target-closing benefit.

[PD] Entirely invented continuation identity, independently recomputed. [HR/AI] No mature programme effect or share of the historical target gap is certified here.

EXHIBIT 5 / EXECUTABLE COMMITMENT

A local pledge on another metric does not close the network bridge

[AI] A measurable business-unit proposal may be useful while still answering a different question from the network allocation request.

Layer	Required release evidence
Metric identity	Compatible defect construct, numerator, denominator, geography and clock.
Allocation decision	Approved baseline, governing principle, exception treatment and original exposure weights.
Delivery capability	Versioned intervention, accepted dependencies, capacity, timing and independent outcome evidence.
Economic conversion	Incremental mature event count, claim conversion, applicable value, full cost and overlap ledger.
Submission acceptance	Which proposal was actually filed, accepted or returned; no inference from a prepared handoff.

[HR/AI] The narrative proposes a controlled business-unit commitment while withholding an unallocated network contribution. It also carries competing target versions and a deadline inconsistent with the surrounding annual-plan frame. Those are questions for the original submission and goal owner. A different metric or period cannot substitute for a missing network allocation without a demonstrated crosswalk.

[AI] Local ownership and a measurable actual do not by themselves make a future commitment executable. A plan requires lawful decision rights, supported intervention response and available capacity. Likewise, an unreconciled outbound event is not automatically a paid concession or a uniquely affected customer. Conversion needs the relevant conditional pathway and an appropriate mature outcome.

DO NOT DIVIDE UNMATCHED DOLLARS BY A RATE

[PD] A financial conversion needs compatible eligible exposure, defect-to-valued-outcome conversion, cost mix, avoidable share and time period. Finance approval is distinct from causal effect. Keep a top-down monetary aspiration separate from the analyst's proposed allocation.

[HR/AI] Prepared artifacts, recorded intentions and field ownership are distinguished from accepted commitments, approved valuation and demonstrated service results.

EXHIBIT 6 / EVIDENCE AND CONTRIBUTION

Authenticate the decision trail before crediting the guardrail

[AI] A well-reasoned refusal to invent an allocation can be valuable. Its value is not a measured avoided loss merely because the rationale is persuasive.

Claim	Supported treatment	Remaining evidence
Bridge authorship	Provisional registry-level hoop for the described analysis.	Exact source files, version metadata and independently authenticated handoff.
Quoting guardrail	Reported proposed or self-imposed communication boundary.	Actual use, accepted authority and evidence that it governed a later release.
Open questions	Preserve reported missing answers and assigned addressees.	An acknowledged answer, not simply another copy of the request.
Operating benefit	Not identified by this case.	A counterfactual intervention comparison and mature original-cohort outcomes.

[HR/AI] Only two rich derivative records were selected; they describe a much larger source family. Repeated narrative statements are not independent corroboration. Reported query failure is specific to the attempted access route, while unread attachments or an unresolved metric identifier leave other evidence pathways open.

[AI] Revisions to published actuals require a vintage bridge and a maturity policy. They do not alone prove an unstable physical process or make every use of the series invalid. Likewise, an approximate target explanation and a true arithmetic defect must be handled differently. Preserve what each check establishes and what it does not.

THE ROLE BOUNDARY IS PART OF THE RESULT

[PD] Attribute the analysis, disclosure and proposed escalation to the planning role only to the extent supported. The goal owner chooses the basis; operating owners deliver actions; the reviewer accepts the submission. Recover those decisions before claiming that the guardrail prevented an overcommitment.

[HR/AI] Evidence-reconciliation case. Original acceptance, deployment, customer impact and realized economic value remain unestablished; internal agent-assisted review is not external peer review.

EXHIBIT 7 / ALLOCATION CONTRACT

Test capability evidence against a useful provisional response

[PD] The proposed Basis-to-Burden Allocation Contract separates permission to propose an allocation from evidence that its assigned burden can be delivered.

BBAC obligation	Decision record
Select the basis	Endpoint, baseline version, intended comparison and approximation convention.
Translate the units	Common exposure frame; local rate, network contribution and count bridge.
Authorize the alternatives	Owner-approved allocation principles, admissible exceptions and provisional option.
Test deliverability	Incremental capability under the correct continuation; shared capacity, timing and full cost.
Close the release	Accepted version, unresolved conditions, review evidence and separately measured outcomes.

[PD] A synthetic shadow benchmark holds the network ask fixed while candidate allocations place different burdens on two units. Fallible capability evidence can improve on a balanced default. The stronger comparison is an inexpensive provisional response, which carries delay cost but makes no unsupported capacity claim. An informative review is not automatically the best purchase.

[PD] All original allocation packets remain in the denominator, including known authority failures and missing evidence. The reference represents a constructed capability state, not a field auditor who can observe every counterfactual response. Allocation risk is distinct from customer harm; no shadow recommendation changes actual promises or assigns work.

THE NEXT BOUNDED ACTION

[PD] Recover one authoritative baseline and its exposure bridge, obtain the allocation owner's ruling, then validate one capability assessment before recruiting a large shadow test. Keep provisional communication available. Do not solve an unresolved governance choice by giving an algorithm more observations.

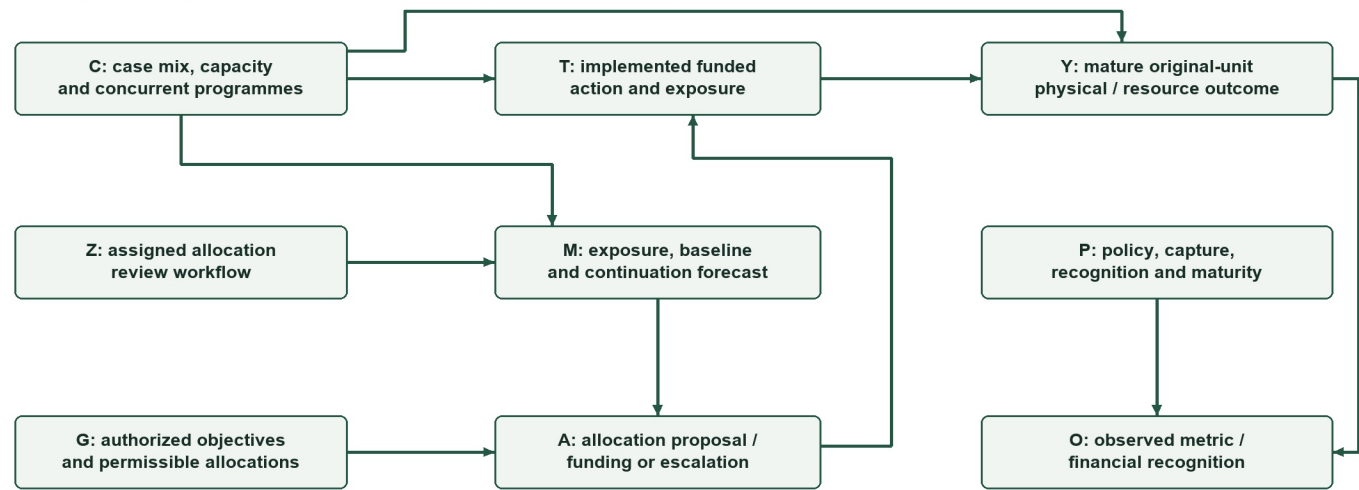
[PD] Later probabilities, prices, clocks and allocations are wholly hypothetical. No source-derived efficacy, achieved field power, adopted rule or financial return is claimed.

TECHNICAL ANALYSIS

Separate the basis, the burden and the attainable effect

[PD] The Basis-to-Burden Allocation Contract (BBAC) reconciles population accounting, authorized allocation criteria, local capability and subsequent physical outcomes.

BBAC: THE ALLOCATION BRIDGE AND THE OPERATING EFFECT ARE DIFFERENT



Proposed paths. Randomize Z for decision quality; a separate approved action study is needed for T → Y.

[PD] Z assigns a review workflow. M records the baseline, exposure weights and forecast version; A is the proposed allocation. Authorized objectives G constrain A. Funded implementation T can affect mature physical/resource outcome Y, while capture and reporting P affect observed O. Context C influences capability and outcomes; existing arrangements belong in the continuation forecast M. A better allocation document does not itself change T or Y. These are proposed paths, not an identified historical causal model.

[HR/AI] The master and narrative describe one bridge analysis; repetition is not independent corroboration. The record reports unresolved baseline and allocation choices alongside a fixed network endpoint. That endpoint can still be a goal while its claimed percentage reduction and local burden remain undefined. Candidate actuals, forecasts and commitments differ in scope and status; their span is neither a confidence interval nor a set of equally plausible counterfactuals.

[AI] A cost share and a miss share can encode different legitimate priorities. Neither uniquely determines responsibility, fairness or controllability. State the decision right and criterion, then test consequences. A separate business-unit target on another metric cannot establish satisfaction of the network mandate. No retrospective approval, implementation or operating benefit is inferred.

Basis: proposed DAG [PD] and bounded registry interpretation [HR/AI]. Thomson (2019) separates normative and operational criteria; JCGM (2020) requires defined input quantities.

TECHNICAL ANALYSIS

A network contribution is not a local rate reduction

[AI] Independent hypothetical closed population: one million original units, split 20% to A and 80% to B. Rates are excess defects per million eligible units.

Quantity	A	B
Local excess rate	100	25
Original exposure	200,000	800,000
Excess defects	20	20
Network-rate contribution	20	20
Share of raw local-rate sum	80%	20%
Share of excess counts	50%	50%

[AI] The network gap is $0.2 \times 100 + 0.8 \times 25 = 40$. Raw local rates suggest a different share from actual counts because exposures differ. For positive original exposure shares w_i , an authorized burden share a_i gives network contribution $a_i \Delta$ and local reduction $x_i = a_i \Delta / w_i$. The shares sum to one, but local reductions do not generally sum to the network gap. Applying a 20-point cut to both local rates yields only 20 network points.

Chosen allocation	Network contributions	Local cuts	Caps: A120 / B30
Equal excess-count shares	20 / 20	100 / 25	Feasible
Raw local-rate shares	32 / 8	160 / 10	A exceeds cap

[AI] Both allocations close the same accounting gap, and aggregate capacity is 48 network points. Nevertheless, only the first meets both invented local caps. Equality does not prove feasibility; choice of objective does not erase constraints. The exact feasible A-share interval in this fixture is 40%–60%. No fixture number is historical, and no field response is assumed linear merely because this example is.

[AI] Before treating reported by-mile rates as a count share, verify their denominator and preserve favorable as well as unfavorable components. If exposure mix changes, separate actual total-rate change from a fixed-mix comparison; neither is automatically a causal programme effect.

Basis: exact independent construction [AI]. Klein/Schoenborn (2001) supports weighted-rate discipline; Boyd et al. (2023) distinguishes equality closure from feasibility.

TECHNICAL ANALYSIS

Subtract existing recovery once, on a declared baseline

[AI] Independent hypothetical: current rate 200, existing expected recovery 30, continuation forecast 170, target 140. The additional required reduction is 30.

Valid or invalid path	Result
Current bridge less existing recovery	$200 - 140 - 30 = 30$
Continuation forecast bridge	$170 - 140 = 30$
Remove embedded recovery again	$170 - 140 - 30 = 0$: invalid

[AI] The last calculation leaves the forecast above target. Existing arrangements belong in the baseline once. If their persistence, exposure or effects change, specify another continuation scenario; ownership of a credit line alone does not determine physical spillover or maintenance value. A future benefit is not realized merely because a bridge includes it. EPA (2024) treats the baseline as a defined future world, not a frozen current observation.

[HR/AI] The selected corner calculation is conditional on chosen candidates; it does not span every baseline in the account. A reported lower threshold for a share is not an exact point or an upper bound. Approximate percentage language requires a declared tolerance. Distinct years, populations and metric definitions cannot be combined into a probability interval by taking their minimum and maximum. Preserve each candidate’s provenance and authority rather than averaging away disagreement.

[PD] Freeze metric, numerator, exposure, time window, vintage, prior-recovery treatment and decision owner. Audit all candidate bases where possible. Independently sample underlying records across business line, version and missingness; duplicate coders blinded to assigned review and outcome assess scope, linkage and approval. Report weighted confusion tables, prevalence, raw agreement and cluster-bootstrap kappa, followed by separate adjudication. A simple random sample of 400 gives worst-case binary agreement precision near ± 4.9 points, not kappa power or clustered precision.

[PD] Convert an independently measured local change d to expected defects using eligible exposure N : $Nd/1,000,000$. Price only aligned outcome units and validated avoidable resources, with full action costs. Matching an algebraic identity or a broad spend total does not validate a causal saving.

Basis: independent baseline construction [AI], source-bounded interpretation [HR], proposed validation [PD]. EPA (2024), JCGM (2020), Cohen (1960).

TECHNICAL ANALYSIS

Evaluate allocation advice before changing operating targets

[PD] A shadow review trial tests decision quality. A later authorized operating trial tests customer and resource effects; the two estimands require different references.

[PD] Freeze original allocation packets, common permitted evidence and owner-preauthorized alternatives. Assign independent review domains to usual review or BBAC; retain blocked and provisional packets. Lock shadow choices at 72 hours, with a hidden constructed capability reference revealed at 21 days in the finite benchmark. These clocks are proposals. Other packets' signals are unavailable at decision lock; within-domain dependence still reflects shared evidence conditions. Common-evidence alternatives and provisional decisions must receive equal rights.

[PD] Primary shadow estimands are mean priced decision loss and unconditional unsupported-allocation risk per original packet. Delay and review work count even when no allocation is released. The constructed reference can specify attainable contributions; real counterfactual capacity cannot be observed by reading one later record. Require separate engineering or randomized operating evidence. A risk reduction against usual does not establish acceptable absolute risk, particularly when provisional advice has zero unsupported allocation.

[PD] For a later approved package, estimate $E[Y(\text{usual}) - Y(\text{offer})]$ per original eligible unit, with independent original-promise receipt and mature full resources. Cluster where staff, budgets and downstream actions interfere. Do not condition total ITT on subsequent allocation acceptance, funded delivery or favorable reported outcomes. Freeze baseline exposure and report actual-mix and standardized contrasts separately.

[PD] Prespecify baseline capability, case mix, source vintage and prior-recovery dependence as moderators. Selection of high-miss groups invites regression to the mean: under an assumed linear conditional-mean model, expected untreated follow-up is $m + p(x - m)$, where x is selected baseline and m population mean. No historical p is estimated. Later observational rollouts need group-time pretrends, equivalence and sensitivity, not nonsignificance alone.

[PD] Calibrate cluster covariance, signal transport, reference uncertainty, costs and recruitment. Compare 80% MDE with break-even review cost per original packet and inspect tractable finite boundary tails. Passing a comparison with usual cannot establish value against provisional or stronger same-information policies.

Basis: proposed design [PD]; Hudgens/Halloran (2008), Barnett et al. (2005), Callaway/Sant'Anna (2021), Strong et al. (2015). Finite-law assumptions are separate from evidence.

TECHNICAL ANALYSIS

Make the bridge claims independently testable

[PD] BBAC gives different tests to accounting, allocation authority, capability and purchased evidence. A failed funding gate can mean imprecision rather than absence of an effect.

Proposition	Rejection or hold criterion
P1: raw rate shares equal defect shares	Reject the universal claim using the exact counterexample; verify denominator alignment on linked records.
P2: accounting closure establishes feasibility	Reject using the capacity fixture; require local constraints and an executable authorized action.
P3: the bridge isolates new recovery	Hold unless continuation effects and original populations reconcile without repeated subtraction.
P4: BBAC review is worth buying	Hold unless cost and safety criteria clear against strong common-evidence alternatives and transport validation.

[AI] Thomson makes the allocation criterion explicit; Klein/Schoenborn preserves the weighting population; JCGM disciplines units and validation; EPA defines continuation; Boyd and colleagues separate feasibility from objective choice. None supplies this case’s causal response or legitimate burden shares. Ittner/Larcker requires evidence through the action–outcome chain. Campbell/Goodhart cautions that target pressure can alter reporting. Deming cautions against reacting to immature readings; Tucker/Edmondson directs repeated missing-basis workarounds toward system repair.

[HR/RC] The frozen variation inventory contains 47 diagnostics: four source/sensitivity pairs, 16 version comparisons, 15 design audits and 12 profiles. All fitted X/MR values are inside tentative bands, using 2.66 and 3.267. The source pairs include a reconstructed contextual endpoint and mixed annual, month or partial-year scopes. None establishes a stable phase. Laney is neither eligible nor computed; missing observations are not invented.

Limitations and contribution

[HR/AI] Two derivative registry rows support a provisional hoop for preparing a bridge and escalating an unresolved basis. A related planning artifact was read; exact goal-bridge, handoff and scorecard versions remain unauthenticated. Search failure is bounded, not proof of nonexistence. No accepted allocation, exclusive authorship, realized reduction or Finance benefit is established. Capability separability, evidence accuracy, continued recovery, normative authority, costs and cross-line interference need validation. The finite model is a shadow decision benchmark; unknown operating value remains unknown, not zero.

Basis: agent-assisted internal methods assessment. [HR] historical record; [RC] recalculation; [AI] analytical inference; [PD] proposed design. Historical numerical coordinates remain private.

Test capability within an already authorized choice set

[PD] This wholly synthetic shadow benchmark changes no operating assignment or customer promise. It tests allocation advice, not which fairness principle ought to govern.

[PD] Each original packet has a 12-point network gap and fixed exposure shares 0.25/0.75. The owner has authorized proposals X=(4,8), M=(6,6), Y=(8,4), or provisional. Each numeric proposal closes the same network gap; local burdens divide contributions by exposure.

Constructed capacity state	Network capacities A / B	Prior
L	4 / 8	0.30
R	8 / 4	0.30
B	8 / 8	0.30
U	4 / 4	0.10

[PD] A review returns L/R/B/U/unknown. Conditional on a non-unknown result, it is correct with probability q; errors split equally across the other three states. Three packets share a hidden review grade, clear with probability 0.75; domains are independent. Capacity is drawn independently per packet.

Evidence version	q: clear / fragile	Unknown: clear / fragile
Base	0.85 / 0.60	0.10 / 0.30
Stress	0.60 / 0.40	0.25 / 0.45
Corroborated	0.93 / 0.80	0.05 / 0.15

[PD] Usual proposes M. The audit maps L to X, R to Y, B to M, and U/unknown to provisional. It sees only its own packet signal at lock. A common 10% known authority blocker permits provisional only; no signal can waive it.

A CONSTRUCTED REFERENCE IS NOT A FIELD ORACLE

[PD] Freeze the frame and prices at intake; lock advice at 72 hours and reveal the constructed capacity reference at day 21. Real reviews cannot observe every counterfactual capacity. Separability, stable exposure, authority and reference validity require independent calibration.

[PD] All probabilities, capacities and clocks are invented. All original packets remain. Known blockers and missing evidence are priced; no historical allocation, field efficacy or causal capability is inferred.

PROPOSED ALLOCATION TEST / 2 OF 4

A strong contrast with usual practice can hide a weak purchase test

[PD] Primary ITT is terminal decision-loss reduction per original packet. A separate gate requires lower unsupported-allocation risk, also over every original packet.

Domains / arm	80% MDE	Review K	Zero-test power at BE	Full-law joint floor
Small / 16	1.291	0.30	9.2%	71.4%
Base / 128	0.465	0.30	43.8%	>99.9%
Stress / 128	0.466	0.30	43.7%	93.8%
Corroborated / 256	0.329	0.65	>99.9%	>99.9%

[PD] Economic clearance requires the loss-reduction lower bound above K; risk superiority requires its bound above zero. Audit replaces usual independently per packet with probability lambda, with K fully paid. Fixed normal radii use exact domain moments and mixture-path variance ceilings; nominal directional error is 2.5%. These are conditional planning screens.

[PD] Base 128 cannot reliably detect break-even: MDE 0.465 exceeds K 0.30, even though its large full-law effect has a joint floor above 99.9%. Corroborated 256 has MDE 0.329 below K 0.65. That contrast still does not settle purchase against a strong provisional alternative.

[PD] Against provisional, base 128 and corroborated 256 have only 14.0% and 20.6% diagnostic normal economic-clearance power. Their expected-mean net lower bounds are - 0.1027 and - 0.0437. Neither can establish risk superiority over a zero-risk provisional output; an absolute tolerated risk needs separate approval.

[PD] Exact-law convolution gives base/corroborated loss-null tails 2.51825%/2.50405% and risk-null tails 2.37833%/2.37319%. Small nominal excesses remain. Eighteen selected marginal tails do not establish uniform coverage; a joint floor is not exact joint power.

FIX THE COMPARATOR BEFORE RECRUITMENT

[PD] Four direct allocations, no minimum search. The largest needs 1,536 packets across 512 domains; availability is unestablished. A confirmatory purchase study must compare the relevant feasible alternative and agree the risk trade-off before enrollment.

[PD] No achieved field power. All probabilities are conditional on the declared law. Values above 99.9% are not certainty. Provisional-comparator screens use full-law variance and are diagnostic, not separately calibrated confirmatory tests.

PROPOSED ALLOCATION TEST / 3 OF 4

Price unsupported burden, changed proposals and delayed decisions

[PD] Loss is 2 per unsupported network-contribution unit, plus 1 work unit for X/Y proposals, or 2 one-cycle delay units for provisional. These prices are judgments, not dollars.

Total loss / unsupported risk	Base	Stress	Corroborated
Usual: balanced M	3.0800 / 63.00%	3.0800 / 63.00%	3.0800 / 63.00%
Fixed X or Y	3.9800 / 36.00%	3.9800 / 36.00%	3.9800 / 36.00%
Provisional only	2.0000 / 0.00%	2.0000 / 0.00%	2.0000 / 0.00%
Proposed audit	1.9163 / 7.71%	2.5034 / 13.84%	1.9392 / 4.16%
Best same-packet rule	1.9163 / 7.71%	2.2541 / 6.46%	1.9392 / 4.16%
Fuller review	1.9333 / 1.32%	1.9333 / 1.32%	1.9333 / 1.32%

[PD] Review K 0.30 base/stress or 0.65 corroborated is paid on all assigned packets. Fuller review costs 0.90, with q 0.97 and unknown 0.02; it uses its optimal rule. All 1,024 own-packet signal mappings are checked, including unknown. Other packets' signals are hidden before lock; pooled inference is outside this comparator.

[PD] Perfect capacity information lowers loss to 0.92 versus best common-evidence loss 2.00: information ceiling 1.08 before fees. Base audit buys only 0.0837 over provisional and adds 7.71% unsupported risk. Fuller review dominates corroborated on loss and risk. At provisional price 0.50, provisional wins at 0.50 versus optimal paid 0.80; prices need independent agreement.

[PD] Base net versus usual = $a \cdot h \cdot 2.3868 - 0.9231 - 0.30$. Realization a and non-overlap h scale favorable state-by-category changes only. Every adverse change, proposal work, delay and review fee remains fully charged.

Net units / packet	h = 0.50	h = 0.75	h = 1.00
a = 0.25	-0.9247	-0.7756	-0.6264
a = 0.50	-0.6264	-0.3281	-0.0297
a = 1.00	-0.0297	0.5670	1.1637

[PD] Fixed X/Y, balanced, provisional, matched signal optima and fuller review use the same prior and feasible-set rules. Known blockers incur delay only. Provisional risk 0 describes a shadow claim, not zero customer harm; common research costs are separately budgeted.

Value information for a separate, named research decision

[PD] This separate experiment chooses whether to repair the measurement basis, study capability or defer. Its value is not added to allocation gains or operating savings.

[PD] State probabilities are 0.40 measurement repair needed, 0.35 capability study relevant, 0.25 neither. Action payoffs are (5,-2,-1), (-2,6,-1) and (0,0,0), including downstream costs. Correct-signal probability is q; each incorrect signal splits equally over the other states.

Evidence scenario	Correct signal	EVSI	Cost	Net EVSI
Low	50.0%	0.70000	0.60000	0.10000
Base	75.0%	1.77500	1.20000	0.57500
High	90.0%	2.54000	2.40000	0.14000

[PD] All 27 signal-to-action policies are enumerated per scenario. No-information value is 1.05 and EVPI 3.05. The base experiment has the highest net value under these assumed prices; the most accurate signal is not the best purchase. These are alternative likelihood-and-cost assumptions, not uncertainty intervals or source estimates.

[PD] With main-price loss support 0..9, unknown reference on epsilon of original packets in each arm permits contrast errors up to 18*epsilon loss and 2*epsilon unsupported risk, with verified costs fixed. Changed exposure, authority, support or eligibility needs another bound. Reference reconstruction cannot by itself identify field counterfactual capacity.

KEEP THE AUTHORITY QUESTION OUTSIDE THE SIGNAL MODEL

[PD] Obtain the goal owner's allocation ruling and reconcile the network-to-local denominator first. Then calibrate a bounded capability assessment. A study may inform a delivery constraint; it cannot decide which business unit ought to bear the target or authorize an unapproved commitment.

[PD] Compact exact finite law and conditional normal screens; zero Monte Carlo. A later operational study needs authorized treatments, original-cohort mature outcomes, shared-capacity effects and a distinct costed implementation design.

REPRODUCIBILITY / READER PROTOCOL

Reproduce the network bridge and the local burden

[AI] The Basis-to-Burden Allocation Contract preserves the distinction between a target, an accounting contribution, an authorized allocation and a feasible operating commitment.

Reproduction layer	Required record and decision test
Authoritative basis	Identify the endpoint, population, observation window, baseline vintage and tolerance attached to approximate language. Separate actuals, prior commitments and forecasts.
Network accounting	Recover compatible counts and exposures. Reconcile positive and negative contributions; identify overlap and offsets before interpreting a share of the gap.
Local obligation	Record the allocation objective and authorized share. Convert network contribution to local rate using exposure weight, then test local capacity and full cost.
Continuation baseline	Identify which recovery is already embedded in the forecast and which resources maintain it. Count a new effect only relative to the specified continuation alternative.
Decision and effect	Preserve the proposed allocation, accepted decision and implemented action as separate events. Evaluate local and network outcomes on matched mature cohorts.

[PD] Replay each candidate bridge with its original scope and time basis intact. Show how the answer changes when the baseline, allocation objective or exposure share changes. Do not average incompatible readings or present selected corners as exhaustive bounds. A later file, an exact formula and a reconciled total answer different verification questions.

[AI] The private archive contains selected source records, recovery findings, raw arithmetic, conflict registers, executable constructions and internal review. It cannot authenticate an original that was not recovered or establish the unrecorded allocation ruling. Public quantities come from independent hypothetical constructions; none is a rescaled disclosure of the historical network.

Protected source register and recovery results; recalculations and proposed BBAC reproduction protocol. Client identities and historical numerical coordinates remain private.

REFERENCES / 1

Primary sources and their role in this case

[AI] These sources inform aggregation, allocation and evaluation. They do not choose the organization's distributional objective or authenticate the historical commitment.

NIST/SEMATECH. Individuals Control Charts, e-Handbook section 6.3.2.2. Use compatible ordered observations before estimating process limits. A month, a cumulative extract, a commitment and a forecast are not a stable time series.

Laney, D. B. (2002). Improved Control Charts for Attributes. *Quality Engineering*, 14(4), 531–537. Require defect counts, matched exposures and rational subgroups. A sum of local rate gaps does not provide the subgroup counts needed for an adjusted attribute chart.

Cohen, J. (1960). A Coefficient of Agreement for Nominal Scales. *Educational and Psychological Measurement*, 20, 37–46. Independently code population, baseline type, contribution unit and authority. Report classification agreement separately from factual correctness.

Barnett, A. G., van der Pols, J. C., & Dobson, A. J. (2005). Regression to the Mean: What It Is and How to Deal with It. *International Journal of Epidemiology*, 34, 215–220. Selecting only adverse units or extreme misses changes the expected follow-up. Estimate reliability and use concurrent comparisons before attributing convergence to target allocation.

Callaway, B., & Sant'Anna, P. H. C. (2021). Difference-in-Differences with Multiple Time Periods. *Journal of Econometrics*, 225, 200–230. For a phased allocation-review protocol, define exposure cohorts and valid comparison groups. Test anticipation, pre-trends, changing exposure weights and spillovers.

Collier, D. (2011). Understanding Process Tracing. *PS: Political Science & Politics*, 44, 823–830. Attribute the reported bridge, sensitivity and escalation separately from goal ownership, accepted allocation, implementation and mature results.

Strong, M., Oakley, J. E., Brennan, A., & Breeze, P. (2015). Estimating the Expected Value of Sample Information Using the Probabilistic Sensitivity Analysis Sample. *Medical Decision Making*, 35, 570–583. Value additional evidence through its effect on a feasible allocation decision under the same objective. Include acquisition cost, unresolved requests and the option to defer.

Primary author, journal, institutional and official methods sources. Read scope and methodological applications are recorded privately.

REFERENCES / 2

Primary sources and their role in this case

[AI] These sources inform aggregation, allocation and evaluation. They do not choose the organization's distributional objective or authenticate the historical commitment.

The W. Edwards Deming Institute. The Funnel Experiment. Reallocating targets in response to noisy local readings may create avoidable instability. Establish comparable measurement and decision rules before changing burdens.

Campbell, D. T. (1976). Assessing the Impact of Planned Social Change. A consequential allocation rule can change reporting behavior and eligibility. Preserve original cohorts and independently verify mature outcomes outside the scored rate.

Goodhart, C. A. E. (1992). The Objectives for, and Conduct of, Monetary Policy in the 1990s. Reserve Bank of Australia Annual Conference, section 1(b)(i). A scored contribution measure can diverge from the intended outcome. Monitor definition and denominator changes after targets become consequential.

Ittner, C. D., & Larcker, D. F. (2003). Coming Up Short on Nonfinancial Performance Measurement. Harvard Business Review, 81(11), 88–95, 139. Test the chain from allocation through accepted resources and actions to customer outcomes. A balanced network bridge is not evidence that local actions will deliver its reduction.

Tucker, A. L., & Edmondson, A. C. (2003). Why Hospitals Don't Learn from Failures: Organizational and Psychological Dynamics That Inhibit System Change. California Management Review, 45(2), 55–72. A one-time workaround can hide recurring failures in measurement and authority. Assign durable owners to the unresolved baseline and exposure definitions.

OECD / European Commission JRC (2008). Handbook on Constructing Composite Indicators: Methodology and User Guide. Weights express substantive trade-offs. Expose the objective behind cost, responsibility and capacity weights; do not treat their average as an objective allocation rule.

Klein, R. J., and Schoenborn, C. A. (2001). Age Adjustment Using the 2000 Projected U.S. Population. Healthy People Statistical Notes, no. 20. National Center for Health Statistics. Use matching population weights to combine rates; a standardized rate and an actual count answer different questions.

Primary author, journal, institutional and official methods sources. Read scope and methodological applications are recorded privately.

REFERENCES / 3

Primary sources and their role in this case

[AI] These sources inform aggregation, allocation and evaluation. They do not choose the organization's distributional objective or authenticate the historical commitment.

Thomson, W. (2019). On the axiomatics of resource allocation: classifying axioms and mapping out promising directions. University of Rochester working paper, revised May 2019. State the normative, operational and strategic properties an allocation rule is meant to satisfy instead of treating one observed share as uniquely correct.

U.S. Environmental Protection Agency (2024). Guidelines for Preparing Economic Analyses, third edition. EPA-240-R-24-001, chapter 5: Setting the Foundation: Scope, Baseline and Other Analytic Design Considerations. Define the future baseline with existing arrangements before estimating the incremental action; do not remove the same expected recovery twice.

Joint Committee for Guides in Metrology (2020). Guide to the expression of uncertainty in measurement—Part 6: Developing and using measurement models. JCGM GUM-6:2020. doi:10.59161/JCGMGUM-6-2020. Define each input quantity and unit, retain transformations, and distinguish implementation checks from independent model validation.

Boyd, S., Vandenberghe, L., and Nobel, P. (2023). Convex Optimization: revised lecture slides. Stanford University, sections 1, 4 and 5. Separate the objective and aggregate equality from local feasibility constraints, and declare uncertainty sets before robust planning.

HM Treasury (2026). The Green Book. Updated 5 February; chapters 1, 4 and 7. Application: separate the authority to choose objectives from appraisal, compare options with continuation of existing arrangements, and show who bears costs and risks. Applied as an appraisal analogy, not as a claim that UK public-sector requirements govern this project.

Hudgens, M. G., & Halloran, M. E. (2008). Toward Causal Inference with Interference. Journal of the American Statistical Association, 103, 832-842. Original manuscript. Allocate review or operating treatment by domains that contain shared analysts, capacity and downstream effects.

Primary author, journal, institutional and official methods sources. Read scope and methodological applications are recorded privately.

Approve the basis before accepting the burden

[AI] Author-led, agent-assisted review; not external peer review. The case formalizes why an allocation that closes at network level can remain undefined or infeasible at local level.

Major issue	Resolution and decision boundary
Scenario spread treated as a bound	Separate incompatible scopes and periods. Retain the full candidate set, threshold wording and rounding tolerance; selected scenarios are not confidence limits.
Network contribution treated as local rate	Require the exposure conversion and signed accounting bridge. A share of positive rate gaps is not automatically a share of net network defects.
Arithmetic used to select fairness	State the allocation objective and decision owner. Counts, cost shares and capacity inform different choices; no calculation supplies the missing normative ruling.
Recovery credited twice	Identify recovery embedded in the continuation forecast. Keep maintenance, incremental effects and attribution distinct, including spillovers between owners.
A proposal presented as execution	Attribute reported analysis and disclosure within the registry. Preserve missing originals, unresolved review decisions and unconfirmed submission.
Model treated as a delivery guarantee	Keep assumed capacity, signal quality, decision prices and field recruitment visible. Strong comparators and information costs remain part of the evaluation.

Partner critique: can a COO act on page one?

[AI] Yes. Select the population and baseline, name the allocation objective, and require the bridge from network contribution to local capability before accepting commitments. Preserve the unresolved decisions explicitly instead of asking a spreadsheet formula to settle them.

Remaining limits and minor issues

[AI] Original-source authentication, exposure weights, signed contributions, embedded recovery and accepted decision rights constrain the historical conclusion. The technical section consolidates these limits. An exact constructed allocation does not establish a causal effect or a correct organizational objective.

REVIEW DISPOSITION / PASS WITHIN STATED SCOPE

[AI] Publish the bounded allocation analysis and proposed test. Retain the distinction between a reconciled target, an authorized burden and a funded intervention with measured outcomes.

Final source, independent numerical, methods, partner and actual-page reviews are required. Internal publication review does not constitute external assurance.