



IRWIN

v11

Business Plan



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IRWIN v11 Business Plan

09/04/2025

Executive Summary

The IRWIN v11 Business Plan outlines a strategic set of enhancements, system integrations, and modernization efforts aimed at meeting the evolving needs of the wildland fire community. Developed in close coordination with interagency partners, this plan is the result of retrospective analysis, stakeholder engagement, and a focus on aligning IRWIN's capabilities with operational demands across the fire management lifecycle.

Key Initiatives of IRWIN v11 include:

- Expanding integration with new and existing systems to ensure timely, authoritative data exchange.
- Improving workflow efficiency and system usability to support real-time decision-making.
- Addressing critical gaps in resource tracking, incident reporting, financial integration, and training system connectivity.
- Modernizing the technical infrastructure for increased scalability, performance, and cost-efficiency.

Strategic Themes:

- Integration: New system connections such as the Integrated Internal Procurement Application (IIPA), expanded support for learning management systems, and improved coordination with EDG and CADs aim to unify disparate data sources and improve incident visibility.
- Modernization: Cloud migration, transition to a Linux-based architecture, and enhancements such as AI-driven reporting and disposable prototyping help ensure IRWIN remains a forward-looking, adaptable platform.
- Optimization: Workflow refinements (e.g., incident transfer processes, resource status alignment, frequency management) minimize disruption to external systems while increasing data accuracy and usability.

Notable v11 initiatives include the implementation of direct system-to-system procurement data exchange via IIPA, the refinement of incident and resource workflows, and improved reference data validation processes. Additionally, the plan prioritizes system requests by importance, establishes clear milestones, and introduces a long-requested integrated training environment to support operational readiness.

Together, these efforts strengthen IRWIN's role as a central integration point and authoritative data source for wildland fire systems, driving greater consistency, reliability, and efficiency across agencies.

New System Integrations:

IIPA

- Business Need: As a connected system, I need an established system of record for agencies' contract and associated resource data so that the latest authoritative data is shared with the resource ordering system for users to fill capability requests appropriately.
- Add Contract and Agreement Number
 - Business Need: As a connected system, I need contract and agreement values to be integrated within the data exchange so I can associate those values with the appropriate resource and associated invoice.
- Impacted Systems: IROC, HEMS, e-ISuite,
 - Washington State has an interest in the data.

California Counties (CAD)

- CONFIRE (San Bernardino) Central Square
- Orange County
- Impacted Systems: CAL FIRE (incident conflict detection), WildCAD, IROC, FireCode

Additional Learning Management Systems

- IRWIN is working with the learning management systems to facilitate the connection between LMS and the qualifications systems. IRWIN implemented the learning API in v9 and will support the systems to connect v10.
- Business Need: As a user, I need responder training to come into IRWIN and subsequently into the qualification systems.
 - IAT
 - CF QMS
 - ESO
 - FEMA's All Hazard Training Portal
- Impacted Systems: IQS, IQCS, CAL QMS, EDG

EDG

- IRWIN is actively coordinating and collaborating with the EDG Team, and all impacted connected systems.
- Business Need: As a connected system, I need an integrated system of record for reference data so that I can provide users the most updated authoritative data.
- Impacted Systems: Any system looking to access EDG reference data sets via IRWIN.

e-ISuite

- Read/Write Incidents and Incident Financial Data, Read-Only for Resources in v10.
- Business Need: As a system, I want to be able to read incident data so that I have the most updated records from connected systems.
- Business Need: As a system, I want to be able to read resource data so that I have the most updated request and resource status information from connected systems.
- Impacted Systems: CADs, IROC, FireCode, EGP

Importance: Highest

Add Owner Organizations

- Business Need: As a resource qualification system and resource ordering system, I need to be able to exchange contracted resource and owner organization so that information is correct in both reporting and in the system of record.
- Impacted Systems: CAL QMS, IROC, IQS, IQCS

Importance: High

Frequencies

IRWIN will continue discovery for creation of a mechanism to associate incident frequencies with incidents in IRWIN for initial and extended attack.

- v11 resource ordering frequencies
- Create frequency catalog and solidify business requirements.
- EDG connection for Frequencies (complete)
 - Business Need: As the integration system, I want to be able to pull frequency data from EDG or have EDG send frequency data to the integration so that we have the most updated data to share with connected systems.
 - EDG serves as the authoritative source for the reference data set for Frequencies as well as for potential validation of frequency data elements (standard).
- Initial Attack Resource Order Header Data
 - Business Need: As a resource ordering system or a CAD, I want to be able to send frequency information so that both dispatchers and users have the same, accurate information during initial attack.

****Coordination with IROC, CADS, IRWIN, EDG/DMO Team, CDO and Agency Frequency Managers ****

- Impacted Systems: CADs, IROC, EDG, READ ONLY systems – catalog transition

Importance: Medium

Resource Operational and General Status Alignment

- Business Need: As a connected system utilizing resources, I want to understand how resource statuses align between both my system and the integration as well as other connected systems so that I can better status my resources and identify gaps where additional statuses are needed.
 - Prescribed Fire
 - Available At-Incident
- Impacted Systems: CADS, IROC, ICS 209

Merged Incident Business Rules/Validation

- Business Need: As a user I need the integrated systems to contain a workflow for the implementation of the NWCG Event Kind Category revision inclusive of the associated business rules regarding incident relationships.
 - Proposed additional data element:
 - Merged Date and Time

- Captured with the date and time when the relationship was created i.e., Reported Created Date Time
- Systems may allow updates to the value for accuracy of when the merge occurred.
- Acres
 - Merge Acres
 - Individual Fire(s) Acres
 - IRWIN will validate: Consumer should always have a larger acreage than the consumed children.
- Impacted Systems: CADs, ICS-209, InFORM

Prescribed Fire Record lifecycle stages and associated statuses

- Business Need: As a connected system, I need to be able to indicate what stage or phase a Prescribed Fire (RX) is in and based on the phase, have the ability to status resource appropriately. DEFER to 12
- Advised requestor will be deferred to 12 due to budget and time constraints.
 - USFS offered to fund.
 - Further defined the business need.
- IRWIN will add the data elements to be exchanged.
 - Planned
 - Active
 - Patrol/Monitor
 - Complete
- Impacted Systems: CADs. Requestor does not expect read/write systems or Final Fire Reporting system to integrate these data elements.

Unit ID Role Validation

The IRWIN team is working to support additional validation to ensure Unit IDs associated with incident record creation is in alignment with the established wildland fire roles for the particular data element.

Importance: Low and Lowest

Increase character limit for Unit ID to meet the need to mobilize international resources.

- Business Need: As a connected system that adds foreign or international resources, I need to be able to utilize international provider units which may have 3 characters in the country subdivision code, currently limited to 2 characters.
 - Unit IDx has developed to allow in the SOR. Will allow 3 characters in country sub code if Unit Type is International or International country Subdivision (State/Province)
- Impacted Systems: All Resource and Incident Read/Writes currently integrated.

Reintegration of InFORM Data

- IRWIN team and community continues to review progress made towards reintegration of final fire report data from InFORM. Did we meet objectives set? Are there gaps in the needs of the extended community and final fire reporting data?
 - Business Need: As a connected system, I want to have access to the Fire Occurrence Data Record ID so that I can relate the IRWIN record to the Final Fire Report record in InFORM.
 - Define Clear Workflows for Incident Records that have been Uncertified or Spliced with another in InFORM

ICS-209 Resource integration

- Business Need: As a 209 user, I need incident resources, showing at incident, to be integrated in a manner consistent with ICS-209's Resource Tab so that I can better create the incident resource summary based on already integrated request and resource data.
- IRWIN Implementation Team is coordinating with e-ISuite utilizing the established query e-ISuite has utilized for their 209 Resources Report in support of this effort.
- Impacted Systems: ICS-209

Additional IRWIN Improvements

Handing off maintenance of Data Mapping Workbook Domains

As an integration service, the IRWIN team is working to take advantage of existing data standards applications so that SMEs can better manage their data without having to wait for the integration service to make changes.

- Capability Type
- Frequency Inventory
- Learning Catalog
- FireCause
- Lookup Layers

Dispatch Cost Analysis Tool (prototype)

Dispatch Cost Analysis Tool (DCAT) is a proposed Wildland Fire Information and Technology (WFIT) affiliated investment intended to develop a national standard process to evaluate dispatch center workloads, identify recommended staffing, and determine agency Dispatch costs based on workload by unit/agency for supporting a dispatch center. The intent of Tool's output, Final Agency Adjusted Total, is to serve as a starting point for dispatch board of directors or coordinating groups to discuss financial contributions. It is not intended to determine an exact financial obligation.

- Business Need: As a user I need a tool to return DCAT input data elements as well as deliver DCAT output data elements identified in DCAT's business plan.

Enhanced Reporting in Observer

As an integration service, the IRWIN team is working to implement AI-enhanced reporting so that I can provide better insights and reports that are more easily accessible to leadership and non-technical staff.

Migration of Infrastructure to the OWF Enterprise Cloud

As an integration system, I want to move my application environments to the shared DOI cloud so that I can take advantage of joint coordination with other systems and reduce costs.









Transition from Windows to Linux

IRWIN is transitioning our system from Windows to Linux to reduce costs and simplify maintenance.

Disposable Prototyping

The IRWIN team will continue the longstanding design approach that emphasizes quickly creating low-fidelity prototypes to explore ideas, test concepts, and gather user feedback without the commitment to perfection. This technique supports the iterative design and development process by helping teams move swiftly and efficiently through the conceptualization phase for proposed new integration patterns demonstrating how integration might work and discover additional business requirements.

V11.0 Milestones and Dates

-  Business Requirements Drafted Friday, April 4, 2025
-  Release of Business Plan Friday, April 18, 2025
-  Project Management Plan Published Friday, April 25, 2025
-  Release Management Plan Published Friday, April 25, 2025
-  Testing Plan Published Friday, April 25, 2025
-  IRWIN “Feature Complete” Wednesday, September 16, 2025
-  Integration Specifications Published Wednesday September 16, 2025
-  Data Mapping Workbook Published Wednesday, September 16, 2025
-  Initial API (Incidents and Resources) Build to TEST/Next Tuesday, September 23, 2025
-  Initial API Build (Incidents and Resources) to OAT/Next Thursday, September 25, 2025
-  Build Freeze December 19, 2025 – January 2, 2026
-  Integration Testing Monday January 26, 2026, thru Friday January 30, 2026
 - New Systems and high transaction systems
-  IRWIN “Code Freeze” Friday, February 20, 2026
-  IRWIN Production API Release Wednesday, March 4, 2026
-  IRWIN Observer Production Release Wednesday, March 4, 2026

On Deck for IRWIN v12

New System Integrations:

Interior Fuels & Postfire Reporting System

- Business Need: As a connected system, I need to be able to query Prescribed Fire records that originated from Interior Fuels & Postfire Reporting System (IFPRS) so that I can order resources to the appropriate record and so that I do not create duplicate incidents.
- Impacted Systems: CADs, IROC, e-ISuite.

Fire Business Management System (FBMS)

- Business Need: As a connected system, I need financial incident and contracting resource commitment data obligating funds for compliance with the Digital Accountability and Transparency Act and Public Law (DATA Act, 2014)
- Beginning discussions and business requirements gathering.

California Counties (CAD)

- Santa Barbara County
- Marin County
- Impacted Systems: CAL FIRE (incident conflict detection), WildCAD, IROC, FireCode

Enhancements

Update Dispatch Center ID (intersystem)

- Business Need: As a user, I need an established workflow within incident integration to facilitate transferring an incident from one dispatch center to another.
- Impacted Systems: CADs, IROC, ICS-209

Updates to Resource Location

- Business Need: As a connected system, I want to be able to update a resource location (either through coordinates or through a duty location) as well as having the integration system automatically set location based on business rules so that I can better understand where my dispatch's resources are at a given time.

Incident Type Endorsements for Overhead based on Business Requirements

- IRWIN allows one capability w/endorsement from qualification system at a time.
- Business Need: As a qualification system, I need the ability to exchange two distinct capability types as appropriate and not consolidate them under the same IRWINCID. They have different requirements and are not the same i.e., unique hazard type/qualification match.
- Business Need: As a qualification system, I want to be able assign capabilities that are endorsed by NIMSIC so that I can assign overhead resources who have this qualification to appropriate resource requests.
- Business Need: As a resource ordering system or a CAD, I want to know what qualification endorsement types can be assigned to what incident types so that I can

follow the appropriate business rules and present users with the correct qualification(s) at the time of assignment.

- Impacted Systems: CADs, IROC, IQS, IQCS, CFQMS

Kneeboard Capability

- Business Need: As an aircraft dispatcher, I need to be able to give timely, accurate, consistent data the pilots incident and resource information so that they can complete their mission.
- Impacted Systems: CADs, IROC

Update Unit ID fields to include Country Code

- Business Need: As a connected system that adds or updates incidents, I want to be able to send in UnitID with the country code included to comply with the NWCG standard.
 - Clarify with systems if IRWIN corrected the way it handles Unit ID fields if they would be impacted. Systems have already accounted for this within data exchange.
- Impacted Systems: All Resource and Incident Read/Writes currently integrated.

New Environments:

Integrated Training/Practice Environment(s)

- Longstanding request to have an integrated environment where systems can train users. Discussions need to be had on what the ask is for IRWIN as well as members who are connected to IRWIN higher environments.
- Business Need: As an extended system, I want to be able to have an integrated environment with all extended systems connected with the production version (higher environment) of their software so that users can learn how to operate in the integrated environment without disturbing production data.
 - IRWIN connected system users have requested the ability to conduct organized training i.e., NWCG courses with dependencies on the applications.
 - IRWIN connected system users have requested the ability to conduct day to day practice using the integrated IRWIN environment.

****The creation of integrated training and practice system will allow users to train and practice in an end-to-end incident lifecycle workflow utilizing all the IRWIN integrated functionality and data without impacts to the production systems. ****

Impacted Systems: All integrated systems.