

# Workforce Stability Among Post-9/11 Veterans

*A founder-operated R&D program operating under Six Sigma DMAIC and military After-Action Review discipline. Ten risks identified at charter, scored on a likelihood × impact framework, with owners, triggers, mitigations, and contingencies recorded openly.*

PROGRAM	SPONSOR	CHARTER	REGISTER
Workforce Stability	Legends' Return Foundation	v1.0 · 2026-04-16	v1.0 · 2026-05-12

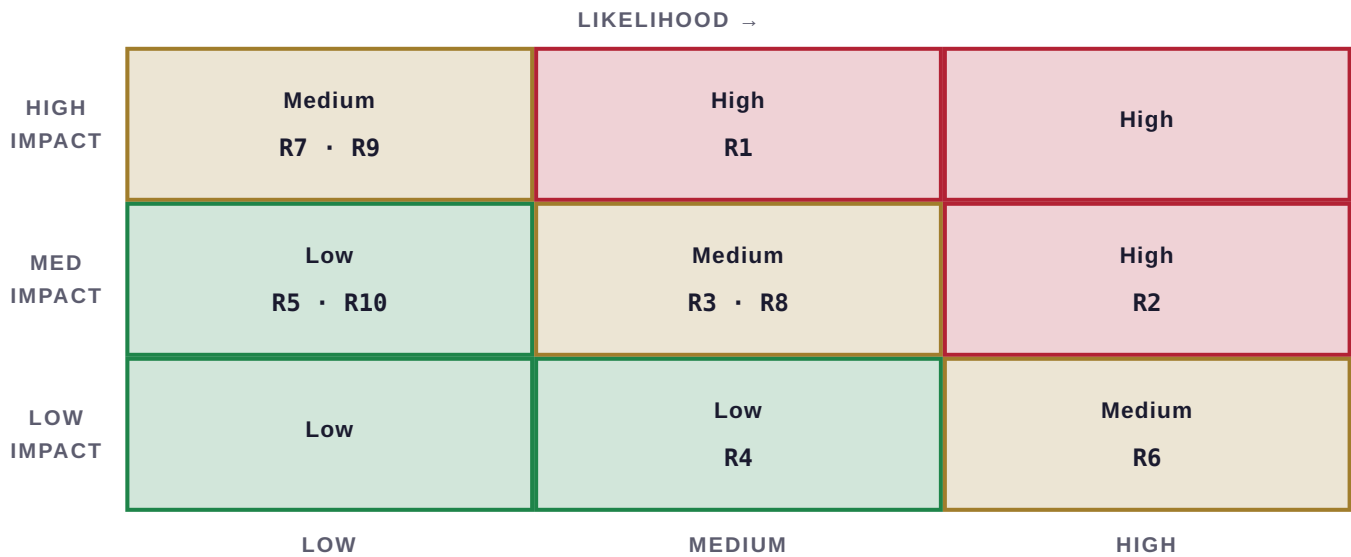
## Methodology

Each risk is scored on two ordinal dimensions: **Likelihood** (Low / Medium / High = 1 / 2 / 3) and **Impact** (Low / Medium / High = 1 / 2 / 3). Composite score is the product. Bands: Low (1–2), Medium (3–4), High (6–9). Scoring is judgment-based, not actuarial; the value is the disciplined surfacing of risk, not numerical precision.

LIKELIHOOD	IMPACT	CATEGORIES
<p><b>Low (1)</b> Plausible but no current signal.</p> <p><b>Med (2)</b> Observed once or expected in normal operation.</p> <p><b>High (3)</b> Observed repeatedly or structurally embedded.</p>	<p><b>Low (1)</b> Cosmetic; recoverable without rework.</p> <p><b>Med (2)</b> Slows program; partial rework.</p> <p><b>High (3)</b> Invalidates a deliverable or the evidence trail.</p>	<p><b>Data</b> · sources, schemas, access.</p> <p><b>Methodology</b> · model and identification.</p> <p><b>Communications</b> · how findings are read.</p> <p><b>Reproducibility</b> · external execution.</p> <p><b>Governance</b> · process and oversight.</p>

# Heat Map

Risk identifiers are plotted on the likelihood × impact grid. Empty cells indicate no risk currently scored at that intersection.



## Register Summary

ID	RISK	CATEGORY	LIKELIHOOD	IMPACT	SCORE	STATUS
R1	Synthetic retention outcome misread as a real prediction	COMMUNICATIONS	Medium	High	6 · High	Mitigated
R2	Tier-2 OCCP → 8-digit SOC crosswalk blocked outside the allowlist	DATA	High	Medium	6 · High	Open
R3	Sandbox API restrictions block reproducibility for outside reviewers	REPRODUCIBILITY	Medium	Medium	4 · Medium	Mitigated
R4	Brand inconsistency across case study, model card, and explorer	COMMUNICATIONS	Medium	Low	2 · Low	Open
R5	Reviewer challenges lived-experience legitimacy of the cohort framing	GOVERNANCE	Low	Medium	2 · Low	Mitigated

ID	RISK	CATEGORY	LIKELIHOOD	IMPACT	SCORE	STATUS
R6	Quasi-multicollinearity between O*NET composites and SOC-major dummies	METHODOLOGY	High	Low	3 · Medium	Mitigated
R7	Federal data source policy change mid-program	DATA	Low	High	3 · Medium	Open
R8	Model card §4a not read by a casual reader	COMMUNICATIONS	Medium	Medium	4 · Medium	Mitigated
R9	Build log loss or version drift between artifacts	GOVERNANCE	Low	High	3 · Medium	Open
R10	Reproducibility failure on an external reviewer's machine	REPRODUCIBILITY	Low	Medium	2 · Low	Open

# Risk Profiles

Each profile records the risk, owner, trigger conditions, current mitigation, and the contingency to be executed if the risk materializes.

**R1**

## Synthetic retention outcome misread as a real prediction

CATEGORY Communications LIKELIHOOD Medium IMPACT High SCORE 6 (High)  
OWNER Program Manager STATUS Mitigated

The retention model uses a synthetic target constructed from cross-sectional ACS panels rather than observed longitudinal transitions. A casual reader who skips the model card §4a may interpret AUC and predicted probabilities as operational predictions.

### TRIGGER

External reference to the model that cites AUC as evidence of predictive accuracy without §4a context.

### MITIGATION

Model card §4a written before any results section; case-study language uses “illustrative” in every relevant paragraph; deck slide 11 carries a red-bordered AUC honesty callout.

### CONTINGENCY

*If a misread is observed in public reference, publish a short blog post pinned to the case study clarifying the synthetic-target ceiling.*

**R2**

## Tier-2 OCCP → 8-digit SOC crosswalk blocked outside the allowlist

CATEGORY Data LIKELIHOOD High IMPACT Medium SCORE 6 (High) OWNER Program Manager  
STATUS Open

Clean composite identification on O\*NET Work Context features requires a Tier-2 OCCP → 8-digit SOC crosswalk that is not in the program’s data allowlist. Composites remain partially collinear with SOC-major dummies until secured.

### TRIGGER

Phase 7 work cannot begin; reviewer challenges interpretation of composites.

### MITIGATION

Document the constraint explicitly in the model card and the charter; defer Phase 7 rather than cancel; pursue the crosswalk via the O\*NET Chrome session reference.

### CONTINGENCY

*Ship Phase 8 (public launch) without Phase 7; mark composite interpretation as a known limitation.*

**R3**

## Sandbox API restrictions block reproducibility for outside reviewers

CATEGORY Reproducibility LIKELIHOOD Medium IMPACT Medium SCORE 4 (Medium)  
OWNER Program Manager STATUS Mitigated

The sandbox proxy returns 403 for api.census.gov and api.bls.gov, preventing end-to-end execution inside the build environment. Outside reviewers using a similar environment may believe the pipeline does not run.

**TRIGGER**

External reviewer reports unable to execute scripts/  
fetch\_acs\_smoke\_test.py.

**MITIGATION**

README documents local-Python execution path;  
`.env.example` provides credential template; build log  
v0.1a explicitly records the sandbox failure and the local-  
execution workaround.

**CONTINGENCY**

*Publish a 90-second screen recording of the pipeline running on a standard local machine.*

**R4**

## Brand inconsistency across case study, model card, and explorer

CATEGORY Communications LIKELIHOOD Medium IMPACT Low SCORE 2 (Low)  
OWNER Program Manager STATUS Open

The case study, model card, and explorer were built across separate sprints and use slightly different palettes and type pairings. Inconsistency undermines the “evidence program” framing.

**TRIGGER**

Side-by-side comparison reveals different fonts, accent  
colors, or spacing scales.

**MITIGATION**

Single design spec (docs/claude-design-system-  
spec.md) declared canonical; consolidation pass  
scheduled before public launch.

**CONTINGENCY**

*If launch ships pre-consolidation, publish a tracking note acknowledging the planned visual unification.*

**R5**

## Reviewer challenges lived-experience legitimacy of the cohort framing

CATEGORY Governance LIKELIHOOD Low IMPACT Medium SCORE 2 (Low)

OWNER Program Manager STATUS Mitigated

A reviewer may question whether a single Program Manager — even one who is post-9/11 11C — can speak with authority for the post-9/11 cohort.

### TRIGGER

Public or private reviewer comment questions cohort framing on identity grounds.

### MITIGATION

PM identity disclosed openly in About and case study; lived-experience review embedded in the PM role, not a separate sign-off; methodology relies on public federal microdata, not lived narrative.

### CONTINGENCY

*Add a Reviewer's Note section to the case study citing two additional veteran reviewers if needed.*

**R6**

## Quasi-multicollinearity between O\*NET composites and SOC-major dummies

CATEGORY Methodology LIKELIHOOD High IMPACT Low SCORE 3 (Medium)

OWNER Program Manager STATUS Mitigated

O\*NET Work Context composites added in Phase 6 (v0.16) share variance with the SOC-major dummies already in the model. `military\_skill\_match` jumped 0.12 → 0.43 as composites decollinearized it; df\_model dropped 46 → 43.

### TRIGGER

Composite coefficients flip sign or move outside historical confidence intervals.

### MITIGATION

Model card §4a quantifies the collinearity; reduced df\_model documented; AUC stability across versions confirms no overfit.

### CONTINGENCY

*If reviewer requires clean identification, defer composite interpretation pending Tier-2 SOC crosswalk (see R2).*

R7

## Federal data source policy change mid-program

CATEGORY Data LIKELIHOOD Low IMPACT High SCORE 3 (Medium) OWNER Program Manager  
STATUS Open

Census, BLS, BEA, or VA public-use terms or schemas could change between program-version refits and invalidate the pipeline or the published findings.

### TRIGGER

Source release notes announce schema change; pipeline ingest returns 4xx after a refresh.

### MITIGATION

Raw parquet snapshots cached per year and per source; build log records exact ingest dates; pipeline modular by source so any one can be re-implemented without rewriting the joins.

### CONTINGENCY

*Pause refits; publish an addendum noting the source change; rebuild the affected ingest only.*

R8

## Model card §4a not read by a casual reader

CATEGORY Communications LIKELIHOOD Medium IMPACT Medium SCORE 4 (Medium)  
OWNER Program Manager STATUS Mitigated

§4a contains the synthetic-target ceiling disclosure. If the case study draws more traffic than the model card, §4a may be invisible to most readers.

### TRIGGER

Case-study analytics show high traffic; model card analytics show <10% click-through.

### MITIGATION

Case study chapter 8 surfaces §4a content inline; deck slide 11 carries the AUC honesty callout; explorer header line repeats the “illustrative” framing.

### CONTINGENCY

*Move §4a content above the fold in the model card if click-through stays low after launch.*

**R9**

## Build log loss or version drift between artifacts

CATEGORY Governance LIKELIHOOD Low IMPACT High SCORE 3 (Medium)  
OWNER Program Manager STATUS Open

The build log is the spine of the AAR and the reproducibility claim. Loss, corruption, or silent divergence between the log and the actual code state would invalidate the program's evidence trail.

### TRIGGER

Build-log timestamp gap exceeds 72 hours during active work; or a deployed version cannot be traced to a log entry.

### MITIGATION

Build log committed alongside code; checksum recorded in project\_config.yaml; daily entry discipline enforced.

### CONTINGENCY

*Halt new work until version-to-log alignment is restored; reconstruct the missing window from git history before resuming.*

**R10**

## Reproducibility failure on an external reviewer's machine

CATEGORY Reproducibility LIKELIHOOD Low IMPACT Medium SCORE 2 (Low)  
OWNER Program Manager STATUS Open

A reviewer follows the README on a clean machine and the pipeline fails — missing dependency, OS-specific path issue, or API-key step skipped.

### TRIGGER

External report of pipeline failure unrelated to R3 (sandbox).

### MITIGATION

`requirements.txt` pinned; `.env.example` provided; README covers Windows/macOS/Linux paths; smoke test (DC-only, 2022) runs in under five minutes.

### CONTINGENCY

*Open a short troubleshooting issue tracker on the case study page; address within 48 hours.*

## Owner of Record

Patrick Neil Bradley, Founder of Legends' Return Foundation and Program Manager. This register is reviewed weekly during the active phase of the program and at each phase gate. Any new risk surfacing during execution is added with a dated entry; mitigated risks are retained for the historical record rather than deleted.