



DIGITAL TRANSFORMATION

Close Your **Storm Readiness Gaps**

How Leading Utilities Sharpen
Emergency Response to Reduce
Risk and Restore Faster

- ☑ 01 SYSTEM STATUS: OPERATIONAL
- ☑ 02 NETWORK HEALTH: WITHIN PARAM
- ☑ 03 RESPONSE READINESS: CONF
- ☑ 04 INCIDENT MONITORING: CON
- ☑ 05 RESOURCE AVAILABILITY: V
- ☑ 06 EVENT READINESS LEVEL
- ☑ 07 OPERATIONAL DASHBOARD
- ☑ 08 DECISION SUPPORT: EN
- ☑ 09 INCIDENT METRICS: CA
- ☑ 10 AUDIT TRAIL: MAINTA

When the Storm Hits the **Pressure is**

Every utility has a storm plan.

But when a major event strikes, **plans are only as strong as the systems behind them.**

Too often, those systems can't keep up with **the speed and scale that storms demand.**

Dispatchers are at capacity. Mutual aid crews wait on site for work orders to catch up with their arrival. Field updates lag behind what's actually happening on the ground. And leadership is left trying to coordinate a dynamic response using tools built for business as usual.

The result? Costs rise as overtime and inefficiencies pile up. Customers lose patience when delays stretch and communication falters. Regulators and executives scrutinize operational performance and expect answers.

This guide will show you how to close those gaps and strengthen your response—so your utility can restore power faster, control costs, and protect customer trust.

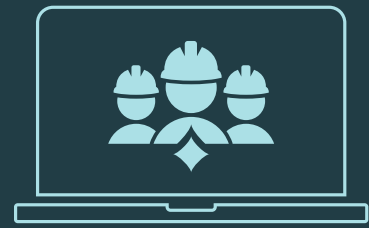
Because storms don't just test your readiness. They reveal whether your plan can withstand the pressure.

01 DATA INTEGRITY VERIFIED
02 SYSTEM SYNCHRONIZATION ACTIVE
03 OMS / GIS INTEGRATION COMPLETE
04 FIELD DATA STREAMLINED
05 OPERATIONAL DASHBOARD
06 DECISION SUPPORT ENHANCED
07 INCIDENT RESPONSE MAINTAINED

- ☑ 01 RESOURCE ALLOCATION: OPTIMIZED
- ☑ 02 CREW LOGISTICS: ACTIVE
- ☑ 03 SHIFT ROTATIONS: SCHEDULED
- ☑ 04 SUPPLY STATUS: MONITORED
- ☑ 05 STAGING LOCATIONS: CONFIRMED
- ☑ 06 MEAL & LODGING: COORDINATED
- ☑ 07 MOBILIZATION STATUS: VERIFIED
- ☑ 08 FIELD SUPPORT: DEPLOYED

Closing the Storm Readiness Gaps

Even the strongest storm plan will crack under pressure if you don't have the right systems in place to support it. These are the capabilities that close the gaps and keep your teams storm-ready:



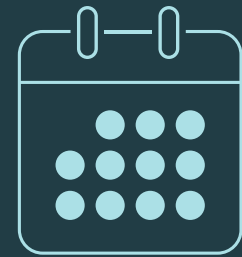
See every crew in real time

Protect safety, eliminate costly delays, and accelerate restoration.



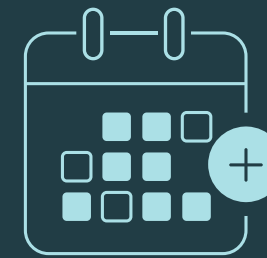
Automate callouts with built-in audit trails

Simplify reporting and reduce manual work.



Keep dispatch, field teams, and leadership aligned

Eliminate miscommunication and inefficiencies.



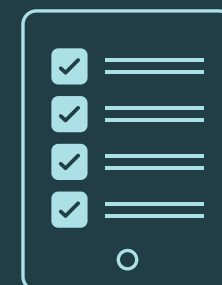
Scale logistics for lodging, meals, and shifts

Control costs during extended events.



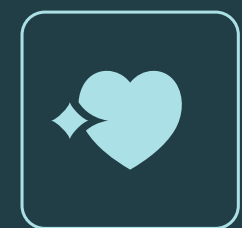
Integrate data across OMS, GIS, and HRIS

Support faster, smarter decisions.



Document every response effort easily

Prove compliance and protect your reputation.



Onboard mutual aid crews seamlessly

Get crews into the field and executing restoration work.

The **Hidden Flaw** in Your Storm Plan

The flaw in most storm plans isn't a lack of preparation—it's dependence on systems that weren't designed for storm response.

Some utilities still rely on a mix of OMS, WMS, spreadsheets, and paper-based processes to manage storm events. But these everyday systems aren't designed to scale or keep up with storm response.

Fragmented and manual systems slow decision-making and create confusion across internal and external teams. When field crews, operations teams, and executive leadership lack a shared view of work in progress, it puts crews at risk and slows restoration.

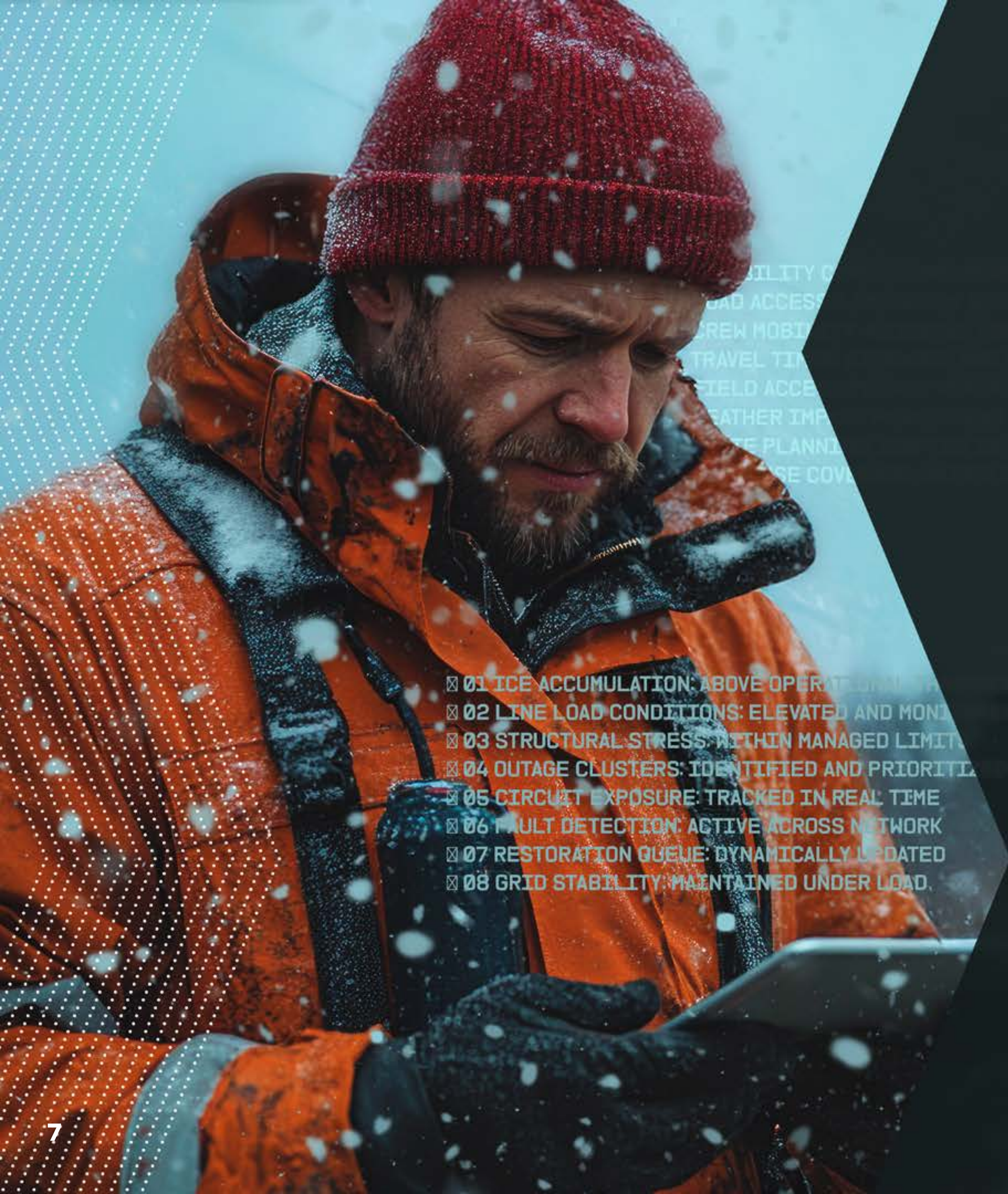
- ☒ 01 CREW VISIBILITY: REAL-TIME ACROSS ALL ZONES
- ☒ 02 RESPONSE TIMES: ACCELERATED
- ☒ 03 RESOURCE DEPLOYMENT: OPTIMIZED
- ☒ 04 FIELD UPDATES: STRATEGICALLY
- ☒ 05 DECISION SUPPORT: INSTANTLY
- ☒ 06 COORDINATION: ENHANCED
- ☒ 07 SAFETY STATUS: MONITORED
- ☒ 08 WORKFLOW: AUTOMATED
- ☒ 09 OPERATIONAL EFFICIENCY: IMPROVED
- ☒ 10 RESTORATION: EXPEDITED

- ☒ 01 LIGHTNING STRIKE DENSITY: INCREASING
- ☒ 02 RAINFALL ACCUMULATION: ABOVE BASELINE
- ☒ 03 STORM VECTOR: NORTHEAST TRACKING
- ☒ 04 WIND GUSTS: EXCEEDING NORMAL PARAMETERS
- ☒ 05 SURFACE CONDITIONS: DEGRADED
- ☒ 06 STRIKE DETECTION SYSTEM: ACTIVE
- ☒ 07 WEATHER ALERT STATUS: ELEVATED
- ☒ 08 ENVIRONMENTAL RISK INDEX: MONITORED

What's at Risk When Your Systems Can't Weather the Storm

When systems can't scale for storm response, the consequences can add up quickly.

Category	Characteristics	Damage
01	Escalating Costs & Delayed Cost Recovery Inefficient workflows and poor documentation drive up expenses and slow reimbursement approvals.	Some
02	Regulatory Scrutiny Audits, hearings, and tighter oversight follow failed response efforts.	Extensive
03	Loss of Customer Trust Missed ETRs (estimated time of restoration) and poor communication erode public confidence.	Devastating
04	Rate Case Challenges Risk of disallowed or more challenging rate cases due to poor storm response and incomplete reporting.	Catastrophic



- ☒ 01 ICE ACCUMULATION: ABOVE OPERATIONAL LIMITS
- ☒ 02 LINE LOAD CONDITIONS: ELEVATED AND MONITORING
- ☒ 03 STRUCTURAL STRESS: WITHIN MANAGED LIMITS
- ☒ 04 OUTAGE CLUSTERS: IDENTIFIED AND PRIORITIZED
- ☒ 05 CIRCUIT EXPOSURE: TRACKED IN REAL TIME
- ☒ 06 FAULT DETECTION: ACTIVE ACROSS NETWORK
- ☒ 07 RESTORATION QUEUE: DYNAMICALLY UPDATED
- ☒ 08 GRID STABILITY: MAINTAINED UNDER LOAD



Utilities that communicate outage updates score **62 points higher** in business customer satisfaction ratings, a testament to the importance of accurate, timely ETRs.”

— J.D. Power’s 2023 Electric Utility Business Customer Satisfaction Study

How Everyday Systems **Break Down** Under Pressure

When a major weather event hits, **you need to act fast**, scale operations quickly, and coordinate seamlessly across internal teams, contractors, and mutual aid crews.



- ☒ 01 VISIBILITY CONDITIONS: SEVERELY REDUCED
- ☒ 02 ROAD ACCESS: LIMITED IN ACTIVE ZONES
- ☒ 03 CREW MOBILITY: ADJUSTED FOR CONDITIONS
- ☒ 04 TRAVEL TIMES: EXTENDED AND MONITORED
- ☒ 05 FIELD ACCESS POINTS: VERIFIED
- ☒ 06 WEATHER IMPACT: PERSISTENT
- ☒ 07 ROUTE PLANNING: ADAPTED IN REAL TIME
- ☒ 08 RESPONSE COVERAGE: MAINTAINED

If you're like many utilities, you rely on a combination of OMS, WMS, GIS, and mobile tools to manage day-to-day operations. **These systems work fine for routine needs, but they can't rise to the demands of storm response.** Here's how they fall short.



Limited integration slows everything down

Disconnected technology creates extra work and confusion.

- External crews must utilize separate systems or manual processes
- Dispatchers, planners, and crews operate in silos
- Updates must be manually entered or reconciled across platforms, slowing decisions and increasing the risk of errors



Manual processes can't keep pace

Manual systems can't deliver the speed or accuracy storm response demands.

- Crew locations and assignments are tracked in spreadsheets, texts, or whiteboards
- Work orders are printed, distributed by hand, and updated via phone or radio
- Restoration data can lag hours behind what's happening in the field



External crews are harder to coordinate

Contractors and mutual aid teams lack access to internal systems.

- Onboarding delays create early friction
- Limited visibility increases safety and coordination risks
- Dispatch can't track who's where or what's been completed



Traditional platforms don't scale for storm mode

OMS, WMS, and other core systems were designed for blue-sky operations.

- Everyday systems struggle with multi-region, multi-crew event response
- The more complex the storm, the faster traditional systems unravel
- The systems you typically depend on start working against you

Yesterday's Systems Weren't Built for Today's Storms

Is your utility relying on everyday systems to manage extraordinary events? Here's how legacy tools stack up against the demands of modern storm response.

YESTERDAY'S SYSTEMS

SILOED SYSTEMS

OMS, WMS, and GIS don't sync in real time; updates are reconciled manually

LIMITED VISIBILITY

No centralized view of crew locations or job progress

MANUAL WORKFLOWS

Crew assignments are tracked via spreadsheets or whiteboards

STATIC PLANNING

Resource planning is built around known internal crews only

PAPER-BASED PROCESSES

Printed work orders and job packets are distributed by hand

ACCEPTABLE LAGS

Minor delays are manageable and forgiven during normal operations

What Today's Storms Demand

Multi-crew coordination

Native, contractor, and mutual aid crews must stay in sync

Seamless integration

OMS and WMS reflect field progress to support accurate ETRs and efficient dispatch

Real-time updates

Work progress is updated in real time for field and back office, accelerating work completion

Common operating picture

Clear communication and shared situational awareness across crews and systems is essential

Surge capacity required

Systems must flex to accommodate large-scale external resources

No margin for delay


Customers and regulators expect immediate answers and demand accountability

From Blue Sky to Gray: How to Shore Up Your Response

Going from blue-sky operations to storm mode is easier than you may think. By addressing four key areas, you can close the gaps left by everyday systems and take your storm readiness and restoration to a whole new level.

- ☒ 01 COMMAND VISIBILITY: COMPLETE
- ☒ 02 CROSS-TEAM ALIGNMENT: VERIFIED
- ☒ 03 RESPONSE PRIORITIES: CLEAR AND ACTIVE
- ☒ 04 EXECUTION STATUS: TRACKED IN REAL TIME
- ☒ 05 FIELD INTELLIGENCE: CONTINUOUS
- ☒ 06 DECISION SUPPORT: ENABLED
- ☒ 07 OPERATIONAL CONFIDENCE: HIGH
- ☒ 08 SYSTEM CONTROL: MAINTAINED

OPERATIONAL MODE: TRANSITIONING TO STORM RESPONSE
SYSTEM READINESS: VERIFIED ACROSS NETWORK
CREW MOBILIZATION: INITIATED
RESOURCE ALIGNMENT: IN PROGRESS
AND STRUCTURE: ACTIVATED
RESPONSIBILITY: ASSIGNING IN REAL TIME
PERSONNEL: ENGAGED
RISK LEVEL: ELEVATED



Four Pillars of **Readiness**

These pillars form the foundation of a modern, storm-ready utility, helping you mobilize faster, collaborate better, and restore power more predictably.

Pillar One

Real-time Situational Awareness

- Give utility leaders, dispatchers, and field ops a real-time shared view of storm status to improve decision making and protect crew safety
- Track crew progress, outage updates, and restoration metrics across all regions
- Improve leadership decision making by providing accurate and timely field intelligence



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Mobilize
crews
30% faster
with shared
digital
workflows.

Pillar Two

Unified Communications & Dashboards

- Give all stakeholders—dispatch, line crews, and leadership—a centralized and shared view of operations
- Manage native, contractor, and mutual aid crews in the same place; no more “swivel chair” switching between OMS, WMS, GIS, and spreadsheets
- Reduce confusion, duplication, and manual reporting errors

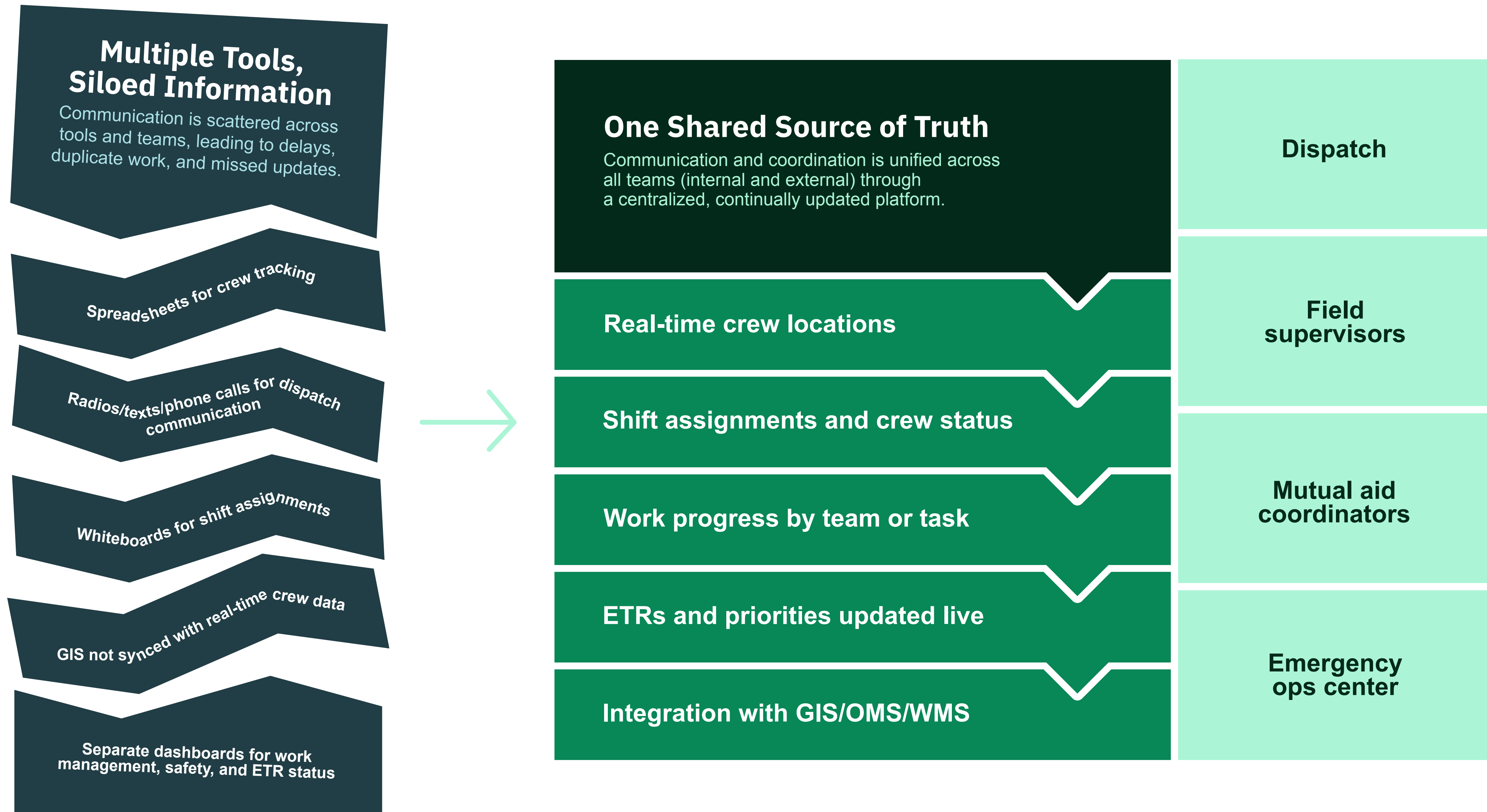
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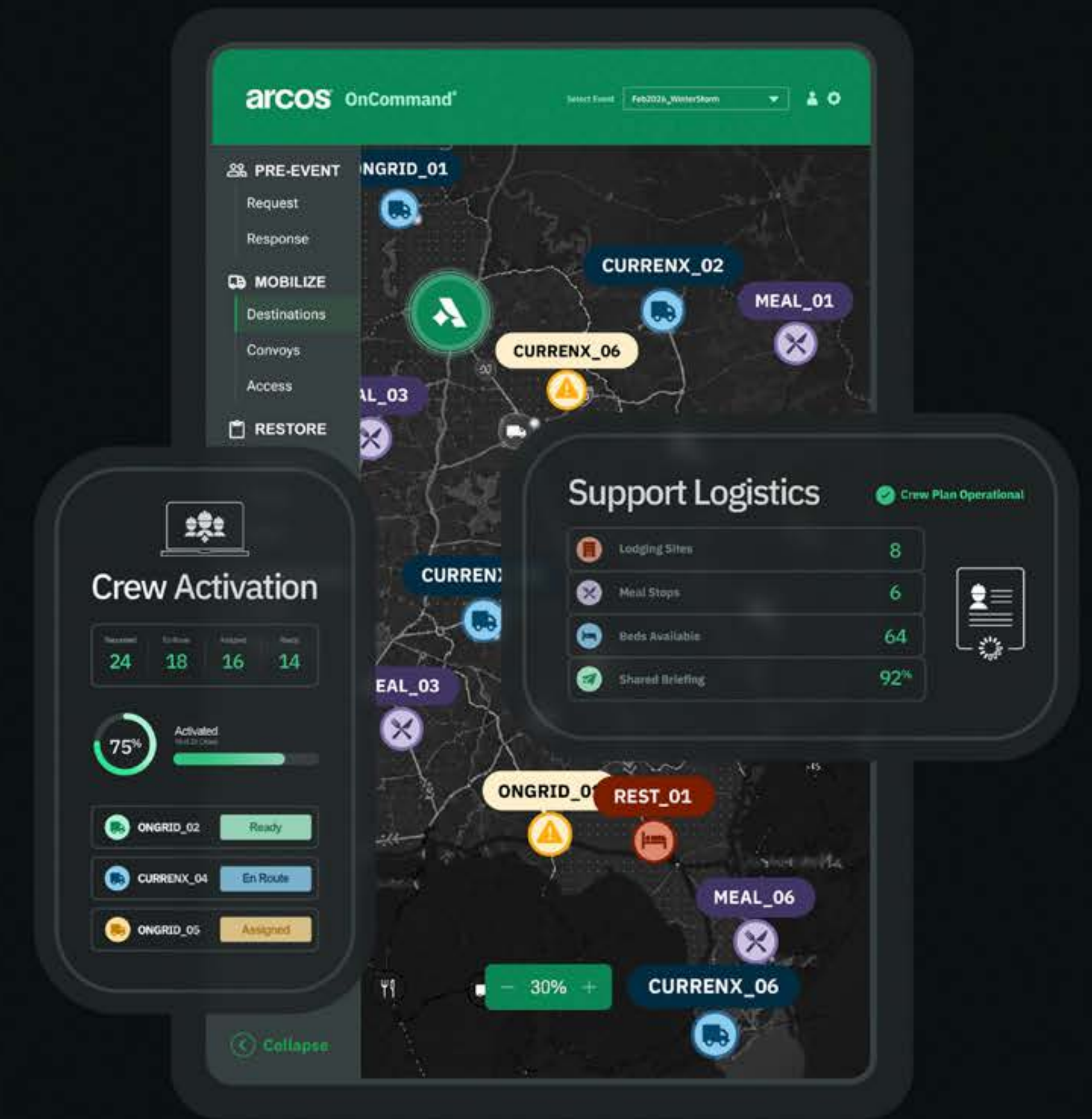
From Disjointed Tools to **Unified Command**



Pillar Three

Coordinated Logistics Across All Crews

- Automate the entire crew activation process
- Integrate meal and lodging plans, shift assignments, and mutual aid onboarding in a single system
- Deliver and track a single shared safety briefing across all crews and ensure compliance with labor rules, qualifications, and safety protocols
- Manage ongoing logistics for shifts, lodging, meals, and more during extended events
- Enable rapid scaling of crew resources while keeping planning transparent



CASE STUDY

Connexus Energy Gains a Single View of All Crews

As Minnesota's largest electric cooperative, Connexus Energy needed a more efficient way to manage its growing mix of native, construction, and mutual aid crews, especially during large-scale events.

By implementing Arcos Crew Manager and integrating it with their OMS, Connexus created a single system to assign, track, and manage all crew types. What was once handled through disconnected departments and manual workflows is now centralized, giving the utility clearer visibility and faster response capabilities across its entire service area.

[Learn More >](#)



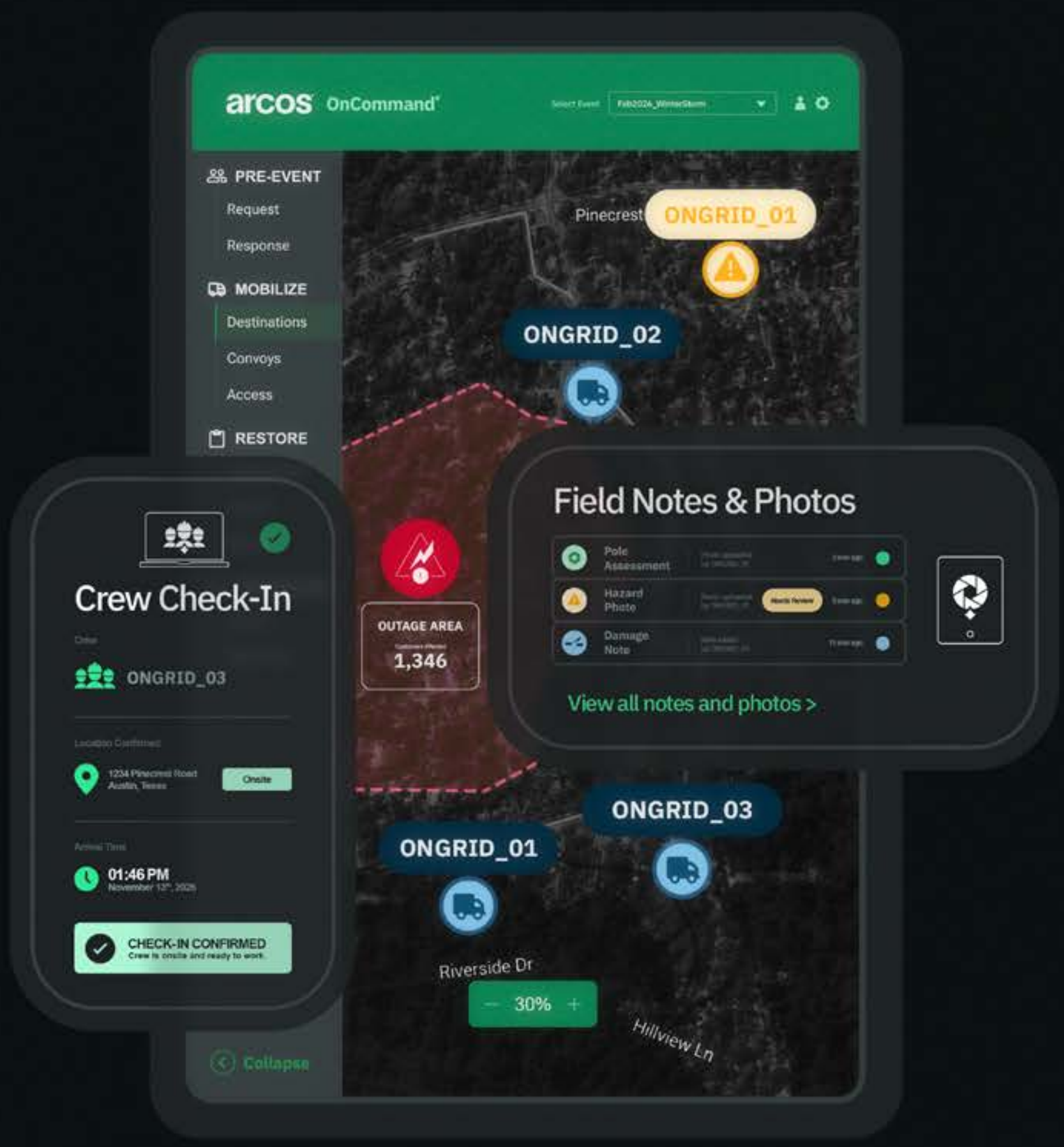
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Pillar Four

Scalable Field Coordination

- Ensure all crews—internal and external—are operating from the same plan to improve safety and communication
- Provide field crews with digital job packets containing GPS, material needs, and ETRs
- Have crews update job status, photos, and notes with real-time data capture via mobile app
- Remove delays from paper-based reporting and radio handoffs, while maintaining FEMA and regulatory defensibility

CASE STUDY

Appalachian Power Connects Storm Response

Appalachian Power—part of American Electric Power—needed to scale storm response without sacrificing visibility, safety, or speed. Traditional approaches relying on paper maps, manual damage assessments, and limited communication made it difficult to coordinate crews efficiently and provide accurate restoration timelines—especially during Hurricane Helene.

With Arcos Mobile Workbench, Appalachian Power connected field crews, coordinators, and dispatch through a shared, real-time operational view. Digital work packages with GPS navigation, damage photos, and circuit-level visibility helped improve coordination and accelerate safer, faster restoration.

[Watch the Video >](#)

**APPALACHIAN
POWER**

An **AEP** Company

WIND IMPACT: EXCEEDING NORMAL PARAMETERS
RISK: ELEVATED IN LOW-LYING AREAS
EXPOSURE: WIDESPREAD
ASSESSMENTS: IN PROGRESS
STABILITY: MONITORED CONTINUOUSLY
OPERATION: ACTIVE
INTERRUPTIONS: LOCALIZED AND TRACKED
RESTORATION PATHS: DYNAMICALLY UPDATED

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When the Storm Hits, **Will You Be Ready?**

You can have the best-laid plan and a strong team, but without the right systems behind them, your response will be compromised.

Arcos can help you make the shift from reactive recovery to proactive readiness, ensuring crews stay safe, restoration stays on track, costs are contained, and trust is preserved.



Abraham Lincoln famously said,

Give me six hours
to chop down a tree,
and I will spend the
first four sharpening
the axe.”

Start sharpening your storm response now with these steps:



Audit your existing systems for gaps, delays, and redundancies.



Eliminate silos between dispatch, crews, and leadership through shared tools.



Test cross-team coordination with drills to expose failure points.



Leverage real-time field visibility to improve coordination and accelerate recovery.



Build a culture of readiness—where safety, speed, and communication come first.

- ☒ 01 WORK ORDER ID: 20250712-8842
- ☒ 02 TASK CODE: 3021
- ☒ 03 START TIME: 20250712083015
- ☒ 04 END TIME: 2025071209024
- ☒ 05 STATUS FLAG: ACTIVE
- ☒ 06 PRIORITY LEVEL: HIGH
- ☒ 07 RESOURCE STATE: ALLOCATED
- ☒ 08 SIGNAL INTEGRITY: VERIFIED
- ☒ 09 OPERATION MODE: LIVE
- ☒ 10 SYSTEM CONFIDENCE: NOMINAL



Ready to be better prepared?

Discover how Arcos can help you sharpen your systems, so your plan holds up when the next storm hits.

