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The Public Policy Brief

AI in Wholesale Distribution — Considerations for Federal and State Policymakers

For: members of Congress and their staffs, federal agency leadership and rulemaking teams, state legislators and executive-branch officials, government relations professionals, and policy researchers focused on AI's effects on small business, manufacturing supply chains, and community employment.

PURPOSE AND SCOPE This brief is intended to inform — not to instruct — public policy as it touches AI in wholesale distribution. It is written with appropriate caveats: NAW does not present itself as an authority on the intersection of any specific regulated vertical with AI law, and this document is not legal advice. Specific legal positions, regulatory interpretations, and enforcement strategies remain the province of agencies, courts, and qualified counsel.

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Executive Summary

Wholesale distribution is a structurally significant — and structurally unusual — sector of the American economy. It generates roughly $8 trillion in annual revenue, employs more than six million Americans across some 35,000 firms operating roughly 150,000 locations, and serves as the connective tissue between manufacturers and end customers in nearly every supply chain that matters to American households, hospitals, jobsites, restaurants, schools, and military installations. Most distributors are privately held, family-owned, and locally embedded; they are often among the largest private employers in small and mid-sized communities.

AI is now arriving in this industry at scale. Adoption is moving faster than governance, and the regulatory environment is moving faster still. The three priorities of this brief are to:

1. **Establish a single federal standard** for AI governance applicable to wholesale distribution that preempts a multi-state patchwork that would impose disproportionate costs on the small and mid-sized firms that anchor local economies.
2. **Recognize the workforce, community, and small-business dimensions** of AI policy in this industry — including the empirical pattern that AI adopters in distribution are expanding workforce at higher rates than non-adopters when productivity gains are reinvested in customer-facing capability.
3. **Coordinate AI policy with existing sector-specific compliance regimes** rather than building parallel regulatory structures that conflict with the obligations distributors already meet under DSCSA, FSMA, TSCA, ITAR/EAR, CMMC, and others.

> *A single, federal standard for AI governance — one that recognizes the realities of multi-state, margin-thin, lean-IT operators — is the most consequential public-policy step that can be taken to support responsible AI adoption in this industry. Absent it, the burden of compliance with a state-by-state patchwork falls disproportionately on smaller and mid-sized distributors, the firms least able to absorb it.*

1. The Economic and Community Footprint of Wholesale Distribution

Wholesale distribution is one of the largest sectors of the American economy and one of the least visible in policy debate. The basic facts:

- **~$8 trillion** in 2024 revenue, accounting for an outsized share of national supply-chain throughput.
- **~6 million** Americans employed across some 35,000 firms operating ~150,000 locations.
- **19 NAICS-recognized verticals** — including pharmaceutical distribution; food and beverage distribution; chemical distribution; electrical, plumbing, and HVAC distribution; defense and industrial distribution; petroleum, alcoholic beverages, and others — each with sector-specific regulation.
- **Predominantly private and family-owned.** A large majority of firms are privately held, family-owned, often multi-generational, and often local — the owner is frequently a community fixture rather than a remote corporate entity.

- **Critical role in hospitals, jobsites, restaurants, schools, and military supply.** Distributors are the breaking-bulk, credit-extending, technically advising layer of the supply chain that maintains local availability and timely delivery for the end customer.
- **Margin-thin.** Typical EBITDA margins of 4–7%, which makes compliance and operating cost increases consequential.
- **Lean IT and lean compliance.** A meaningful share of mid-market distributors operate with one or two IT professionals; a majority do not have dedicated AI, data, or compliance teams. A $100 million distributor with 200 employees may have one general counsel — or none.

Why this composition matters for AI policy

AI policy that imposes uniform compliance overhead — particularly through state-by-state divergence — falls disproportionately on the small and mid-sized firms that comprise the bulk of the industry. Larger national distributors can staff multi-jurisdictional regulatory teams; smaller distributors cannot. The result of an uncoordinated patchwork is, in practice, a structural transfer of competitive advantage from local and regional operators to the largest firms — a transfer that is rarely the intended outcome of state legislators considering AI laws individually.

> *The relevant policy comparison is not between "AI-using companies" and "non-AI-using companies." It is between firms that can absorb regulatory complexity and firms that cannot. Compounding state-by-state AI regulation acts as an effective subsidy to the largest operators in any sector with national reach — including this one.*

2. The Case for a Single Federal AI Standard

> PRIORITY **Federal preemption is the priority.** A single, well-designed federal standard for AI governance — one that preempts the emerging patchwork of state laws — is the most consequential single policy action that can support responsible AI adoption across wholesale distribution. The remainder of this brief is constructed in service of that priority.

The patchwork problem in concrete terms

Many distributors operate across multiple states while deploying technology centrally. A regional electrical distributor with branches in twelve states, a national foodservice distributor with forty distribution centers, or a specialty chemical distributor shipping into all fifty states each face the same problem: AI regulation is emerging state by state, and each jurisdiction may impose different requirements on the same technology.

The Colorado AI Act takes effect June 30, 2026, imposing the first comprehensive state-level AI consumer-protection requirements. Other states are drafting or considering their own legislation. The EU AI Act adds extraterritorial reach for distributors with European operations. A distributor headquartered in Texas with branches in Colorado, California, and Virginia — and customers in the EU — may face four or more distinct AI regulatory regimes governing the same centrally deployed pricing tool, the same order-entry system, and the same customer-data platform. None of those regimes is unreasonable in isolation; their cumulative cost on a multi-state operator is substantial.

What a workable federal standard would look like

The Council's view, informed by the operating reality of distributors at every scale, is that a workable federal AI governance standard would have the following characteristics. The list is intended to inform a serious legislative or regulatory conversation; specific statutory drafting properly belongs to legislative counsel.

- **Risk-tiered.** Aligns governance burden to consequence of error. Low-risk applications carry minimal obligation; high-risk applications — particularly those affecting safety, employment, credit, or consumer outcomes — carry meaningful documentation, validation, and review requirements.
- **Outcome-based, not technology-prescriptive.** Sets expectations on outcomes (auditability, reasonable accuracy, non-discrimination, security) rather than mandating specific technical mechanisms that will be obsolete in eighteen months.
- **Aligned with NIST AI RMF.** A federal standard built on or referencing the existing NIST framework would converge with EU AI Act structure and reduce dual-compliance burden for U.S. distributors with European customers.
- **Preemptive of inconsistent state law.** Cleanly preempts conflicting state-level AI legislation, while permitting states to address residual local matters such as workforce protections that do not interfere with the federal framework.
- **Right-sized for small and mid-sized firms.** Includes proportionate compliance pathways and safe-harbors for firms below defined thresholds. Treats the dominant population of the industry — privately held, mid-market, lean IT — as the design point, not the exception.
- **Coordinated with sector-specific regulation.** Recognizes that distributors already comply with DSCSA, FSMA, TSCA, ITAR/EAR, CMMC, and other regimes. Avoids parallel structures that conflict with these existing obligations.
- **Workable for citizen development.** Recognizes the reality that employees in modern firms are increasingly building AI-assisted tools using approved enterprise platforms. Rules designed only for IT-built systems will be unworkable.
- **Affirmative-defense pathway.** Provides a clear, reasonable affirmative-defense pathway for firms that adopt the federal standard and operate in good faith — analogous to the existing structures in some state-level proposals — to limit per-incident liability and encourage proactive governance.

Absent a federal standard

Where a federal standard does not exist, the practical posture for many distributors is to align governance with the most restrictive applicable jurisdiction, while balancing operational feasibility and cost. This is a default born of compliance prudence, not a recommendation. Distributors should not be in the position of designing internal controls around the most restrictive subnational jurisdiction simply because federal coordination is absent. The cost of that posture — disproportionate to the underlying risk — is one of the strongest practical arguments for a single federal standard.

3. Workforce, Community, and Small-Business Considerations

Distribution is a people business. The outside sales representative who has served a contractor for fifteen years, the counter person with twenty-five years of valve-selection expertise, the warehouse associate with two decades of branch-specific knowledge, and the delivery driver who knows that the loading dock at the local hospital is only accessible before 7 a.m. — these are the people who make distribution work. Public policy that touches AI in this industry should reflect this composition.

Empirical pattern

Independent surveys consistently find that organizations adopting AI are expanding their workforce at higher rates than non-adopters. The pattern reflects an underlying mechanism: when AI handles repetitive tasks (manual order entry, basic reconciliations, routine documentation), employees are freed to perform higher-value work — building customer relationships, providing technical advisory, growing the business. Distributors who reinvest productivity gains in customer-facing capability outperform competitors who use AI primarily for headcount reduction. The reinvestment story is the operating reality at AI-mature distributors.

Implications for public policy

- **AI is more often a workforce-development question than a workforce-displacement question.** Public policy that resources AI literacy, skills upgrading, and role evolution will yield more durable returns than policy framed primarily around displacement.
- **Local employment impact matters.** Distributors are often the largest private employers in small and mid-sized communities. AI-related disruptions in this sector translate directly to community-level effects. Conversely, AI-enabled growth in this sector translates directly to community-level employment durability.
- **Aging workforce dynamics intersect AI policy.** The share of wholesale firms with a quarter or more of workers over age 55 has grown sharply since 2000. AI is the first technology that can credibly capture and scale the institutional knowledge of long-tenured employees before they retire. Policy that supports knowledge-capture investments — directly or indirectly — produces compounding returns.
- **Small business is the median, not the exception.** Policy designed for the F500 will not work for the bulk of the industry. Right-sizing AI compliance pathways for firms with limited IT and compliance resources is essential.

Recommendations for federal and state action

- **Workforce training infrastructure.** Support — directly through funding or indirectly through tax treatment — investments in AI literacy training programs delivered through industry channels (NAW Institute, partner academic programs, trade associations). Generic enterprise AI courses are a poor fit for distribution; sector-specific training is materially more effective.

- **Apprenticeship and reskilling.** Recognize AI-augmented apprenticeship programs (counter sales, application engineering, warehouse operations) as eligible workforce-development investments.
- **Knowledge-capture incentives.** Acknowledge intentional capture of institutional expertise as a workforce-continuity investment with downstream community-economic effects.
- **Avoid framing AI as primarily a displacement story in this industry.** The empirical evidence in distribution is more nuanced; policy framed primarily around displacement will miss the larger reality.

4. Coordination with Existing Sector-Specific Regulation

Distributors operate inside sector-specific regulatory regimes that already address many of the underlying concerns AI policy seeks to manage — particularly traceability, auditability, and accountability. AI policy that conflicts with or duplicates these existing regimes increases compliance cost without proportional public benefit. The illustrative summary below is not legal advice and is intended only to flag intersections; specific compliance requirements remain the responsibility of regulated entities and their counsel.

Regulated context	Existing obligation	Intersection with AI policy
Pharmaceutical distribution	DSCSA serialization; FDA 21 CFR Part 11 electronic records	AI tools producing or processing relevant records should be auditable and traceable; existing validation expectations apply
Food and beverage distribution	FSMA 204 traceability; HACCP	AI cold-chain monitoring, traceability, and recall-readiness should align with existing recordkeeping obligations
Chemical distribution	TSCA, OSHA HazCom, EPA	AI-automated SDS handling, classification, and shipping documentation should comply with existing standards
Defense supply chain	ITAR / EAR; CMMC 2.0	AI processing of controlled technical data raises deemed-export risk; CMMC governs cybersecurity posture for DoD eligibility
Electrical and industrial	NEC, UL, OSHA	AI recommendations affecting product specification or installation should reference valid certifications and code
Alcoholic beverages	TTB / state ABC	Three-tier compliance and franchise protections must be respected by AI-driven sales or routing systems
Cross-cutting	CCPA/CPRA, FTC consumer-protection authority, antitrust	AI policy intersects with existing privacy, consumer-protection, and antitrust regimes; coordination avoids duplicative parallel structures

> **PRINCIPLE** AI policy should be additive to existing sector-specific regulation where additive value is clear, and parallel where it is not. Federal and state AI policy that adds compliance overhead without coordinating with the regulators distributors already report to imposes cost without commensurate benefit.

5. Critical Infrastructure and National Security Considerations

Wholesale distribution is part of the country's critical infrastructure in a quiet but consequential way. Hospitals depend on pharmaceutical and medical-supply distributors for daily operating consumables. Restaurants and schools depend on food and beverage distributors for daily inputs. Construction sites depend on building-product distributors for materials. The Department of Defense depends on hundreds of thousands of distributors and suppliers across the defense industrial base. Most of these flows are managed by private, often family-owned firms.

As AI is woven into the operating systems of these distributors — pricing, ordering, replenishment, customer service, technical advisory, supply-chain visibility — the resilience of this layer becomes a national-resilience question. Three considerations follow from this.

- **Cyber resilience.** Ransomware actors have increasingly targeted wholesale and retail. AI introduces additional attack surfaces (vendor model training, prompt injection, AI-augmented BEC, deepfake supplier impersonation). Federal investment in small and mid-sized firm cyber resilience — including AI-specific scenarios — has direct critical-infrastructure benefit.
- **Supply-chain visibility.** Agentic AI for supply-chain monitoring, tariff exposure, and alternative sourcing is rapidly maturing. The AI Applied Consortium's Tariff 360 demonstration showed agentic AI can profile tariff exposure across a large supply chain in minutes rather than weeks. Federal policy that supports access to high-quality public data (HTS code changes, port telemetry, supplier financial-distress signals) has a multiplicative effect on the resilience of this layer.
- **Defense industrial base.** CMMC 2.0 cybersecurity certification is now a prerequisite for DoD contract eligibility for relevant distributors. AI tools processing controlled unclassified information must meet CMMC requirements; AI policy should explicitly recognize this and avoid creating conflicts.

6. Considerations at the State Level

In the absence of a federal standard — or in advance of one — many states are considering or enacting AI legislation. Where state-level action proceeds, the Council respectfully offers the following considerations for state legislators and rulemakers.

- **Coordinate with neighboring states.** Where coordination is possible, harmonized definitions, risk-tier categories, and reporting expectations across regional groupings of states materially reduce the patchwork problem and improve member compliance posture.

- **Recognize the small-business reality.** Compliance pathways proportionate to firm size and resources are essential. Treating a $50 million regional electrical distributor like a multi-state technology platform creates compliance burdens out of proportion to the underlying risk.
- **Reference NIST AI RMF where possible.** Statutes that recognize NIST AI RMF as a defensible baseline reduce friction with federal direction and with the EU AI Act, simplifying multi-jurisdictional operations for firms headquartered in the state.
- **Coordinate with sector regulators.** AI policy that interacts with pharmaceutical, food, chemical, defense, or alcoholic-beverage distribution should be coordinated with the agencies that already regulate those sectors. Parallel and conflicting requirements are particularly costly in regulated verticals.
- **Workforce dimension.** Recognize the empirical pattern of workforce expansion at AI-adopting distributors when productivity is reinvested in customer-facing capability. Policy that resources reskilling and AI literacy is more impactful than policy that frames AI primarily through a displacement lens.

7. Closing

Wholesale distribution is a sector where public policy choices have unusually direct effects: on the availability of medicine in hospitals, on the price of building materials on jobsites, on the availability of food in restaurants and schools, on the ability of the defense industrial base to resupply, and on the prosperity of communities where distributors are often the largest private employer. AI is reshaping how this layer of the economy operates. The Council's view, offered in good faith and with appropriate caveats, is that the most consequential public-policy contribution that can be made at this moment is the establishment of a single federal AI governance standard — risk-tiered, outcome-based, NIST-aligned, preemptive, right-sized for small and mid-sized firms, and coordinated with existing sector regulation.

> *A federal standard, well-designed, will support responsible AI adoption across the industry, protect the workforce and community footprint of distributors, and reduce a compliance burden that currently falls disproportionately on the small and mid-sized firms that anchor local economies. The Council and its members are available to inform that conversation.*

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> between any specific regulated vertical and AI law; substantive vertical compliance properly involves the agencies and trade associations responsible for those sectors and qualified counsel.