

ow much is your e-log data worth? By one count, a discount offered by Progressive Insurance, it knocks off an average of \$1,384 from premiums of users willing to share data from their electronic logging devices. If other insurers have similar offers, they haven't made them known widely, though one insurer confirms to Overdrive it's moving in similar directions.

Behind-the-scenes interest among ELD vendors and other parties in drivers' location and driving behavior, among other data recorded by ELDs, raises questions of how to control the data and who should profit from it.

"It's kind of the classic move now in all sectors," says Karen Levy, a sociology professor at Cornell University, whose research concentrates on data privacy and technology and who is penning a book on the ELD mandate. "The data becomes a currency itself," she says. "It obviously has value to the people purchasing it, and none of that is accrued to the people producing it."

By agreeing to terms of service with an ELD provider, customers often grant permission for data sharing, possibly without realizing it. The providers can use the data for customers' benefit, such as by helping carriers address detention problems by offering them analytics on dock delays. However, providers also are monetizing the data in other ways, such as selling it to third parties or using it to further other business interests of their own.

"Are you surprised? I'm not," says David Owen, head of the National Association of Small Trucking Companies, about the demand for ELD data. "We've turned the world over to technocrats."

Among 14 ELD providers - serving more than 80 percent of the total market, based on Overdrive research - interviewed or surveyed by Overdrive, none admitted selling ELD-derived datasets, though at least one has a user agreement that allows it by default. Four declined to answer questions on the topic.

Yet there's no doubt that the data sharing is off and running, whether as an outright sale, as a company's spinoff product or as part of a new joint venture. Many data-share applications are freight-related - often load matching and location tracking and aggregate data for anonymity.

Data firm FreightWaves purchases data from ELD suppliers and carriers, says Daniel Pickett, a data scientist. He works on the company's Sonar product, a data aggregation dashboard that details freight rates, fuel prices and more.

The provider of the Trucker Tools smartphone app and Smart Capacity load-matching service has spoken of efforts to leverage location data to track dock delays. Trucker Tools also has integrated more than one ELD provider's devices with its services for the purposes of using the ELD to power its tracking service.

KeepTruckin, provider of an ELD popular among owner-operators, is using its customers' ELD data and a brokerage acquisition to expand into freight matching and related services, including detention-time monitoring.

The BigRoad ELD provider operates a load-board-like service called BigRoad Freight, as does Konexial with its GoLoad service in partnership with a transportation management software provider for shippers.

Load board provider Truckstop. com is building data connections with major ELD suppliers to its carrier customers and has partnered with the Dock411 facilities information and review service. Many other load-tracking technology providers have integrated with ELD systems.

FleetOps was founded with the intention of partnering with ELD/ telematics providers, assuming that "a lot of them will need some solution to help them extract additional

Data sharing practices among leading providers of ELDs to owner-operators

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Provider	Sells or shares data?	Uses internally?	Opt-out/opt-in *
Blue Ink Technology	Never sells	Yes, to improve the product's functionality	Sharing requires customer opt-in
RoadLog Continental VDO RoadLog	Never sells; terms allow for sharing of anonymized data	Yes, to help develop new products	Sharing requires customer opt-in
GARMIÑ Garmin	No	No	N/A
GEOTAB Geotab	Not currently selling; terms allow for sharing of anonymized data	Yes, to help develop new products	Opt-out not available
J. J. Keller & Associates, Inc. Since 1983 J.J. Keller	Never sells; terms allow for sharing of anonymized data	Yes, to improve the product's functionality	Opt-out available at customer request
KEEP TRUCKIN	Never sells; terms allow for sharing of anonymized data	Yes, to help develop new products	Opt-out available at customer request
M)'20 Konexial	Not currently selling or sharing; terms allow aggregating of anonymized data	Yes, to improve the product's functionality	Sharing requires customer opt-in
Rand McNally	Not currently selling; terms allow for sharing of anonymized data	Yes, to improve the product's functionality	Opt-out not available
TRANSFLO [®] Transflo	Never sells	Yes, to improve the product's functionality	Sharing requires customer opt-in



Regarding ELD data policies, Overdrive attempted to survey 14 ELD providers, representing those used by significant percentages of readers of Overdrive and sister fleet publication Commerical Carrier Journal, based on a late 2018 reader survey. As shown in this chart, none of the providers that answered questions were engaged in direct sales of individual customer data, but many do share aggregated, anonymized data with third parties and employ such data internally in the development of new products. Trimble (formerly PeopleNet), Omnitracs, BigRoad and Verizon Connect (owner of the former Fleetmatics, Telogis) declined to answer the questions in the survey, while Samsara did not respond to inquiries. See further points of comparison among the providers via OverdriveOnline.com/eld-data.

st An opt-in policy refers to a situation where a user requests that the ELD provider share often nonanonymous information with a third-party service, such as a management system, to enable expanded functionality. An opt-out policy allows users to exclude their data from an ELD provider's internal use or its sharing of data in any form, including anonymous, aggregated information.

A GOLD RUSH FOR ELD DATA



dollars from existing customers," says Chris Atkinson, chief executive officer. The company's technology underlies the BigRoad Freight load-matching offering.

On the insurance front, where Progressive is leading the way in using ELD data by discounting insurance premiums, the insurer views data on an individual level, offering owner-operators and small carriers discounts of between 3

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and 18 percent on premiums.

Owner-operators voluntarily submit their ELD data, usually in concert with their ELD supplier, via a one-time file transfer, so Progressive does not access ELDs directly. Dave Lubeck, a business consultant for Progressive, says the company looks at the data only once a year to make a determination about insurance premium discounts.

However, a concern about an insurer getting such granular behavioral data is that it has the potential to "expose the vulnerabilities" of an individual driver or carrier and increase premiums, Atkinson says. "That's where you don't want things to go," he says. "We always want these things to work for us, not against us."

Rishi Arora, a product development manager for Progressive, says the company will reassess operators' discounts each year, potentially rolling back any premium discounts if driving behavior worsens. But drivers still will receive the 3 percent discount off their baseline premium for submitting their data, Arora says.

In Canada's Ontario province, where Atkinson lives, it's illegal for insurance companies to use telematics data to raise rates, he says, but not to reduce rates.

In the United States, "there isn't anything limiting the use of data" to raise rates, says Pete Frey, director of commercial lines telematics for Nationwide Insurance. State insurance commissions approach insurers' use of telematics-derived data in different ways, he says. As long as companies are "clear and transparent in how we're using" customer data, most states, Frey believes, will continue to see telematics data "as a way to improve safety and be fair and equitable."

That's how Frey's company views data derived from ELDs, cameras and other in-cab devices. Use of such behavioral driving data to raise premiums "would be extremely contrary to the purpose of telematics at Nationwide," he says. "We're thinking about ways to reduce costs" for customers and the insurer.

Insurers have approached Trimble (formerly PeopleNet), one of the nation's largest ELD providers, about acquiring aggregate and individualized ELD data, says Eric Witty, vice president of products. But the company will provide such data only if customers sign a data-sharing agreement, he says. Customers would define access limits, such as what data points to share, but so far "we haven't enabled any of those integrations," Witty says.

Witty sees "risk assessment" value for insurers and carriers in sharing

"There isn't anything limiting the use of data,, to raise insurance rates.

— Pete Frey, director of commercial lines telematics for Nationwide Insurance

ELD data. "The incentive for carriers is to get lower premiums."

The use of telematics data generally remains in its infancy in the commercial vehicle market, says Jeff Moseler of Michigan-based Navigator Truck Insurance Agency. Outside Progressive's program, he's not seen commercial liability insurers in trucking connecting premium rates to telematics-derived driving data — not directly, in any case.

"If you have a driver scorecard system," Moseler says, "what a lot of agencies and insurers are working on is a way to take the telematics data and combine it with other resources like the CSA (Compliance, Safety, Accountability) record of inspections and violations, and score the drivers so you know who the

ones are that are causing their problems and have a policy to correct the behavior."

With such a program in place, they say, the underwriting process will be more accurate and potentially reduce rates. Moseler likens it

to how insurers treat carriers' use of camera systems. "They're not actually looking at video, but they are asking, 'What type of camera programs do you have in place? Forward- and/ or rear-facing? What's your policy on that?" and pricing accordingly.



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BUT PRACTICES VAR

Leading ELD providers interviewed by Overdrive agree that carriers and drivers jointly own ELD data. A one-truck independent would be the sole owner. Customer privacy comes first. Beyond that, beginning with customer signups, there's not much consensus in how providers handle ELD data.

"For the purpose of providing services, the [ELD] provider can use that data," says Chris Atkinson, chief executive officer for FleetOps, whose freight-matching technology underlies the BigRoad Freight loadmatching service. "That's usually what you're signing off on in terms of service agreements."

An ELD provider that's committed to integrity, some industry watchers suggest, will make obvious to potential customers any secondary or outside use of their data that's granted through the service agreement. Likewise, the company would give customers a conspicuously simple way to opt out of unnecessary data sharing — or, ideally, prohibit all data sharing unless the customer takes the initiative to opt in.

Konexial requires opt-in permission for services beyond its smartphone-based ELD product, such as the company's GoLoad freightmatching platform or its GoFuel program, says Ken Evans. The GoLoad service leverages ELD data to determine rates, available capacity, truck location and more.

Carriers "sign a separate agreement allowing us to use the data they own for those services," Evans says. If a carrier doesn't opt in, "we don't share any driver data," he says. Konexial's terms of service allow for aggregated, anonymized data to be shared or sold, though the company currently isn't doing so.

J.J. Keller's Encompass ELD and some other ELD providers take a similar opt-in type of approach.

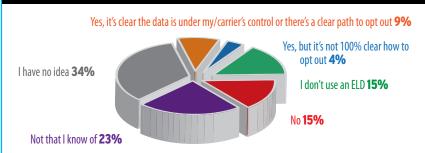
Old Time Express Operations Manager Mark White says his small fleet's agreement with Omnitracs, provider of the ELDs/onboard communications units the fleet has used for years, states his data will be kept private. He says he has no reason to doubt that, but Omnitracs has

terms of service.

BigRoad's terms of service allow direct sale or sharing of customer ELD data, with relatively few spelled-out restrictions.

KeepTruckin's boilerplate language requires carrier users to accept internal use of their data for

Can you opt out of sharing data for ELD provider's internal use?



Though concern exists over data connections between carriers' ELDs and third parties such as trackingtechnology providers, it's ELD companies' internal use of data for other purposes that's more often gotten the attention of truckers. Among poll respondents who use an ELD, more than half reported no knowledge of clear ways to opt out of such internal use.

leaned on user data in developing products upsold to the user base.

"They just keep trying to improve the physical product in my truck," White says, such as offering a fuel management program.

User agreements ultimately dictate what controls companies have over sharing data. That includes when it's anonymized (stripped of features that can connect to a particular company or individual) and/or used in aggregate (in combination with other data), as in an hours of service benchmarking tool from Omnitracs that White mentioned, though he doesn't subscribe.

Some ELD providers – such as Konexial with its My20 ELD, Blue Ink Technology with its BIT and Garmin with its eLog - confirm that data won't be shared or used externally outside of what's required for the product to function. Other companies are more liberal with their

the development of new products and services, with some exceptions in custom contracts, notes Shoaib Makani, KeepTruckin CEO. The data the company's using is deidentified and used only as part of aggregated data sets. "Privacy is paramount," Makani says. Users can opt out of data usage by direct request to support@keeptruckin.com.

KeepTruckin has applications that work in concert with third-party systems — transportation management software vendors, fuel card providers, safety consultants and an insurer. Users agree to share data with them on an opt-in basis, which is required if they want to use the applications.

However, Makani says, the company has yet to share customer data with a third party without user knowledge. He acknowledges that in the first six months after KeepTruckin bought a broker, KeepTruckin customers were not

informed of the broker's access to aggregated datasets, useful in selling to shippers.

Geotab's terms allow for aggregated, anonymized data to be used and shared. Most sharing is fed back to the entire universe of customers in the form of a variety of benchmarking tools that are parts of their service, says Dirk Schlimm, executive vice president. "The interests of our fleet [or owner-operator] customer come first," Schlimm says. "We never sell [individualized] data."

Anonymized and aggregated data nonetheless also may go to third parties. Geotab works with universities, municipalities and higher-level transportation authorities to help them prioritize road improvements and enhance safety. Before deciding whether to provide data in such instances, an internal committee discusses whether such sharing will benefit the customer who owns the data, Schlimm says. A vetting service provides quality assurance in the anonymization and aggregation.

Users cannot opt out of sharing anonymized data for aggregation with Geotab, part of the reason the company puts so much focus on making certain any sharing with third parties is a value to customers. While it doesn't do so today, Schlimm couldn't rule out selling access to various products built on aggregated user data in the future.

J.J. Keller's Encompass ELD terms of service indicate that data sharing could include "a third-party company that performs a service function for us," says Paul Schwartz, vice president of technology solutions. "However, we do not currently use a third party for our ELD or Encompass services."

Aggregated, anonymized data, however, may be used to improve its own products and services or to "share learning or trends that can help the industry improve safety and compliance." Users, Schwartz says, are free to opt out of any aggregating

Missing reins in an emerging marketplace

Electronic logging device providers have no legal restrictions on how they aggregate and use data generated by carrier use of their products, nor on how they distribute it to other companies.

Congress has not addressed such practices. Privacy and sharing issues involving ELD data fall outside the Federal Motor Carrier Safety Administration, whose primary concern is safety. Unless an ELD vendor violates its own service terms regarding data handling, those issues also are outside the jurisdiction of the Federal Trade Commission.

Regulation of this area could emerge from the West Coast, where last June then-Gov. Jerry Brown signed into law the California Consumer Privacy Act. Its sweeping regulations add transparency to what data is being collected by technology companies and how it's being used. It also addresses how consumers can opt out of unwanted data sharing, request seeing the data collected on them and even demand deletion of their personal data. It's the first law of its kind in the United States, though it mostly affects California residents.

The European Union in 2016 enacted similar laws, the General Data Protection Regulation, designed to protect individual privacy. At the U.S. federal level, there's no data protection mandate, despite high-profile examples of companies mining user data and selling it.

"Facebook is expecting a \$3-to-\$5 billion judgment about how they protected or didn't protect customers' identities," says broker Jeff Tucker. "A lot of the stronger regulatory guidelines and/or court cases that end up changing business practices happen" well after the actual infringement upon consumers.

Instead of regulating ELD data specifically, "personally identifiable information should be regulated" uniformly for all industries, says Doug Schrier, a vice president for ELD provider Transflo.

Until regulations, legislation or court cases set guidelines for data privacy, "it's kind of 'what you sign up for is what you get," says Eric Witty of ELD supplier Trimble. "If you don't read the fine print in an agreement you're signing," you might be giving a provider the right to freely share.



Tracking-tech providers see new uses of location data

Location data is some of the most valuable output from electronic logging devices, driving tracking services to make deals with ELD providers.

The five-year-old Project44, which serves large brokers, thirdparty logistics providers and shippers, is one that's looking to integrate its location service with as many ELD providers as possible.

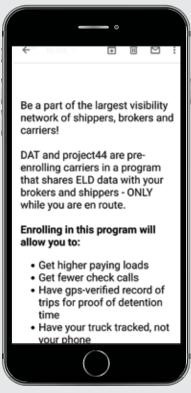
Vernon O'Donnell, the company's chief customer officer, described still ongoing talks over ELD integration with DAT not as a direct route toward better freight, even though the emailed solicitation on this page touts "higher paying loads." Instead, he stresses the integration as a way for truckers to opt in to Project44's tracking service when pulling a load booked through the board with a broker using the service.

The ELD then would provide the location data connection between the carrier and the customer broker/shipper. Information on hours of service or other unrelated data would not be shared.

Trucker Tools and Descartes Macropoint have leveraged ELD location data further. They've allowed for a connection to truckers' ELDs to feed location and other data into algorithms to suggest load matches from brokers on the other end of the service.

Macropoint's freight co-op allows truckers to share their availability for loading, and the company's integration with more than 100 ELD providers enables carriers to allow brokers and shippers a window into a load's location. Data privacy is handled on an opt-in basis.

If a new carrier is using an ELD not integrated with Macropoint's tracking system, that gets set up, says Brian Hodgson, a vice presi-



This email solicitation touts a tracking integration with the DAT load board. Given Project44's far-reaching tracking technology in different transportation modes, including across the Atlantic, the trucker who forwarded the email to Overdrive wondered whether this represented some kind of "new world order" for spot market

dent. If the carrier's using an ELD already set up, "there's a permissions process through which the carrier opts in to share ELD data with that customer."

How some customers then use any historical data is centered primarily around en-route location and timing, the ability to predict transit times on particular loads, etc. Descartes Macropoint itself doesn't do much now in terms of taking carrier data and layering aggregated, anonymized analytics on dock time, time in transit for particular lanes and more for individual customers, but that's coming, says Hodgson.

Load board Truckstop.com, purveyor of its own load track functionality, also is headed toward a "predictive" matching capability, says Brent Hutto, chief relationship officer. The company is creating data connections with the ELDs most commonly used by Truckstop.com carriers.

"ELDs provide another piece of the puzzle" when it comes to information that can be brought to bear in matching freight (hours available), yet "you still have to have freight for that information to be valuable."

Hutto describes eventual integration of drivers' hours of service status as a way to help put load offers in front of drivers who not only are close enough to the load but also have the available time to meet deadlines.

of their anonymized data with others, but it's something the customer has to request explicitly.

Even with user agreements that spell out relationships and data uses, some questions remain, says

Jeff Tucker, CEO for broker Tucker Company Worldwide.

Owner-operators, drivers and carriers are expected to trust the companies that say they're de-identifying the data and the technology that's

anonymizing the data. "Where does the data go prior to becoming anonymized?" Tucker asks. "Who has it? Who destroys it? How do I know who destroys it? How do I know it's destroyed at all?"