

The Data We Have, and Cannot Find

An Inventory of Red Cross Operational Data — Roughly Fifty Layers We Hunt Down One at a Time: What Each Tells Us, Where It Hides Inside the Organization, and How Hard It Is to Reach.

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The American Red Cross is not short on data. It is drowning in it — and almost none of it can see the rest. Every line of service keeps its own: Disaster Response has the fires and the shelters, Recovery has the casework and the dollars, Biomedical has the blood drives, Volunteer Services has the people, Real Estate has the buildings. Each lives in its own system, behind its own login, guarded by its own gatekeeper. To assemble one honest picture of a single county, you must track down a dozen owners and a dozen exports. The data is real. The access is tribal.

These are the questions that should be a single query and are instead a multi-week project: *Where are our DAT volunteers, and can they actually cover the home fires we keep responding to? How much have we invested in long-term recovery in this county over the last three years? How many nights did we shelter people here, and where? Which counties have the most need and the least Red Cross presence?* Every one of these is answerable. None of them has a single place to ask.

We don't have a data shortage. We have fifty layers in fifty pockets — and no map that holds them all.

This report inventories that data: roughly fifty Red Cross operational layers, grouped by line of service. For each it records what the layer tells us, **where it lives inside the organization today**, how we actually reach it, and how hard that is. Public reference data — Census, hazard, vulnerability — is real and valuable, but it is already easy to get; it appears at the back as *context we layer on top*, not as the headline. The headline is everything we generate ourselves and then lose track of.

THE SHAPE OF THE PROBLEM

Every layer in this report is hard to use for two separate reasons, and it helps to keep them apart.

The first axis is the silo: which pocket of the organization holds it. A regional GIS analyst has the Florida DAT layer; a national team owns the 800-RED-CROSS calls; one person receives the BioMed file each month; Recovery owns the relief dollars. None of these were built to be seen together, so they aren't.

The second axis is the friction: how hard the data is to get out once you find it. That friction sorts onto a four-rung ladder — and the inventory tables that follow tag every layer with its rung.

1 Routine — A Repeatable Path Exists

It works, even if it's clumsy. The BioMed file arrives every month; the geography is re-exported when chapters reorganize. Reliable — until the one person who knows the path moves on.

2 Manual — No Interface, Periodic Human Export

The data sits in a system we can see, but the only way out is a person clicking *export*: facilities from a Power BI on CoStar, home-fire layers pulled one at a time, inventory typed from a warehouse list.

3 Negotiated — Owner Approval, Sensitivity, Long Lead Time

Reaching it means a request, a review, and a wait. Volunteer readiness took twelve to eighteen months, state by state. Relief dollars and casework need privacy review and aggregation before anyone can touch them.

4 Locked — No Usable Export Today

The data is generated and stored, but there is no path out into a map at all: live dispatch records, vehicle telematics, case-level systems with no governed extract. It exists, and it is effectively invisible.

A layer can be low on one axis and high on the other — easy to extract but trapped in one region, or organization-wide but locked behind a system with no export. The pages that follow turn horizontal so the full inventory reads across one line: **what it answers, where it lives today, how we reach it, and how hard that is.**

Disaster Cycle Services — Response

THE DAILY HEARTBEAT · FIRES, SHELTERS, DAMAGE, DISPATCH

ROUTINE repeatable path MANUAL human export, no API NEGOTIATED owner approval / sensitive LOCKED no export path today OPEN public (see back section)				
LAYER	WHAT IT ANSWERS	WHERE IT LIVES TODAY	HOW WE REACH IT TODAY	FRICTION
A · DISASTER RESPONSE — OPERATIONS				
DAT Responses	Local Disaster Action Team incidents — fires, floods, displacements — by county, date, and type.	DCS Operations; held as regional layers.	A mapped layer that exists for Florida only; per-region, with no national rollout.	NEGOTIATED
DAT Volunteer Locations	Where our responders live and the radius they can realistically cover.	Volunteer Services + regional DAT rosters.	Anonymized point positions; Florida connector only; names withheld for privacy.	NEGOTIATED
Home Fire Incidents	Every reported home fire — location and date — the demand signal we respond to.	DCS Operations (a GIS fire-incident layer).	A GIS layer pulled per project and joined on county; works, but re-pulled each time.	MANUAL
Home-Fire & Disaster Casework	Home-fire and disaster casework: clients served, assistance opened, follow-up.	DCS Operations (casework).	No self-serve export; owner-held. Aggregation and privacy review required.	NEGOTIATED
Response Dispatch	Who was dispatched, who responded, and how fast — response time and coverage gaps.	DCS Operations (a mobile dispatch app).	No governed extract into a map today; data lives inside the app.	LOCKED
800-RED-CROSS Calls	National home-fire and help-line call volume by county.	DCS National Operations (a GIS call layer).	A GIS layer joined on county; requires source-owner review before use.	NEGOTIATED
Active & Past Operations (DROs)	Large relief operations — DR number, geography, scale, duration.	DCS National Operations.	Ad hoc; current ops are visible operationally, history is hard to assemble.	MANUAL
Damage Assessment	Destroyed, major, minor, and affected structures by address after an event.	DCS Damage Assessment.	Per-operation export; not retained as a standing, queryable layer.	MANUAL
Open Shelters	Shelters open during an operation — location, capacity, current status.	DCS Mass Care (a national shelter system).	Operational feed; built for live ops, not for historical analysis.	MANUAL

Response & Recovery

MASS CARE, SHELTER HISTORY, AND THE DOLLARS OF RECOVERY

LAYER	WHAT IT ANSWERS	WHERE IT LIVES TODAY	HOW WE REACH IT TODAY	FRICTION
A · DISASTER RESPONSE — MASS CARE (CONTINUED)				
Shelter Usage History (1–3 yrs)	How many people we sheltered, where, and for how many nights, year over year.	DCS Mass Care (shelter-system archives).	Special request; not a self-serve historical layer. The multi-year trend is invisible by default.	NEGOTIATED
Feeding & ERV Routes	Meals served, fixed feeding sites, and mobile (ERV) feeding routes.	DCS Mass Care / Logistics.	Per-operation tracking; meals-served totals assembled by hand afterward.	MANUAL
Bulk Distribution	Relief items distributed and the sites they went through.	DCS Mass Care.	Per-operation; not retained as a standing layer.	MANUAL
Health & Mental Health Contacts	Disaster Health, Mental Health, and Spiritual Care client contacts.	DCS Health Services.	Aggregated only; sensitive; owner approval and suppression required.	NEGOTIATED
Reunification	Registrations and matches reconnecting people after a disaster.	DCS Operations (a reunification system).	Operational; not surfaced as an analytic layer.	MANUAL
B · DISASTER RECOVERY				
Long-Term Recovery (LTR)	LTR cases, unmet needs, and recovery plans after the response ends.	Recovery.	Owner export; no standing county view of where recovery is still active.	NEGOTIATED
Long-Term Recovery Groups	Community LTRG partners and coalitions by area.	Recovery partnerships.	Directory maintained by hand; scattered across regions.	MANUAL
Client Casework	Client case-management records — the backbone of recovery delivery.	Recovery (a case-management system).	Case-level export is IT-gated; no governed analytic extract.	LOCKED
Relief Investment \$ by County	Financial-assistance dollars delivered to clients, by place — the number that makes geography matter in a meeting.	Recovery (a case-management system + a Power BI dashboard).	Manual Power BI export + case-level export + direct owner request. Dollars must be traceable, never faked to a county.	NEGOTIATED
Client Financial Assistance	Emergency financial assistance issued to clients.	DCS Operations (casework).	Aggregated only; privacy-gated.	NEGOTIATED

Preparedness & Biomedical

PREVENTION WORK AND THE BLOOD SUPPLY

LAYER	WHAT IT ANSWERS	WHERE IT LIVES TODAY	HOW WE REACH IT TODAY	FRICTION
C · DISASTER PREPAREDNESS				
Smoke Alarm Installs (FY15–FY24)	Where we have installed alarms and how many — a decade of prevention work.	Preparedness (Sound the Alarm; a GIS layer).	A GIS layer joined on state + county name; validate before rollup.	MANUAL
Sound the Alarm Events	Install events, homes reached, volunteers mobilized.	Preparedness program tracking.	Program export; not a standing geographic layer.	MANUAL
Preparedness Education Reach	Pillowcase Project, Prepare with Pedro — sessions delivered, youth reached.	Preparedness / Youth education.	Program trackers; reach totals assembled by hand.	MANUAL
Community & Faith Partners	Partner organizations, MOUs, and shelter agreements per chapter.	Chapter relationships (largely informal).	Scattered chapter lists; no single partner registry.	MANUAL
Pre-Positioned Supplies / Staging	Where supplies are staged ahead of hurricane and wildfire season.	DCS Logistics.	Ad hoc; staging picture rebuilt each season.	MANUAL
D · BIOMEDICAL SERVICES (BLOOD)				
Blood Drive Sponsors	Sponsor sites and scheduled drives by jurisdiction.	Biomedical Services.	A spreadsheet emailed once a month; one file feeds a dozen chapter-view layers.	ROUTINE
Fixed Collection Sites	Permanent donor centers and apheresis sites.	Biomedical operations.	Site list maintained by the blood region.	ROUTINE
Collections by Location	Units collected and drive performance by site.	Biomedical Services.	Owner-held; not exposed outside Biomedical Services.	NEGOTIATED
Hospital Distribution	Where blood ships and which hospitals carry the demand.	Biomedical Services.	Owner-held; commercially sensitive.	NEGOTIATED
Donor Base & Demographics	Donors by geography and donation frequency — where the supply comes from.	Biomedical Services.	Owner-held; donor privacy-gated.	NEGOTIATED

People — Volunteers & Training

THE CAPACITY TO RESPOND AND TO TEACH

LAYER	WHAT IT ANSWERS	WHERE IT LIVES TODAY	HOW WE REACH IT TODAY	FRICTION
E • VOLUNTEER SERVICES				
Volunteer Roster & Positions	Who we have, where they are, and what role they hold.	Volunteer Services.	Downloaded state by state; access took 12–18 months to negotiate; still no API.	NEGOTIATED
Readiness / Deployment Availability	Who can actually deploy right now, and to what.	Volunteer Services.	Aggregated, owner-gated; assembled by hand from the roster.	NEGOTIATED
Credentialed by Activity	Trained counts by chapter — shelter, feeding, damage assessment, mental health.	Volunteer Services.	Derived manually; no standing skills-by-geography layer.	NEGOTIATED
DAT Leadership & Captains	Local response leaders and their coverage areas.	Regional DAT structure.	Roster held regionally; not centralized.	MANUAL
Recruitment Pipeline	Applicants and where they are in onboarding.	Volunteer Services.	Program report; not geographic.	MANUAL
F • TRAINING SERVICES				
Certifications by Geography	CPR, First Aid, BLS, and lifeguard certifications by place.	Training Services.	Owner report; not joined to Red Cross geography.	MANUAL
Training Sites & Instructors	Where courses run and where instructor coverage is thin.	Training Services.	Site and instructor lists; manual.	MANUAL
Aquatics / Lifeguard Coverage	Lifeguard certifications against community need.	Training Services (Aquatics).	Manual; rarely mapped.	MANUAL

Mission Lines & Physical Assets

ARMED FORCES, INTERNATIONAL, FACILITIES, FLEET, INVENTORY

LAYER	WHAT IT ANSWERS	WHERE IT LIVES TODAY	HOW WE REACH IT TODAY	FRICTION
G · SERVICE TO THE ARMED FORCES & INTERNATIONAL				
Armed Forces Emergency Cases	Emergency military communication and assistance cases by geography.	Service to the Armed Forces.	Owner report; sensitive (military families).	NEGOTIATED
Installations & SAF Stations	Military installations served and where SAF operates.	SAF program.	Station list; manual.	MANUAL
Restoring Family Links	International reconnection casework by geography.	International Services.	Owner report; sensitive.	NEGOTIATED
H · PHYSICAL ASSETS – FACILITIES, FLEET, INVENTORY				
Facilities & Real Estate	Owned and leased properties, square footage, and lease obligations.	Real Estate / CoStar.	A download from a Power BI dashboard built on a CoStar report.	MANUAL
Fleet Vehicles & Trailers	ERVs, response vehicles, and equipment trailers — where assets are staged.	Fleet management / the trailer study.	Manual rosters and spreadsheets, assembled by hand.	MANUAL
ERV GPS / Telematics	Live location of response vehicles during an operation.	Fleet telematics provider.	Not integrated into any Red Cross map today.	LOCKED
Equipment & Supply Inventory	Cots, blankets, comfort kits, and clean-up kits by warehouse.	Logistics / warehouses.	Inventory-system export; reconciled by hand.	MANUAL
Warehouse / Distribution Network	Storage locations and capacity across the network.	DCS Logistics.	Facility list; not a standing geographic layer.	MANUAL

Funding, Governance & External Context

WHERE THE MONEY COMES FROM, WHO RUNS IT, AND THE PUBLIC LAYERS WE ADD

LAYER	WHAT IT ANSWERS	WHERE IT LIVES TODAY	HOW WE REACH IT TODAY	FRICTION
I · DEVELOPMENT & FINANCE				
Fundraising & Donations	Dollars raised and donors by geography.	Development.	Owner report; donor privacy-gated.	NEGOTIATED
Grants & Foundation Funding	Grant-funded programs and dollars by area.	Development / Grants.	Grants tracker; manual.	MANUAL
Corporate & Workplace Partners	Corporate partners and workplace-giving relationships.	Development.	Partner list; manual.	MANUAL
J · ORGANIZATIONAL & GOVERNANCE				
Chapter / Region / Division Geography	Which chapter, region, and division owns each county — the key everything joins on.	GIS team.	Internal ArcGIS export, regenerated on reorg. A quiet rename can break every downstream map.	ROUTINE
Board & Community Leaders	Board members and key volunteer leaders by chapter.	Chapter governance.	Rosters held locally; not centralized.	MANUAL
Government Relations	Elected officials and jurisdictions per chapter.	Government Relations.	Manual; rebuilt as needed.	MANUAL
K · EXTERNAL CONTEXT – PUBLIC, ALREADY EASY (WE LAYER THESE ON TOP)				
Census Geography & ACS Demographics	Boundaries and who lives there — population, income, language, age.	U.S. Census (governed in red-cross-data).	Public download / API; refreshed annually.	OPEN
ALICE Households	Households above poverty but below the cost of survival.	United for ALICE (extract).	Public reference; joined at county and ZIP.	OPEN
CDC SVI · FEMA Risk Index · FEMA Declarations	Social vulnerability, hazard risk, and where disasters have been declared.	CDC/ATSDR and FEMA (governed).	Public downloads and APIs; on a known cadence.	OPEN

WHAT THE INVENTORY SHOWS

Read the friction column down the page and the pattern is impossible to miss: almost nothing the Red Cross generates itself is *Open*. The wall of **MANUAL**, **NEGOTIATED**, and **LOCKED** tags is the report's real finding. The data exists; reaching it is the job.

Three things compound:

- **The most valuable data is the hardest to reach**
Volunteers, relief dollars, casework, disaster response — the layers that answer what leadership actually asks — are exactly the ones behind monthly emails, year-long negotiations, and systems with no export.
- **Every layer is keyed differently**
One joins on FIPS, one on State + County name, one on ZIP, one on a chapter code. Without a shared key, even the data we *do* get rarely lines up.
- **The path lives in a person, not a system**
Most of these connectors work only because someone knows who to email. When they move on, the access leaves with them.

This is why the same map gets rebuilt every year, why two teams report two different numbers for the same county, and why a question that should take seconds takes a month. It is not a failure of any one program — each protects its data for good reasons. It is the absence of a shared place and a shared key to bring them together.

Stop Fixing the Same Errors Twice

The friction is not only about access. It is also that the *same work is redone every single time*. A team downloads a source, geocodes the same addresses, and re-applies the same corrections to the same known errors — misspelled county names, bad ZIP codes, Connecticut’s planning regions, territory rows that don’t match. Then it hand-joins the result to chapter, region, and division. Next month, someone downloads the same file and does all of it again. The corrections die in a spreadsheet and are never saved back.

The answer is to move the work **upstream**. Data should be **born correct and born joinable** — fixed once, where it is created, not re-rehabilitated by every team that touches it.

1 Geocode at the Source

Every record gets a latitude and longitude when it is created — not re-geocoded by each downstream user. Geocoding once, well, beats geocoding ten times, inconsistently.

2 Stamp the Cross-Codes at the Source

Every record carries its county **FIPS** and its Red Cross **ECODE** (chapter), **RCODE** (region), and **DCODE** (division). Born joinable: any layer lines up with any other without re-deriving the hierarchy by hand.

3 Clean at the Source

The known corrections — county spellings, ZIP fixes, territory handling, Connecticut planning regions — are applied once, upstream, and persisted. The error is fixed where it lives, not patched on the way out, over and over.

4 Correct Once, Forever

When someone finds a new error, the fix goes back to the source so the next person never hits it. Corrections accumulate instead of evaporating into a hundred private copies.

Every hour spent re-geocoding and re-correcting the same data is an hour not spent serving. Fix it once, at the source — and never pay for it again.

What “Good” Looks Like

This report does not name a platform. That choice — a warehouse, a hosted layer service, a shared reference database — belongs to the organization, and the technology matters far less than the criteria it must meet. Wherever this data lands, it should pass five tests.

1 Visible Across the Organization

One place where any program can see every layer — not a dozen pockets each guarding its own. The point is not to take data away from its owners, but to let the rest of the Red Cross find it.

2 One Shared Key, Stamped at the Source

Every record carries its county FIPS and its Red Cross chapter, region, and division codes — born joinable. If two layers cannot join on place, they cannot answer a question together.

3 Interfaces, Not Attachments

Every recurring source reachable by a documented endpoint — not a monthly email, a manual Power BI export, or an eighteen-month negotiation repeated by each new analyst.

4 A Named Owner and Governed Sensitivity

Every layer states who maintains it, when it refreshes, and how it may be used. Public, internal, and restricted are labeled; dollars and identities are never exposed by accident.

5 Provenance on Every Number

Where it came from, how it was rolled up, and when it was last updated — carried with the data. A number you cannot trace is a number you cannot defend.

We do not lack data. We lack a place for it to live and a key to join it — and until that exists, every map is rebuilt from scratch and every answer is re-negotiated.

The Shared Place Now Exists

The platform choice has been made the simplest way possible: a versioned repository of flat reference layers — red-cross-data — is the source of truth, and every tool reads from it or from a mirror published out of it. It already holds the county spine (one row per FIPS, 110 fields), every rolled-up grain, boundary geometry, a source registry, and provenance on every field. Chapter ED geography and 2023 demographics now read from the generated `chapter_ed_reference.csv`; the rest of the apps migrate next. Here is how it answers the five tests above today.

1 Visible Across the Organization LIVE

One repo, one published catalog at `data.jbf.com`. Owners keep their systems; the rest of the Red Cross can finally find the layers.

2 One Shared Key, Stamped at the Source LIVE

Every record carries county FIPS and Red Cross ECODE / RCODE / DCODE. Counties are immutable; the chapter/region/division layer is re-enrichable — the FY27 California realignment and the Florida rename were applied this way on 2026-06-23 by overlay, not by hand-editing the export.

3 Interfaces, Not Attachments BUILDING

Public sources (Census, FEMA, SVI, ALICE) are reached by documented endpoints today. The operational layers move from monthly emails and Power BI exports onto registered ingests, one line of service at a time.

4 A Named Owner and Governed Sensitivity LIVE

Every layer is registered with owner, cadence, source type, and sensitivity. Dollars and identities are aggregated and gated; private item IDs stay out of the public catalog.

5 Provenance on Every Number LIVE

A 156-field provenance index records, for every field, where it came from, how it rolled up, and when it last refreshed. A number you can trace is a number you can defend.

Fix it once, at the source — born correct and born joinable — and never pay to rebuild the map again.

Apps Using The Data

THE TOOLS THAT READ THE MASTER — AND WHERE EACH IS HEADED

LIVE

 on the master

PLANNED

 migration mapped

The pattern is the same for every app: the repo is the source of truth; each tool keeps its natural format (Supabase, ArcGIS, static build) but every value traces to one origin. Once the mirrors are published, a chapter rename is a one-place edit — not the four-place hand-patch it was on 2026-06-23.