United States: AVs

Framing profit pools in rideshare, trucking, and insurance as AVs move from concept to commercialization

Autonomous vehicles have arrived for both rideshare and trucking. We believe the key focus for investors is now on the pace at which AVs will grow and how big the market will become, **rather than if the technology works** (although the degree to which AVs will continue to need human remote assistance, and how many providers of AV technology there will be, remain debates). There are already over 1,500 Waymo robotaxis on roads in the US, Tesla hopes to begin commercial robotaxi operations in June in Austin, and there are numerous AV companies now scaling in China (as detailed in our report led by Allen Chang in May 2025).

We estimate that the rideshare market filled by AVs in the US will reach $7 bn in 2030 (or 8% of the total market), the potential market for AV virtual drivers for Class 8 trucks in the US will be ~$5 bn in 2030 (with AVs accounting for 3% of miles in 2030), and the $400 bn+ insurance market for personal and commercial vehicles could be disrupted as accident rates decline. In addition to the large market size, there are meaningful real world implications from this technology, with over 1 mn global and ~40K US traffic-related fatalities annually per the WHO and NHTSA.

In this report, we forecast the domestic market for robotaxis (including the percent of the rideshare market we expect to be filled by AVs), update our cost analysis for robotaxis (building on the illustrative cost analysis in our July 2024 report), analyze the Class 8 trucking market and how it could be affected by AVs, and detail potential impacts on the insurance industry as autonomous technology becomes more prevalent. Based on input from our broader autos, industrial, tech, and financial teams, our industry model tracks how we believe the fleet of vehicles on the road will evolve for AVs and human-driven vehicles for both rideshare and Class 8 trucking.

The risks to incumbent rideshare networks (**Uber & Lyft**) from the rise in commercial autonomous vehicle deployments remains a key debate among investors. While there will likely continue to be some element of AV fleets operating under a DTC model, we believe that incumbent rideshare networks will primarily operate as asset-light, third-party (3P) marketplaces for AV fleet operators to plug

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their supply into as a way to generate demand & maximize utilization. We note that there have been several global and US announcements between Uber/Lyft and AV tech providers in recent periods, including Mobileye, Waymo, May Mobility, Momenta, and WeRide. We view the industry as being in its early stages, with important questions remaining around which autonomous vehicle companies can first solve the technology problem and become operational with some measure of scale, and the ultimate shape of business models in the end state. Building on our previous analysis (link), we provide a forecast of Waymo's commercial ramp through 2030. Our analysis suggests that Waymo (**GOOGL**) is unlikely to have a material impact on UBER's consolidated financials through 2030. **Specifically, we estimate the scaling of Waymo in certain US markets would represent a ~$270mm/~$160mm Adj. EBITDA headwind to UBER/LYFT in 2030; this would represent a 1%/10% headwind to UBER/LYFT's 2030E Adj. EBITDA.**

We believe the degree to which **Tesla** can have differentiated scale and technology will be key for its long-term profitability in the robotaxi business. **We expect Tesla to meet its objective to start AV operations this summer in Austin, although we also believe that Tesla's use of certain tools (including geofencing and local specific parameters) as well as a need to validate/improve on the technology for wider unsupervised use will limit how fast Tesla can scale its AVs in the near-term.** We believe the extent to which Tesla's end to end approach to AI training results in a more generalized solution and faster deployments in the longer term will be key to monitor. The fact that ADAS profits for L2+ technology in China have been diminished due to a high degree of competition is a warning sign, in our opinion, that a wider proliferation of autonomous capability could limit profits even with eyes-off/unsupervised offerings. However, there are scenarios where Tesla has strong margins/returns in the long-term. We show a range of valuation scenarios for Tesla's robotaxi efforts in this report. **Our base case view remains that Tesla's earnings can improve in the medium to longer term from FSD and AV technology, but we have a more moderate outlook for its profits than the company targets.**

In terms of stocks, we highlight **UBER, LYFT, GOOGL**, **TSLA, AUR, TEL, PGR** and several trucking/fleet vendors **(PCAR, Volvo, KNX/WERN/SNDR)** as either beneficiaries of AVs or Buy-rated stocks where we believe investor concerns about risks from AVs are overdone, based on the analysis in our report. While we believe **MBLY** can benefit from growth in autonomy too, we downgrade the stock to Neutral in a separate note to better reflect the degree of competition in the market.

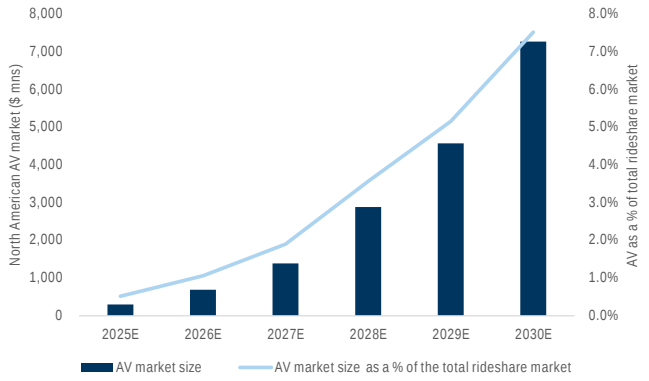
Robotaxis: Industry gaining momentum

We estimate that the rideshare market in North America in terms of bookings is currently ~$58 bn (predominantly from human-driven vehicles) and that the TAM could rise from $252 bn in 2025 to >$336 bn by 2030. Based on our bottom-up analysis of key AV providers (e.g. Waymo and Tesla) along with top-down industry considerations, we believe the market for rideshare filled by robotaxis will be about $300 mn in 2025 and grow to ~$7 bn in 2030, implying a ~90% CAGR. This suggests that AVs will make up

less than 1% of the market in 2025 and ~8% in 2030.

While we recognize the pace of scaling and degree of competition will be key factors that determine AV rideshare profitability, we estimate that gross margins for a vertically integrated AV operator could reach the 40-50% range over the next 3-5 years, which would imply gross profit for the total US AV market of ~$3.5 bn in 2030 (when applying these margins to our ~$7 bn AV rideshare market sales forecast).

Exhibit 1: North America AV rideshare market



Source: Goldman Sachs Global Investment Research

This pace of robotaxi scaling is based on our expectation for improving technology capability, falling costs, and regulatory support, as we discuss further in this section of the note.

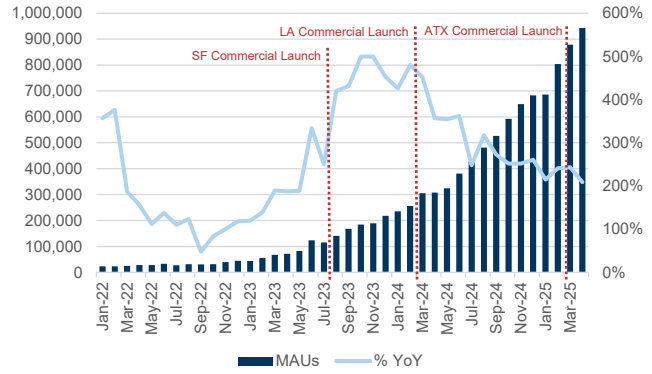
How quickly are AVs growing?

There are already over 1,500 robotaxis on the road from Waymo (with the company already operating commercially in 4 cities, potentially operating commercially in 7 markets by the end of 2026, and testing in many others). With this roll out from Waymo, coupled with planned launches from others including Tesla and Zoox, we expect over 1.8K commercial autonomous vehicles in the US by the end of 2025 and 35K in 2030.

One key area to monitor is whether improving AI training technology and models (with end to end approaches potentially leading to faster R&D cycles), as well as simulation tools, will lead to an increased number of AV tech providers over time.

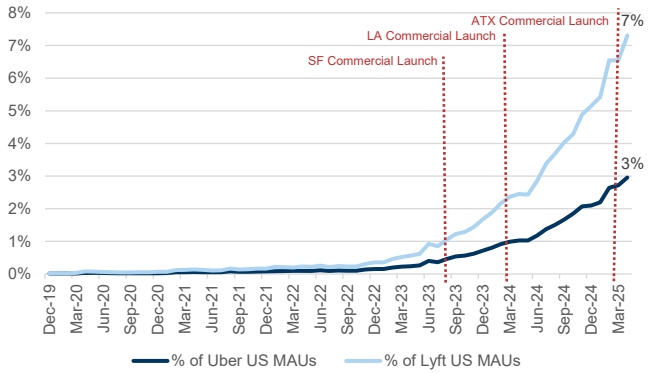
There are early signs of AVs scaling successfully. While Waymo operated at low volumes for several years (recall the company started as Google's self-driving project in 2009, initially launched in 2018 in the greater Phoenix area and began fully autonomous commercial rides in 2019), Waymo vehicles are now making over 250k paid trips per week. In addition, data from Sensor Tower shows Waymo as a first choice for many consumers, with monthly active users growing quickly and Waymo gaining traction (Exhibit 2 - Exhibit 3).

Exhibit 2: Waymo Monthly Active Users are growing rapidly in the US



Source: Goldman Sachs Global Investment Research, Sensor Tower

Exhibit 3: Waymo now accounts for a single-digit percentage of UBER/LYFT US MAUs

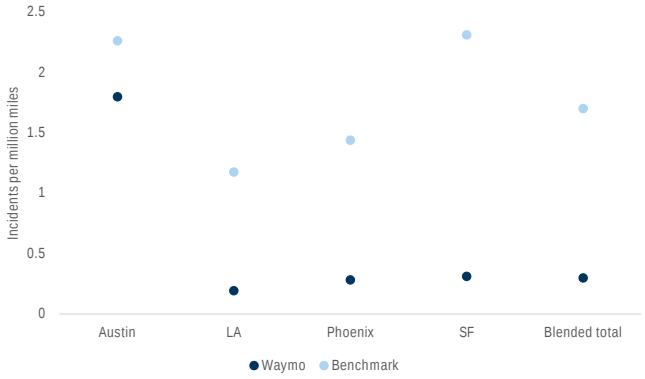


Source: Sensor Tower, Goldman Sachs Global Investment Research

One key driver of this scaling is safety...

Waymo studies show that its vehicles had 83% fewer airbag deployment crashes and 81% fewer injury-causing crashes in San Francisco and Phoenix compared to human drivers. A study from Swiss Re shows Waymo had an 88% reduction in property damage claims and 92% reduction in bodily injury claims relative to a human benchmark.

Exhibit 4: Waymo airbag deployed accidents vs human benchmark in its key active markets



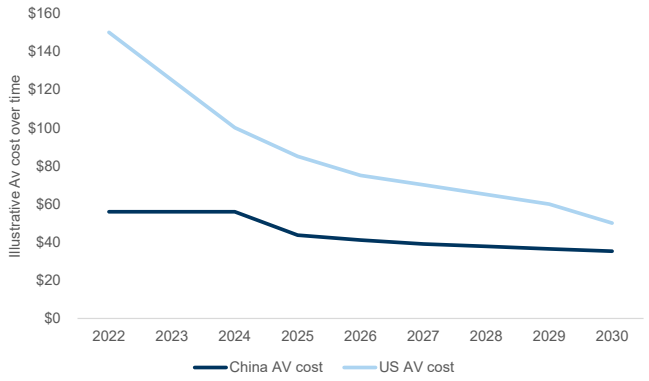
Source: Company data, Goldman Sachs Global Investment Research

... and falling costs are another key enabler.

We expect the cost of AVs to come down over time, enabled by purpose-built hardware and scale, putting the industry on a path to costs per vehicle that are well under the historical >$100K range. For example, while Waymo's 5th gen AV has 29 cameras, the 6th Gen is down to 13 (along with 4 lidar units and 6 radar sensors). Similarly, Tesla believes its most recent vehicles (HW4 compute) have the necessary hardware to work as robotaxis (they do not use radar or lidar), and these vehicles start with prices for consumers in the US (prior to any incentives) in the low $40K USD range. Although we recognize that market economics in China are different, purpose-built AV costs in China have already reached the $40K USD range, and our team expects costs to decline

further into the low $30K range over the next 10 years.

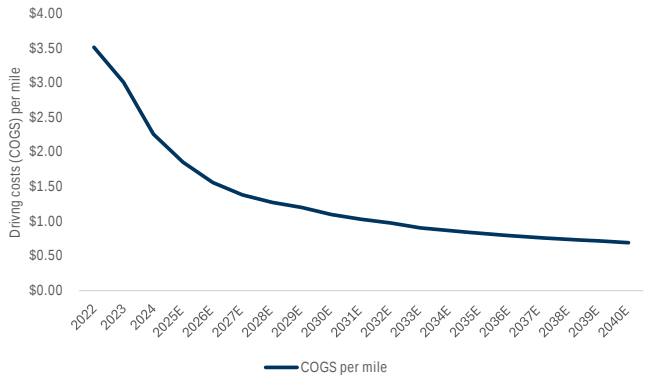
Exhibit 5: US and China illustrative vehicle cost over time



Source: Goldman Sachs Global Investment Research, Company data

We also expect driving costs per mile to fall, enabled in part by lower hardware costs, savings in the long-term on insurance, and more miles traveled (Exhibit 6). Specifically, we assume: 1) depreciation costs per mile could decline from ~$0.35 in 2025 to ~$0.15 in 2040 for a representative AV; 2) insurance costs will decline from ~$0.50 in 2025 (a premium to human-driven rideshare of about $0.30) to about $0.23 per mile in 2040; 3) wages for remote operators per mile will decline to $0.02 in 2030 from $0.49 in 2025, driven by a higher ratio of vehicles per operator (from 3 cars to 1 operator currently to 10 to 1 in 2030, and 35 to 1 in 2040).

Exhibit 6: Illustrative driving costs (COGS) per mile for an AV



Source: AAA, Goldman Sachs Global Investment Research

What about the market size for a virtual driver?

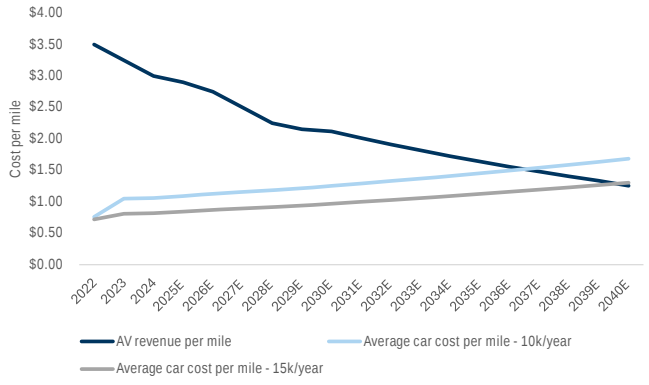
Given that some tech companies are open to a licensing type of model (and not owning the fleet of AVs), we believe it is helpful to examine the implied market size for virtual drivers. For context on how revenue/costs are currently allocated, Lyft committed to paying human drivers at least 70% of rider payments per week after external fees such as commercial insurance (we estimate ~$0.30 per mile) are subtracted, and Lyft estimates that there are ~$0.31/mile of expenses associated with operating the car for the human driver (i.e. fuel costs, maintenance, cleaning, and depreciation). If we assumed these types of economics were available to a virtual driver instead of a human

driver, and applied that to the full number of rideshare miles we expect for 2030 in total, it implies that the theoretical TAM for virtual driver technology would be ~$50 bn in 2030 (although, to be clear, we expect only a high-single-digit percent of the rideshare market to be filled by AVs in 2030 and, moreover, think most of the initial AV fleet in the US market will be owned by the tech stack providers such as Waymo and Tesla).

How will robotaxis and AVs affect personal car ownership?

There is a view from some investors that the proliferation of AVs will materially lower the size of the personal vehicle market. While this is a possibility, our base case view is that this is too negative due to economic and use considerations. First, the cost of owning and operating a personal vehicle in the US was $0.82 to $1.06 per mile in 2024 according to AAA (at 10K and 15K miles traveled annually, respectively). This remains well below the cost of rideshare at >$2 nationally. Second, while we expect the cost of AVs (and, in turn, the price of rides with AVs) to fall (potentially to $1 or less long-term), these types of economics would be enabled by hardware costs that are on par with or below the current price of consumer vehicles. If the cost and convenience of an AV improves enough in the long-term (e.g., over 10-20 years), especially if users can sleep in them while traveling, we see this being something many users would prefer to own (perhaps with a monthly subscription to access remote assistance). Importantly, this aligns with the ambitions of several OEMs. Waymo has said it's potentially open to selling AVs to individuals (and has a preliminary agreement with Toyota), Tesla's plan is to allow for unsupervised personal autonomy in the long-term, and GM has pivoted its AV efforts to personal autonomy. However, we think AV shipments in the US for the next 3-5 years will be mostly or entirely for commercial applications.

Exhibit 7: Price to use AV rideshare compared to cost to own a personal light vehicle 2022-2040E



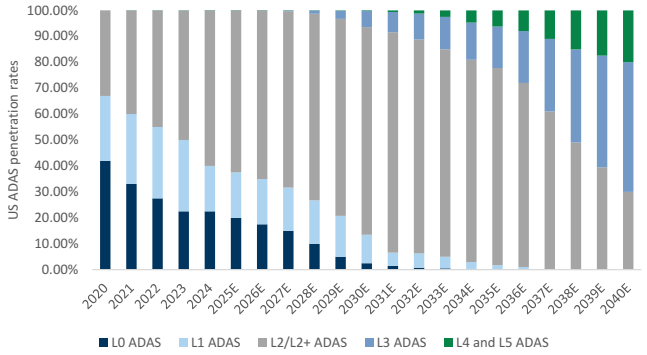
Source: AAA, Goldman Sachs Global Investment Research

AVs are still a small part of new vehicle shipments, but growing over time

AV (L4/L5) volumes remain very small as a percent of new vehicle shipments in the US, given the use in commercial applications only (we estimate about 0.1% of all new light vehicle shipments in the US currently), and we modestly lower our L3/L4 shipment assumptions over the near to medium term to better reflect the actual shipment levels and bottom-up AV work we did for this report. However, we raise our longer-term forecast for L4 adoption in the US market (e.g., 2035-2040 timeframe), and we expect a

faster ramp as L4 technology becomes available to consumers. By 2040, we assume the majority of new vehicle shipments will be situationally (L3) or fully (L4/L5) autonomous.

Exhibit 8: US ADAS penetration rates as a percent of new vehicle sales



Source: Goldman Sachs Global Investment Research, Wards

Regulations - potential to become less onerous, but state and local rules still the key

There are federal standards under the Federal Motor Vehicle Safety Standards (FMVSS) with which all vehicles must comply. While the FMVSS was amended in 2022 to allow vehicles to have no steering wheel or pedals, there are still other requirements that vehicles, including purpose-built AVs, need to adhere to, such as needing a windshield wiper. In order to deploy AVs that don't meet full FMVSS requirements, approval is needed and there is a limit of 2,500 vehicles per year for up to 2 years (or a maximum of 5,000 in total) that don't comply.

In addition, robotaxis are typically subject to regulations at the state and local level. From a hardware standpoint, some states only require compliance with state and federal traffic and safety regulations, while others require several AV-specific permits for commercial deployment and/or testing. Beyond robotaxi/AV-specific rules at the state and local level, many cities have rideshare and taxi & limousine licensing and permitting rules.

Additionally, on April 24, 2025, NHTSA announced a new Automated Vehicle framework, under which it expanded the Automated Vehicle Exemption Program to domestically produced vehicles, though these vehicles can only be used for research and demonstration purposes. The framework also looks to expand the efficiency and effectiveness of the existing process for temporary exemptions from FMVSS standards for vehicles that offer equivalent safety, such as AVs, for uses including commercial deployment. Companies could request exemptions for a certain number of vehicles from NHTSA under this existing process. During a media interview, the Secretary of Transportation noted that the Department of Transportation would work towards a federal standard for AVs and would want to avoid having state-by-state regulations.

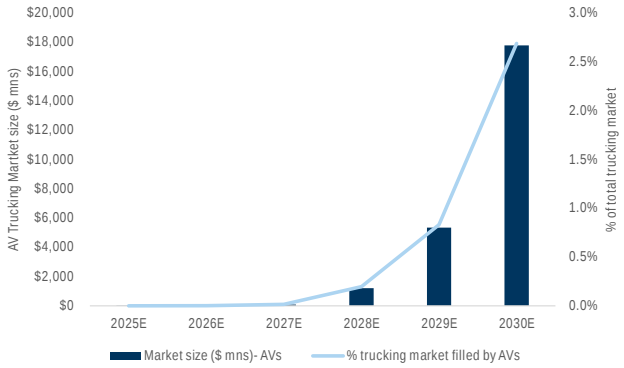
Class 8: AV trucks have potential to travel more miles and lower costs,

although we expect a slow ramp over the near to medium term

There are a handful of AVs now operating commercially in Texas and in the Permian Basin. We expect that the number of AV trucks on the road will increase to ~25k in 2030 (making up a little less than 1% of the fleet). We estimate that the market for freight hauled by AVs will rise to $18 bn in 2030 out of a total market of ~$660 bn.

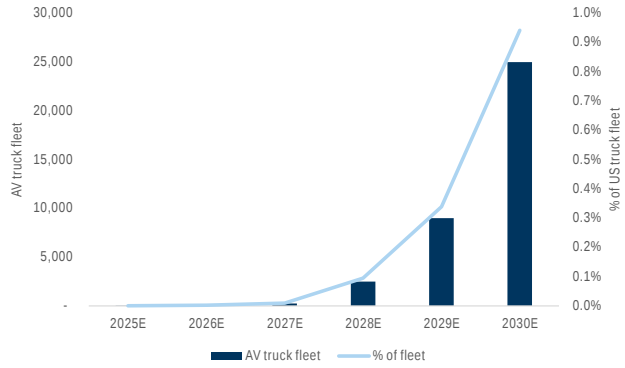
We estimate that gross profit for the AV trucking market in the US could be ~$7 bn in 2030, assuming a gross margin in the mid-to-high 30% range applied to our $18 bn revenue estimate from AV trucking. Note that we assume a virtual driver model would have a higher gross margin.

Exhibit 9: AV trucking market size and penetration of total US trucking market



Source: Goldman Sachs Global Investment Research, ATRI, FTR

Exhibit 10: AV truck fleet and penetration of US truck fleet 2025E-2030E



Source: ACT, ATRI, Goldman Sachs Global Investment Research

Market dynamics for AV trucks

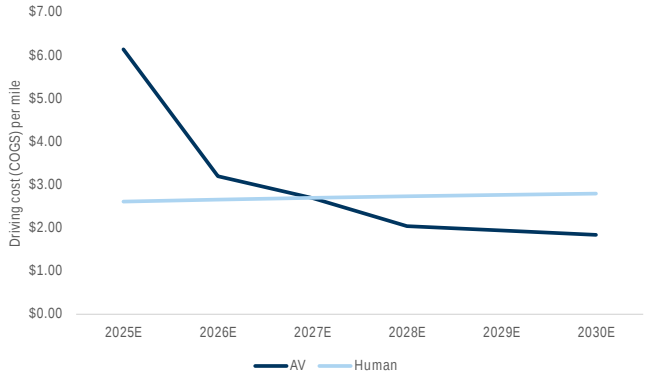
Currently, there are a small number of AVs deployed commercially (e.g. Aurora on-road and Kodiak off-road), with a few vehicles on the road from each (with Aurora noting it had commercially deployed two trucks for driverless operations on its 1Q25 earnings call). We expect further deployments going forward from other industry participants such as Plus and Waabi.

We expect that part of the increased adoption and deployments through 2030 will be driven by the cost of AV trucking improving relative to a human driver. **At present, we believe the additional upfront costs to make an AV truck are ~$150k, and we expect this to decline to a premium of ~$50k in 2030,** driven by improved hardware costs and economies of scale.

On driving costs, when factoring in remote operations as well as expected savings from fuel and, over the longer-term, insurance, as well as typical truck costs such as maintenance, depreciation, and tolls, we expect the cost per mile for an AV truck to decrease from ~$6.15 in 2025 to ~$1.89 in 2030. By comparison, we expect the like-for-like cost for a human-driven truck (including tolls, maintenance, depreciation costs, etc.) to increase from ~$2.61 in 2025 to $2.80, driven by rising driver wages. Driver wages and benefits are currently about $1.00 per mile, per ATRI. We show our expectations for both AV and human-driven trucks in Exhibit 11. One of the key drivers of

the improvement in AV cost per mile is an increase in miles traveled per AV, as AVs aren't subject to hours of use limits like humans (up to 11 hours of driving per day for human-driven trucks, with a break of at least 30 minutes after 8 hours).

Exhibit 11: Forecast cost per mile (ex. opex): AV truck vs human-driven truck



Source: ATRI, Goldman Sachs Global Investment Research

For virtual driver models, similar to what Aurora plans to launch in partnership with Continental, we expect costs (including hardware depreciation, cost of remote operation, etc.) to decline from >$1 in 2027 (when Aurora expects to launch with Continental) to ~$0.30-$0.40 in 2030, as remote operators can supervise more vehicles and AV hardware costs decline. We expect revenue per mile to decrease from $0.95 in 2027 to $0.80 in 2030, driven by increased competition and better costs (implying solid gross margin potential for a virtual driver). We estimate that the revenue potential for virtual driver technology will increase from $0.4 bn to ~$5 bn from 2027-2030 assuming all AV trucks were to use a virtual driver model (although we believe that not all AVs will operate with the virtual driver model).

Regulations

Similar to robotaxi and passenger AVs, AV trucks must also comply with the relevant FMVSS standards at the federal level, with AV-specific regulations set at the state level. Presently, per Aurora, 40 states implicitly or explicitly allow the deployment of driverless AVs including trucks, with the notable exception of California, which allows passenger/light vehicle AVs (with the appropriate permits/approvals) but not trucks. However, California introduced a draft regulation in April 2025 that would permit heavy duty vehicles, such as trucks, to test and deploy after securing the appropriate permits. On the other hand, the Texas legislature is considering a bill that would require a human operator to be present in any commercially operated autonomous vehicle, including trucks, starting in September should it be passed and signed into law.

Rising importance of truck machinery in the value chain

We believe that truck machinery would benefit from rising importance in the value chain as the driver is replaced with a combination of hardware and software content. This dynamic would drive higher ASPs for truck machinery companies, in our view. We also believe that truck cost competitiveness could improve compared to other transport

methods, which could be balanced by potentially higher miles per truck. We think this could present a positive opportunity for truck OEMs such as Paccar (PCAR) via higher hardware content and value in the software integration. We also think this could be positive at the margin for Cummins (CMI) and Atmus Filtration (ATMU) if truck cost competitiveness improves compared to other transport modes.

European truck OEMs have announced different JVs on the path to launching autonomous trucks. Daimler Truck is developing autonomous trucks according to SAE Level 4, which are equipped with safety-relevant, redundant driving systems and targets to enter the US market by 2027 with its subsidiary Torc Robotics. The trucks have been tested on routes in New Mexico, Texas and Arizona. Volvo is exploring transportation as a service models leveraging its JV with Aurora (currently piloting in collaboration with DHL group) and Waabi. At the moment, Volvo fully integrates the software solutions at its factory and provides services to customers. It also has its own virtual driver options available for mining trucks at sites. Traton also expects to launch autonomous mining truck operations in late 2025, with hub-to-hub automation being the next step (partnering with Plus and Applied Intuition).

Insurance: Real growth still expected, but lower accident rates and changing landscape longer-term

The primary takeaways for the $432bn US auto insurance market are: **1)** despite increasing autonomy, we expect a continuation of modest real growth in auto insurance premiums for at least the next 10-15 years, giving auto insurers time to develop strategies to participate in the future of auto insurance and/or diversify their business mix before the TAM is impacted more significantly (premiums plateau, shrink, or change form); **2)** autonomy (primarily ADAS) is already impacting accident frequency and repair costs, and is likely to have an increasing impact as the pace of adoption accelerates in the coming decades; and **3)** autonomy has the potential to significantly reduce accident frequency longer-term and reshape the underlying claim cost distribution and legal liability for accidents, leaving risks and opportunities for both insurers and OEMs.

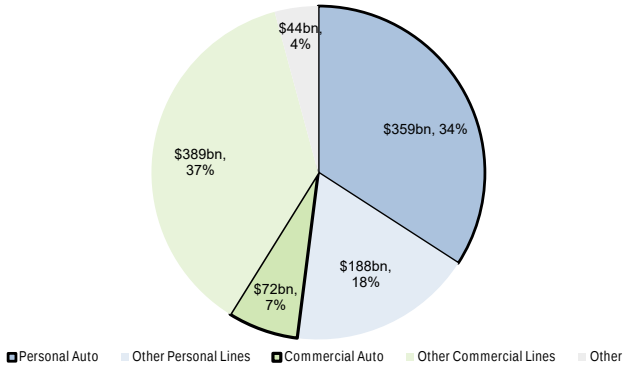
US Auto Insurance Market Growth + Autonomy's near and medium term impacts: Increasing autonomy is already decreasing auto insurance accident frequency, but we don't expect the auto insurance market to shrink any time soon. State minimum car insurance requirements apply to cars with driver-assist features the same way that they do to cars without. We expect a continuation of the modest real growth that the auto insurance market has produced over recent decades/years, driven by increases in the number of vehicles and above-CPI increases in cost per claim, partially offset by lower accident frequency. Cost per claim, or accident severity, should continue to increase at an above-CPI rate, as cars become more complex/expensive and increased litigation drives higher payouts for claims. Partially offsetting this is a continuation of the longer-term trend of lower accident frequency as cars become safer and implement autonomy technology, such as ADAS.

We estimate that the potential market for robotaxi insurance will be $1-1.5 bn in

2030 and thus small vs. the ~$360bn personal and $72bn commercial auto markets currently. Furthermore, we expect the realized market for robotaxi insurance to be less than $1-$1.5 bn, given our industry discussions that suggest some larger companies in the AV space could self-insure.

Exhibit 12: The US Personal Auto and Commercial Auto Insurance Market is ~$432bn, or 41% of the $1.05tn US Property & Casualty Market

U.S. Property & Casualty Direct Premiums Written (DPW) by Product (2024)



Source: S&P Global Market Intelligence, Goldman Sachs Global Investment Research

Exhibit 13: Many Large-Cap publicly traded P&C Insurers have exposure, led by Progressive & Allstate

Public Insurers Net Premiums Written (NPW) Exposure to Auto Insurance

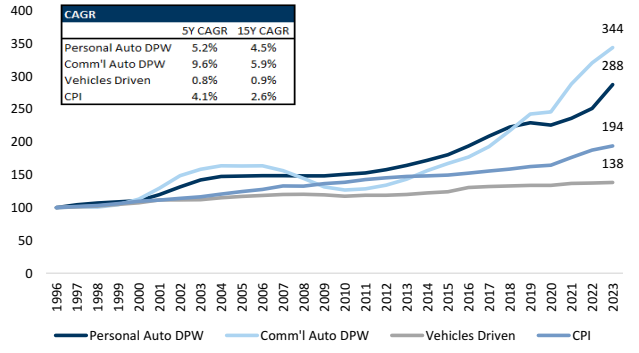
Insurers with Greatest Exposure to Auto Insurance					
Ticker	Market Cap ($mn)	US NPW ($mn)	Personal Auto as a % US NPW	Comm'l Auto as a % of US NPW	Total Auto as a % of US NPW
ROOT	2,108	359	100%	0%	100%
KMPR	4,078	3,841	77%	21%	98%
PGR	167,033	74,412	80%	14%	94%
SAFT	1,223	1,093	61%	12%	73%
MCY	3,571	5,343	63%	7%	70%
ALL	55,577	52,715	66%	1%	66%
BRK	1,089,312	80,324	53%	3%	56%
ORI	9,343	3,811	0%	52%	52%
ERIE	16,696	12,052	42%	9%	50%
Exposure of Other GS Covered Insurers					
TRV	62,465	41,098	19%	9%	29%
HIG	36,888	16,503	15%	8%	22%
WRB	28,334	10,798	1%	13%	15%
AIG	48,781	13,277	7%	7%	14%
CB	119,096	25,887	4%	5%	9%
AHL	3,150	1,169	0%	0%	0%

Blue shading represents a GS covered insurer.

Source: Factset, S&P Global Market Intelligence, Goldman Sachs Global Investment Research

Exhibit 14: Despite increasing autonomy, the auto insurance market has experienced modest real growth, and we expect a continuation of that trend for the next 10-15 years at least...

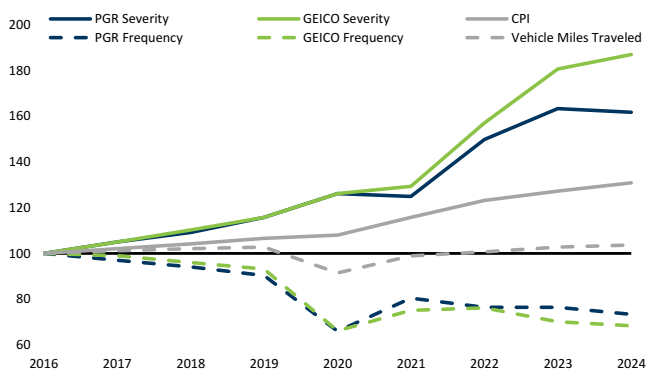
Index Personal Auto Direct Premiums Written Growth vs. Inflation & Miles Driven (1996=100)



Source: Federal Reserve Bank of St. Louis, Federal Highway Administration, S&P Global Market Intelligence, Goldman Sachs Global Investment Research

Exhibit 15: ...as increases in claim severity (cost per claim) and a modest increase in vehicles outweighs a decline in accident frequency

Auto Physical Damage Severity & Frequency (2016 = 100)



Source: Federal Reserve Bank of St. Louis, Company data, Goldman Sachs Global Investment Research

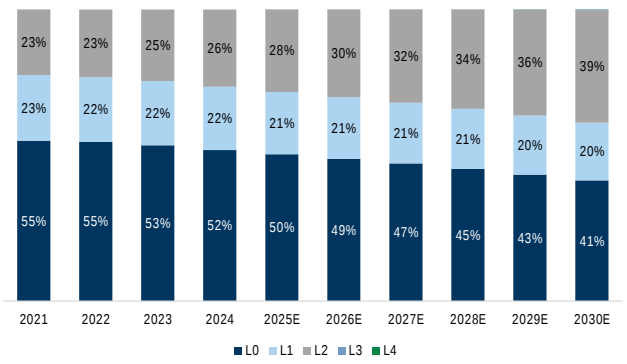
Exhibit 16: ADAS technologies such as emergency braking and forward collision warning are having success in lowering accident frequency but are making repairs/replacement more expensive
Impact of L2 Tech on Accident Frequency & Severity

Impact of L2 Technologies on Accident Frequency and Severity				
	Accident Frequency			Accident Severity
	Physical Damage	Collision	Bodily Injury	Collision
Forward Collision Warning	-9.0%	-3.1%	-17.3%	2.1%
Auto Emergency Braking	-14.4%	-3.0%	-23.2%	NM
Curve Adaptive Headlights	-5.2%	-1.4%	-6.7%	4.3%
Blind Spot Warning	-7.1%	-2.1%	-8.2%	NR
Parking Sensors	-5.4%	-0.8%	NM	NR
Rear Camera	-4.4%	0.7%	-5.0%	NR

NR = Not Reported; NM = Not Meaningful/Not Statistically Significant; Frequency & Severity Data from 2023 HLDI Compendium

Source: Highway Loss Data Institute, Data compiled by Goldman Sachs Global Investment Research

Exhibit 17: Despite material advances in autonomy, we project only 0.2% of the overall US fleet will be L4 by 2030
US light vehicle fleet (ex. commercial AVs) by autonomy level



Source: Goldman Sachs Global Investment Research, Wards

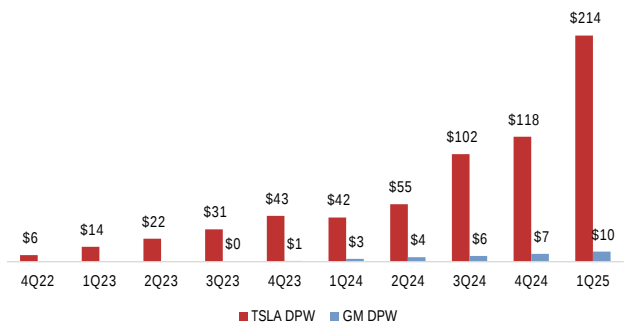
Autonomy has the potential to reshape the auto insurance underlying claim cost distribution and legal liability: Autonomy could significantly reduce the number of auto accidents, particularly those caused by human error. Over the long-term, fewer accidents (but likely more costly accidents) could incrementally shift auto insurance towards a more accident severity driven product versus the very accident frequency driven product that it is today. Additionally, **it's possible that the legal liability of accidents may shift**, potentially changing the underlying claim costs distributions between physical damage and liability coverages as well. The ways in which incumbent insurers, suppliers, manufacturers, and municipalities ultimately participate in insuring the legal liability of accidents will depend first on how the technology and regulation develops and then on 1) company foresight to invest in future competitiveness and 2) ability/desire to insure risk. The underlying protection needed for autonomous vehicles could shift the insurance pool towards product liability and cyber coverage - a different underlying risk profile than what auto insurers cover today. Therefore, incumbent auto insurers may need to invest in talent and capabilities to profitability underwrite a new set of underlying risk. OEMs may look to participate in these insurance profit pools but will need to prove out underwriting prowess and wade through potential valuation headwinds associated with having insurance risks on the balance sheet. **Ultimately, we come away with a few key considerations:**

- **Insurers:** We believe that the two primary long-term risks to auto insurers are: **1)** declines in accident frequency and/or car ownership at some point start to outweigh the increase in accident severity, leading to a decreasing premium TAM (we do not expect this to happen for at least 10-15 years, and perhaps much longer) and **2)** shifts in the underlying claim costs and legal liability of accidents change incumbent auto insurers' ability to compete effectively to provide coverage (such that product suppliers and manufacturers may know their product better and can offer insurance at point of sale, etc.). **Said another way, the coverage needed to protect**

autonomous vehicles may shift towards product liability and/or cyber coverage, in which current incumbent auto insurers may be less prepared to partake, without foresight, partnerships, and/or investment. As a side note, we think that, with more technology integration, insurers/OEMs will have a stronger ability to detect fraudulent claims, which industry participants estimate in the 10%-15% of claims costs annually (Verisk, Insurance Research Council). Less fraud would ultimately be a headwind to a growing TAM because all claim risk is currently embedded in price and market premiums.

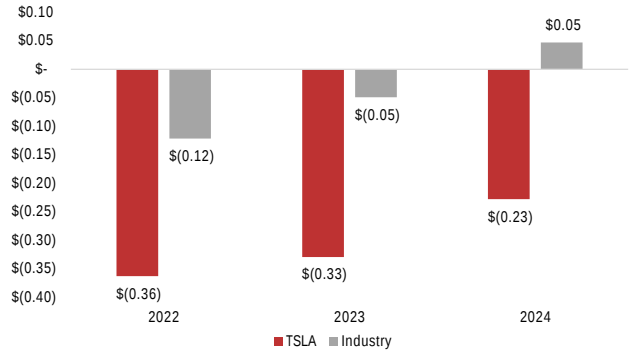
- **OEMs:** We believe that insurance represents a long-term opportunity for auto OEMs to increase their profits from recurring services, if they can underwrite profitably (which we believe can be challenging for new insurance market entrants). Tesla, GM, and Rivian all offer insurance (either directly or through partnerships), although these efforts remain small (per statutory filings from Tesla and GM). For example, Tesla offers insurance in 12 states and earned only ~$317 mn revenue from its insurance business in 2024, based on data from S&P Capital IQ. Separately, Rivian sells insurance but is not taking underwriting risk (underwriters include Nationwide and Progressive), which we believe helps ensure a solid margin but limits the size of the business given the shared economics.

Exhibit 18: Tesla has grown insurance premiums, while GM premiums are not yet material
US Direct Premiums Written ($mn)



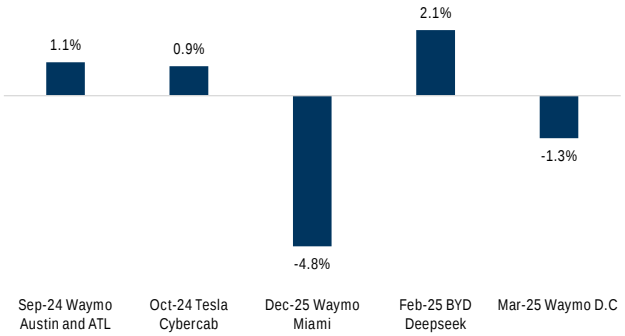
Source: S&P Global Market Intelligence, Goldman Sachs Global Investment Research

Exhibit 19: Tesla's underwriting margin improved in-line with the industry during 2024 but remains well below the industry average
Underwriting Margin (Pre-Tax Underwriting Profit per Dollar of Premium Revenue)



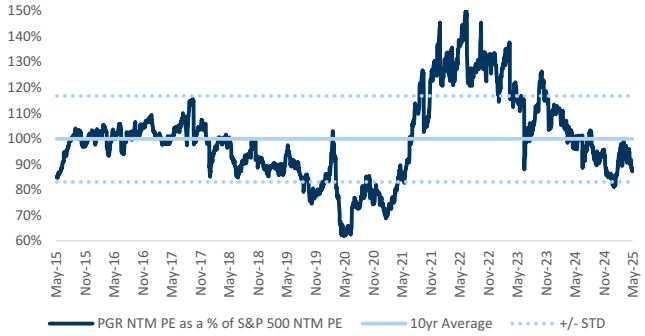
Source: S&P Global Market Intelligence, Company data, Goldman Sachs Global Investment Research

Exhibit 20: Auto insurer PGR share price returns have been mixed on positive announcements for Autonomous driving
PGR 2-Day Price Returns vs. S&P 500



Source: S&P Global Market Intelligence, Goldman Sachs Global Investment Research

Exhibit 21: And we can't unpack a clear autonomous impact on valuation multiples over a longer period of time
PGR Price/NTM Earnings as a % of S&P Price/NTM Earnings (ex-AAPL, MSFT, NVDA)



S&P 500 NTM PE (ex-AAPL, MSFT, NVDA)

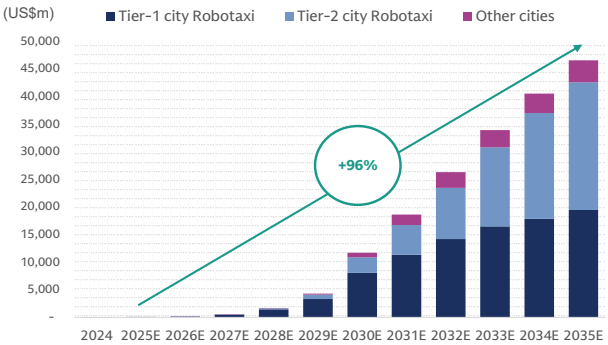
Source: FactSet, Goldman Sachs Global Investment Research

Spotlight on China

Our global colleagues expect the China robotaxi market to grow from ~$54 mn in 2025 to ~$12 bn in 2030 and ~$47 bn in 2035 as robotaxis continue to scale across an increasing number of cities, as detailed in our report led by Allen Chang in May 2025. This compares to our estimate for the US robotaxi market to grow from about ~$300 mn in 2025 to ~$7 bn in 2030. A large driver of this difference is fleet size, with our colleagues expecting a robotaxi fleet of ~500k in 2030 for China, while we expect ~35k in the US.

Exhibit 22: Our colleagues expect the China robotaxi market to grow from $54 mn in 2025 to $47 bn in 2035

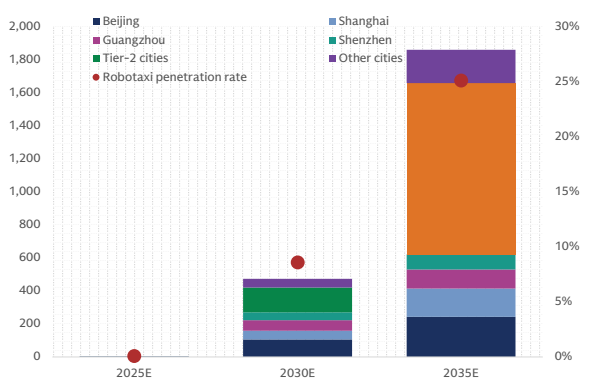
China Robotaxi market: US$47B opportunity by 2035E, compared to US$54m in 2025



Source: Goldman Sachs Global Investment Research

Exhibit 23: Our colleagues expect the China robotaxi fleet to grow from ~4k vehicles in 2025 to 1.9 mn in 2035

China Robotaxi Fleet: 1.9M by 2035E with 25% penetration to total shared mobility vehicles, vs. 4,000 in 2025E with 0.1% penetration



Source: Goldman Sachs Global Investment Research

Notably, our colleagues expect significantly lower ASPs/mile for robotaxis in China, which is partly due to lower hardware costs. Specifically, they expect the upfront cost for an AV including the AV sensor/tech stack to decrease from ~$44k today to $35k in

2030 and ~$32k in 2035. Indeed, costs of AVs in China have already been decreasing meaningfully, with Baidu's Apollo Go noting that its Gen 6 AV costs only ~$29k (excluding the battery), a 60% improvement over Gen 5. Similarly, Pony AI's Gen 7 underlying vehicle has an MSRP between $17k-$33k. For comparison, we assume the upfront costs of an illustrative sensor-rich AV in the US market will decline from ~$85k in 2025 to $50k in 2030 (including the cost of the AV hardware).

Waymo: Analyzing the Ramp of the Largest AV Operator in the US

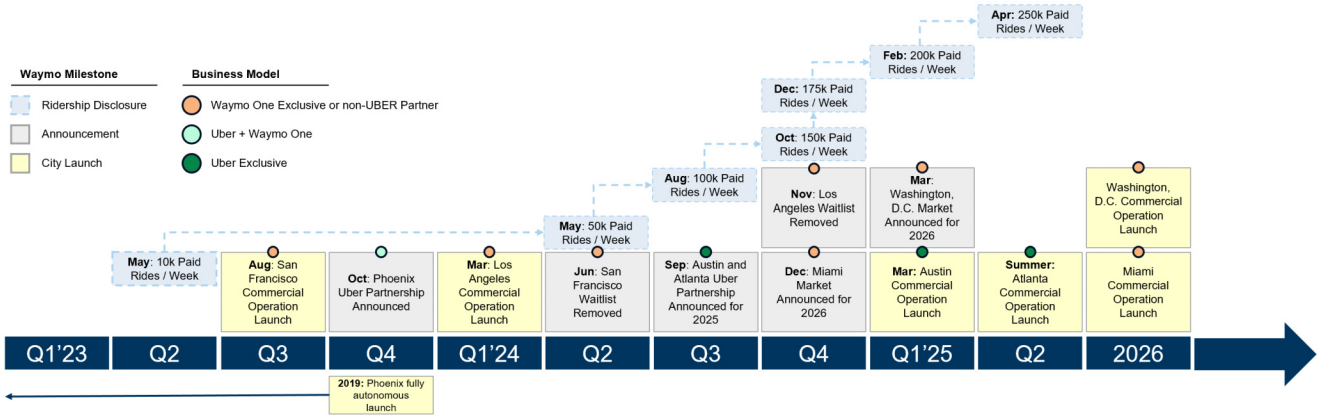
Waymo Could be Commercially Launched in 7+ US Cities by the end of 2026E

Waymo started in 2009 as Google's self-driving car project and launched the world's first commercial autonomous ride-hailing service in the Metro Phoenix area in 2018 (with fully autonomous rides starting in 2019).

Fast-forward to today, Waymo now serves over 250k paid rides per week (as of April 2025), up significantly from 10k in May 2023 only ~24 months prior. This ramp has resulted in ~5mm paid rides in 2025 to date and 10mm+ cumulative rides since launch (as of May 2025). These rides are serviced by a fleet of >1,500 vehicles (as of May 2025), with Waymo disclosing plans to build over 2,000 more vehicles through 2026, including Jaguar I-PACE AVs and through building partnerships with other OEMs such as Zeekr and Toyota for further vehicle deployments. Commercial operations are live in 4 US markets (Phoenix, San Francisco, LA, Austin), with 3 more market launches announced across 2025 (Atlanta) and 2026 (Miami, Washington D.C.) for a total of 7 announced markets through 2026, as well as planned expansions for existing service areas.

GOOGL expects that Waymo could be in ~10+ US markets by the end of 2025 (with live commercial Waymo One operations on top of that), based on comments made by the GOOGL CEO at an industry conference in December 2024. Since the end of January 2025, Waymo has announced 10 US markets in its roll-out of cross-country testing, including Las Vegas, San Diego, Washington D.C., New Orleans, Nashville, Boston, Dallas, San Antonio, Houston & Orlando. Waymo also announced its first international road trip in Tokyo in early 2025 (the vehicles will initially be driven manually to map key areas of the city).

Exhibit 24: Waymo Major Announcements Timeline

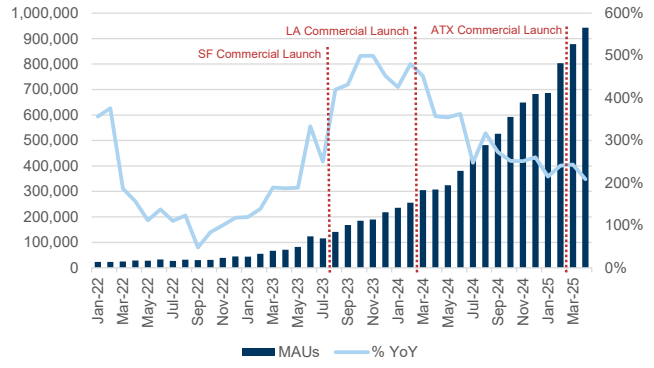


Source: Press Articles, Company data, Goldman Sachs Global Investment Research

Waymo is Attracting Users and Gaining Market Share

Waymo users have grown exponentially in the past 18 months as commercial operations started in San Francisco in August 2023 (followed by LA in March 2024, Austin in March 2025 and with Phoenix already live since 2018/2019). According to Sensor Tower, Waymo MAUs now represent the equivalent of 3%/7% of UBER/LYFT's US users and are still growing triple digits YoY. According to Google Trends, search interest for Waymo is now approaching/slightly above LYFT in markets where it has live commercial operations (but still much lower than UBER).

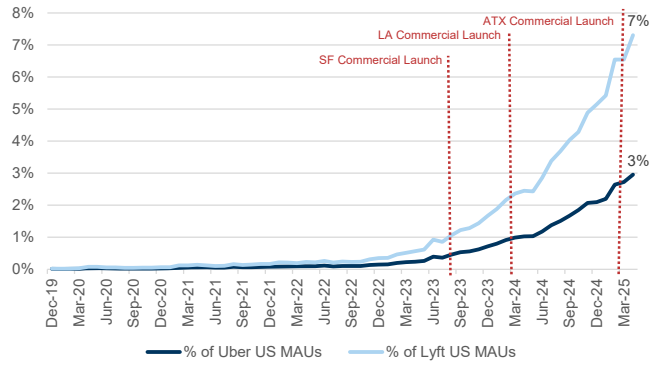
Exhibit 25: Waymo MAUs are Growing Rapidly in the US



Absolute MAU figures are Sensor Tower estimates

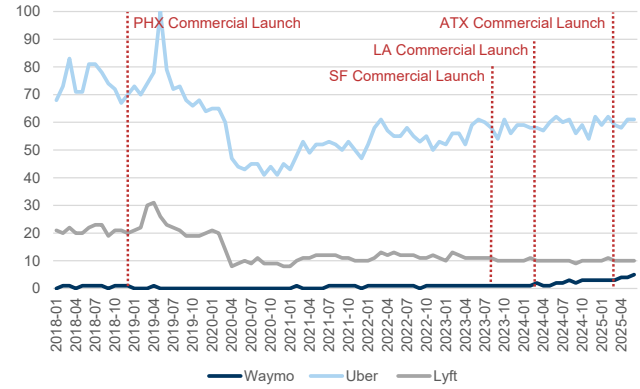
Source: Sensor Tower, Goldman Sachs Global Investment Research

Exhibit 26: Waymo now Accounts for a Single-Digit Percentage of UBER/LYFT US MAUs



Source: Sensor Tower, Goldman Sachs Global Investment Research

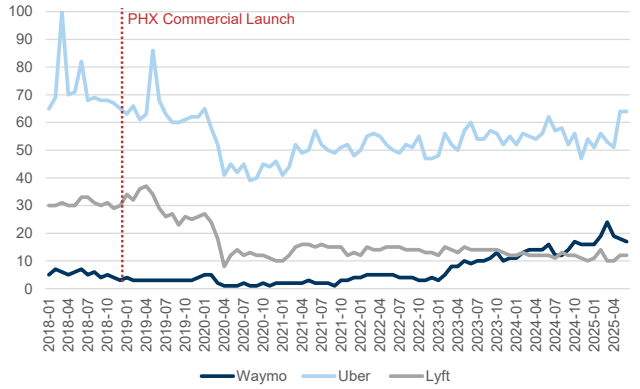
Exhibit 27: Google Search Interest for Waymo is Rising in the US



Trend data calculated based on period of Jan 2018 - May 2025. Numbers represent search interest relative to the highest point on the chart for the given region and time. A value of 100 is the peak popularity for the term. A value of 50 means that the term is half as popular. A score of 0 means there was not enough data for this term.

Source: Google Trends (
Global Investment Research

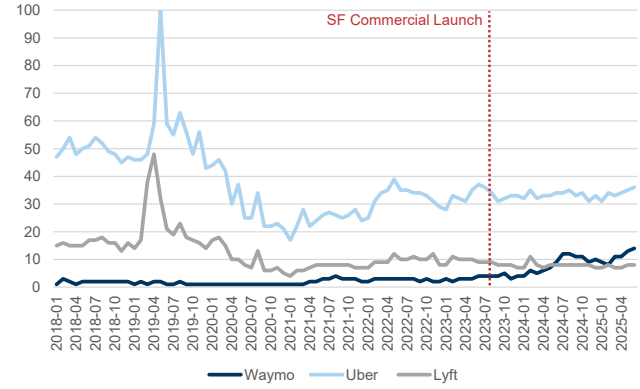
Exhibit 28: Search Interest for Waymo is Above LYFT in Phoenix...



Trend data calculated based on period of Jan 2018 - May 2025. Numbers represent search interest relative to the highest point on the chart for the given region and time. A value of 100 is the peak popularity for the term. A value of 50 means that the term is half as popular. A score of 0 means there was not enough data for this term.

Source: Google Trends (
Global Investment Research

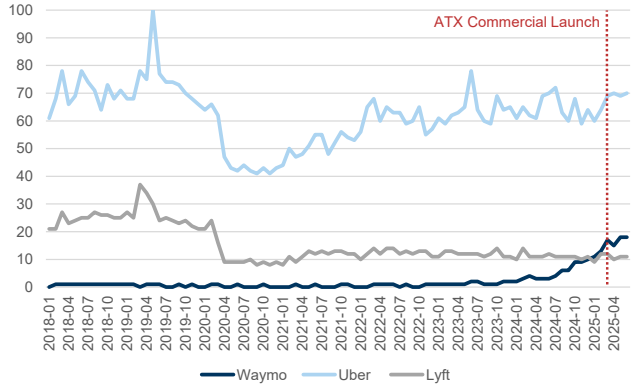
Exhibit 29: ...and Search Interest for Waymo now Exceeds LYFT in the Bay Area...
San Francisco, Oakland, San Jose



Trend data calculated based on period of Jan 2018 - May 2025. Numbers represent search interest relative to the highest point on the chart for the given region and time. A value of 100 is the peak popularity for the term. A value of 50 means that the term is half as popular. A score of 0 means there was not enough data for this term.

Source: Google Trends (
Global

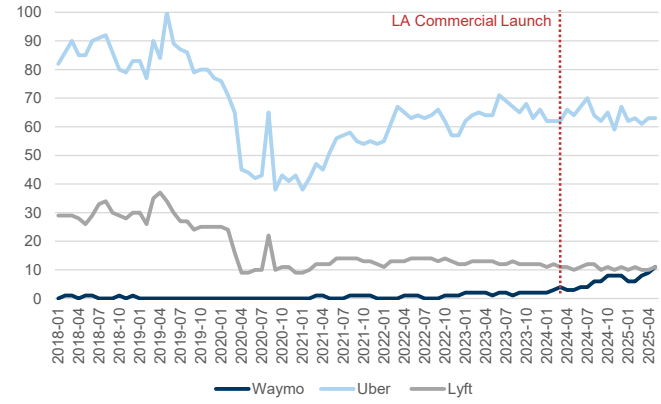
Exhibit 30: ...and Waymo Search Interest is Greater than Lyft in Austin as well...



Trend data calculated based on period of Jan 2018 - May 2025. Numbers represent search interest relative to the highest point on the chart for the given region and time. A value of 100 is the peak popularity for the term. A value of 50 means that the term is half as popular. A score of 0 means there was not enough data for this term.

Source: Google Trends (
Global

Exhibit 31: ...while Waymo Search Interest is In-line with LYFT in LA



Trend data calculated based on period of Jan 2018 - May 2025. Numbers represent search interest relative to the highest point on the chart for the given region and time. A value of 100 is the peak popularity for the term. A value of 50 means that the term is half as popular. A score of 0 means there was not enough data for this term.

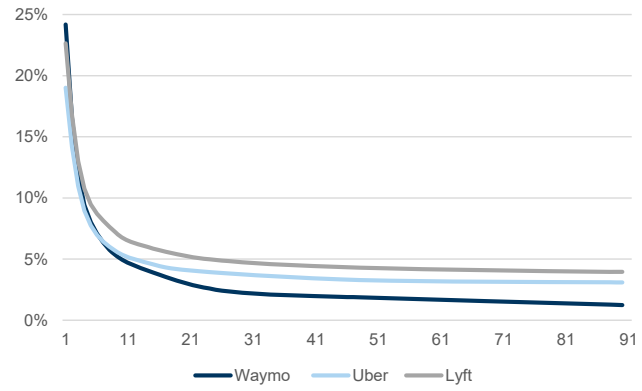
Source: Google Trends (

Retention and Engagement Remains Below UBER/LYFT in the US

Waymo's 90-day user retention is lower than that of UBER/LYFT, according to Sensor Tower data as of Q1'25. The data suggests that Waymo has higher churn than UBER/LYFT, especially when moving past the 5-day mark. However, the 90-day retention delta has improved modestly from Q3'24.

Relatively lower retention could partially be driven by the tourism/novelty effect around Waymo where users download the app when visiting markets where the service is available (e.g., San Francisco) before going back to markets where the service is not available. Waymo's average usage frequency (avg. sessions/month) is also lower than that of UBER/LYFT, albeit with trends improving since the middle of 2024.

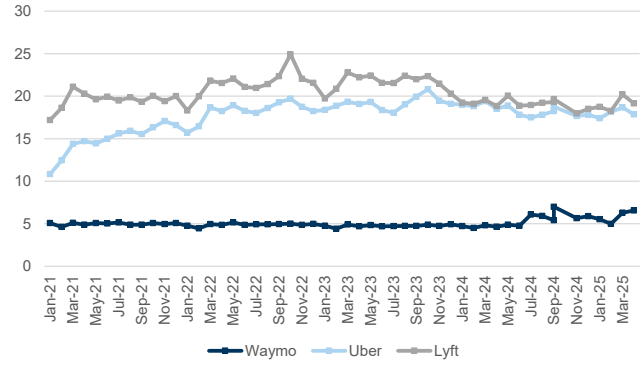
Exhibit 32: Waymo's User Retention Lags LYFT and UBER in the US
As of Q1'25



Measures the percentage of users retained throughout a 90-day period. Calculated as the weighted average of App Store and Google Play retention rates weighed by downloads.

Source: Sensor Tower, Goldman Sachs Global Investment Research

Exhibit 33: Waymo Users Use the App Less Frequently Than UBER/LYFT Users, but Trends are Improving
Average Monthly Sessions per User

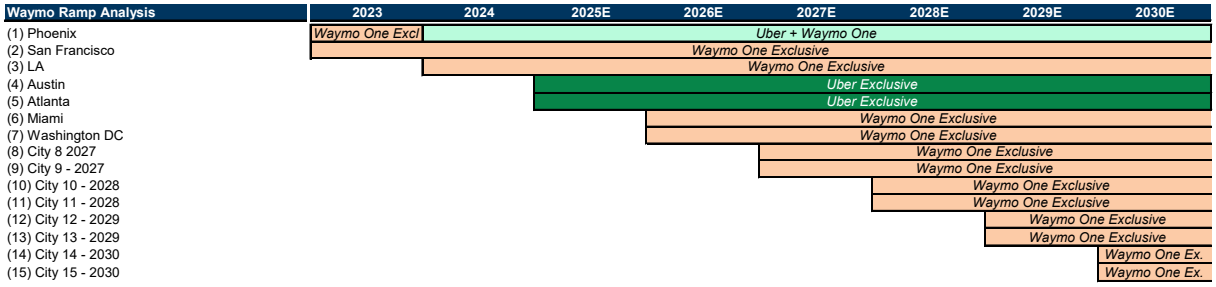


Source: Sensor Tower, Goldman Sachs Global Investment Research

Waymo Ramp Analysis: Path to $4bn+ Gross Bookings by 2030E

We expect Waymo to be live in 5 US markets by the end of 2025 (Phoenix, SF, LA, Austin, Atlanta) and 15 US markets by the end of 2030. We assume Waymo launches commercially in 2 additional cities each year from 2026-2030. In 2026, we assume those cities are Miami and Washington D.C.; thereafter, we assume Waymo launches in 2 cities per year, approximately representative of a top 15 MSA (Metropolitan Statistical Area) by population. Importantly, for the purposes of our analysis of the potential impact to UBER & LYFT, we conservatively assume that each city (other than Austin & Atlanta) will be launched as a Waymo One service exclusively (i.e., direct to consumer).

Exhibit 34: Waymo Expected US Launches (GSe)



Source: Company reports, Goldman Sachs Global Investment Research

As we lay out below, we expect Waymo to ramp from ~$300mm gross bookings (or 17mm paid trips) in 2025 to $4.3bn (or 268mm paid trips) in 2030. This ramp in Waymo paid volume compares to our current estimates for US/CAN Rideshare Industry Gross Bookings of ~$97bn (against a TAM of $336bn) across ~5.6bn trips.

Exhibit 35: Waymo vs. North America Rideshare Comparison
$mm, mm

Gross Bookings ($mm)	2023	2024	2025E	2026E	2027E	2028E	2029E	2030E
US/CAN TAM	$ 223,556	$ 240,615	$ 252,385	$ 269,353	$ 286,891	$ 304,120	$ 320,953	$ 336,405
US/CAN Rideshare Bookings	$ 43,781	$ 51,466	$ 57,627	$ 65,057	$ 72,799	$ 80,740	$ 88,746	$ 96,669
UBER US/CAN Mobility Bookings	$ 29,636	$ 34,971	$ 39,167	$ 44,259	$ 49,570	$ 55,023	$ 60,525	$ 65,973
LYFT Bookings	$ 13,775	$ 16,099	$ 18,052	$ 20,373	$ 22,792	$ 25,271	$ 27,771	$ 30,242
Waymo GBs ($mm)	$ 14	$ 83	$ 292	$ 649	$ 1,105	$ 1,800	$ 2,841	$ 4,338

Trips (mm)	2023	2024	2025E	2026E	2027E	2028E	2029E	2030E
US/CAN Rideshare Trips	2,354	2,763	3,186	3,640	4,115	4,605	5,099	5,591
UBER US/CAN Mobility Trips	1,626	1,914	2,209	2,528	2,861	3,203	3,544	3,884
LYFT Trips	709	828	955	1,089	1,230	1,378	1,529	1,682
Waymo Paid Rides	1	5	17	37	67	115	181	268

Vehicle Miles Traveled (mm)	2023	2024	2025E	2026E	2027E	2028E	2029E	2030E
US/CAN Vehicle Miles Traveled (VMT)	3,452,138	3,485,313	3,520,166	3,555,368	3,590,921	3,626,831	3,663,099	3,699,730
Addressable US/CAN VMT	1,035,642	1,045,594	1,056,050	1,066,610	1,077,276	1,088,049	1,098,930	1,109,919
US/CAN Rideshare VMT	17,931	21,253	24,751	28,558	32,613	36,857	41,219	45,652
UBER US/CAN Mobility VMT	12,385	14,726	17,164	19,838	22,677	25,635	28,655	31,710
LYFT VMT	4,052	4,733	5,730	6,859	8,138	9,570	11,154	12,883
Waymo VMT	4	28	101	236	442	800	1,320	2,049

Source: Company data, Goldman Sachs Global Investment Research

We expect Waymo paid weekly rides to ramp from 250k in April 2025 to ~5.1m in 2030. As of April 2025, Waymo was making 250k paid weekly rides (runrate of ~13m annually), per the company. We expect FY25 to average ~320k paid weekly rides (or ~17m annually) and grow to ~5.1m+ paid weekly rides by 2030 (~268m annually).

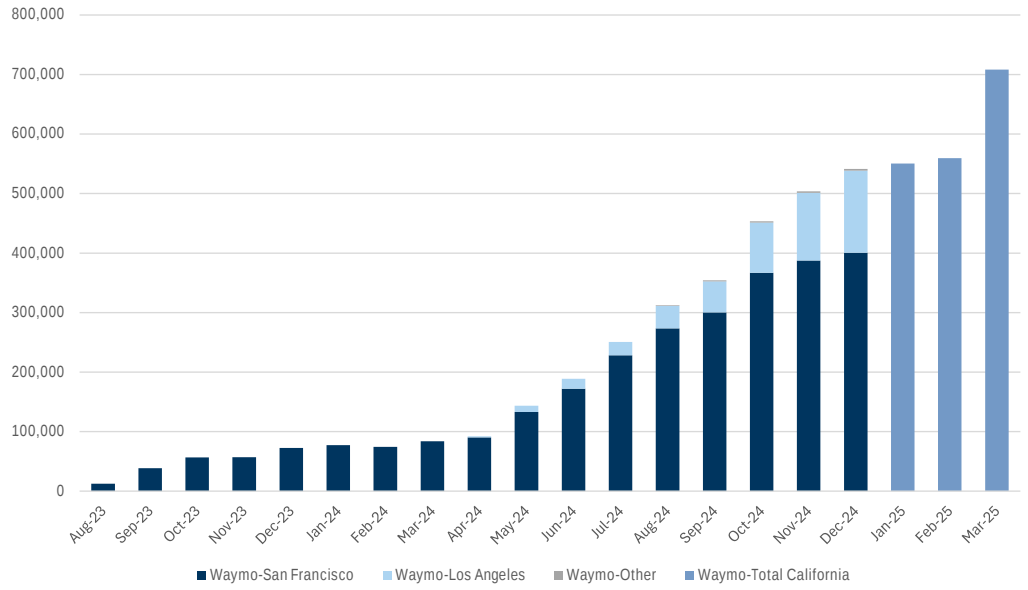
Exhibit 36: Waymo Paid Weekly Rides by City Cohort

000s

	2023	2024	2025E	2026E	2027E	2028E	2029E	2030E
Waymo Paid Weekly Rides ('000)	**15**	**93**	**322**	**720**	**1285**	**2215**	**3480**	**5145**
(1) Phoenix	10	30	60	100	150	215	280	345
(2) San Francisco	5	50	129	215	330	475	625	775
(3) LA		13	94	215	330	475	625	775
(4) Austin			25	75	150	275	450	650
(5) Atlanta			15	75	150	275	450	650
(6) Miami				25	75	150	275	450
(7) Washington DC				15	50	150	275	450
(8) City 8 2027					25	75	150	275
(9) City 9 - 2027					25	75	150	275
(10) City 10 - 2028						25	75	150
(11) City 11 - 2028						25	75	150
(12) City 12 - 2029							25	75
(13) City 13 - 2029							25	75
(14) City 14 - 2030								25
(15) City 15 - 2030								25
YoY Growth								
(1) Phoenix		*200%*	*100%*	*67%*	*50%*	*43%*	*30%*	*23%*
(2) San Francisco		*895%*	*159%*	*67%*	*53%*	*44%*	*32%*	*24%*
(3) LA			*605%*	*130%*	*53%*	*44%*	*32%*	*24%*
(4) Austin				*200%*	*100%*	*83%*	*64%*	*44%*
(5) Atlanta				*400%*	*100%*	*83%*	*64%*	*44%*
(6) Miami					*200%*	*100%*	*83%*	*64%*
(7) Washington DC					*233%*	*200%*	*83%*	*64%*
(8) City 8 - 2027						*200%*	*100%*	*83%*
(9) City 9 - 2027						*200%*	*100%*	*83%*
(10) City 10 - 2028							*200%*	*100%*
(11) City 11 - 2028							*200%*	*100%*
(12) City 12 - 2029								*200%*
(13) City 13 - 2029								*200%*
(14) City 14 - 2030								
(15) City 15 - 2030								
Total		***520%***	***246%***	***123%***	***78%***	***72%***	***57%***	***48%***
% Total								
(1) Phoenix	*67%*	*32%*	*19%*	*14%*	*12%*	*10%*	*8%*	*7%*
(2) San Francisco	*33%*	*53%*	*40%*	*30%*	*26%*	*21%*	*18%*	*15%*
(3) LA		*14%*	*29%*	*30%*	*26%*	*21%*	*18%*	*15%*
(4) Austin			*8%*	*10%*	*12%*	*12%*	*13%*	*13%*
(5) Atlanta			*5%*	*10%*	*12%*	*12%*	*13%*	*13%*
(6) Miami				*3%*	*6%*	*7%*	*8%*	*9%*
(7) Washington DC				*2%*	*4%*	*7%*	*8%*	*9%*
(8) City 8 - 2027					*2%*	*3%*	*4%*	*5%*
(9) City 9 - 2027					*2%*	*3%*	*4%*	*5%*
(10) City 10 - 2028						*1%*	*2%*	*3%*
(11) City 11 - 2028						*1%*	*2%*	*3%*
(12) City 12 - 2029							*1%*	*1%*
(13) City 13 - 2029							*1%*	*1%*
(14) City 14 - 2030								*0%*
(15) City 15 - 2030								*0%*

Source: Company data, Goldman Sachs Global Investment Research

Exhibit 37: Waymo Paid Weekly Rides - California



Source: California Public Utilities Commission

Our rides forecast is anchored in increasing Waymo vehicle supply and vehicle utilization improvements. In its current form, Waymo's business model is capital intensive, and more vehicles will be required to support demand growth over time. Waymo had ~700 driverless cars in June 2024, of which 300-400 were in California. Currently, Waymo's fleet size is >1,500 vehicles (as of May 2025), with Waymo disclosing plans to build over 2,000 more vehicles through 2026, including Jaguar I-PACE AVs and building partnerships with other OEMs such as Zeekr and Toyota for further vehicle deployments. **Our central case of ~5.1m paid weekly Waymo rides by 2030 would require ~20k vehicles (from >1,500 today) while also assuming improvements in vehicle utilization (trips per vehicle per day).** For additional context, we assume Waymo ramps to ~2,400 vehicles in San Francisco by 2030, which compares to Lyft recently citing that it had 20,000 drivers in SF at the end of May 2025. This compares to Zoox's co-founder & CTO saying recently that in order to offer a competitive service to the current rideshare offering in SF, an AV fleet would need to scale to 1,000-2,000 robotaxis (which compares to his estimate of ~8,000 concurrent Uber/Lyft drivers at any one time in SF).

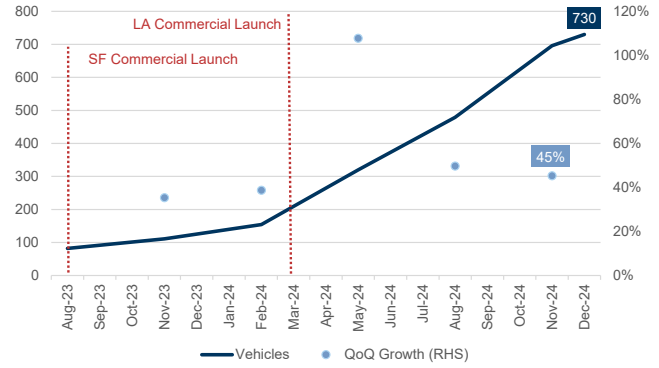
Exhibit 38: Our Central Case of ~5.1m Paid Weekly Waymo Rides by 2030 Would Require ~20k Vehicles (Even as Utilization Improves)

Waymo Supply Analysis	2023	2024	2025E	2026E	2027E	2028E	2029E	2030E
Vehicles Required to Support Waymo GBs								
Waymo Total Paid Rides ('000)	**780**	**4,838**	**16,762**	**37,440**	**66,820**	**115,180**	**180,960**	**267,540**
Waymo Paid Weekly Rides ('000)	15	93	322	720	1,285	2,215	3,480	5,145
Waymo GBs ($mm)	**$ 14**	**$ 83**	**$ 292**	**$ 649**	**$ 1,105**	**$ 1,800**	**$ 2,841**	**$ 4,338**
GB/Ride (GSe)	$ 19	$ 17	$ 17	$ 17	$ 17	$ 16	$ 16	$ 16
$/Mile (GSe)	$ 3.25	$ 3.00	$ 2.90	$ 2.75	$ 2.50	$ 2.25	$ 2.15	$ 2.12
Waymo Vehicles Required	**200**	**775**	**1,653**	**3,512**	**5,745**	**9,375**	**13,972**	**19,687**
Paid Weekly Rides per Vehicle	75	120	195	205	224	236	249	261
Paid Daily Rides per Vehicle	11	17	28	29	32	34	36	37
Implied GBs/Vehicle ($, GSe)	$ 72,429	$ 106,971	$ 176,436	$ 184,685	$ 192,340	$ 192,003	$ 203,361	$ 220,362
(1) Phoenix	150	275	320	475	649	853	1,026	1,173
(2) San Francisco	50	400	600	900	1,274	1,696	2,076	2,407
(3) LA		100	450	900	1,274	1,696	2,076	2,407
(4) Austin			150	400	714	1,190	1,786	2,381
(5) Atlanta			133	400	714	1,190	1,786	2,381
(6) Miami				225	357	649	1,091	1,648
(7) Washington DC				212	286	765	1,267	1,891
(8) City 8 - 2027					238	429	765	1,267
(9) City 9 - 2027					238	429	765	1,267
(10) City 10 - 2028						238	429	765
(11) City 11 - 2028						238	429	765
(12) City 12 - 2029							238	429
(13) City 13 - 2029							238	429
(14) City 14 - 2030								238
(15) City 15 - 2030								238
YoY Growth								
(1) Phoenix		*83%*	*16%*	*48%*	*37%*	*31%*	*20%*	*14%*
(2) San Francisco		*700%*	*50%*	*50%*	*42%*	*33%*	*22%*	*16%*
(3) LA			*349%*	*100%*	*42%*	*33%*	*22%*	*16%*
(4) Austin				*167%*	*79%*	*67%*	*50%*	*33%*
(5) Atlanta				*201%*	*79%*	*67%*	*50%*	*33%*
(6) Miami					*59%*	*82%*	*68%*	*51%*
(7) Washington DC					*35%*	*168%*	*66%*	*49%*
(8) City 8 - 2027						*80%*	*79%*	*66%*
(9) City 9 - 2027						*80%*	*79%*	*66%*
(10) City 10 - 2028							*80%*	*79%*
(11) City 11 - 2028							*80%*	*79%*
(12) City 12 - 2029								*80%*
(13) City 13 - 2029								*80%*
(14) City 14 - 2030								
(15) City 15 - 2030								
Total		*288%*	*113%*	*112%*	*64%*	*63%*	*49%*	*41%*

Source: Company data, Goldman Sachs Global Investment Research

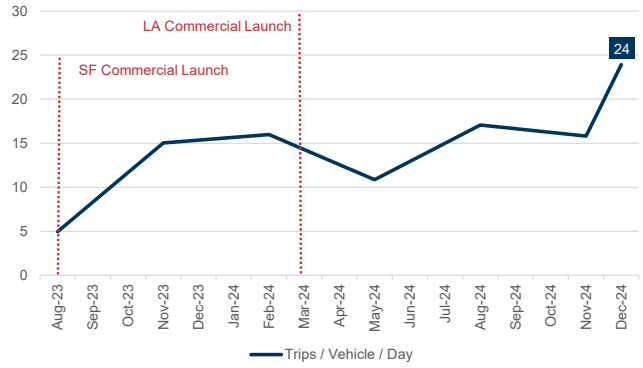
As part of the dataset reported to the California Public Utilities Commission (CPUC), we know that Waymo has improved utilization of deployed vehicles (trips per vehicle per day) from ~15 in November 2023 to ~24 in December 2024. We use this data point to help forecast a ramp in vehicle utilization by city cohort over time.

Exhibit 39: Waymo # of Deployed Vehicles - California



Source: California Public Utilities Commission

Exhibit 40: Waymo Vehicle Utilization - California



Source: California Public Utilities Commission

We assume Waymo ramps utilization from 28 trips per vehicle per day in 2025 to 37 in 2030. This implies the average Waymo vehicle will travel ~100k+ miles per year during paid trips. At ~10 fully utilized hours per day, this leaves room for further vehicle utilization improvements over time, in our view. Said differently, Waymo's fleet of vehicles likely has excess capacity to handle incremental demand even if we assume each vehicle will need a few hours per day of maintenance & unutilized miles (e.g., positioning of vehicles, etc.).

Exhibit 41: Waymo Vehicle Utilization Metrics

	2023	2024	2025E	2026E	2027E	2028E	2029E	2030E
Vehicle Utilization Checks								
Fully Autonomous Miles Driven per Week ('000)	86	532	1,934	4,536	8,500	15,385	25,380	39,399
Implied Miles/Ride*	5.7	5.7	6.0	6.3	6.6	6.9	7.3	7.7
Average Speed (Miles per Hour)	30 MpH	30 MpH	30 MpH	30 MpH	30 MpH	30 MpH	30 MpH	30 MpH
Implied Trips per Fully Utilized Hour	5.3	5.3	5.0	4.8	4.5	4.3	4.1	3.9
Implied Fully Utilized Hours/Day	2.0	3.3	5.6	6.2	7.0	7.8	8.6	9.5
Implied Total Miles Driven per Vehicle ('000)	22	36	61	67	77	85	94	104
**Assumed from 1mm miles disclosure: (1) 1mm miles, (2) all miles from paid rides*								
Trips per Day per Vehicle								
(1) Phoenix	10	16	27	30	33	36	39	42
(2) San Francisco	14	18	31	34	37	40	43	46
(3) LA		19	30	34	37	40	43	46
(4) Austin			24	27	30	33	36	39
(5) Atlanta			16	27	30	33	36	39
(6) Miami				16	30	33	36	39
(7) Washington DC				10	25	28	31	34
(8) City 8 - 2027					15	25	28	31
(9) City 9 - 2027					15	25	28	31
(10) City 10 - 2028						15	25	28
(11) City 11 - 2028						15	25	28
(12) City 12 - 2029							15	25
(13) City 13 - 2029							15	25
(14) City 14 - 2030								15
(15) City 15 - 2030								15
Total Fleet Average	**11**	**17**	**28**	**29**	**32**	**34**	**36**	**37**
YoY Growth								
(1) Phoenix		*64%*	*72%*	*12%*	*10%*	*9%*	*8%*	*8%*
(2) San Francisco		*24%*	*73%*	*11%*	*8%*	*8%*	*8%*	*7%*
(3) LA			*57%*	*15%*	*8%*	*8%*	*8%*	*7%*
(4) Austin				*13%*	*12%*	*10%*	*9%*	*8%*
(5) Atlanta				*66%*	*12%*	*10%*	*9%*	*8%*
(6) Miami					*89%*	*10%*	*9%*	*8%*
(7) Washington DC					*148%*	*12%*	*11%*	*10%*
(8) City 8 - 2027						*67%*	*12%*	*11%*
(9) City 9 - 2027						*67%*	*12%*	*11%*
(10) City 10 - 2028							*67%*	*12%*
(11) City 11 - 2028							*67%*	*12%*
(12) City 12 - 2029								*67%*
(13) City 13 - 2029								*67%*
(14) City 14 - 2030								
(15) City 15 - 2030								
Total Fleet Average		***60%***	***63%***	***5%***	***9%***	***6%***	***5%***	***5%***
Miles per Vehicle (Annual)								
(1) Phoenix	19,810	32,416	58,500	68,968	79,459	91,017	103,532	117,071
(2) San Francisco	29,714	36,963	66,969	78,260	89,091	101,130	114,151	128,220
(3) LA		39,339	64,863	78,260	89,091	101,130	114,151	128,220
(4) Austin			52,000	61,425	72,236	83,432	95,568	108,709
(5) Atlanta			35,183	61,425	72,236	83,432	95,568	108,709
(6) Miami				36,400	72,236	83,432	95,568	108,709
(7) Washington DC				23,158	60,197	70,791	82,295	94,772
(8) City 8 - 2027					36,118	63,206	74,331	86,409
(9) City 9 - 2027					36,118	63,206	74,331	86,409
(10) City 10 - 2028						37,924	66,367	78,047
(11) City 11 - 2028						37,924	66,367	78,047
(12) City 12 - 2029							39,820	69,685
(13) City 13 - 2029							39,820	69,685
(14) City 14 - 2030								41,811
(15) City 15 - 2030								41,811
Total Fleet Average	**22,286**	**35,657**	**60,840**	**67,158**	**76,936**	**85,335**	**94,454**	**104,067**
Fully Utilized Hours/Day								
(1) Phoenix	1.8	3.0	5.4	6.3	7.3	8.3	9.5	10.7
(2) San Francisco	2.7	3.4	6.1	7.2	8.2	9.3	10.5	11.7
(3) LA		3.6	5.9	7.2	8.2	9.3	10.5	11.7
(4) Austin			4.8	5.6	6.6	7.6	8.8	10.0
(5) Atlanta			3.2	5.6	6.6	7.6	8.8	10.0
(6) Miami				3.3	6.6	7.6	8.8	10.0
(7) Washington DC				2.1	5.5	6.5	7.5	8.7
(8) City 8 - 2027					3.3	5.8	6.8	7.9
(9) City 9 - 2027					3.3	5.8	6.8	7.9
(10) City 10 - 2028						3.5	6.1	7.1
(11) City 11 - 2028						3.5	6.1	7.1
(12) City 12 - 2029							3.6	6.4
(13) City 13 - 2029							3.6	6.4
(14) City 14 - 2030								3.8
(15) City 15 - 2030								3.8
Total Fleet Average	**2.0**	**3.3**	**5.6**	**6.2**	**7.0**	**7.8**	**8.6**	**9.5**

Source: Company data, Goldman Sachs Global Investment Research

Another sanity check on our Waymo ramp assumptions relates to user penetration & engagement/frequency vs. UBER/LYFT. Specifically, Uber MAUs (Sensor Tower) represent ~8% of the US Adult Population. We assume Waymo MAUs ramp from ~5-6% of adult population in live MSAs/cities today to ~8% over time. When coupled with our trip volume estimates, this would represent Waymo paid rides/MAU of ~41 per year by 2030. This compares to UBER & LYFT at ~60-65 paid rides/MAU today.

Exhibit 42: Waymo MAU Penetration & Frequency

	2023	2024	2025E	2026E	2027E	2028E	2029E	2030E
Sensor Tower Waymo MAUs	121,703	428,862	1,250,000	2,243,452	3,198,289	4,231,308	5,344,571	6,540,178
% Adult Population in Live Markets	1.6%	2.8%	5.8%	7.0%	7.3%	7.5%	7.8%	8.0%
Paid Rides/MAU	6.4	11.3	13.4	16.7	20.9	27.2	33.9	40.9
Sensor Tower UBER US MAUs	30,559,731	30,930,431						
% Adult Population in US	8.3%	8.3%						
Paid Rides/MAU	53.2	61.9						
Sensor Tower LYFT US MAUs	13,147,694	12,949,423						
% Adult Population in US	3.6%	3.5%						
Paid Rides/MAU	53.9	64.0						

Source: Company data, Goldman Sachs Global Investment Research, SensorTower, Census Bureau

Tesla: Rate of scaling likely key for the robotaxi business

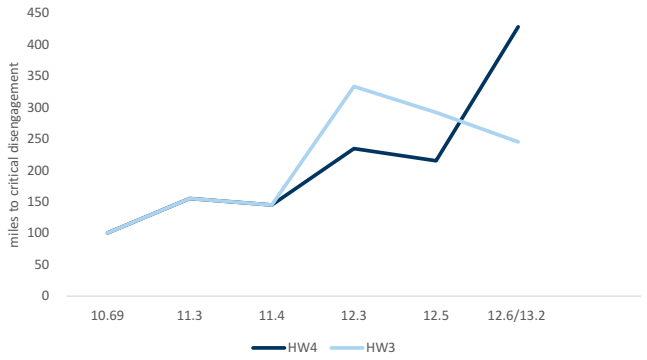
Tesla is targeting to start operating its robotaxi business in June in Austin with a small fleet of 10-20 vehicles. We believe the company plans to make use of geofencing, remote assistance, and local specific parameters for its tech stack. While we expect these tools to allow Tesla to begin operations this summer, we also believe this will limit the rate of scaling to other locations at least in the short-term. Over the long-term, we believe the extent to which Tesla's end to end approach to AI training results in a more generalized solution and faster deployments will be key to monitor.

There are two key potential advantages that Tesla could have in the AV business, in our view. One is the lower cost of its vehicle hardware and the other is the potential for its end to end AI training approach to allow for faster geographic scaling. On vehicle costs, Tesla believes its current vehicles (with ASPs in the US that start in the low-to-mid $40K range) are capable of unsupervised autonomous operation and hopes its purpose-built Cybercab will have a cost of less than $30K at scale long-term. We believe this cost is lower than AVs in the western market from competitors (which we believe are currently in the high five figure range). We attribute Tesla's lower cost to both the scale it has from the vehicle business and the cost of compute and sensors on its vehicles (with Tesla using internally designed silicon and no lidar/radar). However, we expect Tesla's cost difference to be relatively limited on a per mile basis in the long-term (e.g., we estimate an AV with a $50K upfront cost could have depreciation costs of ~$0.15 per mile in the 2030-2040 timeframe) as hardware costs decline and are spread over more miles. Importantly, in our opinion a key driver of lower costs more generally for the industry (both depreciation costs per mile and costs overall) will come from scale (allowing companies to leverage opex) and thus the ability for Tesla to scale robotaxi volumes with a more generalized AI approach will be a key variable for its long-term success.

We currently expect a relatively measured ramp for Tesla's AVs in the next few years. This is partly driven by the use of local specific tools (e.g., additional model parameters, remote assistance) but also safety considerations. Tesla has suggested on its earnings calls and on X that critical interventions per mile with its internal fleet are at or above every 10K miles (and we believe that Tesla likely has better performance in Austin specifically given the resources it has deployed for this market). However, we believe that miles per intervention should reach at least multiple tens of thousands if not closer to 100K to operate at scale in a dense urban environment, based on testing data

provided by the California DMV, and, in fact, data from Waymo's safety hub shows only 1 police reported accident in over 500K miles traveled in Austin through the end of 2024. Crowd-sourced data on Tesla, which we recognize is imperfect, shows critical interventions every 450-500 miles, and we believe this illustrates that a broader roll-out without geofencing could take time. Tesla's own safety report shows that its vehicles with human supervision are involved in far fewer accidents per mile when autopilot is used (which is skewed toward highway miles) than a typical human driver, and we think investors will look for data from Tesla on its AV safety performance (and potentially unsupervised FSD performance for consumers) going forward.

Exhibit 43: Crowd-sourced data on FSD miles to critical intervention by version



v12.6 is only on HW3 and v13.2 is only on HW4

Source: TeslaFSDTracker, Goldman Sachs Global Investment Research

Tesla is optimistic on its scaling potential. The company expects to enter additional markets, including California, by the end of the year and to ramp its AV fleet to millions of vehicles over the next few years. At its 'We Robot' event in October 2024, Tesla commented that, at scale, its pricing per mile could be ~$0.40.

We now assume Tesla will have 2,500 robotaxis deployed by the end of 2027, up from our prior 1,500 assumption, to better reflect the AV market potential. We also moderately reduced our miles per trip estimate to better align with our industry analysis. Overall, we believe the EPS contribution from robotaxis will remain small in the next few years and our estimates for 2025/2026/2027 (including SBC) are unchanged at $1.10/$2.05/$3.00.

To help frame the potential present value for Tesla's robotaxi business, we constructed an illustrative DCF of the incremental value assuming a fleet of 100K - 1 mn AVs on the road with an EBIT margin of 10-40% in 2040, which implies a wide range of outcomes in value per share (Exhibit 44). We believe this analysis suggests that the ultimate value of its rideshare business will depend on the degree to which it can scale and earn a differentiated margin. One downside risk in this dimension is what has happened with the ADAS market in China, with many local OEMs now including hands-free technology as a standard feature or at low cost even for mainstream vehicles. However, if Tesla is able to benefit from scale/early-mover benefits/low hardware costs, there are scenarios where it could have a very attractive margin, in our view.

Exhibit 44: Tesla illustrative robotaxi DCF per share

	Illustrative Robotaxi DCF Fleet size (in Ks)						
EBIT margin	100	150	250	500	750	800	1000
10%	$2.50	$3.50	$6.00	$12.00	$18.00	$19.25	$24.25
20%	$4.25	$6.50	$10.75	$21.75	$32.50	$34.75	$43.25
30%	$6.25	$9.50	$15.75	$31.25	$47.00	$50.00	$62.50
35%	$7.25	$10.75	$18.00	$36.00	$54.00	$57.75	$72.25
40%	$8.25	$12.25	$20.50	$40.75	$61.25	$65.50	$81.75

We assume a WACC of 12% in the near-term decreasing to 8.7% in 2040 and a terminal growth rate of 3%

Source: Goldman Sachs Global Investment Research

Separate from the robotaxi business opportunity, Tesla sells its Full Self Driving (FSD) software to consumers. We believe that Tesla's FSD revenue is currently ~$1-2 bn per year (more likely near the lower end of this range) and mostly comes from up-front license sales (currently priced at $8K/vehicle in the US market) that is generally a license attached to that vehicle for the life of the car. Tesla also offers FSD as a subscription at $99 per month. Going forward, we believe investors will look for Tesla to provide disclosures on revenue and paid subscription take rates/churn with FSD.

We show revenue potential from purchases of FSD on a subscription or up-front basis in Exhibit 45 and Exhibit 46, and we assume that, by 2030, Tesla's software related revenue could be tens of billions of dollars per year in total (we expect this to come primarily or entirely from sales to its own fleet of vehicles as a base case). We recognize there are scenarios beyond the range we show (e.g., upside cases given that Tesla could license FSD to other OEMs, and downside cases that are less positive owing to factors including regulatory constraints and/or software development challenges). Ford, for example, has stated it could license AV technology, potentially from Tesla or Waymo.

Exhibit 45: Potential FSD TAM sizing from monthly subscriptions

Annual revenue in mns from monthly FSD subscriptions							
		Installed Base (mn)					
Monthly ASP	Attach Rate	20	22	25	30	40	50
$25.0	10%	600	660	750	900	1,200	1,500
	25%	1,500	1,650	1,875	2,250	3,000	3,750
	40%	2,400	2,640	3,000	3,600	4,800	6,000
	50%	3,000	3,300	3,750	4,500	6,000	7,500
	75%	4,500	4,950	5,625	6,750	9,000	11,250
$50.0	10%	1,200	1,320	1,500	1,800	2,400	3,000
	25%	3,000	3,300	3,750	4,500	6,000	7,500
	40%	4,800	5,280	6,000	7,200	9,600	12,000
	50%	6,000	6,600	7,500	9,000	12,000	15,000
	75%	9,000	9,900	11,250	13,500	18,000	22,500
$100.0	10%	2,400	2,640	3,000	3,600	4,800	6,000
	25%	6,000	6,600	7,500	9,000	12,000	15,000
	40%	9,600	10,560	12,000	14,400	19,200	24,000
	50%	12,000	13,200	15,000	18,000	24,000	30,000
	75%	18,000	19,800	22,500	27,000	36,000	45,000
$150.0	10%	3,600	3,960	4,500	5,400	7,200	9,000
	25%	9,000	9,900	11,250	13,500	18,000	22,500
	40%	14,400	15,840	18,000	21,600	28,800	36,000
	50%	18,000	19,800	22,500	27,000	36,000	45,000
	75%	27,000	29,700	33,750	40,500	54,000	67,500
$200.0	10%	4,800	5,280	6,000	7,200	9,600	12,000
	25%	12,000	13,200	15,000	18,000	24,000	30,000
	40%	19,200	21,120	24,000	28,800	38,400	48,000
	50%	24,000	26,400	30,000	36,000	48,000	60,000
	75%	36,000	39,600	45,000	54,000	72,000	90,000

Source: Company data, Goldman Sachs Global Investment Research

Exhibit 46: Potential FSD TAM sizing from upfront purchases

Revenue in mns from upfront FSD purchase							
		2030 Unit Sales (mn)					
ASP	Attach Rate	3	4	5	6	7	8
$2,500.0	10%	750	1,000	1,250	1,500	1,750	2,000
	25%	1,875	2,500	3,125	3,750	4,375	5,000
	40%	3,000	4,000	5,000	6,000	7,000	8,000
	50%	3,750	5,000	6,250	7,500	8,750	10,000
	75%	5,625	7,500	9,375	11,250	13,125	15,000
$5,000.0	10%	1,500	2,000	2,500	3,000	3,500	4,000
	25%	3,750	5,000	6,250	7,500	8,750	10,000
	40%	6,000	8,000	10,000	12,000	14,000	16,000
	50%	7,500	10,000	12,500	15,000	17,500	20,000
	75%	11,250	15,000	18,750	22,500	26,250	30,000
$8,000.0	10%	2,400	3,200	4,000	4,800	5,600	6,400
	25%	6,000	8,000	10,000	12,000	14,000	16,000
	40%	9,600	12,800	16,000	19,200	22,400	25,600
	50%	12,000	16,000	20,000	24,000	28,000	32,000
	75%	18,000	24,000	30,000	36,000	42,000	48,000
$10,000.0	10%	3,000	4,000	5,000	6,000	7,000	8,000
	25%	7,500	10,000	12,500	15,000	17,500	20,000
	40%	12,000	16,000	20,000	24,000	28,000	32,000
	50%	15,000	20,000	25,000	30,000	35,000	40,000
	75%	22,500	30,000	37,500	45,000	52,500	60,000
$12,000.0	10%	3,600	4,800	6,000	7,200	8,400	9,600
	25%	9,000	12,000	15,000	18,000	21,000	24,000
	40%	14,400	19,200	24,000	28,800	33,600	38,400
	50%	18,000	24,000	30,000	36,000	42,000	48,000
	75%	27,000	36,000	45,000	54,000	63,000	72,000

Source: Company data, Goldman Sachs Global Investment Research

While we find DCF analysis to be a helpful tool to understand the potential value of various businesses (or infer what may be priced into the stock), we prefer a P/E based approach for our price target due to the wide range of potential outcomes a DCF can show (especially for new/emerging businesses in markets where long-term profits in 10-15 years are unclear). We're currently using a high target multiple on Q5-Q8E EPS to reflect what we expect will be a higher earnings growth rate over the next 4-5 years given our expectation for increased FSD-related profitability (which we think could add a few to several dollars per share to EPS in 2030 as a median assumption if Tesla is able to begin offering situational unsupervised autonomy, for example on select highways in good weather). That said, we think it will be some time before Tesla makes unsupervised FSD available in consumer vehicles, especially in a wide operating domain, so we think this will limit FSD-related revenue for at least the next one to two years.

We are Neutral rated on the stock. Our 12-month price target is $285, which is based on 120X (implying about 100X non-GAAP EPS, which is near the higher end of Tesla's

historical trading range) applied to our Q5-Q8E EPS estimate including SBC. A downside valuation scenario for the stock, assuming less volume growth and slower margin improvement, could be ~$150 (assuming a ~20% reduction to our 2027E EPS estimate including SBC and a multiple of ~60X). An upside valuation scenario could be ~$400, assuming a 115X multiple applied to non-GAAP 2027E EPS.

Key downside risks to our view relate to potentially larger vehicle price reductions than we expect, increased competition in EVs, a larger than expected tariff impact or negative effects from government policy changes more generally, slower EV demand, delays with products/capabilities such as FSD/4680, key person risk, the internal control environment, margins, and operational risks associated with Tesla's high degree of vertical integration. Upside risks include faster EV adoption and/or share gain by Tesla, a stronger macroeconomic environment for new vehicle sales more generally, earlier new product launches than we expect, an earlier/larger impact from AI-enabled products (e.g., FSD, Optimus and robotaxis), and a smaller than expected tariff impact than we currently anticipate.

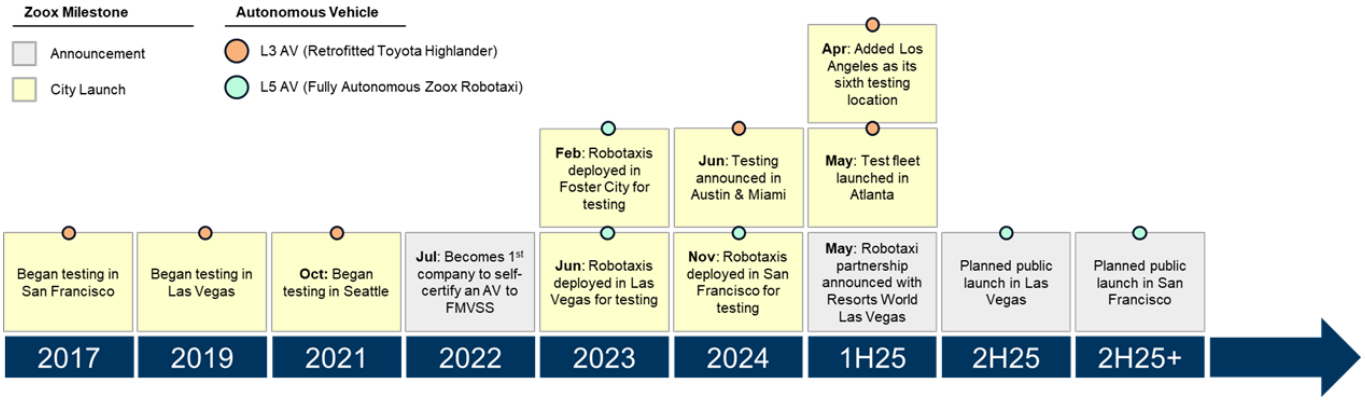
Zoox: Underappreciated Asset Inside AMZN

Zoox First Commercial Launch Planned in 2025

Zoox was founded in 2014 and acquired by Amazon (AMZN) in 2020. The company began testing is AV technology in 2017 in the Bay Area & completed it first long-range autonomous drive in 2018 (from Menlo Park to SF). Zoox was acquired by Amazon in June 2020 and has since grown from >1,000 employees to >2,500 employees today.

Zoox is gearing up for a commercial rollout in the US. The company has plans to launch public rides in Las Vegas in the second half of 2025, followed by San Francisco. The company currently operates two dozen test vehicles across 7 cities in the US (including Las Vegas, San Francisco, Austin, Miami, Los Angeles, Seattle, and the most recent addition of Atlanta).

Exhibit 47: Zoox Major Announcements Timeline



Source: Press Articles, Company data, Goldman Sachs Global Investment Research

Ultimate business model & fleet size remain unknown, but company appears open to both DTC model & partnerships. Zoox's co-founder & CTO recently said that in

order to offer a competitive service to the current rideshare offering in SF, an AV fleet would need to scale to 1,000-2,000 robotaxis (which compares to his estimate of ~8,000 concurrent Uber/Lyft drivers at any one-time in SF). To support this scale-up, Zoox is expanding its footprint beyond its Fremont facility by adding a 200,000 square foot site in the Bay Area, and plans to start serial production in 2026. In terms of business model, the company is developing its own ride-hailing app and plans to offer its service direct to customers. That said, the company appears open to partnerships with rideshare networks such as Uber & Lyft, based on public comments.

Zoox's robotaxis feature unique design elements. These include face-to-face seating to provide better customer experience, and high redundancy with dual motors, batteries, braking systems, sensor pods, and a 132kWh battery to support full-day operation. This has been enabled by its choice of building the vehicle from the ground up, unlike certain competitors, which retrofit OEM-produced vehicles with AV systems. Zoox vehicles use the costlier lidar technology, but according to Zoox co-founder Jesse Levinson, at scale the cost per trip of the lidar technology will come down over time.

Exhibit 48: Zoox Vehicle

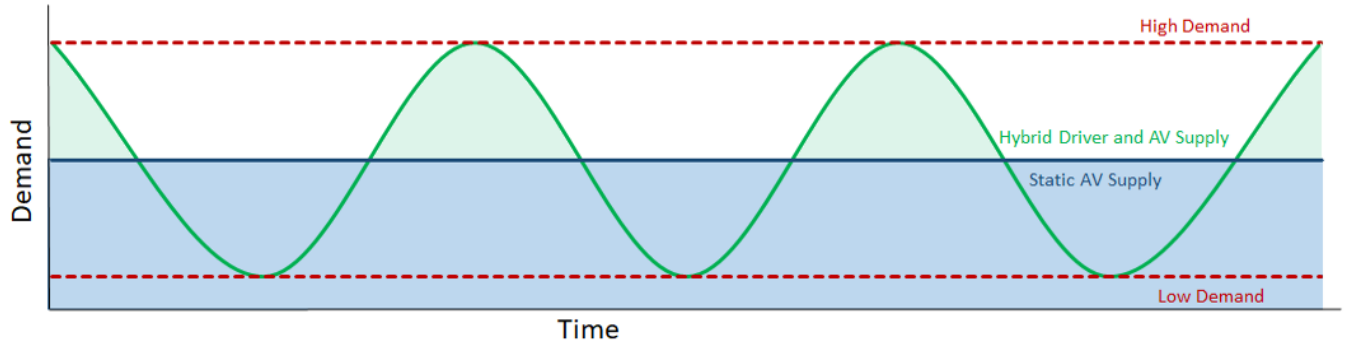
Source: Zoox

Analyzing Potential Impact of Waymo on Uber & Lyft

The risks to incumbent rideshare networks (e.g. Uber & Lyft) from the rise of commercial autonomous vehicle deployments remains a key debate among investors. As we've previously published (link), **we believe that incumbent rideshare networks will primarily operate as asset-light, third-party (3P) marketplaces for AV fleet operators to plug their supply into as a way to generate demand & maximize utilization.** We also view the industry as being in its early stages, with important questions remaining around which autonomous vehicle companies can first solve the technology problem and become operational with some measure of scale and the

ultimate shape of business models in the end state.

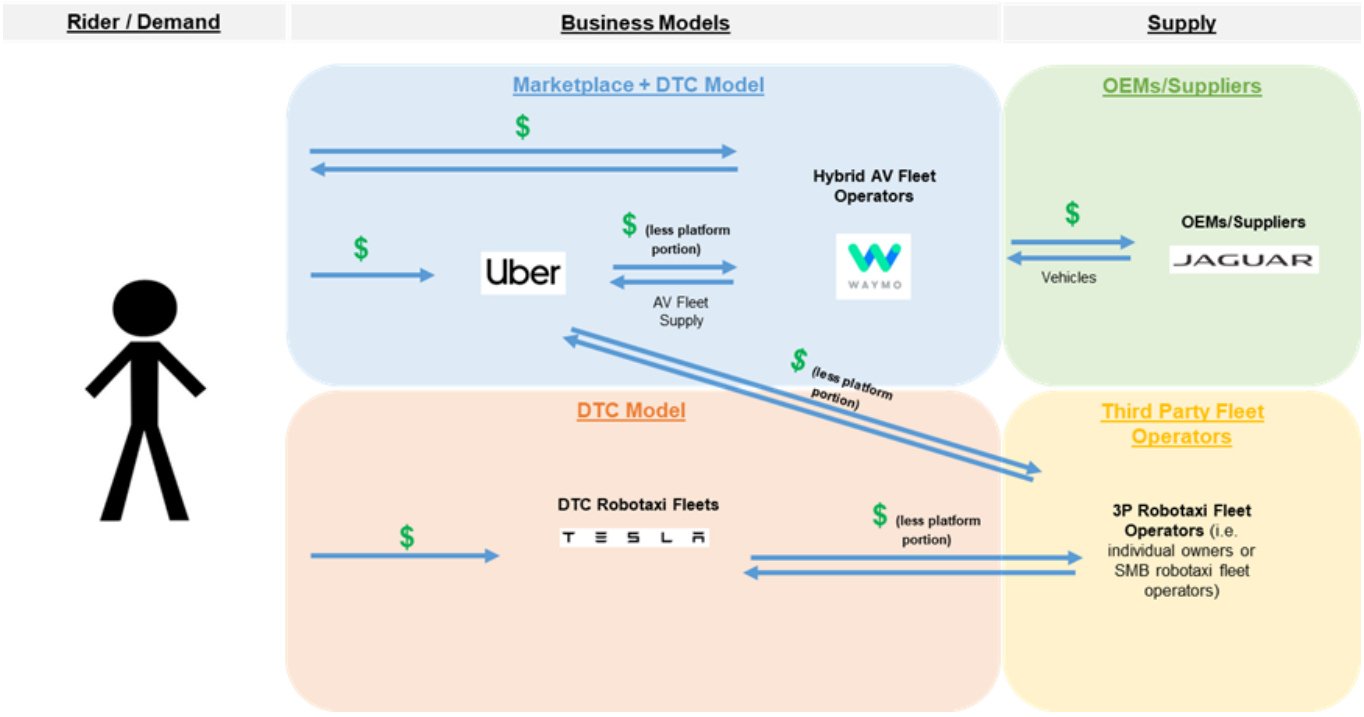
Exhibit 49: Hybrid AV Networks Allow for Balance of Utilization & Customer Experience



Source: Goldman Sachs Global Investment Research, Lyft

That said, we acknowledge other businesses could emerge as well within the broader rideshare/robotaxi industry. For example, in addition to utilizing rideshare networks to optimize utilization, certain fleet managers are also likely to have direct-to-consumer (DTC) strategies (e.g. Waymo in SF & Tesla in Austin). We also see a potential scenario where entirely new businesses could be formed around this technology. For example, professional fleet operators that buy 10-20 robotaxis and plug in to marketplaces for demand generation (similar to how vacation rental owners list on Airbnb/Vrbo or individuals who own fleets of vehicles list them to rent on Turo).

Exhibit 50: US Rideshare Industry - Illustrative Ecosystem with Autonomous Vehicles



Source: Company data, Goldman Sachs Global Investment Research

While some investors worry about competition/disruption risk from AVs, there are more positive scenarios for incumbent rideshare networks (e.g., UBER & LYFT) that we believe are underappreciated: 1) if the first AV companies to reach scale are those that have indicated a partnership approach with existing rideshare networks as

part of their go-to-market strategy and/or 2) a larger portion of AV supply ends up coming from individual owners/fleet managers that have the freedom to chose where to list their supply in order to maximize utilization. Alternatively, a DTC AV fleet operator getting to market at scale faster than rideshare networks can onboard AVs onto their network at scale would give more credibility to the disintermediation risk for Uber & Lyft.

Further, as AVs begin to be deployed on ridesharing networks, we will be paying attention to how these deals are structured and what the unit economics look like. As AV fleet operators scale, and we transition from Ridesharing 1.0 to Ridesharing 2.0, we could see a gradual shift in the supply-side industry structure from highly fragmented (i.e., millions of individual drivers) to more consolidated (i.e., a handful of AV fleet operators). This could have implications for take rates & unit economics for marketplaces. That said, pricing & demand elasticity will also be a significant factor in determining whether this technology ends up being a positive or negative to rideshare networks' ability to compound EBITDA/FCF dollars over time.

The relative negotiating leverage will likely depend on a number of factors, including: the route coverage AVs will be capable of handling, how consolidated AV fleet operators become, AV unit economics, how successful AV fleet operators will be in launching a DTC product, etc. That said, even if AVs were to be deployed gradually in certain geographies over the next 3-5 years, it is likely they will operate as supplemental supply for specific routes. Over the near-to-medium term, a hybrid offering combining AVs and human drivers unlocks the highest utilization and ensures availability and a better user experience for riders, in our view.

Waymo Ramp Analysis Suggests Potential 2030 Headwind is Greater for LYFT Than UBER

Building on our forecast of Waymo's commercial ramp through 2030, we also provide an analysis of the potential impact this could have on UBER & LYFT consolidated financials. **Specifically, the scaling of Waymo in certain US markets would represent a ~$270mm/~$160mm Adj. EBITDA headwind to UBER/LYFT in 2030, per our analysis. This would represent a 1%/10% headwind to UBER/LYFT's 2030E Adj. EBITDA**.

Exhibit 51: Estimating UBER & LYFT Lost GBs (Gross Bookings) & Adj. EBITDA to Waymo

	2023	2024	2025E	2026E	2027E	2028E	2029E	2030E
Waymo GBs ($mm, GSe)	**$ 14**	**$ 83**	**$ 292**	**$ 649**	**$ 1,105**	**$ 1,800**	**$ 2,841**	**$ 4,338**
Non-Waymo GBs ($mm, GSe)	**$ 2**	**$ 4**	**$ 7**	**$ 42**	**$ 282**	**$ 1,083**	**$ 1,732**	**$ 2,933**
Waymo GBs Incremental to Ridesharing	$ 12	$ 41	$ 117	$ 195	$ 221	$ 360	$ 568	$ 868
% Waymo GBs	80%	50%	40%	30%	20%	20%	20%	20%
Waymo GBs Competitive to Human Rideshare	$ 3	$ 41	$ 175	$ 454	$ 884	$ 1,440	$ 2,273	$ 3,471
% Waymo GBs	20%	50%	60%	70%	80%	80%	80%	80%
UBER Lost GBs to Waymo	**$ 2**	**$ 29**	**$ 107**	**$ 252**	**$ 474**	**$ 758**	**$ 1,180**	**$ 1,816**
Austin/Atlanta Share of Waymo Trips	0%	0%	12%	21%	23%	25%	26%	25%
Share of Competitive Waymo GBs Lost (ex-Austin/Atlanta	70%	70%	70%	70%	70%	70%	70%	70%
LYFT Lost GBs to Waymo	**$ 1**	**$ 12**	**$ 52**	**$ 136**	**$ 265**	**$ 432**	**$ 682**	**$ 1,041**
Share of Competitive Waymo GBs Lost	30%	30%	30%	30%	30%	30%	30%	30%
Estimating UBER Lost Adj. EBITDA to Waymo								
UBER Lost Adj. EBITDA to Waymo	**$ 0.3**	**$ 4**	**$ 16**	**$ 38**	**$ 71**	**$ 114**	**$ 177**	**$ 272**
% Decremental Adj. EBITDA GB Margin	15%	15%	15%	15%	15%	15%	15%	15%
UBER Mobility Adj. EBITDA (GSe)	$ 4,963	$ 6,497	$ 7,791	$ 9,260	$ 10,895	$ 12,566	$ 14,277	$ 15,996
% Impact	0%	0%	0%	0%	1%	1%	1%	2%
UBER Adj. EBITDA (GSe)	$ 4,051	$ 6,484	$ 8,561	$ 10,864	$ 13,400	$ 15,892	$ 18,427	$ 20,933
% Impact	0%	0%	0%	0%	1%	1%	1%	1%
UBER Lost Adj. EBITDA per Competitive AV Trip	$ 2.79	$ 2.57	$ 2.61	$ 2.60	$ 2.48	$ 2.34	$ 2.36	$ 2.43
Total Mobility Segment Adj. EBITDA/Trip (GSe)	$ 0.68	$ 0.73	$ 0.74	$ 0.74	$ 0.74	$ 0.73	$ 0.71	$ 0.71
Total Mobility Segment Incremental Adj. EBITDA/Trip (GSe)	$ 1.04	$ 0.99	$ 0.77	$ 0.74	$ 0.74	$ 0.67	$ 0.62	$ 0.65
LYFT Lost Adj. EBITDA to Waymo	**$ 0.1**	**$ 2**	**$ 8**	**$ 20**	**$ 40**	**$ 65**	**$ 102**	**$ 156**
% Decremental Adj. EBITDA GB Margin	15%	15%	15%	15%	15%	15%	15%	15%
LYFT Adj. EBITDA (GSe)	$ 222	$ 382	$ 527	$ 667	$ 885	$ 1,101	$ 1,296	$ 1,500
% Impact	0%	0%	1%	3%	4%	6%	8%	10%
LYFT Lost Adj. EBITDA per Competitive AV Trip	$ 2.79	$ 2.57	$ 2.61	$ 2.60	$ 2.48	$ 2.34	$ 2.36	$ 2.43
Total Adj. EBITDA/Trip	$ 0.31	$ 0.46	$ 0.55	$ 0.61	$ 0.72	$ 0.80	$ 0.85	$ 0.89
Total Incremental Adj. EBITDA/Trip	$ 0.31	$ 1.34	$ 1.14	$ 1.05	$ 1.53	$ 1.46	$ 1.29	$ 1.33

Source: Company data, Goldman Sachs Global Investment Research

Important open questions remain around whether Waymo rides are incremental to the existing rideshare market and around the percentage of Waymo rides that will happen on the Uber/Lyft apps. Waymo is still experimenting with different business models and partnership approaches and there are important unknowns around how competitive Waymo GBs will end up being to UBER/LYFT:

- **Are AVs Incremental?:** To be conservative, our central scenario presented in the above Exhibit assumes that only a minority of Waymo GBs are incremental to the rideshare market by 2026 and beyond (as opposed to a view where AVs mostly unlock new demand pools).
- **DTC vs. Partnership:** For the purposes of this analysis, we assume that each incremental city launch by Waymo is a DTC market (as opposed to a market where it lists on UBER/LYFT).
- **Lost market share (UBER):** We start by isolating the competitive Waymo GBs in markets where Uber is not the exclusive distribution network for Waymo (e.g. non-Austin/Atlanta markets), which represent ~75-80% of trips in 2026-2030E. We then assume that UBER loses 70% of Waymo GBs that are competitive to the human driver ridesharing industry in markets outside of Austin & Atlanta, in line with UBER's current market share of US ridesharing.
- **Lost market share (LYFT):** We assume that LYFT loses 30% of Waymo GBs that are competitive to the human driver ridesharing industry, in line with LYFT's current market share of US ridesharing. Importantly, and distinct from our UBER assumptions, we do not assume any mitigation in the form of AV partnerships given LYFT & Waymo do not currently have announced partnerships.

UBER bears point to the higher profitability of GBs at risk in the US, but Waymo is

still unlikely to move the needle on consolidated EBITDA through 2030E. UBER's US Mobility business is higher margin than its overall Mobility segment (and its Delivery business). Assuming that lost trips to Waymo have a 15% decremental Adj. EBITDA GB margin based on the higher profitability of the US business (vs. the incremental margins for the overall Mobility being closer to 10%+), implying over $2-3 of lost profit per trip, only creates a ~$270mm Adj. EBITDA headwind to UBER in 2030E (or ~1% of consolidated Adj. EBITDA). We note the $2-3 of lost profit per trip compares to Mobility Segment Adj. EBITDA per trip and incremental Adj. EBITDA per trip of <$1 (partially driven by mix shift to lower unit economic geographies and products, as well as continued investments such as CAC (customer acquisition costs) being embedded in those metrics).

Exhibit 52: We Expect UBER to Lose <$2bn in 2030 Mobility GBs (or ~1% of Mobility GBs) to Waymo on our Assumptions
$mm

2030 UBER Lost GBs to Waymo

$mm	Waymo 2030 Paid Weekly Rides ('000)						
% Competitive to RideSharing (not Incremental to Market)	3,600	4,100	4,600	5,145	5,700	6,200	6,700
65%	$ 1,032	$ 1,176	$ 1,319	$ 1,475	$ 1,634	$ 1,778	$ 1,921
70%	$ 1,112	$ 1,266	$ 1,420	$ 1,589	$ 1,760	$ 1,914	$ 2,069
75%	$ 1,191	$ 1,356	$ 1,522	$ 1,702	$ 1,886	$ 2,051	$ 2,217
80%	$ 1,270	$ 1,447	$ 1,623	$ 1,816	$ 2,011	$ 2,188	$ 2,364
85%	$ 1,350	$ 1,537	$ 1,725	$ 1,929	$ 2,137	$ 2,325	$ 2,512
90%	$ 1,429	$ 1,628	$ 1,826	$ 2,042	$ 2,263	$ 2,461	$ 2,660
95%	$ 1,509	$ 1,718	$ 1,928	$ 2,156	$ 2,389	$ 2,598	$ 2,808

Central Scenario Presented

2030 UBER Lost GBs to Waymo as % of Mobility GBs

% Mobility	Waymo 2030 Paid Weekly Rides ('000)						
% Competitive to RideSharing (not Incremental to Market)	3,600	4,100	4,600	5,145	5,700	6,200	6,700
65%	0.6%	0.7%	0.7%	0.8%	0.9%	1.0%	1.1%
70%	0.6%	0.7%	0.8%	0.9%	1.0%	1.1%	1.1%
75%	0.7%	0.8%	0.8%	0.9%	1.0%	1.1%	1.2%
80%	0.7%	0.8%	0.9%	1.0%	1.1%	1.2%	1.3%
85%	0.7%	0.9%	1.0%	1.1%	1.2%	1.3%	1.4%
90%	0.8%	0.9%	1.0%	1.1%	1.3%	1.4%	1.5%
95%	0.8%	1.0%	1.1%	1.2%	1.3%	1.4%	1.6%

Assumes $16 of GB/Ride for Waymo Rides; Assumes that UBER loses 70% of non-Austin/Atlanta Competitive Waymo GBs (in line with national US market share)

Source: Company data, Goldman Sachs Global Investment Research

Exhibit 53: We Expect UBER to Lose ~$270mm in 2030 Adj. EBITDA (or ~1% of Total Adj. EBITDA) to Waymo on our Assumptions
$mm

2030 UBER Lost Adj. EBITDA to Waymo

$mm	2030 UBER Lost GBs to Waymo ($mm)						
% Decremental Adj. EBITDA Margin on Lost GBs	$ 1,500	$ 1,600	$ 1,700	$ 1,800	$ 1,900	$ 2,000	$ 2,100
8%	$ 113	$ 120	$ 128	$ 135	$ 143	$ 150	$ 158
10%	$ 150	$ 160	$ 170	$ 180	$ 190	$ 200	$ 210
13%	$ 188	$ 200	$ 213	$ 225	$ 238	$ 250	$ 263
15%	$ 225	$ 240	$ 255	$ 270	$ 285	$ 300	$ 315
18%	$ 263	$ 280	$ 298	$ 315	$ 333	$ 350	$ 368
20%	$ 300	$ 320	$ 340	$ 360	$ 380	$ 400	$ 420
23%	$ 338	$ 360	$ 383	$ 405	$ 428	$ 450	$ 473

Central Scenario Presented

2030 UBER Lost Adj. EBITDA to Waymo as % Total Adj. EBITDA

% Total	2030 UBER Lost GBs to Waymo ($mm)						
% Decremental Adj. EBITDA Margin on Lost GBs	$ 1,500	$ 1,600	$ 1,700	$ 1,800	$ 1,900	$ 2,000	$ 2,100
8%	0.5%	0.6%	0.6%	0.6%	0.7%	0.7%	0.8%
10%	0.7%	0.8%	0.8%	0.9%	0.9%	1.0%	1.0%
13%	0.9%	1.0%	1.0%	1.1%	1.1%	1.2%	1.3%
15%	1.1%	1.1%	1.2%	1.3%	1.4%	1.4%	1.5%
18%	1.3%	1.3%	1.4%	1.5%	1.6%	1.7%	1.8%
20%	1.4%	1.5%	1.6%	1.7%	1.8%	1.9%	2.0%
23%	1.6%	1.7%	1.8%	1.9%	2.0%	2.1%	2.3%

Assumes $16 of GB/Ride for Waymo Rides; Assumes that UBER loses 70% of non-Austin/Atlanta Competitive Waymo GBs (in line with national US market share)

Source: Company data, Goldman Sachs Global Investment Research

The impact is greater on LYFT than UBER given LYFT's higher exposure to US rideshare. Assuming that lost trips to Waymo have a 15% decremental Adj. EBITDA GB margin (similar to assumption for UBER and compared to the incremental margins for the overall business being closer to ~HSD%), implying over $2-3 of lost profit per trip, creates a ~$160mm Adj. EBITDA headwind to LYFT in 2030E (or ~10% of consolidated Adj. EBITDA). We note the $2-3 of lost profit per trip compares to Total Adj. EBITDA per trip of ~$0.50-1.00 and incremental Adj. EBITDA per trip of $1.00-1.50.

Exhibit 54: We Expect LYFT to Lose ~$1bn in 2030 Mobility GBs (or ~3% of Total GBs) to Waymo on our Assumptions
$mm

2030 LYFT Lost GBs to Waymo

$mm	Waymo 2030 Paid Weekly Rides ('000)						
% Competitive to RideSharing (not Incremental to Market)	3,600	4,100	4,600	5,145	5,700	6,200	6,700
65%	$ 592	$ 674	$ 756	$ 846	$ 937	$ 1,019	$ 1,102
70%	$ 637	$ 726	$ 815	$ 911	$ 1,009	$ 1,098	$ 1,186
75%	$ 683	$ 778	$ 873	$ 976	$ 1,081	$ 1,176	$ 1,271
80%	$ 729	$ 830	$ 931	$ 1,041	$ 1,153	$ 1,255	$ 1,356
85%	$ 774	$ 882	$ 989	$ 1,106	$ 1,226	$ 1,333	$ 1,441
90%	$ 820	$ 933	$ 1,047	$ 1,171	$ 1,298	$ 1,411	$ 1,525
95%	$ 865	$ 985	$ 1,105	$ 1,236	$ 1,370	$ 1,490	$ 1,610

Central Scenario Presented

2030 LYFT Lost GBs to Waymo as % Total GBs

% Total	Waymo 2030 Paid Weekly Rides ('000)						
% Competitive to RideSharing (not Incremental to Market)	3,600	4,100	4,600	5,145	5,700	6,200	6,700
65%	2.0%	2.2%	2.5%	2.8%	3.1%	3.4%	3.6%
70%	2.1%	2.4%	2.7%	3.0%	3.3%	3.6%	3.9%
75%	2.3%	2.6%	2.9%	3.2%	3.6%	3.9%	4.2%
80%	2.4%	2.7%	3.1%	3.4%	3.8%	4.1%	4.5%
85%	2.6%	2.9%	3.3%	3.7%	4.1%	4.4%	4.8%
90%	2.7%	3.1%	3.5%	3.9%	4.3%	4.7%	5.0%
95%	2.9%	3.3%	3.7%	4.1%	4.5%	4.9%	5.3%

Assumes $16 of GB/Ride for Waymo Rides; Assumes that LYFT loses 30% of Competitive Waymo GBs (in line with national US market share)

Source: Company data, Goldman Sachs Global Investment Research

Exhibit 55: We Expect LYFT to Lose ~$160mm in 2030 Adj. EBITDA (or ~10% of Adj. EBITDA) to Waymo on our Assumptions
$mm

2030 LYFT Lost Adj. EBITDA to Waymo

$mm	2030 LYFT Lost GBs to Waymo ($mm)						
% Decremental Adj. EBITDA Margin on Lost GBs	$ 750	$ 850	$ 950	$ 1,050	$ 1,150	$ 1,250	$ 1,350
8%	$ 56	$ 64	$ 71	$ 79	$ 86	$ 94	$ 101
10%	$ 75	$ 85	$ 95	$ 105	$ 115	$ 125	$ 135
13%	$ 94	$ 106	$ 119	$ 131	$ 144	$ 156	$ 169
15%	$ 113	$ 128	$ 143	$ 158	$ 173	$ 188	$ 203
18%	$ 131	$ 149	$ 166	$ 184	$ 201	$ 219	$ 236
20%	$ 150	$ 170	$ 190	$ 210	$ 230	$ 250	$ 270
23%	$ 169	$ 191	$ 214	$ 236	$ 259	$ 281	$ 304

Central Scenario Presented

2030 LYFT Lost Adj. EBITDA to Waymo as % Total Adj. EBITDA

% Total	2026 UBER Lost GBs to Waymo ($mm)						
% Decremental Adj. EBITDA Margin on Lost GBs	$ 750	$ 850	$ 950	$ 1,050	$ 1,150	$ 1,250	$ 1,350
8%	3.7%	4.2%	4.7%	5.2%	5.7%	6.2%	6.7%
10%	5.0%	5.7%	6.3%	7.0%	7.7%	8.3%	9.0%
13%	6.2%	7.1%	7.9%	8.7%	9.6%	10.4%	11.2%
15%	7.5%	8.5%	9.5%	10.5%	11.5%	12.5%	13.5%
18%	8.7%	9.9%	11.1%	12.2%	13.4%	14.6%	15.7%
20%	10.0%	11.3%	12.7%	14.0%	15.3%	16.7%	18.0%
23%	11.2%	12.7%	14.2%	15.7%	17.2%	18.7%	20.2%

Assumes $16 of GB/Ride for Waymo Rides; Assumes that LYFT loses 30% of Competitive Waymo GBs (in line with national US market share)

Source: Company data, Goldman Sachs Global Investment Research

We do believe that the ridesharing industry will continue to shift towards AVs, but argue that investor concerns on UBER & LYFT terminal value are overdone. While we acknowledge our analysis on medium-term financial metrics (through 2030) does not entirely address the terminal value debate, we are surprised at the level of conviction that some more bearish investors seem to have on an ecosystem that is still evolving and has a wide range of potential outcomes. We make the following points:

- **(1) Waymo's Success, even in a DTC model, is Unlikely to Derail UBER/LYFT's 2030 Financial Trajectory** - Under the assumptions presented above, the scaling of Waymo in certain US markets would represent a ~$270mm/~$160mm Adj. EBITDA headwind to UBER/LYFT in 2030. This would represent a 1%/10% headwind to UBER/LYFT's 2030E Adj. EBITDA.
- **(2) The Shift Towards AVs Will Happen Over Years (if not decades)** - Our Autos team believes wide scale AV adoption is still several years away as a base case, with only 6% of new vehicles sold in the US in 2030E being level 3 (L3) ADAS enabled and less than 1% being either level 4 (L4) (e.g. eyes-off in a given area, such as a robotaxi in a city) or level 5 (L5) enabled.
- **(3) We Expect the Ridesharing Industry to Evolve Towards Hybrid Networks (humans/AVs)** - Supply availability is crucial to maintain appropriate demand service levels/ETAs, and we are of the view that hybrid networks that combine AVs and human drivers will produce the best consumer experience for riders and the highest utilization rates for ridesharing vehicles.
- **(4) Building Ridesharing Networks is Capital Intensive** - Economic incentives matter, and building on-demand local networks requires significant capital investments. As one measure of the losses incurred to reach scale, we note that

UBER's accumulated deficit (negative cumulative retained earnings) peaked at $(33)bn in 2022. This is with UBER adopting an asset-light approach and not owning the supply outright; UBER also did not need to invest to compete/displace a scaled mobile-first incumbent in on-demand personal mobility (as is the case for challengers today).

- **(5) The Industry is Evolving, but not Every Outcome is Outright Negative for UBER or LYFT (Partnerships, Fragmentation of AV Supply)** - We believe that UBER & LYFT are well positioned to participate in the shift towards AVs as a technology and customer acquisition partner. UBER has partnered with 18 autonomous vehicle (AV) partners globally across Mobility & Delivery to facilitate tens of thousands of trips per month, providing a consistent framing that UBER is positioning itself as a network operator in a hybrid/AV world (among a collection of software and hardware providers). Further, LYFT has its own set of autonomous vehicle ecosystem partners (incl. May Mobility, Mobileye, Marubeni, etc.).

Exhibit 56: Uber & Lyft AV Partnerships
As of June 2025

Source: Uber (

Stocks in focus

TEL - We believe TEL is well positioned to capitalize on higher levels of autonomy and has incremental content opportunities tied to the high speed data connectivity that is needed for partly and fully autonomous vehicles. We believe that connectors for data connectivity make up about 10% of the total connector value per vehicle, and represent an attractive growth opportunity. This is underscored by the company's recent $1 bn design win for data connectivity products with a leading Chinese auto OEM for its next gen platform. Taken together with the company's content opportunity on electrified powertrains (both hybrids and BEVs), TE continues to expect to outgrow auto production by 4-6 points over the medium to longer-term.

Beyond the role TE's products play to enable power-efficient and high speed vehicle platforms, the company also has opportunities to power datacenters, both with high-speed connectors for AI training and power products for utilities (a growing part of

its Energy segment). Specifically, the company expects its AI datacenter revenue in FY25 to be >$700 mn, up from ~$300 mn in FY24. Separately, we expect a cyclical recovery in its industrial business, post destocking that occurred from late CY23 through CY24.

We are Buy rated on TEL shares with a 12-month price target of $184, which is based on 21X our normalized EPS estimate of $8.75. Key downside risks to our Buy thesis relate to automotive, industrial and datacenter end demand, TE executing on its margin expansion plan, the impact of EVs and new car architectures on automotive content for TE, unfavorable commodity pricing, macroeconomic demand trends, potential tariff impacts, and TE successfully expanding into the sensor market.

MBLY - Mobileye is a leading provider of ADAS and AV technology, which we attribute to its strength in perception/vision and power-efficient solutions. The company has recently had design wins for its tech to support AVs on both the Uber and Lyft networks. However, the competitive landscape has been more difficult than we had expected in advanced ADAS. Several western OEMs have announced plans to use competitors and/or in-house tech for advanced ADAS/AVs (e.g., GM, Ford, Nissan, Honda), which reduces the opportunity for Mobileye, in our view (although we still believe there could be a degree of potential business for Mobileye at some of these OEMs). We expect a more mixed win rate for Mobileye going forward, and this, coupled with limited upside to our unchanged price target plus what we think is downside risk to 2026/2027 Street estimates, led to our downgrade to Neutral (see our separate MBLY note for details).

Our 12-month price target is $17, which is based on 35X Q5-Q8 EBITDA ex. SBC. Key risks relate to the success it has (positively or negatively) with new design wins, the rate of ADAS/AV penetration in the market, the level of growth in auto production, ASPs/margins, and corporate actions.

GM - GM has shifted its focus to ADAS and personal autonomy (including AVs), having decided to close its robotaxi effort (Cruise) in December 2024. On GM's 1Q25 call, it noted that Super Cruise-enabled vehicles on the road increased by more than 100% yoy; recall, the company targets ~$2 bn of revenue from Super Cruise within 5 years. Super Cruise is currently an L2+ product, but the company is working to add L3 capability. Additionally, GM announced in March 2025 that it was collaborating with NVIDIA on its next-gen vehicles and AI.

We are Buy rated on GM stock. Our 12-month price target of $60 is based on 6X our normalized EPS estimate of $10.00. Key risks to our view relate to the auto cycle, market share, tariffs, margins, FCF, and GM's ability to profitably pivot to growth areas such as EVs and AVs.

F - Ford currently offers its Blue Cruise L2+ ADAS product, it is working to develop L3 ADAS technology with its in-house team, and it has commented it could license L4 technology (potentially from Tesla or Waymo). Ford remains focused on growing its software and services mix more generally, and it has had particular success in Pro (with Pro paid software subscribers growing about 20% yoy last quarter). Recall that Ford shut down ARGO, its former robotaxi AI partnership with VW, in October 2022 and took

some ARGO employees in house.

We are Neutral-rated on the stock. Our 12-month price target of $10 is based on 6X our normalized EPS estimate of $1.60. Key upside/downside risks to our Neutral rating relate to the auto cycle (demand and/or price-mix could be weaker or stronger than we expect), Ford gaining or losing more market share than we expect, a larger/smaller than expected tariff impact, and margins (both from margin and pricing pressure in a downturn, the degree of success with company-specific initiatives such as the transition to hybrids/EVs, and its ability to grow in higher margin software & services).

RIVN - We believe Rivian's technology puts it in a good position to bring more advanced ADAS and autonomy products to market over time. This is enabled partly by its electrical and electronic architecture (which VW is licensing) and partly by its in-house software development. The company currently offers L2+ technology as part of its Rivian Autonomy Platform, and the company expects to provide L3 technology next year. Longer-term, the company is focused on developing additional features and higher levels of automation, enabled by an end to end AI training approach (along with certain pre-set rules).

We are Neutral rated on RIVN stock. Our 12-month price target of $14 is based on 2.5X our Q5-Q8 revenue estimate. Key upside/downside risks to our view relate to EV adoption/volumes, tariffs, margins and the competitive landscape, Rivian's high degree of vertical integration, cash burn, and the supply chain.

AUR - We believe the start of commercial operations in late April not only demonstrates the long-term potential of the technology and Aurora's position in the market but will also help to generate demand from customers. We continue to believe valuation is full relative to what we expect will be a gradual ramp over the near to medium term and a multi-year path to profitability. While Aurora expects to reach positive cash flow in 2028, we expect this to take until 2029/2030.

We are Neutral rated on AUR. Our 12-month price target is $7, based on: 1) 90% weight of our base case valuation of $7 using an 11X EV/revenue multiple applied to 2030E revenue discounted back; 2) a 5% weight of our bull case valuation of $19 using a 15X EV/revenue multiple on a 2030 bull case revenue scenario that is twice our base case and discounted back; and 3) 5% weight of our bear case valuation of $3 using a 7X EV/revenue multiple on a downside case 2030 revenue view that is half of our base case view, discounted back. Key risks to our view include a faster/slower AV volume ramp (including its ability to ramp up its supply chain partners/shift to an as-a-service model and expand routes), better/worse pricing/margins (with factors including its ability to reduce BOM costs and the degree of competition), and the cost to raise capital.

PGR (covered by Rob Cox) - We expect PGR to continue taking market share within the large and modestly growing (in real terms) auto insurance market, driven by competitive advantages in customer acquisition and pricing segmentation. PGR has been vocal on vehicle technology for over a decade and has shown an ability to embrace technology, such as its early implementation of usage-based insurance nearly 30 years ago. We expect PGR has a mid-to-high-single-digit sustainable growth rate over the next decade

and will find ways to participate in insuring the future of auto insurance.

We are Buy rated on PGR stock. Our 12 month price target of $307 is based on 5.0x our Q4 book value ex AOCI of $61.4.

Key downside risks include increased pricing competition from peers, greater-than-expected catastrophe losses, and lower advertising effectiveness.

UBER (covered by Eric Sheridan) - We continue to view UBER as an equity story centered on the key themes of scaling end-markets, rising profitability levels (even while remaining committed to investing for the long-term) and increased evidence of platform cross-sell/flywheel effects, which should result in investors revisiting the mix of growth, margins & FCF that UBER can generate in the years ahead. While the AV theme will likely remain an overhang, we believe that investors have multiple pathways to generate an attractive multi-year IRR without the need for multiple expansion by buying UBER shares as the company compounds FCF at 25-30%/yr through 2027E (we believe that UBER can produce $3.40/$4.62 of GAAP EPS in 2026/2027).

We are Buy rated on UBER. Our $110, 12-month price target is based on an equal blend of (1) 20.0x EV/GAAP EBITDA applied to our NTM + 1 year estimates and (2) a modified DCF using a 20.0x EV/FCF-SBC multiple applied to our NTM + 4 years estimates discounted back 3 years.

Key downside risks include: a) Slower growth in Mobility due to demand elasticity, maturation, competition from Autonomous Vehicles, etc.; b) Regulatory environment around driver classification (incl. compensation, benefits, etc.), merchant commission caps, ESG, etc.; c) Competitive forces in both Mobility and Delivery (incl. local commerce/logistics); d) Normalization of consumer discretionary spend habits within Delivery; and e) volatility caused by the global macroeconomic environment and investor risk appetite for growth stocks.

LYFT (covered by Eric Sheridan) - While short-term debates will likely stay rooted in industry trends around rideshare pricing, market share fluctuations, positioning against the AV theme and/or any changes in consumer discretionary behavior, we believe that shares are dislocated from LYFT's earnings power in the next 2-3 years. We believe that the opportunity is created by investors' concern about 1) the bridge between current growth levels and the company's 3yr +mid-teens GB growth target laid out at its 2024 Investor Day, 2) fears around potential disruption from autonomous vehicles from emerging operators (e.g., Waymo) and the solid cadence of new partnerships signed by UBER in recent weeks/months in the space, 3) debates around pricing, given moderating insurance inflation (which tends to be passed through as price) and the ridesharing industry's general focus on driving affordability, and 4) general competitive concerns given LYFT's #2 position in North America ridesharing.

We view those concerns as more than already discounted in the stock today as: 1) while achieving the Investor Day targets will likely be a key determinant of sentiment and valuation levels, shares trade at 7x our 2027E FCF, 2) we believe that the AV ridesharing landscape remains in its very early days and expect that AV operators and fleet owners will continue to enter into partnerships in the coming years and that LYFT has an

important role to play in the broader hybrid/AV ecosystem (incl. for demand generation and fleet management), 3) we expect lower cost inflation and more moderate pricing trends to be longer-term positives as more affordable price points are likely to drive increased penetration levels of the large addressable opportunity for rideshare networks, and 4) execution has been solid at LYFT in recent quarters, as exhibited by a solid +16% YoY rides growth in Q1, and we believe that the North America ridesharing duopoly industry structure is supportive of rational competitive behavior in the years ahead (all while we expect the category to grow double-digits).

We are Buy rated on LYFT. Our $20 12-month price target is based on an equal blend of (1) 1.0x EV/Sales applied to our NTM + 1 year estimates and (2) a modified DCF using a 10.0x EV/GAAP EBITDA multiple applied to our NTM + 4 years estimates discounted back 3 years.

Key downside risks include: a) Active rider growth or frequency below our forecasts (losing market share, slower consumer adoption of Mobility); b) Unfavorable changes in consumer behavior (autonomous vehicle adoption away from LYFT, work from home, office commute, airport travel, expanded use cases, etc.); c) Impact of introduction and adoption of new products/solutions; d) Worse return earned on micromobility investments (bikes & scooters); e) Higher levels of consumer/driver incentives; f) Impact of higher insurance costs on unit economics; & g) Regulation of driver classification (incl. compensation, benefits, etc.). In addition, Lyft is exposed to volatility caused by the global macroeconomic environment and investor risk appetite for growth stocks.

GOOGL (covered by Eric Sheridan) - Based on our refreshed operating and financial analysis (link) and the company's recent public presentation, we continue to be constructive on Alphabet's long-term strategic positioning across many end-markets (both consumer & enterprise-facing; search & non-search) and continue to view the company as the leading collection of AI/machine learning-driven businesses in our coverage universe. Looking long-term, we continue to advocate that the combination of AI distribution at scale (collection 1bn+ user applications), personalization (ability to leverage 1P data/context across its various apps & services) and infrastructure footprint (scale of compute for training & inference; low latency AI outputs; vertical integration with custom silicon; etc.) remains an underappreciated competitive advantage for Alphabet over the long-term, particularly as we move from the "infrastructure" to "platform" and "application" layers of AI monetization.

We are Buy rated on GOOGL. Our $220 12-month price target is based on an equal blend of (1) 17.5x EV/GAAP EBITDA applied to our NTM + 1 year estimates and (2) a modified DCF using 23.0x EV/FCF-SBC multiple applied to our NTM + 4 years estimates discounted back 3 years.

Key downside risks to our rating include: a) competition of product utility levels and advertising dollars; b) headwinds to monetizable (product) search from industry disruption; c) shifting media consumption habits; d) heavy investments depress operating margins for longer than our forecasts; e) no/low levels of incremental shareholder returns going forward; & f) regulatory scrutiny and industry practices altering the business model's prospects. In addition, Alphabet is exposed to volatility

caused by the global macroeconomic environment and investor risk appetite for growth stocks.

Volvo Group (VOLVb.ST) (covered by Daniela Costa) - We continue to view Volvo as one of the most mis-valued stocks among our multis coverage, given its superior ROIC profile (>20% in FY25E, expanding to >30% by 2028E), strong cash return to shareholders (12% vs sector median at 5%) and signs of end-market inflection in sight with Europe seeing >1x book-to-bill for the first time since 1Q23 following a period of high inventories and declining capacity utilisation as well as benefiting from Construction Equipment exposure from the German infra stimulus plan. Despite this, Volvo trades well below the sector's EV/IC vs. ROIC/WACC relationship, leaving scope for the multiple to re-rate closer to the sector average, in our view. **We are Buy rated and our 12-month Volvo price target is at SEK306,** which is based 100% on our sector-relative EV/IC to ROIC/WACC methodology over a valuation horizon of 9m 2026E/3m 2027E.

Key downside risks: US tariff risk (here for our sector screen); worse global macro growth affecting the cyclical commercial vehicle industry; delayed freight rate recovery affecting capex; raw material/FX headwinds; product/anti-trust issues.

Daimler Truck (DTGGe.DE) (covered by Daniela Costa) - We continue to expect moderation in order backlog and inventories of finished trucks remaining at historically high levels to put pressure on 2025 deliveries, with increasing uncertainty on EPA regulation post the recent re-evaluation announcement. **We remain Neutral rated** as we see downside risk to FY25 guidance, given its high exposure to US freight capex, which could materialize before the July CMD. However, Daimler Truck has a strong balance sheet that could support further shareholder returns in a weak market environment. Our 12-month price target is €40, which is based 100% on our sector-relative EV/IC to ROIC/WACC methodology over a valuation horizon of 9m 2026E/3m 2027E.

Key downside risks include: 1) weaker-than-expected volumes in Europe due to lack of follow through from German infra bill; 2) more severe pricing pressure as OEMs compete in industry downturn; 3) risks to EPA regulation; 4) delays in self-help measure progress; 5) unfavourable FX moves; 6) larger-than-expected impairments from antitrust civil claims; 7) overhang risk due to uncertainty around the final decision from Mercedes regarding its stake. Key upside risks include: 1) quicker-than-expected freight capex recovery in 2025 and German stimulus impact; 2) better-than-expected self-help progress; 3) further market share gains, especially in the US vocational market.

Traton (8TRA.DE) (covered by Daniela Costa) - We expect higher margin headwinds in Scania from its China investment and weak volume in MAN to partially offset margin improvement in International and VWTB. Despite that, we remain cautious on deliveries in 2025E as we expect backlog to deplete, especially in International due to weak 2024 orders, which leads us to be 12% below consensus on FY25E industrial adj. EBIT. **We are Neutral rated and our price target is €29.1,** which is based 100% on our sector-relative EV/IC to ROIC/WACC methodology over a valuation horizon of 9m 2026E/3m 2027E.

Key upside risks to our view and price target include: (1) stronger pricing power; (2) lower required investments to meet regulations towards lower emissions; (3) better-than-expected retention of MAN/Navistar savings. Key downside risks include the converse as well as order cancellations and anti-trust charges.

KNX/WERN/SNDR (all covered by Jordan Alliger) - We note that the LTL and truckload markets are exhibiting several attributes that could suggest a bottom is near – from both a sentiment and fundamental perspective (margins and earnings are under significant pressure and share prices indicate underperformance relative to the transport sector and the markets).

We are Buy-rated on KNX, WERN, SNDR. For KNX, our price target is $65, based on a 16.5x P/E multiple applied to our mid-cycle EPS estimate of $3.96. Downside risks include slower than expected volume growth, an influx of truck capacity (or lack of capacity exiting the market), inability to push contract rates higher, difficulty with LTL/TL integrations, inflationary cost pressures, insurance payout risk and recession (many in conjunction with tariff-related risk). For WERN, our price target is $39, based on a 16.5x P/E multiple applied to our mid-cycle EPS estimate of $2.38. Downside risks include slower than expected volume growth, an influx of truck capacity (or lack of capacity exiting the market), inability to push contract rates higher, inflationary cost pressures, insurance payout risk and recession (many in conjunction with tariff-related risk). For SNDR, our price target is $32, based on a 16.5x P/E multiple applied to our mid-cycle EPS estimate of $1.93. Downside risks include slower-than-expected volume growth, an influx of truck capacity (or lack of capacity exiting the market), inflationary cost pressures, insurance payout risk, and underperformance within SNDR's other business segments (including recession and tariff related risk).

Disclosure Appendix

Reg AC

We, Mark Delaney, CFA, Eric Sheridan, Allen Chang, Ben Miller, Jordan Alliger, Jerry Revich, CFA, Andrzej Tomczyk, CFA, Robert Cox, Daniela Costa, Kota Yuzawa, Will Bryant, Aman Gupta, Jack Kendall, Jatin Khanna, Clay Williams, CFA, Adam Bubes, CFA and Meihan Yang, hereby certify that all of the views expressed in this report accurately reflect our personal views about the subject company or companies and its or their securities. We also certify that no part of our compensation was, is or will be, directly or indirectly, related to the specific recommendations or views expressed in this report.

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Financial Returns and Multiple use the Goldman Sachs analyst forecasts at the fiscal year-end at least three quarters in the future. Growth uses inputs for the fiscal year at least seven quarters in the future compared with the year at least three quarters in the future (on a per-share basis for all metrics).

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Disclosures

Rating and pricing information

Alphabet Inc. (Buy, $173.68), Aurora Innovation Inc. (Neutral, $5.87), Daimler Truck Holding (Neutral, €37.63), Ford Motor Co. (Neutral, $10.26), General Motors Co. (Buy, $47.47), Knight-Swift Transportation Holdings (Buy, $44.61), Lyft Inc. (Buy, $15.53), Mobileye Global Inc. (Neutral, $16.88), Progressive Corp. (Buy, $279.32), Rivian Automotive Inc. (Neutral, $14.00), Schneider National Inc. (Buy, $24.10), TE Connectivity Plc (Buy, $164.65), Traton (Neutral, €29.20), Uber Technologies Inc. (Buy, $85.60), Volvo Group (Buy, Skr263.10) and Werner Enterprises Inc. (Buy, $26.85)

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Price target and rating history chart(s)

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