

Fleet, Transportation and Mobility Industry Pulse Analysis (Vol. 1)

Reviewing the impact of COVID-19 and recovery efforts

GEOTAB

Acknowledgements

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About Geotab

Geotab is advancing security, connecting commercial vehicles to the internet and providing web-based analytics to help customers better manage their fleets. Geotab's open platform and Marketplace, offering hundreds of third-party solution options, allows both small and large businesses to automate operations by integrating vehicle data with their other data assets. As an IoT hub, the in-vehicle device provides additional functionality through IOX Add-Ons. Processing billions of data points a day, Geotab leverages data analytics and machine learning to help customers improve productivity, optimize fleets through the reduction of fuel consumption, enhance driver safety, and achieve strong compliance to regulatory changes. Geotab's products are represented and sold worldwide through Authorized Geotab Resellers.

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Introduction

Every industry is experiencing various impacts as a result of COVID-19, due to work from home orders, essential versus nonessential businesses and service designations, and restarting operations. The purpose of the Industry Pulse Checks is to provide insight into the operations and recovery of 24 specific industry, government and associations relevant to the fleet, transportation and mobility segments. The core focus is directly related to the COVID-19 impact and recovery on their overall company, operations and the industry at large which they represent.

Taking the heartbeat of the fleet, transportation and mobility sectors

For our analysis, we contacted global bellwether clients from across a range of industries to better understand how their business, suppliers, customers and competitors have been impacted and what recovery efforts and impacts are occurring. This first summary is focused on three key areas:

- Business impact
- Operational impact
- Financial impact

The objective is specific to consulting with these industry bellwether clients to gain insight and provide updates on how businesses relative to the fleet and mobility industry are impacted and rebounding. We know full recovery could take many months if not years for some industry segments to fully rebound. The analysis from these checks will aid in identifying needs and concerns on both a national and local level. This will be a sharing of information and valuable insights from customers, providing metrics and analytics relevant to these industries.

The information gathered will help answer questions like:

- How is the industry segment rebounding?
- What trends are occurring?
- How are industry segments being directly impacted?

What we are hearing	What this means
No company travel and unsure when it will return.	More webinars, less face-to-face meetings, and fewer miles driven.
Cost cutting measures put in place for 2020-2021.	Fleet utilization is critical: operate with less vehicles.
Implementing new corporate safety policies.	Need for technology to enable compliance.

Back to work

80% of our Fleet & Mobility community is back at work full time and 90% believe their company will survive, although they face major income loss.

Almost back to business as usual

Almost 80% of respondents believe business will return back to normal by Q4 2020 or Q1 2021.

^{*}Source: Global Fleet & Mobility Research by Nexus Communication May 2020

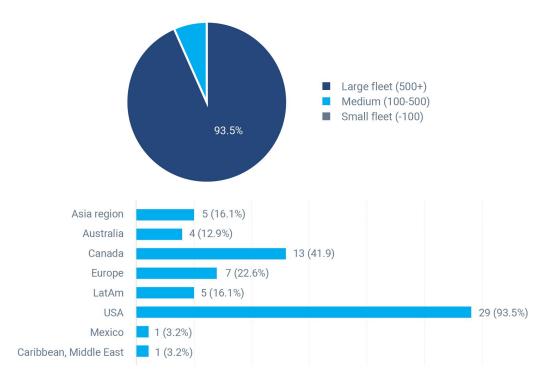
Industry impact analysis

For this analysis, we captured information from 18 of the 24 industry categories in time for this report to be published (noted in the chart below with an *). We consulted with several bellwether companies to provide insight and perspective on their company, suppliers and competitors. Where possible, those who participated in the study reviewed aggregated and anonymized insights to assist in summarizing the impact of the recovery.

Industry types

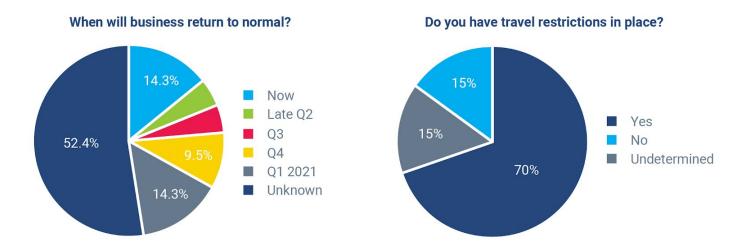
Agriculture	Healthcare*	Public Utility & Services*
Airline/Airport Supply Chain*	Hub & Spoke (Class 6,7,8)*	Rail*
Automotive Aftermarket*	Insurance*	Residential Services*
Construction*	Last Mile Delivery*	Retail Essential
Equipment Rental*	Long Haul Class 8*	Rideshare/Carshare*
Government — Federal*	OEM*	School Transport
Government - Local*	Oil & Gas*	SmartCharge-EV
Government — State/Provincial*	Owner Operator*	Supply Chain*

From the bellwether companies identified and who have participated in the study, all but one were fleets with 500+ vehicles. The majority of vehicles are operating in the U.S.

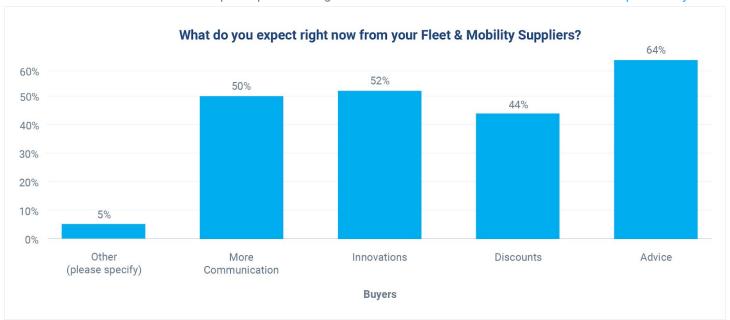


Although impact to each industry segment varies, key points remain relevant for all. The majority of Geotab fleet and commercial clients are at 80% normal operation compared to pre-COVID-19 data. In conversations with survey

participants, **52.4% were unsure of when their business would be operating at "normal" levels**. We heard consistently among our surveys, as well as industry surveys, that company travel has been restricted, **70% of companies have travel restrictions** through the end of 2020 and are unsure when that will change.



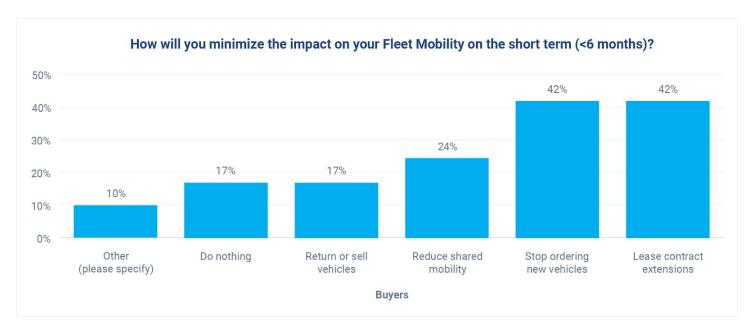
Additional analysis conducted by Nexus Communication in early May indicates that today, clients are wanting advice and innovation above all else from their suppliers, followed by more communication (see chart below). Conversations, such as the ones conducted for this analysis, enable our partners to have these meaningful discussions, to be consultative with the data and offer advice and innovation, especially during these trying times. This same sentiment echoed across 38 countries and 600 participants during the Nexus Communication Global Fleet COVID Impact Study.



^{*}Source: Global Fleet & Mobility Research by Nexus Communication - May 2020

When Nexus Communication surveyed fleet and mobility buyers on how they intended to minimize the impact of

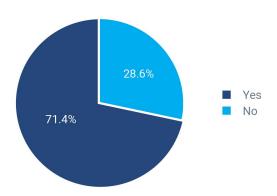
COVID-19 in the short term, it was a tie for extending leasing terms to keep existing vehicles and cancelling/not ordering new replacement vehicles (see chart below). We heard the same from the companies we surveyed during this analysis, along with uptime and utilization strategies.



^{*}Source: Global Fleet & Mobility Research by Nexus Communication - May 2020

Coinciding with the discussions with the bellwether companies, we introduced a COVID-19 Recovery Dashboard intelligence tool that depicts the level of utilization and compares it to normal activity prior to COVID-19 or and how the utilization (use of the vehicles/assets) have been performing since COVID-19. We reviewed the tool with 72% of respondents and nearly 71.4% of respondents said the data accurately depicted their fleet activity. In contrast, 28.6% did not feel it was representative as personal use had severely dropped and so had weekend travel.

Did the intel tool depict your fleet activity?

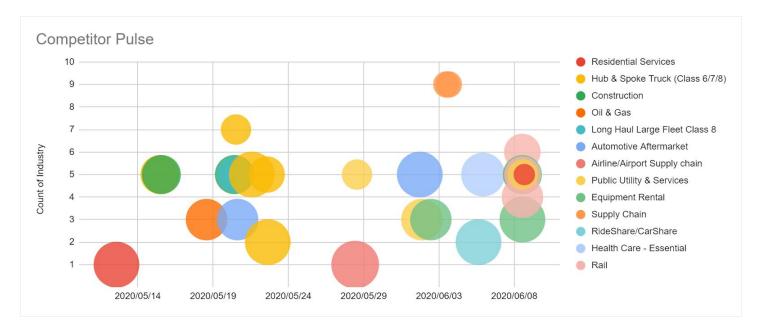


Where appropriate, we have included information from other industry sources to provide context to a particular segment or overall health of the fleet and mobility industry. When possible, we included the same survey questions to gauge the overall impact to the industry segments. Certain industries, such as Owner/Operator and Government provide an overall industry summary compiled from subject matter experts to give a collective voice to this segment.

Overall business impact

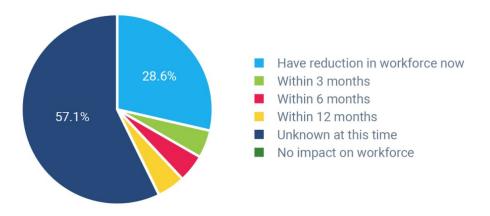
- 47.6% had significant **impact to their business**.
- 28.6% of respondents said they had little **impact to their business**.
- 43.3% of respondents said **competitors** have been significantly impacted.

The chart below depicts how respondents feel their **competitors have been impacted** (1 = little to no impact and 10 = significant impact), and over the course of several weeks not much has changed.

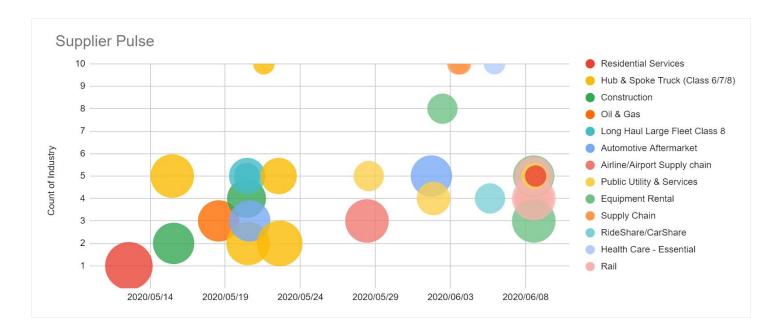


Overall operational impact

- 57.1% of respondents said it was unknown at this time if they would have additional **reduction in workforce** in the next 6 months.
- 28.6% of respondents said they are still experiencing some reduction in their workforce now.
- 6.7% of respondents said they had **no impact to their workforce**.
- 23.3% of respondents said they have had a significant impact from suppliers.
- 36.7 of respondents have had little to no **impact by suppliers**.



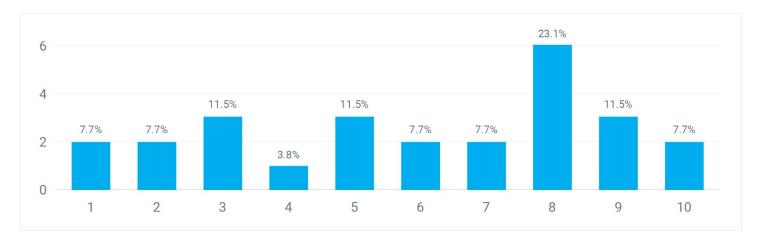
The chart below illustrates how respondents felt the impact from their suppliers (1= little to no impact and 10 = significant impact).



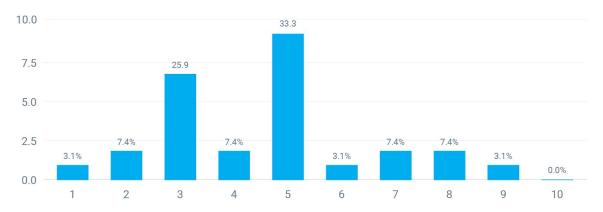
Overall financial impact

- 42.3% of respondents have had significant impact to their **customer base**.
- 26.9% of respondents had little to no impact to their customer base.
- 65.1% of respondents had little to no impact on pricing or services offered.

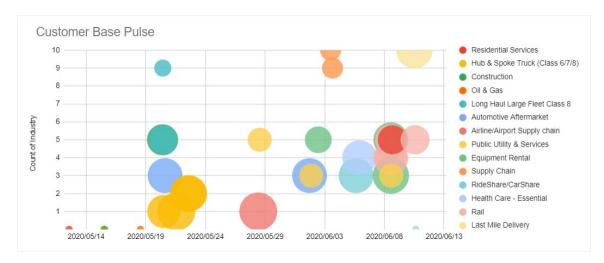
The graph below depicts the degree of impact to their **customer base** in which they serve (1=no impact and 10=significant impact).



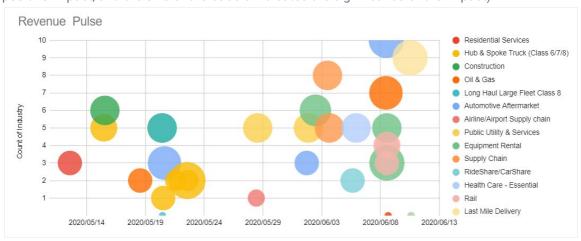
The image below illustrates impact the respondents felt relative to the **revenue on their business**: (1=no impact, 10=significant impact)



The chart below represents the industries surveyed on how respondents felt the customer **base** had positively or negatively impacted their business, (1 = negative impact and 10 = positive impact).



This chart explores how customers say COVID-19 has **impacted their revenue stream** (1 = negative impact and 10 = positive impact, and the size of the bubble indicates the significance of the impact).



Industry-specific impacts

Airport / Airline Supply Chain

Business impact: Air travel and operations have been one of the hardest hit segments with over 95% of airport travel decreased during the month of April according to CNBC news. Projections are this will be a long recovery and will take years to get back to normal travel pre-COVID-19, if that will happen at all. One comment suggested that business travel will forever be impacted and that face-to-face meetings will now be the exception.

Operational impact: Substantial lay-offs and workers continue to be on unemployment. Impacts from the airline industry all the way through supply chain (manufacturing and airport support services) are long-lasting with continued reduction in workforce and additional reductions expected for the remainder of the year. The supply chain is just as impacted with limited customers and need for service, catering, fuel, etc.

Financial impact: Financial impacts have been severe with nearly all airline travel being suspended to a large degree and drastic cancellations of pre-booked flights. The impacts have been felt globally. Short term concerns over how to protect employees as well as customers and implementing those new procedures will also have an economic impact, and airline services will have additional costs as a result of new processes for COVID-19 that will further hinder the industry recovery.

Automotive Aftermarket

Business impact: This industry took a direct hit from COVID-19 when a halt in commute took place along with minimal driving activity. Distance driven plays a big role in this industry whether new tires are needed or the windshields get broken. Now that states are opening up and people have started driving again, there is hope that recovery will be made soon. The way of doing business has also changed. This type of business requires face-to-face interaction but the companies are now trying to figure out how to sell their products over video calls or webinars. Fewer onsite visits are happening and more video and phone calls are taking place while recovering. The expectation is that all will be back to normal by the end of this year, however, it is also obvious that businesses will operate with less staff than before, doing less traveling and customer visits while trying to catch up for the losses. We did have some automotive aftermarket companies see steady sales during the shutdown, primarily in the auto parts divisions where B2B and B2C helped keep businesses afloat during the shutdown with little impact to their workforce.

Operational Impact: A significant amount of employees (as much as 50%), whether from the HQ or from the field, had been furloughed and positions had been eliminated. There is not much impact on the supply chain as the demand never exceeded the supply while pandemic was at high levels and businesses were slow. Operations teams have had to make changes in how their businesses operate, adding safety and cleaning measures for both the staff and the customers, extending the time spent for each job. New marketing activities needed to be considered, especially on the digital side to make sure that sales can pick up fast. Operations efficiency is the focus and getting the work done with the smallest fleet/teams available.

Financial impact: Significant reduction measures were taken right out the gate for cash reserve. Companies still seem to be healthy financially and taking cost cutting measures to extend their reserves. The focus will be on picking up sales activities while carefully monitoring expenses and efficiency. There are optimistic expectations in Q3 and Q4 for recovery while planning to bring employees back, forecasting and adjusting the company goals, restructuring operations on both field services and work from home positions. Although people started driving again, it is clear that companies are recalibrating to function in a new environment.

Construction

Business impact: The construction industry has been one of the few industries that has been able to maintain business and continue working during the COVID-19 crisis. Short term indications from companies surveyed all felt that short term has had little impact on the state of the business, but longer term is of concern as they complete existing contract work that has been keeping their workers employed and on the job site during this time. There are concerns for long-term with many factors such as supply chain disruptions, shortage of subcontractors and materials, and impacts of future contracts and work to bid coming to a slowdown to control expenses from other industries. A few key construction companies we talked to that are specific to construction with utility and telecommunications felt they were shielded a bit from the overall impacts to the construction industry. Residential and new commercial building construction is the most concern for the long term as we start to see weak project pipelines for the construction industry.

Operational impact: Construction companies across the globe are having to react and respond differently with their workforce during COVID-19. New policies have been adopted for both work crew traveling in vehicles and trucks together as well as on the worksite. Most companies we spoke to were monitoring the health of every employee, starting with temperature checks when arriving on the worksite and throughout the day. In vehicle sanitation, limiting the number of employees who travel together and mandating that PPE must be worn when in work vehicles traveling together, were new challenges. Company growth internationally will need to be reconsidered in regions as companies put more restrictions on foreign companies and travel.

Financial impact: Construction companies around the globe will experience decreased demand as their customer base, including governments, residential and commercial, as they face rising deficits, unemployment and slowed GDP growth. Some companies felt more at ease for the long term with a backlog of projects, but the pipeline forward is weak and it suggests construction companies will face a liquidity crisis if they have high levels of debt with low cash reserves. Smaller businesses and sub-contractors will also be heavily impacted by the scenario the construction market is in. Overall, the industry is concerned for the future with decreased demand, growing layoffs and reduced cash flow for the market.

Equipment Rental

Business impact: The COVID-19 situation has impacted the Equipment Rental industry in terms of overall rentals. There have been drops in rental utilization as the companies they typically rent to have suspended work projects. Some companies have closed branches in the harder hit areas. Normal activity has been significantly reduced and workers are feeling the lasting effects.

Operational impact: Equipment rental companies were plagued with equipment left on worksites during the shutdown which required time for their staff to get this equipment back. Travel is suspended for most companies through the remainder of the year, which will impact sales and new operations. Suppliers have been slow to respond due to shipping lag times but the equipment availability has not been impacted and their OEMs are still delivering on time. An additional reduction in staff is not anticipated for the remainder of the year.

Financial impact: All companies in this segment have experienced slowdowns in business primarily in heavily hit areas. The majority have stated that cash flow remained unhindered. Overall rentals are down but only slightly as it mostly depends on geography. Cutting back on expenses and carefully watching utilization of inventory will be a focus for the remainder of the year.

Government - Federal, State/Provincial and Local

Business impact: Government fleets have had a two-pronged response to this pandemic. Most State/Provincial/Local agency fleets (Police, Fire, EMS, DOT, and general service fleets) are operating at over-capacity in response to new COVID-19 related activities while others (DOE and school buses, parks & recreation) are shut down. Federal fleet activities seem to be largely unaffected although a disruption in OEM vehicle deliveries have resulted in significant challenges to leasing and rental operations (GSA).

Operational impact: While some government staff have transitioned to working from home, many are still commuting to work in order to keep essential government services open for the public. We have not seen, nor do we expect to see, any government layoffs, although a short to medium-term hiring freeze is likely. Longer term, we expect government operations to return to pre-COVID-19 levels.

Financial impact: Although existing government budgets have been negatively affected (mostly in the form of spending freezes), these effects have predominantly impacted our government prospects (existing customers have been largely unaffected). The larger concern is a widespread expectation that FY21 budgets will drop by 10-15% across all government agencies and departments, primarily in U.S., but this might be the case across most governments globally as we are yet to see the full impact to government budgets. This puts a renewed focus on ROI and cost-savings, and in particular the use of telematics to effectively manage towards these new budget reduction targets. This narrative has already resulted in a number of telematics mandates within government fleets, which will continue into 2021. Lastly, the team is working with some select customers to gain access to new emergency management funding (in response to COVID-19) from the federal government.

Healthcare

Business impact: Just four months prior to COVID-19, the International Monetary Fund (IMF) predicted positive economic growth for over 160 countries related to the Healthcare industry and its suppliers. Today, IMF is stating that over 170 countries will have a negative economic impact in 2020 due to the COVID-19 outbreak. The healthcare industry has been severely impacted across the globe in every way imaginable. The demand for essential workers and caregivers, as well as personal protective equipment and supplies, continues to surge around the globe. Impacts have been severe in both areas of COVID-19 related healthcare and non-essential healthcare. Most healthcare industry companies are anticipating a substantial decline in profit margins for the remainder of 2020. The impacts on healthcare and companies that supply them are varied by company, time and even geography. The Healthcare industry will have long term changes and reform to access and cost control, as well as technological advancements that will enable new philosophies and business models to be adopted, changing healthcare for everyone in the future.

Operational impact: No industry has been as essential as the Healthcare industry during this time. Not only are companies adding restrictive measures to protect healthcare workers, but COVID-19 has also taken a toll on the daily lives and mental health of so many companies in this segment. There is a heavy need across the globe for additional trained healthcare providers such as nurses and doctors. Long term impacts to healthcare agencies and suppliers will focus on the reprioritization of agendas and resources. Telehealth and other digital options have been implemented in nearly every company and agency and will likely change the future of how healthcare is provided, and have long-lasting implications to healthcare suppliers as well.

Financial impact: Both public and private healthcare, as well as the healthcare industry suppliers, have all experienced huge declines in revenue, with many seeing an 80% drop in non-COVID-19 related business, although many regions have started to reopen and provide non-COVID-19 services and appointments. In many hospital sectors, they have experienced short term operating losses which will cause cash balances to be completely depleted in a very short time if they haven't experienced it already. Companies that are investing in developing COVID-19 related solutions are likely to see a boost in their bottom line. However, those healthcare companies that are not related to COVID-19 measures will likely have

disruptions similar to those in other industries due to the pandemic situation. Suppliers to the Healthcare industry are experiencing reductions in revenue as well, but many indicated substantial savings in travel related costs as it tends to be an industry with high travel requirements.

Hub & Spoke (class 6,7,8) - Rental

Business impact: There was a significant impact to the business, but most companies we spoke to felt the impact could have been more severe to this industry than what it was. The rental market has taken the biggest hit and it will take some time for this segment to recover. Currently, the leasing segment overall is not great, but it is good and slowly recovering.

Operational impact: There have been a small number of layoffs, but for the most part, employees' hours were reduced, or employees were reallocated within the company. The biggest challenge currently is right-sizing their rental fleet with an already flooded used truck market.

Financial impact: From our discussions, regional and local companies that were struggling prior to COVID-19 are the hardest hit and in a prime position to be acquired. We have already seen one acquisition happen in the last 30 days. Many are in a wait-and-see mode. If we have hit bottom now, then the recovery will be quicker. But, if there is a second wave of COVID-19 that forces businesses to close later this year, it will be detrimental to this business segment. One of the surveyed companies indicated that the third quarter will be the "telling" quarter and most have done everything to control the impact but now they need to assess the damage. 2020 is the year to survive and 2021 will be the comeback year.

Insurance

Business impact: Overall, staff that manage claims show that vehicle activity has slowed down tremendously during the latter half of March and early April during COVID-19 and are only slowly recovering. With the percentage of vehicle activity in this sector in February ranging from 60%-78%, and dropping in early June to ranges of 29%-55% for fleet utilization. In addition, many companies in the Insurance industry saw a decrease in activity and distance driven from early March until the full shutdown of around March 16th, and experienced a 30% average reduction, which some are now starting to see normal activity rebound to pre-COVID levels. These levels are consistent with consumer vehicles – Farmers Insurance saw a 58% reduction in miles driven in the week of March 29 to April 4, compared to the previous week, according to Keith Daly, President of Personal Lines for Farmers.

Operational impact: According to <u>Property Casualty 360</u>, an online insurance industry magazine, the reduction in driving of personal vehicles has resulted in fewer claims for insurance companies across the board. The slow rebound to our customers in this space could be caused by both the need to isolate and work from home, but also the fact that accidents are down resulting in less demand for their services.

Financial impact: According to McKinsey in late April, the Insurance industry as a whole has been materially affected. Since the onset of the pandemic to the latter part of April it lost \$760 billion globally in market capitalization, the third highest among all industries. And while claims are down due to less driving, these cost savings by insurance companies are being offset somewhat by the fact that most insurers are offering payment relief, halting insurance cancellations, and providing partial premium refunds. According to an estimate released on April 11 by the Insurance Information Institute (Triple-I), U.S. auto insurers will return more than \$10 billion to their customers nationwide.

Last Mile Delivery

Business impact: Last mile delivery companies like Amazon and Walmart have seen an exceptional increase in business

due to COVID-19. Consumers are purchasing items at a greater rate than usual due to the lockdown. They are in constant communication with their supply chain to ensure timely product deliveries to keep up with demand. The demand for everyday items such as food, beverages, and household cleaners has seen more of an increase than for standard items like electronics.

Operational impact: The need for more drivers and assets has increased due to the volume of orders and deliveries the consumers are demanding since COVID-19 stay at home orders. Most of the companies in this segment have accelerated projects of business growth and have increased assets and employees during this time. Many of the companies anticipate the volume to level out as more states continue to slowly open. A recent article indicated that many last mile delivery companies are seeking to increase employment. In fact one company will employ over 100,000 new employees this fall to keep up with peak demand as they expect impacts from the COVID-19 pandemic to continue through the end of the year.

Financial impact: The financial impact has been positive due to the increase in business. There is an on-going investment to ensure the employees are staying safe. They implemented a global protocol to ensure all assets are sanitized after each driver leaves the assets. They are requiring all employees to wear personal protective equipment during the time they are on the clock.

Long Haul Class 8

Business impact: Overall, long haul fleets are showing true optimism for freight demand again in the past couple weeks since COVID-19 and its impact on fleet operations. The majority of fleets say they expect to see a continued increase of freight levels over the next 30-90 days, while only a very few mostly smaller fleets expect to see a decrease – a clear signal that carriers are seeing customers shuttered by stay-at-home orders begin to reopen and increase of freight shipped to replenish all the idled factories, food services and businesses as they come back on-line. Article- on Trucking shows relative resistance to pandemic as rates, volumes rise during recession - Transport Dive

Operational impact: Freight volumes and rates sank a few weeks after the COVID-19 pandemic caused shutdown, and after the initial surge of essential supplies were restocked. The segment of Long Haul most affected was Intermodal, an area hit early by COVID-19 as imports coming from China were affected. Since Mid-April, Intermodal has seen a sharp rise up and is currently at pre-COVID-19 levels. In the weeks from mid-April to May 1 during the shutdown, they saw the only widespread slowdown for freight. Since the second week of May, they have seen some of the highest spot prices in many quarters. Fleets were faced with reducing driver count and/or non-driving personnel due to a brief slow down of freight and uncertainty of what the market was going to do.

Financial impact: Currently, the top publicly listed Long Haul fleets like JB Hunt (JBHT), Knight-Swift (KNX) and Werner (WERN) are all approaching or hitting 52 week stock price highs. Non-driving staff are climbing back quickly into the workforce, long haul carriers saying they have already brought back most non-driving employees, most expect to bring them all back by the end of June. Looking forward, there are a few long haul fleets concerned by a possible relapse or second wave of the virus, carriers expect the lingering effects of COVID-19 to have a moderate effect on day-to-day trucking through the rest of the year, with practically no meaningful difference between Q3 2020 and Q4. The majority of Long Haul fleets say Q4 will be much better than Q3 and a vaccine changes everything once available. After the ELD learning curve, the industry actually increased capacity, not decreased capacity. It improved everyone's utilization during the initial days and weeks of the COVID-19 shutdown.

OFM

Business impact: Automakers face what likely will be a "profit desert" post-COVID-19. Two main drivers of that are a lingering drop in demand (tied to unemployment and economic weakness) and a big increase in debt, which will take

years to pay off. For volume to really come back, employment needs to come back to pre-pandemic levels, which will then have a positive impact on demand.

Operational impact: The increased debt load will pressure automakers to cut costs, close marginal plants and possibly postpone or kill product programs that don't promise short term profits. Electric vehicle programs are an exception, although some EV programs already have been postponed.

Financial impact: Major multinational automotive OEMs will be carefully managing their cash, liquidity and working capital strategies in light of the outbreak's impact on the world economy and credit markets. None of the top 10 OEMs have the same production or sales footprint in the world. OEMs with a heavy footprint in China, who had been hit very hard in February and March, will benefit from slow economic recovery in China and will even see a small boom situation, as the local market will be supported by subsidies from the local government. OEMs with a heavy European footprint will be the last to recover according to a KPMG recent report.

Oil & Gas

Business impact: Oil & Gas prices were already suppressed by global competition prior to COVID-19. The shutdown exacerbated the problem by an instant, unprecedented, worldwide drop in demand, which caused issues related to where to store excess oil and a rapid drop in prices that were not sustainable for many smaller exploration companies that had a heavy debt load. Prices on the spot market at one point were below the cost of extracting it, and many companies stopped producing and focused on right sizing their personnel and shoring up their financials to survive over the long term.

Operational impact: Substantial lay-offs and most firms have cut dividends. Impacts from the Oil & Gas industry all the way through the supply chain (construction & engineering firms) are long lasting with continued reduction in force and additional reductions expected for the remainder of the year. The supply chain is just as impacted with limited workload to support sustaining the current level of employees.

Financial impact: Financial impacts have been severe with nearly all companies reducing capital expenditures by 30%-40% throughout the rest of 2020. A recent uptick in oil prices provides some optimism, but there is still concern that countries that are dependent on oil revenues will not align with OPEC's goal of reduced production throughout 2020 in order to get prices back to a profitable position.

Owner Operator

Business impact: In April, the availability of trucking loads crashed over 60% but fully recovered in the month of May. Spot rates trended down in April and continued that trend in May. In regards to business impacts, the most important metric to watch is the number of owner operators active in the market. Owner operators are by definition utilized primarily by shippers/for hire fleets to handle excess capacity.

Operational impact: In both April and May, the number of owner operators active on load boards such as DAT went down significantly. The overall business impact will depend heavily on the availability of drivers to handle excess loads that shippers/for hire fleets can't handle internally.

Financial impact: At this point, it is still too early to determine if there will be a material business impact on shippers or for hire fleets due to a shortage of owner operators. We will know more once overall tonnage stabilizes and eventually recovers.

Public Utility & Services

Business impact: Public utilities have experienced a minor business impact due to COVID-19. They are considered an essential service provider so they are taking the necessary measures in order to maintain business as usual. Their residential and commercial customers need power and telecommunication support, so these companies continue to provide services all while maintaining proactive measures to limit the exposure to COVID-19 for their employees and the public. This industry segment has also experienced a surge in services needed due to many working from home and needing these essential services.

Operational impact: Because they are an essential service, the operational impact has been minimal. Employees that are typically in the field providing the service, remain in the field and slower workers have been reassigned to other areas so there has been no loss of workforce in this segment and if so the impact was very minor, however most have instituted hiring freeze at this time. Administrative employees have been working from home and will eventually have the option to come into the office or work from home/office. To help reduce the risk of COVID-19, they closed all buildings to the public and will handle all customer business online and via phone channels. Most companies will continue operations as normal, enacting personal protective equipment and new safety protocol measures to protect employees and the customers they serve. The main focus now is returning to the office and for those that do have plants, getting them up and running as well. Most plants have opened by the end of May with exceptions of plants in China and India.

Financial impact: In response to the COVID-19 pandemic and growing economic challenges, most utility companies have announced to extend the suspension of disconnecting power due to non-payment for residential and commercial customers through May. Although customers may be behind on submitting payment, they will still owe them for the services but will not have lost power. This continues to be monitored as the situation evolves. Most companies are also experiencing a tightening of budgets, they are heavily reviewing all assets and CAPEX spending and determining what is needed and what can wait, and most have restricted travel for employees.

Rail

Business impact: All Class I rail companies we spoke to have seen reduced volumes, and continue to trend downward, which has forced rail companies to react accordingly. Volumes are particularly affected by a decrease in automotive shipping due to COVID-19, oil and coal due to other economic factors. However, all rail has been essential business from the start, and have operated at near full capacity. While the current period and economic impact has had a major effect on the companies, most are fighting on and weathering the storm. Even if volumes are falling, it is not to the extent of other industries such as airlines, as moving freight is still a critical component of the supply chain. There are many news reports highlighting the resiliency of these rail companies: Article-CN Rail, <a href="https://example.com/Article-CN Rail, Article-CN Rail, <a href="https://example.com/Article-CN Rail, Article-CN Rail, <a href="https://example.com/Article-CN Rail, <a href="https://

Operational impact: Reaction has varied between companies. Across the companies, we are seeing operations with fewer trains with less capacity, layoffs or furloughs, in the 15%-30% range. All companies are looking for other ways to further cut costs considering there is large overhead in operating a Class I rail company. Some have had a major focus on increasing efficiencies, including one who has "set records for metrics such as train speed, terminal dwell, and shipment consistency." There will still be more adjustments to come as across the board reactions were that they are planning for the long term impact to last longer, and also lack any sense of when the situation will end. Some are looking to set themselves up for the best possible situation once the economic climate improves.

Financial impact: Most companies did not have much to say for privacy and competitive reasons, being in a very competitive industry. Publicly, the companies have all updated their outlooks for the rest of the year based on current and trending volume reduction. A few have concerns that this will last long term, but one thinks it will carry over into 2021 and then return back to normal at some point.

Residential Services

Business impact: Residential Services covers a diverse group of companies, running from landscaping, pest control, residential construction, telecommunications and more. We heard varying degrees of impact to their businesses, but in all there have been layoffs, furloughed employees, reduction in travel, and corporate office people working remotely. Technicians are still continuing to provide both inside and outside services but wear protective gear for inside work.

Operational impact: Operations have been impacted from needing new processes and procedures for how they operate vehicles to how they engage and interact with customers. Some companies would not allow servicing to residential homes during shutdowns across the globe, however some of the emergency type responders (heating and cooling, plumbing) would allow technicians to work in homes during these types of situations. Telecommunications companies have been experiencing high volumes of calls and demands from customers during the shutdown with many needing internet connections and cable for the stay-at-home orders.

Financial impact: Residential Services continues to see a steady business flow since most customers are working from home and need services. The auto sector is on a stand still. Home internet and TV areas holding steady, services like pest control have seen a decline and there is continued concern of the impact this will have for home construction. Currently, the companies we have talked with and their competitors appear to be rebounding and not as heavily impacted at this time relating to residential, but many of these companies also provide commercial services as well so the residential business is what is keeping workers employed and cash flow coming in, but definitely concern for the future to the unknown long lasting impacts.

Rideshare/Carshare/Car Rental

Business impact: In the first few months after lockdown, all three markets saw 70%-90% reduction in business. Predictions are that business travel will not recover to pre-pandemic levels due to video chat meetings becoming more acceptable. This anticipated drop in business travel will have a long lasting impact on the car rental industry due to its heavy reliance on business travel, particularly from airports.

On the other hand, predictions are that the pandemic will hasten the already existing trend away from vehicle ownership to share mobility offerings such as carsharing and ride hailing as increased work from home scenarios will make owning a second car less necessary further improving the financial benefit of using shared mobility to replace the second car. Environmentalists are also pressuring governments to direct stimulus spending to initiatives that will reduce greenhouse gas emissions (GHG), to which shared mobility can significantly contribute.

Operational impact: Companies in all three segments have laid off substantial staff. Some ride hailing drivers and carshare vehicles have moved or been repurposed to fill driver and vehicle gaps in the last mile delivery segment and fledgling meal delivery services due to the surge of online ordering of physical goods and food. Ride hail and carshare companies have also provided rides or rentals to frontline pandemic staff (e.g., nurses) as charity, serving as a marketing opportunity for the companies but not recouping costs.

Carshare and rental companies that have been forced to reduce their fleet size were initially getting significantly lower prices for their remarketed vehicles due to the pandemic induced influx of supply on the market. However, the resurgence of vehicle ownership due to a mistrust of public transit has brought used car prices back close to normal.

Carsharing and car rentals companies have both increased the cleaning and sanitization of their vehicles to help lure pandemic-weary travellers back to their vehicles. Car rental companies are planning on accelerating their plans to implement 'contactless' rental workflows with online application forms, purely online rentals, and digital key access to vehicles both to reduce the amount of close contact customers have with other customers and staff, and to reduce staff

and building costs to adjust their operational costs to the anticipated long term impact to their business. Many carshare, ride hailing, and ridesharing businesses have reduced marketing budgets and halted pre-existing expansion plans.

Financial impact: The prevalence of using gig workers as drivers in the ride hailing industry has shielded that industry from the financial impact of laying off staff. Similarly, the lack of brick and mortar buildings to engage with customers in the ride hailing and carshare markets has also shielded those businesses from the cost of maintaining buildings.

However, the car rental industry has been left very exposed to both of these costs. The financials of both carsharing and rental companies are also highly dependent on maximizing the utilization of their vehicles. Both markets have been reducing fleet sizes and repurposing vehicles as mentioned above, but losses on the assets are still significant.

Overall, the financial impact has been significantly higher for car rental companies. Consequently, multiple car rental companies have had to file for bankruptcy including big name players such as Hertz. Those rental companies that had healthy finances at the start of the pandemic are predicting they will be able to weather the financial storm, though not necessarily unscathed.

Supply Chain

Business impact: The Supply chain industry saw an increase in activity due to the increased demand, especially in grocery store settings. The restaurant and smaller orders did see decline, however, due to the demand on the grocery side, product has been steadily moving. Data has not indicated a significant decrease to travel time or distance from pre-COVID-19 activity.

Operational impact: Some companies have launched an ability for customers to order directly to their homes. In Supply Chains, the focus was shifted towards the increased demand, resulting in delays to projects that were slated for 2020. It is believed that projects can resume in Q1 2021. Employee safety is their main priority, with ongoing education and appropriate personal protective equipment provided to every employee.

Financial impact: Supply chain partners saw a higher demand in smaller margin products, which typically are family-sized. The stay-at-home order saw an increase in family-sized product purchases. Individually packed products have a higher margin than family sized products, thereby, effecting the margins. Since most drivers fill store stock, they require a significant amount of personal protective equipment as they interact with grocery store employees and customers. The additional equipment requirements and CDC measures followed for employee safety increased expenses, which further decreased margins.

Conclusion

In summary, the impacts and recovery from COVID-19 and business shutdowns has affected nearly every industry around the globe. Some industry segments, such as Airline and Healthcare, will continue to have long lasting impacts. We will continue to monitor the recovery of these industry segments and provide relevant updates to the rebound and impacts to these key fleet, transportation and mobility customers.

As we focus on the remainder of 2020 and look to early 2021, companies will continue to focus on asset utilization, productivity and efficiency, and cost reduction measures, regardless of their financial impact resulting from global economic slowdowns. This insight allows Geotab and our partners to provide consulting and recovery solutions to help ensure the partners we work with can meet their mandates as we all navigate the new "normal."

References

BF Staff, "Study: U.S. Has Returned to 95% Commercial Driving Activity," *Business Fleet*, June 17, 2020, https://www.businessfleet.com/10118924/study-u-s-has-returned-to-95-commercial-driving-activity.

DAT freight & analytics, https://www.dat.com/.

Deloitte, Understanding the sector impact of COVID-19: Engineering & Construction, April 1, 2020,

https://www2.deloitte.com/global/en/pages/about-deloitte/articles/covid-19/understanding-the-sector-impact-of-covid-19-engineering-const.html#.

Dieter Becker, "COVID-19 impact on the automotive sector," KPMG, March 20, 2020,

https://home.kpmg/xx/en/blogs/home/posts/2020/03/covid-19-impact-on-the-automotive-sector.html.

Fleet Owner Staff, "UPS to hire about 100,000 for holiday season," *Fleet Owner*, September 20, 2019, https://www.trucker.com/drivers/article/21747820/ups-to-hire-about-100000-for-holiday-season.

"From the Editor: While uncertainty rules, railroads prep for recovery," *Progressive Railroading*, May 2020, https://www.progressiverailroading.com/rail_industry_trends/article/From-the-Editor-While-uncertainty-rules-railroads-prep-for-recovery-60385.

Insurance Information Institute, https://www.iii.org/.

International Association of Oil & Gas Producers, https://www.iogp.org/.

IPAA (Independent Petroleum Association of America), https://www.ipaa.org/.

Jason Cannon, "Carrier optimism soars as freight volume ticks upward and drivers come back to work," *CCJ*, May 21, 2020, https://www.ccjdigital.com/freight-volume-leveling-off-carriers-optimistic-drivers-work/.

Jason Metz, "How To Reduce Car Insurance Costs During The COVID-19 Pandemic," *Forbes*, April 16, 2020, https://www.forbes.com/sites/advisor/2020/04/16/how-to-reduce-car-insurance-costs-during-the-covid-19-pandemic/#7cad0207587
https://www.forbes.com/sites/advisor/2020/04/16/how-to-reduce-car-insurance-costs-during-the-covid-19-pandemic/#7cad0207587
https://www.forbes.com/sites/advisor/2020/04/16/how-to-reduce-car-insurance-costs-during-the-covid-19-pandemic/#7cad0207587
https://www.forbes.com/sites/advisor/2020/04/16/how-to-reduce-car-insurance-costs-during-the-covid-19-pandemic/#7cad0207587
https://www.forbes.com/sites/advisor/2020/04/16/how-to-reduce-car-insurance-costs-during-the-covid-19-pandemic/#7cad0207587
https://www.forbes.com/sites/advisor/
<a

Jeff Stagl, "CN aims to maintain stay-resilient, stay-lean strategy to overcome business lost to the pandemic," *Progressive Railroading*, May 2020, https://www.progressiverailroading.com/canadian_national/article.aspx?id=60388.

Jennifer Fitzgerald, "US insurance market trends during the pandemic," McKinsey & Company, April 27, 2020, https://www.mckinsey.com/industries/financial-services/our-insights/us-insurance-market-trends-during-the-pandemic.

Laura Adams, "How COVID-19 may affect future auto insurance premiums," PropertyCasualty360, May 1, 2020, https://www.propertycasualty360.com/2020/05/01/how-covid-19-may-affect-future-auto-insurance-premiums/?slreturn=2020052313 0041.

Leslie Josephs, "US airlines are losing money for the first time in years as coronavirus ends travel boom," *CNBC*, April 23, 2020, https://www.cnbc.com/2020/04/23/coronavirus-us-airlines-set-to-report-their-first-losses-in-years-as-travel-demand-falls.html.

Nexus Communication, Update May 2020: COVID-19 The worldwide impact on fleet & mobility survey results, *Global Fleet*, May 2020, https://www.globalfleet.com/en/safety/smart-mobility/europe/features/covid-19-survey-update-corporate-buyers-have-more-confidence-suppliers.

"Norfolk Southern adapts to COVID-19 challenges, forges ahead with strategic plan to 'Reimagine Possible'," News, Norfolk Southern, May 15, 2020,

http://www.nscorp.com/content/nscorp/en/news/norfolk-southern-adapts-to-covid-19-challenges--forges-ahead-wit.html.

Stephen Bennett, "Last-Mile Delivery Fleets Navigate Challenges of COVID-19 Pandemic," *Transport Topics*, May 26, 2020, https://www.ttnews.com/articles/last-mile-delivery-fleets-navigate-challenges-covid-19-pandemic.

U.S. Department of Energy, https://www.energy.gov/.

VynZ Research, COVID-19 Outbreak — Impact Assessment on Healthcare Industry, May 2020, https://www.vynzresearch.com/healthcare/covid-19-outbreak-healthcare-industry.

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