



Embark Technology, Inc.
3Q22 Earnings Call Prepared Remarks Transcript
November 8, 2022

Operator

Good afternoon, and welcome to the Embark Technology Third Quarter 2022 Earnings Conference Call. Today's call is being recorded, and all lines have been placed on mute to prevent any background noise. After the speaker remarks, there will be a question-and-answer session. I will now turn the call over to Adam Fee, Strategic Finance and Investor Relations.

Adam Fee, Strategic Finance and Investor Relations, Embark Technology, Inc.

Thank you, operator, and thank you everyone for joining us today. Joining me on today's call are Co-Founder and CEO, Alex Rodrigues, and CFO, Richard Hawwa.

Embark issued its third quarter 2022 press release and presentation which we will refer to today. These can be found on the Investor Relations section of our website at investors.embarktrucks.com.

Please note this call will include forward-looking statements based on current expectations and assumptions, which are subject to risks and uncertainties. These statements reflect our views only as of today and should not be relied upon as representative about our views as of any subsequent date. We undertake no obligation to revise or publicly release the results of any revision to these forward-looking statements in light of new information or future events. These statements are subject to a variety of risks and uncertainties that could cause actual results to differ materially from expectations. Please refer to our filings with the SEC including our Annual Report on Form 10-K filed on March 21, 2022, our Quarterly Report on Form 10-Q filed on August 12, 2022, and other documents filed with the SEC from time to time.

We will discuss non-GAAP financial measures, which we believe are useful as supplemental measures of Embark's performance. These non-GAAP measures should be considered in addition to, and not as a substitute for, or in isolation from, GAAP results. These additional disclosures regarding the non-GAAP financial measures in today's press release and our filings with the SEC are posted on our company's investor relations website.



Finally, we are recording today's call, and we'll make the recording available this evening also on our website.

I would now like to turn the call over to Alex.

Alex Rodrigues, CEO, Embark Technology, Inc.

Thank you, Adam. Good morning, everyone. I'm excited to provide our last quarterly update in 2022 and walk through what we said we would deliver on, how we have delivered on it, and how these milestones set the stage for our progress in 2023.

Before I get into those updates, on **slide 3** I want to take a minute to talk about our Truck Teams here at Embark. In September, Embark celebrated national Truck Driver Appreciation Week, recognizing the around the clock contributions of our Safety Drivers and AV Operators.

At Embark we deeply value safety, and our people. Embark's Safety Drivers are some of the most experienced truckers in the industry, with an average of over 20 years of experience and over a million miles per person operating big rigs. Our Truck Team's knowledge and experience are paramount to Embark's perfect safety record, as reported this past June by the National Highway Traffic Safety Administration. For those not familiar, a Truck Team consists of a Safety Driver and an AV Operator. The Safety Driver is focused on the truck and on the road, while the AV Operator is in the passenger seat, or now, sometimes remote. The role of the operator is to monitor the AV system, advise the Safety Driver on performance, and continuously capture feedback on the system to relay back to Engineering.

This Company-wide collaboration between the Truck Teams and our world-class engineering team is paramount to building the software required to ultimately deploy commercial autonomous trucks safely. The underlying theme is always: *Safety First*.

While on the topic of safety, I also want to highlight one other recent development, which further underscores our commitment to having a world class safety organization.

Last month, we were very excited to welcome Peter James as our new Head of Systems Engineering & Safety. Peter most recently worked for over 4 years at Outrider and prior to that spent nearly a decade working on deploying autonomous trucks for the Department of Defense while working at Lockheed Martin and others. At Embark, Peter will leverage his experience and expertise creating military-grade autonomous trucks to further enhance the reliability, manufacturability and safety of Embark's autonomous systems, readying it for commercialization.



Now turning to **slide 4**. If you recall back in March during our first public earnings call, we laid out 3 primary milestones for 2022 and we have reiterated these milestones on each quarterly call earnings since. With this being our last earnings call in 2022, I want to walk you through how Embark is delivering on what we set out to do this year. I'll go into more detail on each of these throughout the presentation, but a quick reminder of our 2022 milestones:

First, to deliver the first truck into the fleet of a carrier customer through our Truck Transfer Program;

Second, to demonstrate two of the remaining five capabilities in our technological road map, bringing the total capabilities accomplished to 13 of 16 by the end of 2022; and

Third, to launch the backbone of the Embark Coverage Map across the Sunbelt region.

As I've said on prior calls, we set our objectives to provide a way for you to measure and track our progress as we continue on our path to commercialization.

We measure success by our ability to deliver on our stated objectives, and to that end, I am thrilled with Embark's achievements so far in 2022, and happy to confirm that all these milestones are on track for completion which is a testament to our team's focus, determination and consistency.

We look forward to sharing next year's milestones in the coming months, and more importantly, delivering on them in 2023.

Moving on to **slide 5**, I will update you on our first 2022 milestone, the Truck Transfer Program, or TTP, with Knight Swift. Let me start by giving a little bit of context. All trucks on the road today operate under what is known as a Motor Coach, or MC number, which designates each truck to the operating authority of a particular fleet. Prior to TTP, we believe all testing miles and pilots in the AV trucking industry operated under the AV providers' MC number - not under the carrier or fleet. This means that the AV provider is legally responsible for the truck's operations, not the fleet or shipper.

We believe this configuration for testing and running pilots is driven in part by the fact that these trucks are effectively prototypes that haven't yet achieved the maturity and reliability required for the technology developer to confidently transfer trucks to carrier customers with minimal maintenance and engineering oversight. To take that next step towards commercialization, we must go from prototype to creating a product that can stand on its own within a customer's fleet. This is exactly what TTP is doing. To our knowledge, TTP will be the first time that an AV technology provider has put its technology on a carrier owned truck, under the MC number of the fleet, and which will have its day-to-day maintenance and operations performed by the carrier after training



with Embark. This transition to installing our AV technology on a carrier's trucks is truly unique in the industry and in order to complete this successfully, we have taken a comprehensive, three-pronged approach focused on Hardware Design, Software, and Operations.

First, on the hardware side, our TTP trucks include an improved AV kit with upgrades to critical hardware components designed to achieve reliability for everyday use and to be easily serviceable by fleet maintenance staff with minimal training. We also believe this is a powerful proof point of the Embark Universal Interface, or EUI, and our OEM-agnostic approach. We worked with Knight Swift to select trucks from their order book, which happened to be a new brand for Embark. We then engaged that OEM alongside Knight Swift and received the necessary information which we required to ensure EUI could be integrated with that platform. Next, we completed and validated the hardware integration on that new OEM platform on behalf of our carrier partner. I want to highlight this process because it really reinforces the differentiation of Embark Universal Interface for two reasons. First, our experience with TTP demonstrates that carriers do have a strong preference about vehicle platforms and will choose AV components to meet the requirements of those platforms. And second, this shows that Embark's platform agnostic approach is further validated by efficiently being able to integrate our hardware kit on a new truck platform in only a couple of quarters. With the completion of component level verification and validation, or V&V, testing, the next and final key hardware milestone remaining for the TTP program is the conclusion of track and climatic chamber testing at the proving ground.

Second, Software. In order to achieve the seamless integration required for Knight Swift to implement our technology in their fleet, we made several key upgrades to the software that allows for a frictionless AV system launch experience handled by a single operator. In many cases, the AV-system boot up process is a multi-step process often requiring incremental staff and time compared to a human driver preparing to depart. Our system startup process has been streamlined now to allow for the AV system to be operable in a comparable time to a human driver preparing for departure. Another software upgrade I want to highlight is our ability to automatically detect trailer presence and weight. It's one thing to test software with a single test weight load, but in a real-world setting every trailer is a different weight, and our software is now able to adapt to this real-world scenario based on the weight of the load.

And finally, we are excited about our over-the-air data strategy which reduces the data transmission needed to operate our AV trucks by approximately 95%. I want to share a quick anecdote on how our PDP program led to this innovation. About a year ago, during regular discussions with one of our PDP partners, who was also testing technology from another AV player, we heard feedback that the other AV player was asking them to install complex, expensive data transmission infrastructure at each of



their existing sites to increase bandwidth and support the 100's of gigabytes of data they were producing per truck per day. It was clear to us that this would be a pain point for our carrier customers and that asking them to install dedicated bandwidth infrastructure was not a solution.

Using that carrier feedback, Embark has developed an intelligent data prioritization system that reduces our bandwidth needs by 95%. This brings total bandwidth needs to within the bounds of a typical industrial site. Instead of sending every data point all the time, our system now only sends data associated with specific topics or tags that are critical to technology development and safety. This is a step-change improvement in data efficiency that allows our carrier customers more flexibility operating AV trucks on their own and at third party sites. Our focused, data-optimized strategy is another example of how Embark Driver software continues to evolve from an R&D system to a commercial product.

And that brings me to Operations. Embark and Knight Swift have been working closely to develop and test the standard operating procedures for dispatching, monitoring, and maintaining a commercial grade fleet of AV trucks. People often don't appreciate that AV trucking has never been done before, which underscores the importance of developing these standard operating procedures and honing them through real world operations with leading partners. We are going deep into the nuanced details to work out all the kinks and enable a frictionless customer experience.

A few operational achievements I want to highlight are transitioning our driver-only configuration to Knight Swift, integrating with Knight Swift's dispatch system, and completing the initial maintenance program training.

Our driver-only configuration is an AV operating configuration that allows trucks to operate in AV mode, without needing a passenger-side AV operator. Today, the industry standard for most AV testing as I spoke about at the beginning relies on having a person in both the driver and passenger seat. Using Embark's driver-only configuration, which we were one of the first to explore back in 2020, each TTP truck will be solely operated by a Knight-Swift driver following an extensive Embark training program.

To put this into perspective, this is exactly how we envisioned the AV industry evolving: First, a Truck Team, as I explained at the beginning. Next an Embark safety driver, now a Safety Driver that works for the carrier and then ultimately no driver. The basic premise of TTP is to validate this hypothesis, and as I mentioned earlier, we have hardened and updated our Hardware and Software to enable this new configuration, which now enables *no* Embark staff in the vehicle. We have increased system stability and the need for monitoring or providing feedback to the driver or to engineering has been greatly reduced. These can now be done with automatic alerts, which we believe



is the logical pathway to having a safe and reliable system that can ultimately operate with no driver.

To support this configuration, integration with Knight Swift's dispatch system allows their dispatchers to share critical load details directly with Embark Guardian Operations which allows for more robust remote support.

Finally, as I mentioned, we continue to work closely with Knight Swift to create the maintenance program training, which is the first AV truck maintenance education program between a carrier and an AV software provider. While the initial training is complete, we expect this training to be ongoing throughout 2023 as we transition additional maintenance activities to Knight-Swift and focus on harvesting real world learnings from operating the Embark Driver software in Knight Swift's commercial fleet.

As Knight Swift prepares to receive the trucks, we will continue to run pilot tests on the system as well as take our Embark's driver training program to Knight Swift drivers.

In summary, today our competitors are running under their own operating authority. Handing the trucks over to a carrier to own and operate is a significant milestone which illustrates our confidence in the product and the maturity of the system. This is not a demo or a collaboration where we have engineers nearby to adjust the system if something goes wrong. It's truly handing over a product to a customer. TTP also further highlights the benefits of our close collaboration with Knight Swift, enabling us to be asset light and focus on building world-class software while leveraging the operational expertise of the largest carrier in the United States.

On **slide 6**, I am excited to go under the hood on a few of the key hardware upgrades that we've delivered to enhance the reliability, serviceability and manufacturability of our AV system for deployment in commercial fleets at scale.

Starting with the Autonomous Domain Controller, we have been working with One Stop Systems, or OSS, who specializes in building military grade compute and storage solutions focused on reliability and performance. Through our collaboration, OSS has customized a solution for Embark's autonomous trucking application including attributes such as additional ruggedization, secure system monitoring and control, and dedicated cooling technologies—all elements critical to the durability and reliability required for commercial operation of autonomous trucks. I would also highlight, as I mentioned during our last quarterly earnings call, having partners like OSS enables Embark to be asset-lite, capital efficient, and focus on developing high value software solutions.

Regarding sensor integration, the hardware upfit for TTP features new individual sensor pods designed as independent assemblies and optimized for a commercial duty cycle. Each pod is designed to resist harsh environmental conditions at both the sensor and



module level. The side-sensor pods include upgraded Lidar sensors and utilize the truck's existing mirror mounts making installation and servicing more efficient. Likewise the lower front sensors are integrated into a custom bumper element designed to allow easy access to Embark's sensors while retaining the serviceability of OEM components. This was an important consideration for Knight-Swift as part of TTP.

The upgraded hardware modules have been put through a significant verification and validation testing campaign to ensure the necessary levels of safety, performance and reliability are upheld throughout extremes of shock, vibration, temperature, exposure and more. We are excited to wrap up system level V&V testing both at the track and in our internal pilots before handing over the trucks to Knight Swift.

Before moving on, I want to give a shout out to the Embark operations team who has been working around the clock to complete the testing required for TTP. In the last two quarters, we have completed 4-times the number of weekly AV tests versus 2021. This increase in AV tests conducted is just one example of how our operations team is focused on accelerating the commercial and engineering progress here at Embark.

Turning to **slide 7**, I want to provide an update on our capability roadmap. Again, this is a very consistent slide you have seen many times. Coming into 2022, we had demonstrated 11 of the 16 capabilities we determined were required to safely commercialize our technology. At the beginning of the year, we laid out our objective to demonstrate Emergency Vehicle Interactions and Evasive Maneuvers this year.

And then back in August, we successfully demonstrated the ability to interact with Emergency Vehicles on a public highway by completing a routine traffic stop without any driver interaction.

Next up for Embark is Evasive Maneuvers. Enabling evasive maneuvers is an important step for commercialization because unexpected things *will* happen on the road, and sometimes drastic steering or braking is required in order to avoid dangerous situations that can be caused by unpredictable actions from nearby drivers. I am happy to announce that we are on track to demonstrate Evasive Maneuvers by the end of the year, which would accomplish both of the 2022 items on our technology roadmap.

In addition, we have also been making significant progress on the remaining capabilities, such as Inspections, which I will now talk about on **slide 8**.

The traditional trucking inspection process has long presented barriers to operation of AV trucks. This is because the traditional commercial vehicle enforcement system requires all trucks to be able to stop at weigh stations and engage with law enforcement if not granted a bypass, which poses a couple of challenges for AV trucking. First, each weigh station is a unique, unmapped and unstructured driving environment, which



differs from the on-highway environment. Second, roadside inspections at weigh stations necessitate driver involvement, which an AV truck could not easily execute.

The solution was to remove the need for weigh station stops by conducting rigorous AV truck inspections before every trip. We worked closely with the Commercial Vehicle Safety Alliance (or CVSA) - which represents state law enforcement leaders from across the country - as well as leading national fleets to develop an enhanced commercial vehicle inspection standard for AV trucks. CVSA also developed a training course to qualify carrier technicians to perform autonomous truck inspections at carrier terminals.

CVSA officially voted to adopt the new standard in September. The standard will require comprehensive inspection by CVSA-trained technicians before each trip and at least once per 24 hours of truck operation. The inspection results will then be reported digitally to state highway patrols, allowing all pre-inspected trucks to bypass weigh stations, except in cases where there is an imminent hazard detected.

This new inspection standard raises the bar for truck safety, as 100% of AV trucks will be inspected by CVSA-trained technicians daily to ensure there are no safety defects prior to departure. By comparison, in the existing process for conventional trucks, only a small percentage of trucks receive roadside CVSA inspections, and this happens at the discretion of weigh station personnel. In fact, during an enforcement blitz, when systematically evaluating the full set of trucks on the highway, CVSA recently found that 23.8% of trucks had out-of-service safety violations, according to their 2022 Internal Roadcheck Results analysis.

We are looking forward to providing more updates on the progress of this important capability in 2023.

Turning to **slide 9**, last week, we launched the coast-to-coast backbone of the Embark Coverage Map, which contains nine transfer point sites near key cities across the Sunbelt, including new locations in Dallas, El Paso, Atlanta, and Jacksonville, to accommodate the freight volume in key markets and provide operational support for carriers and shippers using Embark-powered trucks.

We strategically selected these nine transfer point locations to open crucial shipping lanes, which represent 28% of US shipping volume in the Sunbelt, for our carrier partners to begin hauling goods autonomously once Embark's technology is commercialized. The lanes in the expanded network cover 9.5 billion miles of annual freight, including San Antonio to Houston, Dallas to Atlanta and LA to Phoenix – which are some of the highest volume inter-city lanes in the United States.



Our partnership with Alterra and Ryder were critical to achieving this milestone, allowing us to secure optimal real estate sites and support services. We leveraged these partnerships to accelerate our deployment timeline, access superior properties for AVs, and deliver infrastructure for fleet partners, while doing it all in an asset-light manner.

Partnering with Alterra has allowed us to access deep industry knowledge, a team providing nationwide coverage, a portfolio of over 150 existing properties, and a fully discretionary fund, to quickly identify sites and to structure flexible usage agreements that will enable Embarc to scale across specific properties in alignment with our network's growing volumes.

Upon commercial launch, our carrier partners will be able to operate without the need for driver breaks, which we expect will result in delivery times that are significantly faster than what is currently possible. According to Embarc's analysis of government data, 41% of US shipment miles in the coast-to-coast Embarc Coverage Map are on lanes that are longer than drivers can complete in a single shift due to Hours of Service regulations, and which could be accelerated by an autonomous truck

Our proprietary, patent-pending Vision Map Fusion, or VMF, technology is uniquely positioned to allow for utilization of the coast-to-coast transfer point network by our carrier partners. VMF minimizes reliance on cumbersome HD maps by instead integrating real-time inputs from Embarc's suite of sensors, allowing the technology to navigate its environment utilizing a light and easy-to-create and maintain map. This map-light approach allows Embarc to expand to new markets in a way where effort and cost do not scale with mileage.

Establishing the coast-to-coast backbone of the Embarc Coverage Map was the third and final 2022 milestone that we laid out in the beginning of the year and is key on our path to commercialization as it provides our carrier partners the visibility they need to plan their deployment of Embarc-equipped trucks, improving the ecosystem's ability to rapidly scale following commercialization.

And with that, I will turn it over to Richard to discuss the financial details.

Richard Hawwa, CFO, Embarc Trucks

Thanks Alex.

On slide 10, I want to highlight some of the key financial metrics that support our business progress.

Our cash and cash equivalents were \$191 million as of September 30, 2022. Our free cash flow spend for the quarter was \$29.4 million compared to last quarter of \$24.7



million. I'll provide a bit more detail on the quarter-over-quarter change, as most of this increase simply reflects the *timing* of cash payments, and not an increase in the go forward run-rate free cash flow spend, which is why we are also reaffirming our guidance for the full year free cash flow spend, as provided last quarter. This brings us to our total free cash flow spend for the year to \$74.1 million, which is in-line with our expectations. I want to reiterate, we fully expected much of the free cash flow spend to be second half weighted in Q3 and Q4, which is why we are able to reaffirm our guidance for full year 2022 free cash flow spend to be \$100-\$115 million. And, since it's a question we commonly get asked, you can think about our current run-rate free cash flow spend of around \$27 million per quarter, which is reflective of the midpoint of the guidance. And, as you remember, we were able to bring down our original guidance earlier this year of \$125-\$140 million, as we continue to adapt to market conditions, which highlights the benefits of our asset-lite business model. To provide a bit more color, the previously provided guidance earlier this year would reflect a run-rate free cash flow spend of around \$33 million per quarter, at the midpoint. The actions we took earlier this year resulted in more than half a year of incremental runway, which is why we are very happy with our cash position today given how we planned for market conditions earlier this year. When we revised our guidance, it was our expectation that we would be in a prolonged market downturn, and our view on this has not changed and we continue to operate and plan as such. This swift action we took earlier this year has given us flexibility without compromising our ability to commercialize the business and deliver a product in 2024.

As we discussed during the last earnings call, we wanted to really flex our plan to extend the runway, but also ensure we have the appropriate team to execute on the plan to deliver on our timelines. The progress we have made this quarter clearly demonstrates this is *exactly* what we have done. I'll provide some metrics on the next slide to show how disciplined and consistent we've been on our free cash flow spend.

But, before moving on, I do want to talk through the increase in quarter-over-quarter free cash flow spend and how to frame that in the context of a run-rate number. Essentially there was about \$5mm of pre-payments related to certain agreements that get paid in Q3 every year, but they are expensed over the course of the year. Also, we had some incremental expenses this quarter as we began to move employees into our new headquarters - which I should state, is really cool. When you adjust for these items, we continue to have conviction, based on what we know today, on the run-rate spend I discussed. Moreover, as you can easily extrapolate based on Q4 expectations, we do expect a higher amount in Q4, hence why we reaffirmed our original guidance for 2022. This also will not reflect a change in the expected run-rate, but again, simply a timing consideration. I'll talk more on the next slide around our discipline, consistency and focus as it relates to managing the balance sheet.



But, before I go to the next slide I want to summarize the key takeaway here:

- 1) Free cash flow spend and full year guidance is in-line with expectations
- 2) Timing of cash payments throughout the year results in some lumpiness, particularly in the back half of the year; however, it does not change the full year picture or run-rate expectations; and finally,
- 3) We believe the current free cash flow spend and ability to focus and flex the plan is sufficient to advance Embark towards commercialization in 2024

Moving to Slide 11, I've discussed our balance sheet discipline - but let me put some metrics that really demonstrate what this means. As we've consistently said, having an asset-lite business model provides flexibility to refine and define the key initiatives we intend to deliver on based on the resources available. This is why in Q2 we refined our plan to ensure we *focus* resources, as we assumed a pro-longed market downturn. This chart shows the improvement already realized two quarters into the focused hiring initiative, which I'll walk through shortly.

We've spent a lot of time talking about focus. It's very easy, particularly in markets where capital is easy to come by, to get distracted. Trying to do too much, without being able to define the capital required doesn't work. This is *exactly* what differentiates Embark. And this differentiation is even more critical today given market conditions, but goes back to our founding and is part of our culture of being focused. This is why we have been able to deliver a leading technology in a very capital efficient manner, particularly relative to competitors. And, it's why we feel very good about the resources we have today to execute on our commercial plans.

The Self-Driving space broadly is beginning to realize this insight. Certain business models aren't profitable, certain organizations tried to do too much, and a lot of money has been spent without a product. This is not Embark, Embark is deploying capital against high ROI projects that we believe *will* result in an economically viable commercial product. Alex will speak a bit more to this at the end - but I want to really highlight this intersection of not simply a great technology, but a great technology that has an actual commercial business plan.

The chart on this page shows effectively our free cash flow spend per employee. Given the lumpiness of cash payments throughout the year, as I walked through earlier, I have used Adjusted EBITDA minus Capex as a proxy for free cash flow spend – which we present each quarter on our non-GAAP reconciliation tables.

To summarize the key takeaways here:

- Even as we've grown, we've had a fairly consistent spend per employee



- This is important because headcount is our biggest spend, accounting for approximately 60% of our free cash flow spend
- This is *exactly* what you see in Q2 and Q3, after we lowered our free cash flow spend guidance and implemented focused hiring, you can see a slight drop in our spend per employee
- Lastly, I would highlight that we ended the quarter with 317 full time employees – doing the quick math based on Q3 spend per employee, you can further extrapolate and triangulate to the \$27mm of run-rate free cash flow spend number I referenced earlier.

With that, I'll pass it back to Alex

Alex Rodrigues, CEO, Embarc Trucks, Inc.

Thank you, Richard. Moving on to **slide 12**.

I want to talk through how some of the core design principles that led us to identify the trucking use-case, are continuing to be applied today to ensure a clear path to commercialization in 2024. What we observed early on was that we needed to **simplify** the operating domain and focus on customers with a clear and present need for our technology in **high value** applications.

Back in 2016, Embarc was one of the first players to focus on trucking when others were focused on passenger cars. We made this decision, which was controversial at the time, because it achieved the objectives that we thought, and continue to believe, are critical to advancing the technology development in an economically viable manner.

This allowed us to make rapid progress in a highly capital efficient way, achieving our first intervention free run between two cities in 2018 with a few dozen engineers. We were able to achieve this high return on human capital because we took the time to form a view of how to commercialize AV in a focused manner.

Since then, as we have continued to develop the system, we've also doubled down on this thinking, and in the subsequent years, we have further divided the trucking market into sub-segments, enabling us to pull forward the segments of the market that best met our criteria of a simplified operating domain in high value applications.

To provide some specific examples, there are three key divisions we made within certain trucking sub-segments:



First, focusing on the Sunbelt region - this allows us to operate in primarily good weather, which simplifies a variety of constraints for the initial deployment of our software.

Second, pioneering the concept of Transfer Hubs, which allows us to focus on highway driving, and enables us to develop a differentiated technology stack, including technologies like VMF, that are highly critical to address the use-case.

And, **Third**, focusing on long-haul, which represents the most high value segment of self-driving because of its high utilization, but also addresses macro challenges, like the driver shortage issues, which allows our technology to create a lot of value for customers and ultimately benefit consumers.

As we have always said, the best way to advance the technology and operationalize in a commercial setting is through real-world experience and this is a critical aspect of TTP. This is also a significant contributor to how we refine and simplify the problem to ensure we're able to deploy a commercial product in 2024. The Intelligent Data Prioritization system, which I described earlier, is a great example of the output of these real-world learnings. These learnings have supported the evolution of Embark, from testing AV trucks within our own fleet to transitioning to carrier-owned and operated AV trucks in *their* own fleets. We believe the next natural step is to demonstrate our ability to have Embark-enabled AV trucks operate in an economically viable commercial setting.

I want to reiterate this last point. As Richard alluded to, the self-driving industry has slowly followed Embark on some of our key early insights. For example, as I mentioned previously, the focus of some players evolving from Robotaxi to the trucking market, or the focus on the transfer point model. This key insight of simplifying the problem sits at the intersection of developing a product that can be deployed safely and ensuring that once it is deployed, that it can be done economically. With that, let me turn to the next slide and speak in a bit more detail on how we see this evolution continuing.

Turning to slide 13, As I just walked through, Embark has a history of simplifying the problem. We started by segmenting the AV Industry into trucking, and then further segmented down to lanes and route types, and this has accelerated our technology development significantly.

As we now move into the next inning of commercialization and we take stock of the ecosystem's progress and our real-world learnings, we realize that it is time to continue this process *even* further by evaluating the trucking sub-segments through the lens of the current realities of 1.) a manufacturing ecosystem that is taking longer to work down the cost curve and 2.) a macro environment that is requiring tech providers to focus on



financial metrics and pull forward commercialization. The objective remains the same: simplify the problem and ensure we address high value customer applications.

We have therefore been undertaking an exercise that begins to *further* segment the trucking market by different market verticals served to uncover sub-segments that enable us to further simplify the ODD, and most importantly, control our own outcome of commercialization in 2024.

We believe this approach provides an opportunity to achieve regular commercial hauls on our 2024 timeline. I think it's also important to note that, in contrast to some of our competitors who are focused on running deliveries that are fundamentally uneconomical, we want to ensure that when we commercialize we have a sustainable business that not only generates revenue, but also has compelling margins, and a clear path to generating positive free cash flow.

In summary, I wanted to provide this additional context, which I touched on last quarter, on how we are thinking about commercializing our technology under the timelines we've put forward. We are in active conversations with partners, which I can't share more detail on today, but are excited about the multiple opportunities this will provide for us to have i) regular commercial deliveries ii) with driver-out operations and iii) compelling financial metrics.

The real-world learnings from TTP and our PDP program, coupled with all of our projects completed to date are finally coming together as we chart the path to an economically viable commercial business. We are excited about some of the developments on this front and we're looking forward to sharing more early next year.

With that, I will now turn the call back to Adam.

Adam Fee, Strategic Finance and Investor Relations, Embark Technology, Inc.

Thank you, Alex.

Operator, let's begin the question and answer session.