# Millions Dashboards — Goals, Pre‑Season Plan, In‑Season Roadmap (v1)

This lays out **what the Millions dashboards are for**, what we can **ship before the season**, and how we’ll **iterate in‑season**. It also proposes the split between the **Master** (internal/ops) dashboard and the **Member** (public) dashboard, plus the data we’ll carry (injuries/notes/weather/totals, etc.). It’s aligned with the current repo state in the *Runbook*, *Exporter*, and *Audit* docs you’ve been editing.

## 1) Product goals (what “good” looks like)

**Primary outcome:** Make five ATS decisions each week with confidence and discipline, backed by fresh, accurate data and clear QA gates.

**Success criteria** - **Data trust:** No red flags in the audit before export; lines, DVOA scales, and schedule keys are consistent. - **Freshness:** Market lines and injury/notes are current at export time (target: same‑day for weekly export; stretch: morning + afternoon refresh on Sundays). - **Comprehension:** Member cards show only what matters (favorite lines, totals, kickoff, DVOA snapshot, badges, notes chips) with minimal cognitive load. - **Speed:** Pre‑export workflow is a 5‑minute spot‑check (already in place) and a single pasteable command. - **Repeatability:** A clean weekly runbook that anyone can follow.

## 2) What we can accomplish **before the season** (realistic scope)

**Already working (per current docs):** - Planner Week‑1 filtered and enriched; kickoff helpers (\_kickoff\_pt, \_kickoff\_sort\_key) and exporter sort fixed (Thu→Fri→Sat→Sun→Mon last). - DVOA (Total + Off/Def) mapped to team/opponent orientation and rendered as %; scaling guard fixed. - Favorite (Open/Current) logic using \*\_spread\_home/away with TBD fallback. - Structural audit writing diagnostics/millions\_week\_audit.md and gating export.

**Pre‑season deliverables to lock:** 1. **Roadmap → Planner totals** - Add to roadmap: open\_total, current\_total, closing\_total, circa\_total (game‑level).  
- A2 enrich maps these into planner (no team orientation needed).  
- Exporter: display **Current Total** with fallback to Open; show TBD if missing. 2. **Injury & weather chips (MVP)** - Use existing roadmap columns: injuries\_key\_home/away, weather\_notes.  
- Exporter: small pills under the lines (truncate gracefully); include hover title text.  
- Audit: informational presence check (warn if missing but don’t fail). 3. **Line‑movement deltas (Open→Current)** - Add a derived line\_delta\_home = current\_spread\_home − open\_spread\_home (+ away).  
- Exporter: tiny ▲/▼ + value; color if |Δ| ≥ 2.5 pts (configurable). 4. **Tighten kickoff sorting invariants** - Keep planner‑provided \_kickoff\_sort\_key authoritative; exporter only parses if missing.  
- Audit: assert \_kickoff\_sort\_key is present and strictly increasing within weekday buckets. 5. **Safe baseline audit** hardening - Keep thresholds and ranges in CLI; add schema‑drift block (no \*\_x/\_y, no unexpected dup columns).  
- Add lines‑consistency check vs roadmap (already spec’d) with tolerance (±0.5). 6. **One‑shot and A2 guards baked in** - DVOA scale normalizer (divide by 100 when needed) and dedup cleaner are part of A2.

**Definition of done (pre‑season):** A single command produces the member HTML for Week 1 with totals + chips + movement, and the audit file is green.

## 3) In‑season improvements (sequenced)

### A) **Weeks 1–2: Contest accuracy + visibility**

* **Circa PDF ingestion** to fill circa\_spread\_home/away (and circa\_total when available).  
  *Exporter:* show **Circa (spread)** and **Circa Total** on cards; if absent, keep TBD.
* **Delta badges**: open→current and open→closing deltas; flag games with large swings (e.g., ≥ 3.0 pts or ≥ 5 total points).
* **Strict audit profile (Master job)** enabled: require totals coverage, assert kickoff invariants, and fail on schema drift.

### B) **Weeks 3–5: Edge surfacing + ops**

* **Market vs model edge**: derive model\_spread\_team (if/when model exists) and compute edge\_spread = model − current; highlight top edges.
* **Closing Line Value (CLV) tracker** for our picks; show weekly CLV and season aggregate in Master.
* **Pick management hooks**: fields for pick\_side, pick\_confidence, notes; protect member export from leaking these (Member stays read‑only).

### C) **Weeks 6+ : Depth & context**

* **EPA form**: last‑4 EPA/play offense/defense (if you decide to ingest) with small arrows for trend.
* **Pace / PROE** (optional): surface simple labels (Fast/Slow, Pass‑heavy/Run‑heavy) sourced from weekly aggregates.
* **Travel / rest context**: short‑week flag, west‑to‑east body‑clock marker, bye‑week return.
* **Weather expansion**: structured wind\_mph, temp\_f, precip\_code for automated badges.

## 4) Master vs Member — deep split

### Master Dashboard (internal “ops cockpit”)

**Purpose:** QA gate, research, and pick operations.

**Core views** - **Audit board**: per‑game flags (missingness, range, joins, deltas, schema drift). Click to detail.  
- **Lines panel**: open/current/closing/contest with deltas; price columns when present.  
- **Totals panel**: open/current/closing/contest; Δ total; weather/injury overlays. - **Model overlays** (when ready): edges vs market, confidence buckets, filter by thresholds. - **Pick ops**: enter picks, confidence, notes; track CLV; export a pick sheet.

**Pivots & filters** - Week selector; slate (Thu/Fri/Sat/Sun/MNF); favorites/dogs; delta buckets; injury severity; roof/turf.

**QA/controls** - **Profiles**: *Safe* (weekly baseline) vs *Strict* (Master).  
- **Stop‑export rules**: e.g., if totals missing > 20% or \_kickoff\_sort\_key absent for any game.  
- **Schema guard**: fail on \*\_x/\_y or duplicate names; show a diff of column set vs last week.

**Artifacts** - Weekly audit MD + flags CSV; pick sheet CSV/HTML; optional charts for line movement.

### Member Dashboard (public “cards”)

**Purpose:** Clear, concise weekly slate for end users.

**Card content (MVP+pre‑season)** - Header AWAY @ HOME; **Favorite (Open)** and **Favorite (Current)**; **Circa** (TBD until ingest).  
- **DVOA**: Total + Off + Def (percent, signed) with **Top 5/Bottom 5** badges.  
- **Kickoff (PT)**; sorted Thu→Mon automatically.

**Additions in first patch** - **Current Total** (fallback to Open).  
- **Injury/Weather chips**: e.g., Q questionable (2), Wind 18 mph, Rain. Hover shows full injuries\_key\_\* / weather\_notes. - **Line movement** micro‑row: ▲+2.5 since open.

**Intentionally omitted from Member** (kept in Master) - Raw columns, per‑side prices, internal notes, pick candidates, model internals.

## 5) Data model — columns & derived fields

**Already in roadmap (per current files)** - Teams/schedule: week, game\_num, hometm/home\_team, vistm/away\_team, matchup, kickoff\_local, venue  
- Spreads: open\_spread\_home/away, current\_spread\_home/away, closing\_spread\_home/away  
- Contest: circa\_spread\_home/away (+ price columns)  
- Projections: total\_dvoa\_home/away, off\_dvoa\_home/away, def\_dvoa\_home/away, st\_dvoa\_home/away  
- Context: rest\_days\_home/away, rest\_days\_diff, injuries\_key\_home/away, weather\_notes

**Add now (pre‑season)** - **Totals**: open\_total, current\_total, closing\_total, circa\_total *(game‑level)*.

**Planner (team‑oriented)** - Required: season, week, team, opponent, home\_or\_away.  
- DVOA fields: team\_total\_dvoa\_proj, opp\_total\_dvoa\_proj, dvoa\_diff\_proj, team\_off\_dvoa\_proj, team\_def\_dvoa\_proj, opp\_off\_dvoa\_proj, opp\_def\_dvoa\_proj. - Lines: open/current/closing\_spread\_home/away (game level), circa\_line (team‑oriented), **Totals** (game level).  
- Kickoff helpers: \_kickoff\_pt, \_kickoff\_sort\_key.

**Derived (pre‑season)** - line\_delta\_home/away = current\_spread\_\* − open\_spread\_\*  
- has\_injuries = (injuries\_key\_home != '' or injuries\_key\_away != '')  
- has\_weather = weather\_notes not null

**Derived (in‑season)** - edge\_spread\_team = model\_spread\_team − current\_team\_spread *(when model available)*  
- CLV per pick; implied win prob from spread (logistic mapping); large move flags.

## 6) UX details for injuries/weather

**Injuries**  
- Use existing strings in injuries\_key\_\*. Extract quick counts for Q/D/OUT in Master; show a concise chip in Member (e.g., Q (2)).  
- Optional: add qb\_status\_home/away columns when you want a very visible badge (e.g., QB OUT).

**Weather**  
- MVP: pass along weather\_notes string → chip with hover.  
- Next: structured fields wind\_mph, temp\_f, precip\_code for auto icons and thresholds (e.g., windy ≥ 15 mph).

## 7) QA gates and acceptance criteria

**Safe baseline (Member export job)**  
- Required columns present; missingness ≤ 1% for team/opponent/DVOA; spread range in [−20, +20]; DVOA totals in [−0.6, +0.6].  
- Lines consistency vs roadmap within ±0.5 when roadmap is supplied (warn‑only if roadmap missing fields).  
- \_kickoff\_sort\_key present and numeric; no \*\_x/\_y suffix columns.

**Strict profile (Master job)**  
- **Require totals** presence; **require** \_kickoff\_sort\_key + Monday‑last invariant; **fail** on schema drift or duplicate columns; **100%** join coverage Planner↔Roadmap for the target week.

## 8) Milestones & timeline

**Week −3 (now)**  
- Lock exporter sort by planner key; DVOA scaling guard; safe audit green.

**Week −2**  
- Add totals to roadmap → planner → exporter; add chips for injuries/weather; add line‑delta row.

**Week −1**  
- Circa PDF ingestion for spreads (+ totals if available); strict Master profile on; pick‑sheet scaffold in Master.

**Week 1 (go‑live)**  
- Member cards: favorite open/current, current total, injuries/weather chips, kickoff PT sorted; audit green.

**Weeks 1–4**  
- Edge surfaces and CLV; Master pivot filters; simple charts for line movement.

**Mid‑season**  
- Optional depth: EPA form, pace/PROE, travel context; structured weather.

## 9) Engineering tasks (by area)

**Data ingestion & schema** - Add totals columns to roadmap; backfill historical rows when feasible.  
- Extend A2 enrich to map totals; keep dedup + DVOA scaling guard.  
- Add strict audit flags (totals required, schema drift, kickoff invariants).

**Exporter** - Prefer planner \_kickoff\_sort\_key; render **Current Total**; chips for injuries/weather; line‑delta micro‑row.  
- Keep Member minimal; hide empty rows automatically.

**Circa ingest** - Parse weekly PDF; write circa\_spread\_home/away (and circa\_total if present) into roadmap; A2 maps through to planner.

**Ops & testing** - Add a one‑click batch (build → enrich → audit → export).  
- Save audit outputs alongside HTML for each week; lightweight unit tests for audit helpers.

## 10) Risks & mitigations

* **Late totals/contest lines** → Show TBD, fail only in Strict profile; keep export unblocked in Safe profile.
* **Schema drift (e.g., \_x/\_y)** → Pre‑merge drop of overlaps; audit fails fast.
* **DVOA scale regressions** → A2 normalizer + audit range checks.
* **Kickoff parsing variance** → Planner‑first sort key; exporter fallback only.

## 11) TL;DR

* Pre‑season: wire **Totals**, **chips (injury/weather)**, **line‑movement**, and **strict audit options** while keeping Member export on the **safe baseline**.
* In‑season: add **contest ingest**, **edges/CLV**, and **ops views** in **Master**; keep **Member** clean and reliable.