**TESTIMONY IN SUPPORT OF**

# Colorado House Bill 26-1270

## *Agricultural Data Ownership and Market Competition Act*

*Model Legislation & Evidentiary Record*

**Prepared by: Willie Cade, CEO, Graceful Solutions LLC** Date: March 16, 2026

Submitted to: Colorado House Agriculture, Water & Natural Resources Committee

*Evidentiary Record: John Deere S690 Combine | 2025 Harvest Season | October 1 -- 29, 2025*

# PART I: ORAL TESTIMONY SUMMARY

## Opening Statement

**Good afternoon, Chair _____and distinguished members of this committee.** My name is Willie Cade. I am the Chief Executive Officer of Graceful Solutions LLC, an agricultural antitrust litigation consulting firm. I have spent more than nine years studying the intersection of agricultural technology, data rights, and market competition. I have briefed staff of the Federal Trade Commission and provided consulting support to farmers in active federal litigation against John Deere & Company.

Today, I am honored to present testimony grounded not in theory, but in actual data drawn directly from a John Deere S690 Combine operating during the 2025 harvest season. The evidence I will share with you was collected by the machine itself, transmitted to John Deere's MyJohnDeere Operations Center, and then made available to the machine's operator. What this data reveals is both remarkable in its precision and deeply troubling in what it omits.

HB26-1270 does not seek to destroy the current business model. It seeks to ensure that the farmers who make it possible are treated as partners, not sources. The bill's fiduciary duty provisions, its data ownership rights, and its private right of action are not radical interventions -- they are the basic property rights protections that should have been in place from the beginning.

Using John Deere's own estimates of "incremental value" over the nearly 775,000 machines it approaches a staggering $200,000 per machine!

## The Five Core Points of This Testimony

### Point One: The Machine Knows Everything About You

A John Deere S690 Combine that operated across 29 days during October 2025. During that time, it generated 17,140 individual location records, each stamped with GPS coordinates accurate to within an inch. The machine recorded fuel consumption rates, engine loads, ground speeds, threshing settings, and dozens of other operational parameters. This data is extraordinarily valuable. It tells the story of an entire harvest season in granular detail.

### Point Two: The Fiduciary Duty John Deere Has Not Honored

The data collected by this machine should belong to the producer who set the stage and operated the equipment based on their expertise. It was generated by the farmer's labor, on the farmer's land, using fuel the farmer purchased. John Deere's role is that of a custodian, not an owner. Under well-established principles of fiduciary law and the Uniform Commercial Code, a party that collects and holds data on behalf of another has a duty of care, a duty of loyalty, and a duty to avoid self-dealing. John Deere has violated all three.

John Deere monetizes this data. It sells aggregated crop production insights. It uses machine performance data to inform its own service pricing, warranty decisions, and competitive intelligence. The farmer who generated that data receives none of the proceeds.

### Point Three: What the Data Shows -- and What Is Missing

The 53 machine parameters recorded and displayed by Operations Center during this harvest season are impressive. Fuel consumption rates, engine load factors, GPS position, separator hours, threshing clearance -- all of it logged and timestamped. But when I reviewed this data, I noticed critical omissions. John Deere's Operations Center does not report NOx emissions, the nitrogen oxide readings produced by the engine's diesel combustion and managed through the Diesel Exhaust Fluid system. This data exists in the machine's Electronic Control Units. It is simply not made available to the farmer.

## Point Four: The Old Owner's Data Is Still There

Among the documents I am submitting as evidence today is an excerpt from the John Deere MyJohnDeere Operations Center account associated with another machine, prepared on January 27, 2026. This document, titled "Becky Op Center," demonstrates that Operations Center data captured under one owner's profile persists in John Deere's system and is associated with her machine -- not exclusively with the producer who generated it. Only John Deere can correct this error. This asymmetry of access is a form of market control.

## Point Five: The Legislation Before You Is the Remedy

Colorado House Bill 26-1270, the Agricultural Data Ownership and Market Competition Act, directly addresses each of these harms. It establishes that raw agricultural data is the property of the producer who generates it. It requires that companies holding agricultural data in a fiduciary capacity disclose all data collected, transfer that data upon a farmer's request, and refrain from monetizing that data without the farmer's informed, written consent. It provides statutory damages floor so that farmers can enforce their rights without having to outspend billion-dollar corporations in federal court.

I urge you to support this legislation. The farmers of this state have been extraordinarily patient. They deserve the tools to protect what is rightfully theirs.

Thank you. I am happy to take questions.

# PART II: WRITTEN TESTIMONY

## I. Introduction and Witness Qualifications

This written testimony is submitted by Willie Cade, Chief Executive Officer of Graceful Solutions LLC, an agricultural antitrust litigation consulting practice. Mr. Cade has the following relevant qualifications and background:

- More than nine years of experience in agricultural right-to-repair and data ownership advocacy
- Briefed staff of the Federal Trade Commission on John Deere diagnostic and data practices
- Consulting support for farmers in the John Deere Multi-District Litigation (MDL No. 3:22-cv-50188) and related FTC enforcement action (Case No. 3:25-cv-50017)
- Co-authored approximately 25 peer-reviewed papers on electronics sustainability through NSF-funded research in collaboration with colleagues at the Rochester Institute of Technology and other centers of higher education.
- Grandson of Theo Brown, John Deere's legendary Chief Engineer, holder of 158 patents, and a member of John Deere's Board of Directors for 30 years, giving Mr. Cade a uniquely informed perspective on the company's technology heritage and obligations to the agricultural community
- Founder of PC Rebuilders & Recyclers, a social enterprise that employed more than 300 previously incarcerated individuals in electronics repair and refurbishment.
- Board member, Repair.org

## II. The Machine at Issue: John Deere S690 Combine

This testimony is grounded in the actual operational data of a specific machine: a John Deere S690 Combine. This machine is a high-capacity grain harvesting system representing one of the most technologically sophisticated pieces of agricultural equipment available. It is equipped with StarFire RTK precision GPS guidance, AutoTrac autonomous steering, Harvest Smart adaptive control systems, HarvestSmart Capacity and Smart modes, and a fully networked telematic system that continuously transmits machine data to John Deere's MyJohnDeere Operations Center platform.

The machine data presented in this testimony was retrieved directly from the Operations Center platform and reflects a part of the 2025 harvest season. It is authentic, machine-generated, and verifiable. The serial number has not been fully presented to protect the equipment owner from potential manufacturer intimidation or retaliation.

## III. Location Data: Evidence of Continuous Surveillance

The following analysis is drawn from the Location History file for this machine, covering October 1 through October 29, 2025, a period of 29 harvest days. This data was retrieved from the MyJohnDeere Operations Center and is submitted in full as Exhibit A.

| Parameter | Value | Significance |
|---|---|---|
| Machine Serial Number | 1H0S690-XXXXXX | Unique machine identifier (redacted) |
| Date Range Covered | Oct 1 -- Oct 29, 2025 | 29 active harvest days |
| Total Location Records | 17,140 | One record roughly every minute of operation |
| GPS Latitude Range | XXXXXXXX | Approx. 10.3 miles north-south operating range |
| GPS Longitude Range | XXXXXXXX | Approx. 15.6 miles east-west operating range |
| Engine Hours at Start | 2,XXX hrs | Machine lifetime usage at season start |
| Engine Hours at End | 2,XXX hrs | Machine lifetime usage at season end |
| Engine Hours This Season | 90.1 hrs | Documented 2025 harvest operating time |
| Fuel Readings (records) | XXXXX | 92.7% of all location pings include fuel data |
| Speed Readings (records) | XXXXX | 93.6% of all location pings include speed data |
| Average Fuel Rate (gal/hr) | 0.686 | Consistent with field harvesting operations |
| Peak Fuel Rate (gal/hr) | 0.984 | Recorded during high-load harvesting passes |
| | | |

## A. Activity Concentration by Hour -- Harvest Season Summary

The following table summarizes GPS ping counts by hour of day across all 29 harvest days. The complete minute-by-minute breakdown follows immediately below on the next page. Note that the machine continues transmitting overnight during every hour, while stationary -- evidence that Operations Center is a round-the-clock surveillance system, not merely an operational monitor.

| Hours of Day | Total Pings | Activity Level |
|---|---|---|
| 12 AM -- 8 AM | 247 total | Parked / Idle (machine stationary, GPS still transmitting) |
| 9 AM | 327 | Morning startup and field entry |
| 10 AM | 655 | Active harvesting begins |
| 11 AM | 1,035 | Full harvest operations |
| 12 PM | 1,548 | Peak mid-day operations |
| 1 PM | 1,845 | Peak afternoon operations |
| 2 PM | 1,694 | High activity continuing |
| 3 PM | 1,857 | High activity -- late afternoon |
| 4 PM | 2,095 | Very high -- extended harvest day |
| 5 PM | 2,220 | Season peak hour |
| 6 PM | 1,691 | Evening taper begins |
| 7 PM | 1,173 | Reduced evening operations |
| 8 PM | 552 | Significant activity still occurring |
| 9 PM -- 11 PM | 93 total | Shutdown / overnight idle |
| GRAND TOTAL | 17,140 | Across 29 harvest days |

The complete minute-by-minute GPS ping table -- showing the :13 and :14 surveillance heartbeat active every hour including overnight -- appears on the following page.

## III.B. GPS Ping Activity by Hour and Minute -- Complete Record

Count of Location Records -- John Deere S690 Combine, October 2025 (29 Days). Each row = one hour of day; each column = cell = total GPS pings at that hour: minute across all 29 harvest days.

**Highlighted columns :13 and :14** are the two highest-activity minute-columns in the entire dataset (651 and 492 total pings). D AM through 8 AM, when the machine is stationary, pings occur exclusively at :13 and :14. This is strong forensic evidence of a p heartbeat operating on a fixed schedule, independent of any farming activity.

| Hour | 00 | 01 | 02 | 03 | 04 | 05 | 06 | 07 | 08 | 09 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | 25 | 26 | 27 | 28 | 29 | 30 | 31 | 32 | 33 | 34 | 35 | 36 | 37 | 38 | 39 | 40 | 41 | 42 | 43 | 44 | 45 | 46 | 47 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 12 A | | | | | | | | | | | | | | 15 | 15 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 1 A | | | | | | | | | | | | | | 20 | 10 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 2 A | | | | | | | | | | | | | | 19 | 13 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 3 A | | | | | | | | | | | | | | 19 | 11 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 4 A | | | | | | | | | | | | | | 14 | 16 | | | | | | | | | | | | | | | | | | 1 | | | | | 1 | | | | | | | | | | |
| 5 A | | | | | | | | | | | | | | 22 | 8 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 6 A | | | | | | | | | | | | | | 19 | 13 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 7 A | | | | | | | | | | | | | | 19 | 12 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | 2 | 2 | 1 | |
| 8 A | | | | 1 | 2 | 1 | | | | | | | 2 | 17 | 13 | | 2 | 1 | 1 | | | | | 1 | 1 | | | | 2 | | | | | | 5 | 5 | 3 | 1 | 1 | 6 | 2 | 3 | 2 | 2 | 1 | 1 | 1 | 1 |
| 9 A | 1 | 2 | 1 | 2 | 5 | 1 | 1 | 1 | 1 | 1 | 3 | 1 | 3 | 26 | 12 | 9 | 3 | 3 | 6 | 6 | 3 | | 7 | 5 | 4 | 7 | 13 | 7 | 10 | 9 | 2 | 10 | 11 | 12 | 10 | 8 | 5 | 2 | 5 | 8 | 3 | 3 | 7 | 7 | 16 | 5 | 9 | 4 |
| 10 A | 10 | 4 | 6 | 2 | 11 | 14 | 10 | 12 | 2 | 14 | 25 | 27 | 17 | 16 | 15 | | | | 3 | 1 | 5 | 2 | 9 | 9 | 9 | 11 | 2 | 4 | 7 | 9 | 13 | 12 | 21 | 14 | 19 | 19 | 22 | 13 | 13 | 17 | 8 | 4 | 3 | 4 | 9 | 11 | 8 | 19 |
| 11 A | 14 | 22 | 16 | 16 | 11 | 23 | 9 | 11 | 11 | 12 | 22 | 17 | 9 | 30 | 25 | 20 | 12 | 12 | 24 | 19 | 17 | 12 | 14 | 20 | 10 | 14 | 17 | 12 | 11 | 22 | 16 | 12 | 19 | 10 | 18 | 12 | 15 | 18 | 12 | 13 | 14 | 21 | 23 | 22 | 21 | 15 | 22 | 16 |
| 12 P | 19 | 17 | 21 | 22 | 36 | 21 | 17 | 29 | 26 | 27 | 35 | 18 | 20 | 45 | 31 | 26 | 26 | 25 | 27 | 27 | 28 | 25 | 21 | 38 | 14 | 20 | 20 | 21 | 25 | 18 | 32 | 25 | 25 | 12 | 26 | 34 | 19 | 19 | 27 | 16 | 27 | 17 | 31 | 24 | 23 | 24 | 39 | 27 |
| 1 P | 25 | 30 | 39 | 32 | 36 | 30 | 25 | 61 | 35 | 38 | 34 | 23 | 33 | 39 | 30 | 24 | 29 | 25 | 36 | 16 | 33 | 32 | 42 | 28 | 34 | 40 | 34 | 29 | 27 | 37 | 31 | 31 | 27 | 24 | 23 | 22 | 33 | 19 | 34 | 34 | 34 | 31 | 19 | 36 | 25 | 29 | 35 | 33 |
| 2 P | 31 | 33 | 20 | 39 | 30 | 31 | 30 | 19 | 28 | 27 | 47 | 23 | 31 | 30 | 26 | 30 | 30 | 23 | 20 | 39 | 21 | 20 | 24 | 41 | 30 | 31 | 30 | 23 | 25 | 24 | 30 | 24 | 32 | 12 | 16 | 34 | 24 | 19 | 30 | 30 | 23 | 28 | 22 | 23 | 24 | 24 | 25 | 25 |
| 3 P | 42 | 53 | 33 | 41 | 31 | 28 | 31 | 23 | 16 | 41 | 21 | 25 | 44 | 43 | 40 | 27 | 34 | 40 | 43 | 33 | 15 | 42 | 37 | 29 | 30 | 26 | 39 | 37 | 41 | 27 | 30 | 40 | 38 | 46 | 39 | 27 | 33 | 18 | 20 | 39 | 15 | 28 | 36 | 28 | 35 | 25 | 21 | 24 |
| 4 P | 31 | 37 | 29 | 21 | 27 | 21 | 36 | 30 | 40 | 42 | 36 | 28 | 31 | 50 | 38 | 28 | 34 | 24 | 32 | 39 | 30 | 27 | 39 | 34 | 49 | 37 | 34 | 38 | 34 | 42 | 31 | 34 | 39 | 52 | 32 | 38 | 36 | 37 | 43 | 32 | 39 | 30 | 38 | 36 | 21 | 33 | 28 | 42 |
| 5 P | 32 | 41 | 46 | 34 | 32 | 46 | 44 | 36 | 44 | 42 | 40 | 28 | 35 | 56 | 44 | 32 | 36 | 29 | 34 | 43 | 33 | 43 | 37 | 35 | 50 | 55 | 41 | 45 | 40 | 30 | 47 | 46 | 30 | 37 | 40 | 44 | 50 | 42 | 46 | 41 | 36 | 38 | 27 | 37 | 32 | 38 | 38 | 34 |
| 6 P | 33 | 29 | 33 | 17 | 20 | 25 | 32 | 18 | 25 | 20 | 41 | 42 | 24 | 29 | 41 | 26 | 44 | 21 | 29 | 26 | 37 | 25 | 22 | 39 | 20 | 22 | 30 | 25 | 26 | 33 | 24 | 27 | 41 | 28 | 23 | 43 | 31 | 42 | 23 | 41 | 30 | 21 | 27 | 26 | 35 | 35 | 23 | 26 |
| 7 P | 27 | 32 | 21 | 12 | 15 | 25 | 17 | 16 | 21 | 8 | 23 | 25 | 16 | 36 | 31 | 10 | 26 | 14 | 21 | 12 | 15 | 15 | 16 | 29 | 15 | 15 | 16 | 28 | 18 | 21 | 15 | 23 | 18 | 24 | 20 | 13 | 23 | 18 | 18 | 11 | 23 | 11 | 16 | 24 | 20 | 22 | 23 | 23 |
| 8 P | 25 | 22 | 28 | 15 | 19 | 21 | 18 | 13 | 22 | 18 | 19 | 10 | 13 | 28 | 18 | 18 | 15 | 12 | 13 | 10 | 11 | 10 | 4 | 8 | 15 | 8 | 6 | 12 | 9 | 6 | 19 | 7 | 5 | 6 | 6 | 1 | 1 | 4 | 1 | 1 | 6 | 1 | 2 | | 8 | 3 | 5 | 2 |
| 9 P | 2 | 1 | | | | | | | | | | | | 22 | 8 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 10 P | | | | | | | | | | | | | | 18 | 11 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 11 P | | | | | | | | | | | | | | 19 | 11 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | 1 |

*Data Source MyJohnDeere Operations Center Location History Export | Machine John Deere S690 Combine | Period October 1 -- 2*

*Note The serial number on the source file has been redacted to protect the equipment owner.*

*The underlying data file retaining the full serial number is available for in camera review upon request by the Co*

## IV. Machine Performance Data Evidence of Comprehensive Operational Monitoring

The following analysis is drawn from the 2025 Harvest Season Machine Data report for this S690, submitted as Exhibit B. This report summarizes 53 distinct data parameters collected by the machine and transmitted to John Deere Operations Center during the harvest season. The table below presents the complete parameter list with analysis.

| Parameter | Avg Value | Min | Max | Units | Legal Significance |
|---|---|---|---|---|---|
| Active Yield | 0.26 | 0.00 | 1.30 | Status | Crop yield activity tracked |
| Avg Engine Load Factor | 34.94 | 0.00 | 96.36 | % | Work intensity profiling |
| Avg Fuel Rate | 8.98 | 0.00 | 27.43 | gal/hr | Cost/efficiency data |
| Avg Ground Speed | 1.76 | 0.00 | 18.63 | mph | Operational speed pattern |
| Fuel Consumed (per period) | 2.24 | 0.00 | 34.31 | gal | Per-session consumption |
| Avg Engine Speed | 1,128.65 | 0.00 | 2,244.34 | rpm | Engine stress profiling |
| Avg Coolant Temp | 169.01 | 70.85 | 195.42 | F | Thermal condition record |
| Avg Hydraulic Oil Temp | 126.26 | 32.66 | 163.24 | F | System stress record |
| DEF Consumption Rate | 0.36 | 0.00 | 0.82 | gal/hr | Emissions system data |
| DEF Tank Level | 58.45 | 17.20 | 100.00 | % | Refill timing / compliance |
| Fuel Tank Level | 60.52 | 5.60 | 98.00 | % | Operational planning data |
| Chaffer Clearance | 17.54 | 15.00 | 25.00 | mm | Crop-specific settings |
| Threshing Clearance | 31.05 | 15.00 | 54.00 | mm | Crop-specific settings |
| Sieve Clearance | 3.75 | 0.00 | 11.00 | mm | Crop-specific settings |
| Last Cleaning Fan Speed | 1,072.78 | 630.00 | 1,197.00 | rpm | Crop condition inference |
| Last Feederhouse Backshaft | 566.67 | 168.00 | 639.00 | rpm | Crop condition inference |
| Last Harvesting Ground Speed | 3.24 | 0.00 | 6.36 | mph | Yield rate inference |
| Time in Corn | 0.57 | 0.00 | 1.14 | hrs | Crop type identification |
| Time in Soybeans | 0.62 | 0.00 | 1.38 | hrs | Crop type identification |
| Total Separator Hours | 1,614.98 | 1,543.65 | 1,703.30 | hrs | Machine value / depreciation |
| AutoTrac Status | 0.34 | 0.00 | 1.37 | Status | Autonomous op. record |
| Machine Utilization | 0.11 | 0.00 | 1.44 | % | Overall productivity metric |
| Period Separator Hours | 0.60 | 0.00 | 1.38 | hrs | Per-session harvest time |
| Period Fuel Consumed | 12.30 | 0.00 | 34.66 | gal | Session fuel cost record |
| Lifetime Exhaust Cleanings | 49.48 | 47.00 | 52.00 | count | Emissions system record |
| StarFire RTK Accuracy | 0.15 | 0.00 | 1.47 | cm | Sub-inch GPS precision |

This dataset reveals that John Deere is capturing not merely machine health data, but a comprehensive portrait of the farm's agronomic practices which crops are being grown, at what ground speeds, with what threshing and sieve settings, during which hours of the day. This level of operational intelligence, if aggregated across John Deere's installed base of hundreds of thousands of machines, constitutes one of the most valuable agricultural datasets in the world. The farmers who generated it received nothing in return.

## V. The Operations Center Record Evidence of Prior Owner Data Persistence

Exhibit C is a document prepared from the MyJohnDeere Operations Center account associated with another machine, titled "Becky Op Center." This document was prepared on January 27, 2026, and reflects data extracted from the Operations Center system by a party with Operations Center access to that machine's account.

The document references "Data from Globe" and notes "Extracted hourly data in Excel" -- indicating that Operations Center data was being accessed and downloaded for the machine. The account under which this data was organized appears to reflect a prior ownership configuration.

This document is legally significant for the following reasons.

- It demonstrates that Operations Center data profiles persist beyond a machine's sale to a new owner.
- It demonstrates that prior-owner account configurations and data associations are maintained by John Deere rather than being cleanly transferred with the machine.
- It raises the question of whether prior owners retain any form of access to machine data after a sale -- and whether John Deere's data retention policies address this adequately.
- It illustrates the gap between what a farmer believes they own (a machine and its data) and what John Deere actually controls (the data infrastructure through which all of that machine's information flows)

## VI. Missing Data What John Deere Refuses to Provide

Perhaps the most telling finding in this analysis is not what the Operations Center data contains, but what it conspicuously omits. The following critical datasets are generated by this machine but are not provided to the farmer through the MyJohnDeere Operations Center

### NOx Emissions Data

The S690 Combine is equipped with a Selective Catalytic Reduction (SCR) emissions control system, which uses Diesel Exhaust Fluid (DEF) to chemically reduce nitrogen oxide (NOx) emissions from the engine exhaust stream. The machine's Electronic Control Units continuously monitor NOx levels both before and after the SCR catalyst, as well as DEF injection rates and catalyst efficiency.

The Operations Center data provided to this farmer includes DEF Consumption Rate and DEF Tank Level -- confirming that the DEF system is being monitored. However, the actual NOx readings -- the emissions values that the DEF system is designed to control -- are not reported. This is not because the data does not exist. It exists in the ECU. John Deere has simply chosen not to make it available through Operations Center.

This omission is significant from both an environmental compliance and a farmer rights perspective. If the SCR system is underperforming -- failing to adequately reduce NOx -- the farmer may be in violation of EPA emissions standards without knowing it. John Deere holds the diagnostic data that would reveal this condition. The farmer does not.

## VII. Fiduciary Duty the Legal Foundation of HB26-1270

The legal argument for agricultural data ownership legislation rests on the need for a foundation of fiduciary obligation. When John Deere collects farmer data through its telematics systems, it is not acting as an ordinary holder of information. It is acting as a trusted agent, collecting data on behalf of the farmer for the purpose of improving machine operation and providing service. This relationship should carry with it the following legally cognizable duties.

The House Committee on Agriculture, Water & Natural Resources substantially strengthened the fiduciary provisions of HB26-1270 through Committee of Reference Amendment L.003. That amendment adds statutory definitions of "FIDUCIARY" and "FIDUCIARY DUTY," and creates a new Section 35-2.5-104 establishing an independent, non-waivable fiduciary duty enforceable by private right of action and by the Colorado Attorney General. The key provisions follow.

### A. Statutory Definition Who Is a Fiduciary Under HB26-1270

**L.003 Amendment -- Statutory Definition of "Fiduciary"**

"FIDUCIARY" MEANS A DATA SERVICE PROVIDER THAT COLLECTS, HOLDS, PROCESSES, TRANSFORMS, AGGREGATES, ANALYZES, SELLS, LICENSES, OR OTHERWISE COMMERCIALIZES RAW AGRICULTURAL DATA OR TRANSFORMED AGRICULTURAL DATA ON BEHALF OF AN AGRICULTURAL PRODUCER OR DATA OWNER, AND THAT BY VIRTUE OF THAT RELATIONSHIP HAS A FIDUCIARY DUTY TO THE AGRICULTURAL PRODUCER OR DATA OWNER.

This definition is intentionally broad. Every company in the precision agriculture data chain -- from equipment manufacturers to platform operators to data brokers -- that touches a farmer's data in any commercial capacity is a fiduciary. John Deere, the operator of MyJohnDeere Operations Center, falls squarely within this definition.

### B. The Four Statutory Duties

The L.003 amendment establishes four specific, enforceable duties under new Section 35-2.5-104 of the Colorado Revised Statutes

1. **DUTY OF LOYALTY.** The fiduciary must act in the best interests of the agricultural producer in all matters relating to their data. The fiduciary must disclose any actual or potential conflict of interest before any data transaction, must not use the producer's data to benefit itself at the producer's expense, and must not enter into agreements with third parties that compromise the fiduciary's obligations to the producer. John Deere's commercial exploitation of aggregated farm data to build market intelligence products -- without farmer consent or compensation -- is a direct violation of this duty.

2. **DUTY OF CARE.** The fiduciary must employ reasonable technical and organizational measures to protect agricultural data from unauthorized access, disclosure, alteration, or destruction; must exercise professional judgment consistent with industry standards in the transformation and commercialization of that data; and must promptly notify the producer of any breach, unauthorized access, or material adverse event affecting the data. The persistence of prior-owner account configurations in Operations Center -- the "JWILSONCOMB" problem documented in this testimony -- is a failure of the duty of care.

3. **DUTY OF DISCLOSURE.** Prior to any data transaction, the fiduciary must fully and accurately disclose the identity of all prospective purchasers or licensees of the transformed data; the proposed compensation to be paid to the producer; the intended uses of the transformed data; and the fees, commissions, or other consideration the fiduciary will retain. The fiduciary must maintain a publicly accessible, current disclosure of all markets in which it commercializes agricultural data. Within thirty days of a request, the fiduciary must disclose the total revenues it derived from the producer's data over the preceding three years.

4. **DUTY TO ACCOUNT.** The fiduciary must maintain complete and accurate records of all data transactions involving each producer's data for not less than seven years; must provide a full written accounting of those transactions within sixty days of a written request; and must render quarterly statements to each producer showing all transactions and compensation paid or owed during the preceding quarter.

### C. Non-Waiver and Burden of Proof

> **L.003 Amendment -- Non-Waiver Provision**
>
> THE FIDUCIARY DUTY ESTABLISHED BY THIS SECTION MAY NOT BE WAIVED, REDUCED, OR MODIFIED BY CONTRACT, TERMS OF SERVICE, END USER LICENSE AGREEMENT, OR OTHER AGREEMENT OR INSTRUMENT. ANY CONTRACTUAL PROVISION PURPORTING TO WAIVE OR LIMIT THE FIDUCIARY DUTY IS VOID AND UNENFORCEABLE.

This non-waiver provision is critical. Every John Deere Operations Center user agreement contains provisions that purport to transfer data rights to John Deere. Under HB26-1270 as amended, those provisions are void on their face. The click-through agreement a farmer signs when registering for Operations Center cannot waive the fiduciary duty the statute imposes.

Additionally, in any action asserting a breach of fiduciary duty, the amendment places the burden of proof on the data service provider. The data service provider must prove by clear and convincing evidence that it acted in the best interests of the agricultural producer. This is a deliberately demanding standard -- the same standard applied in traditional fiduciary contexts such as trustee-beneficiary relationships.

### D. Breach of Fiduciary Duty as Independent Cause of Action

The L.003 amendment creates a separate and independent cause of action for breach of fiduciary duty, with the following remedies available to a prevailing producer or data owner.

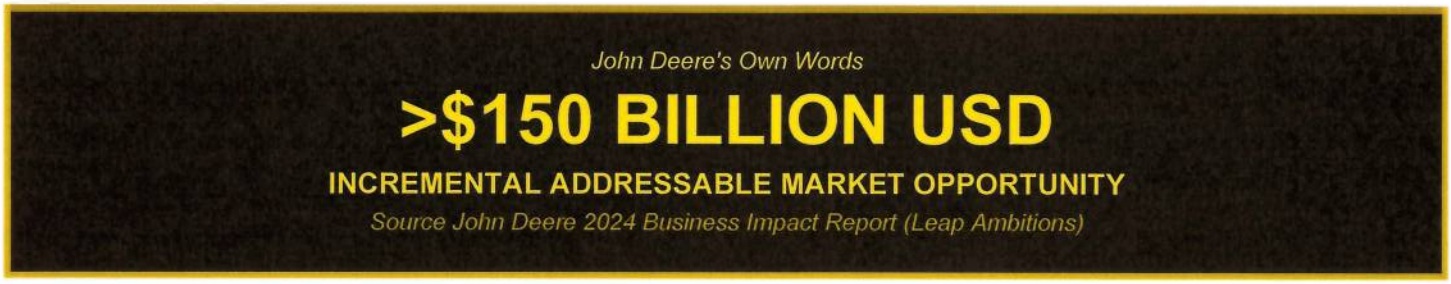
- Actual damages for all losses suffered as a result of the breach.
- Disgorgement of all profits received by the data service provider from the breach, without requiring the producer to demonstrate a dollar-for-dollar loss
- Imposition of a constructive trust over all proceeds derived from the unauthorized commercialization of the producer's data.
- Punitive damages upon a showing that the breach was willful, knowing, or in reckless disregard of the fiduciary duty.
- Injunctive relief, including preliminary injunctions and temporary restraining orders.
- Reasonable attorney fees and costs

The Colorado Attorney General is expressly authorized to bring actions on behalf of agricultural producers and may seek any of the above remedies plus civil penalties of not more than one hundred thousand dollars per willful violation. The statute of limitations for breach of fiduciary duty actions is six years from the date of discovery.

## E. Common Law Foundation

These principles are grounded in the Restatement (Third) of Agency, the Uniform Fiduciary Income and Principal Act, and applicable provisions of the Uniform Commercial Code governing dealings in agricultural goods. They are also consistent with the FTC's established authority to regulate unfair and deceptive trade practices under Section 5 of the Federal Trade Commission Act.

## VIII. The $150 Billion Question What Deere Admits and What Farmers Receive




This is not a number supplied by critics of John Deere. It is the number John Deere published in its 2024 Business Impact Report, under the heading "Leap Ambitions," as the total market opportunity it expects to capture from precision agriculture data services and connected technology. More than $150 billion. That is the value John Deere has assigned to the data ecosystem it is building on the backs of American farmers.

The combine documented in this testimony is one of 775,000 machines John Deere has connected to its data network as of fiscal year 2024. Those machines collectively operate across 455 million engaged acres. John Deere's own report confirms 17% year-over-year growth in the number of acres actively utilizing its technology services. The platform is growing. The value is compounding. And the farmers who generate every bit of that data are receiving nothing.

### A. The Math: John Deere Does Not Share with Farmers

| Metric | Value | Source |
|---|---|---|
| John Deere's stated addressable market | >$150,000,000,000 | Deere 2024 Business Impact Report |
| Connected machines (FY2024) | 775,000 | Deere 2024 Business Impact Report |
| Engaged acres (FY2024) | 455,000,000 acres | Deere 2024 Business Impact Report |
| Highly engaged acres | 125,000,000 acres | Deere 2024 Business Impact Report |
| Sustainably engaged acres | 197,000,000 acres | Deere 2024 Business Impact Report |
| YOY growth in engaged acres | 17% per year | Deere 2024 Business Impact Report |
| Target connected machines by 2026 | 1,500,000 machines | Deere 2024 Business Impact Report |
| Target engaged acres by 2026 | 500,000,000 acres | Deere 2024 Business Impact Report |
| Imputed value per engaged acre | ~$330/acre | $150B / 455M acres (Graceful Solutions calculation) |
| Imputed value per highly engaged acre | ~$1,200/acre | $150B / 125M highly engaged acres |
| Imputed value per connected machine | ~$193,500/machine | $150B / 775K machines |
| Amount of this value returned to farmers | $0 | Current John Deere policy |

These figures require some explanation. John Deere's $150 billion figure represents the total incremental market opportunity it has identified from precision agriculture -- the combination of data services, software subscriptions, predictive maintenance, agronomic analytics, and connected technology that it plans to deliver through its Operations Center and connected machine ecosystem. Every dollar of that opportunity is built on data that farmers generate, transmit at their own expense through connectivity services they pay for, and store on John Deere's servers -- servers the farmer does not own and cannot fully access.

### B. Five Reasons This Value Belongs to Colorado's Farmers

John Deere's $150 billion opportunity is not the result of John Deere's investment alone. It rests on five things that farmers, not John Deere, have provided.

5. The farmer paid for the machine. A John Deere S690 Combine sells for between $600,000 and $750,000. The farmer financed it, insured it, and maintained it. The machine is the sensor array that generates the data. Without the farmer's investment, there is no data.

6. The data represents an accumulation of the farmer's expertise and decisions. Every setting on the combine -- threshing clearance, sieve clearance, cleaning fan speed, harvesting ground speed -- reflects decades of agronomic knowledge embedded in the operator's choices. The machine records the farmer's expertise. That expertise belongs to the farmer.
7. The data was generated on land the farmer owns or rents. The GPS coordinates, field boundaries, and location data in those 17,140 pings represent the farmer's land. Real property rights attach to that data. A farmer's title to the land carries with it a reasonable expectation of ownership over the economic value generated on that land.
8. The farmer paid for all of the inputs and genetics that create the production events being measured. The yields, the crop types, the harvesting efficiency -- these reflect seed genetics the farmer purchased, fertilizer the farmer applied, crop protection products the farmer bought. The data is a record of those investments. The farmer made those investments.
9. The farmer paid for every gallon of fuel and every pound of DEF that keeps the machine running and the telematics transmitting. The 0.686 gallons per hour average fuel rate documented in this testimony -- multiplied by 90 hours of harvest operation -- represents approximately 62 gallons of diesel purchased by the farmer to generate the data John Deere is monetizing.

### C. What Deere's Own Report Says About Operations Center

John Deere's 2024 Business Impact Report is unusually candid about what Operations Center does with farmer data. The report states that John Deere uses Operations Center to "engage closely with farmers to gain insights into low-carbon fuel markets." It describes how "data from John Deere Operations Center also drives agronomic decisions." It confirms that the company is developing a "Solutions as a Service" business model with "usage-based license fees" -- meaning farmers pay again after paying for the machine, to access the insights derived from their own data.

The report boasts 455 million engaged acres -- but does not mention that the farmers on those 455 million acres receive none of the $150 billion in value that John Deere is harvesting from their operations. It celebrates 17% year-over-year growth in "acres actively utilizing our technology services" -- but does not disclose that every acre of that growth is fueled by farmer-generated data that John Deere collects, retains, and commercially exploits without compensation or consent.

HB26-1270 does not seek to destroy this business model. It seeks to ensure that the farmers who make it possible are treated as partners, not sources. The bill's fiduciary duty provisions, its data ownership rights, and its private right of action are not radical interventions -- they are the basic property rights protections that should have been in place from the beginning. The Colorado Committee of Reference Amendments strengthen every one of these protections. This Committee should pass this bill.

## IX. Conclusion

The evidence presented in this testimony -- 17,140 location records tracking a single combine across 29 harvest days, 53 machine parameters logged in granular detail, an Operations Center profile still bearing a prior owner's name, and a growing list of critical data points John Deere collects but does not share -- tells a consistent story. John Deere has built one of the most sophisticated agricultural surveillance systems in history, funded entirely by the farmers it monitors, for its own commercial benefit.

The farmers of this state deserve better. They deserve the right to own what they generate, to access what is collected about them, and to benefit from the data that flows from their labor and investment. Colorado House Bill 26-1270, the Agricultural Data Ownership and Market Competition Act, provides a carefully calibrated, legally sound framework for achieving that outcome.

I am grateful for the opportunity to present this testimony, and I remain available to answer questions, provide additional analysis, or assist in any technical review of the legislation. The work of protecting American farmers from agricultural data exploitation is urgent, and I am glad to be a partner in that effort.

Respectfully submitted,

**Willie Cade**
Chief Executive Officer, Graceful Solutions LLC
Board Member, Repair.org
*March 11, 2026*

# EXHIBITS INDEX

The following exhibits are incorporated into this testimony by reference. Physical or digital copies are available upon request.

| Exhibit | Description | Source | Date |
|---|---|---|---|
| Exhibit A | Location History Data -- S690 S/N 1H0S690SAH0795045, October 2025, with Pivot Table Analysis | MyJohnDeere Operations Center | Oct 1 -- Oct 29, 2025 |
| Exhibit B | 2025 Harvest Season Machine Data Report -- S690 S/N 1H0S690SAH0795045, Avg/Min/Max Summary | MyJohnDeere Operations Center | 2025 Harvest Season |
| Exhibit C | "Becky Op Center" -- Operations Center Account Data, Prior Owner Configuration | MyJohnDeere Operations Center Account Export | Jan 27, 2026 |
| Exhibit D | Comparison of Operations Center Data Parameters Provided vs. Parameters Withheld | Analysis by Graceful Solutions LLC | March 11, 2026 |
| Exhibit E | [To Be Provided] John Deere PRO Service Data vs. Operations Center Data Comparison | Field Demonstration Documentation | Pending |
| Exhibit F | [To Be Provided] John Deere Privacy Policy and Data Terms of Service -- Relevant Provisions | John Deere & Company | Current |
| Exhibit G | Colorado HB26-1270 full bill text as introduced -- leg.colorado.gov/bills/HB26-1270 | Colorado General Assembly | 2026 Legislative Session |
| Exhibit H | John Deere 2024 Business Impact Report -- Full Document (source of Appendix A Leap Ambitions data) | Deere & Company (publicly available at deere.com) | January 16, 2025 |
| Exhibit I | HB26-1270 Committee of Reference Amendments L.001, L.003, L.004, L.005 -- Agriculture, Water & Natural Resources Committee | Colorado General Assembly, LLS Christopher McMichael x4775 | 2026 Legislative Session |

## Note on Data Gaps and Continuing Investigation

This testimony reflects data available through the MyJohnDeere Operations Center as of the date of preparation. The investigation into John Deere's data collection and disclosure practices is ongoing. Additional exhibits may be submitted as further documentation becomes available, including but not limited to

- NOx sensor data retrieved directly from the machine's Electronic Control Units via diagnostic interface.
- John Deere PRO Service software documentation demonstrating parameters available to dealers but not to farmers.
- Comparison of Operations Center data availability across different John Deere equipment models and subscription tiers.
- Documentation of commercial products or data services offered by John Deere that relies on farmer-generated machine data.
- Evidence relating to data access restrictions imposed by John Deere's End User License Agreements and Terms of Service for Operations Center

The undersigned is committed to providing the most complete and accurate evidentiary record possible and welcomes the opportunity to supplement this testimony as additional information is developed.

# APPENDIX A John Deere 2024 Business Impact Report -- Leap Ambitions

The following is a faithful textual reproduction of the key data from the "Leap Ambitions" section of John Deere's 2024 Business Impact Report, published January 16, 2025. This section contains the >$150 billion market opportunity figure cited in Section VIII of this testimony. The full report is publicly available at deere.com and has been submitted as Exhibit H.


### 2024 Actuals vs. 2026 and 2030 Targets

| Leap Ambition Goal | Target Year | 2024 Progress |
|---|---|---|
| **Connect 1.5 million machines** | 2026 | 775,000 connected machines (51.7% of target) |
| **Reach 500 million engaged acres** | 2026 | 455 million engaged acres (91.0% of target) |
| **50% of engaged acres are highly engaged** | 2026 | 125 million highly engaged acres (27.5%) |
| **75% of engaged acres sustainably engaged** | 2030 | 197 million sustainably engaged acres (43.3%) |
| **Deliver Solutions as a Service business model** | 2030 | In active deployment (usage-based license fees) |
| **Grow enterprise recurring revenue to 10%** | 2030 | Target announced; progress toward this goal |
| **50% reduction in operational CO2e (Scope 1 & 2)** | 2030 | 28% reduction achieved (FY2024 vs. 2021 baseline) |
| **30% reduction upstream/downstream CO2e (Scope 3)** | 2030 | 19% reduction achieved (FY2024 vs. 2021 baseline) |
| **50% grade management adoption** | 2026 | 53% adoption of eligible machines (target met) |
| **100% Intelligent Boom Control adoption** | 2026 | 87% adoption of eligible machines |
| **85% precision roadbuilding solution adoption** | 2026 | 87.6% adoption (target met) |

### Connectivity Highlights from the 2024 Business Impact Report

The following statements are drawn directly from the Leap Ambitions and Connectivity sections of the John Deere 2024 Business Impact Report

- John Deere reported year-over-year growth of 17% in the total number of acres actively utilizing its technology services.
- The Operations Center platform is described by John Deere as "foundational to seamless workflow plans from trusted advisors, live monitoring of logistics, and the storage of all data in one place for analysis -- operational, agronomic, and economic."
- John Deere confirmed its JDLink telematics system captures machine data and uses it to "show efficiency gains to customers" -- gains that are monetized through premium service tiers.
- The company stated its goal is to make John Deere Operations Center "the operating system on the farm," with plans to extend it to Small Ag & Turf, earthmoving, and roadbuilding.
- John Deere reported using farm data to "engage closely with farmers to gain insights into low-carbon fuel markets," demonstrating that farm data is being used for market intelligence beyond agricultural operations.
- The "Solutions as a Service" model charges "usage-based license fees" -- meaning farmers pay again to access analytical products derived from the data their machines already collected and transmitted.

## Financial Performance Context

| Financial Metric | FY2022 | FY2023 | FY2024 |
|---|---|---|---|
| **Net Sales and Revenues** | $52.577 billion | $61.251 billion | $51.716 billion |
| **Net Income (attributable to Deere & Co.)** | $7.131 billion | $10.166 billion | $7.100 billion |
| **Diluted Earnings Per Share** | N/A | N/A | $25.62 (2nd best in company history) |
| **Cash Returned to Shareholders** | Part of 76% 3-yr avg. | Part of 76% 3-yr avg. | $5.6 billion (81% of op. cash flow) |
| **Dividends Declared Per Share** | $4.36 | $5.05 | $5.88 |

**The Graceful Solutions Analysis** John Deere's $51.72 billion in net revenues for FY2024 was generated while 455 million acres of farmer-generated data fueled its precision agriculture platform. Its target of $150 billion in incremental addressable market opportunity from that platform represents a value creation claim of approximately $330 per engaged acre. The S690 documented in this testimony operates on that platform. Its owner contributed 90.1 hours of harvest data, 17,140 GPS pings, and 53 streams of machine intelligence to John Deere's data network. The compensation received by that farmer for this contribution is zero dollars. This is what HB26-1270 is designed to correct.

*Source John Deere 2024 Business Impact Report, published January 16, 2025. Available at https//www.deere.com/assets/pdfs/common/our-company/sustainability/data-book-2024.pdf | All figures are as reported by Deere & Company and have not been independently verified by Graceful Solutions LLC. Submitted as Exhibit H.*