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UNITED STATES DISTRICT COURT
NORTHERN DISTRICT OF CALIFORNIA
SAN FRANCISCO DIVISION

DAVID WALLER, on behalf of himself and all others similarly situated,

Plaintiff,

vs.

TESLA INC., TESLA LEASE TRUST, and TESLA FINANCE LLC.,

Defendants.

Case No.: 3:26-cv-5350

CLASS ACTION COMPLAINT

(Related Case: No. 3:22-cv-05240-RFL)

Plaintiff David Waller brings the following claims on his own behalf and on behalf of a nationwide class and Kentucky subclass of purchasers of Tesla, Inc. vehicles that were sold to consumers equipped with Tesla Hardware 1, 2, 2.5, and 3 onboard sensor and computer systems ("Class Vehicles"). Plaintiff makes the following allegations based upon his personal knowledge or reasonable investigation conducted by his counsel.

I. INTRODUCTION

1. For years, Defendant Tesla, Inc. has deceptively and misleadingly marketed its advanced driver assistance systems ("ADAS") technology as autonomous driving technology under various names, including "Autopilot," "Enhanced Autopilot," and "Full Self-Driving Capability" ("FSD"), the latter two of which Tesla charges consumers thousands of additional dollars to add to their new vehicle. Tesla has deceived and misled consumers regarding the abilities of its ADAS technology

and by representing that its vehicles came equipped with hardware that was sufficient to support the implementation of fully autonomous, self-driving vehicle operation. These promises have proven false time and time again, but Tesla and its CEO, Elon Musk, continued making them to generate media attention, to deceive consumers into believing it has unrivaled cutting-edge technology, and to establish itself as a leading player in the fast-growing electric vehicle market.

2. Tesla's deceptive and misleading representations about its vehicles' capacity to achieve fully autonomous self-driving centrally concern its "Advanced Driver-Assistance System" ("ADAS"), which consists of a combination of hard- and software packages that are designed to enable equipped vehicles to steer themselves in real-life driving conditions without intervention by any driver. Tesla has released several versions of the hardware system supporting its ADAS technology since 2014, referring to each hardware version with the term "Hardware" followed by a numeral 1, 2, 2.5, 3, or 4. Each hardware system released before "Hardware 4" consisted of an onboard computer, cameras, and lidar or radar sensors designed to steer the vehicle autonomously, without driver input. Hardware 4, introduced in new in vehicles sold beginning in January 2023, includes upgrades to the onboard computer and camera system but does not include the lidar or radar systems.

4. SAE International, formerly the Society of Automotive Engineers, is a U.S.-based professional association and standards development organization. SAE publishes a taxonomy of vehicle driving automation systems with detailed definitions for six levels for driving automation, ranging from no driving automation (SAE Level 0) to full driving automation (SAE Level 5). According to the SAE standard taxonomy, a "Level 5" vehicle can perform all driving tasks under all conditions, with zero human attention or interaction required.

5. From 2016 until at least 2025, Tesla and its CEO Musk consistently represented that the hardware systems included in all Tesla vehicles were capable of supporting fully autonomous self-driving, or SAE Level 5. At the same time, Tesla offered consumers the option to pay an additional amount for "Full Self-Driving [FSD] Capability" as part of their purchase of Tesla vehicles. The price of this feature ranges as high as $15,000 per purchase.

6. Tesla's campaign of misrepresenting its vehicles as equipped with the hardware needed to support FSD was fully underway by October 2016. At a press conference held that month, Tesla's CEO Elon Musk said of Tesla's second-generation autonomous driving hardware:

> Basic news is that all cars exiting the factory have hardware necessary for Level 5 Autonomy so that's in terms of Cameras, Compute Power, it's in every car we make on the order of 2,000 cars a week are shipping now with Level 5 literally meaning hardware capable of full self-driving for driver-less capability.[1]

7. Tesla's website pages advertising its FSD capability claimed that "[a]ll Tesla vehicles produced in our factory, including Model 3, have the hardware needed for full self-driving capability at a safety level substantially greater than that of a human driver." [2]

8. A newsletter distributed to consumers by Tesla in November 2016 and a post on Tesla's blog published in October 2016 similarly represented that "All Tesla vehicles produced in our factory now have full self-driving hardware."[3]

9. From approximately 2017 to 2019, the page on Tesla's website explaining its "Full Self-Driving Capability" technology promised that consumers who purchased or leased cars with the FSD version of its ADAS technology would receive cars capable of "full self-driving in almost all circumstances," including being able to "conduct short and long distance trips with no action required by the person in the driver's seat" and with a "probability of safety at least twice as good as the average human driver." On the same webpage, Tesla went on to state:

> **All you will need to do is get in and tell your car where to go.** If you don't say anything, the car will look at your calendar and take you there as the assumed destination or just home if nothing is on the calendar. **Your Tesla will figure out the optimal route, navigate urban streets (even without lane markings), manage complex intersections with traffic lights, stop signs and roundabouts, and handle densely packed freeways with cars moving at high speed.**[4]

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[1] Iqtadar Ali, "Transcript: Elon Musk's Autopilot 2.0 Conference Call," Autoworld.com, https://xautoworld.com/news/trasncript-elon-musk-autopilot-2-conference call/ (last accessed May 30, 2026) (Pl. Ex. A).

[2] Tesla.com, "Full Self-Driving Hardware on All Cars," *available at* https://web.archive.org/web/20170126073829/tesla.com/autopilot (Pl. Ex. B).

[3] *See* Consolidated Third Amended Complaint Ex. D, *In re Tesla Advanced Driver Assistance Sys. Litig.*, No. 3:22-cv-05240-RFL (N.D. Cal. Sept. 14, 2022]), (Dkt. 102 at 114-119) (Pl. Ex. C); Declaration of Julie L. Fieber Ex. 5, *In re Tesla Advanced Driver Assistance Sy. Litig.,* No. 3:22-cv-05240-RFL (Dkt. 138-7 at 2) (Pl. Ex. D).

[4] Tesla.com, "Full Self-Driving Hardware on All Cars," *available at* https://web.archive.org/web/20170126073829/tesla.com/autopilot (Pl. Ex. E).

10. Musk reiterated his assurances from his October 19, 2016 press conference that all Tesla vehicles were already equipped with the necessary hardware and that only a software upgrade was needed to achieve fully autonomous self-driving capability in these vehicles. As Musk stated on a May 3, 2017 earnings call, "[t]he sensor hardware and compute power required for at least level 4 to level 5 autonomy has been in every Tesla produced since October of last year."[5] Thereafter, Tesla and its CEO Musk continued to promote Tesla vehicles as having sufficient hardware to enable them to drive themselves without human intervention.

11. Plaintiff David Waller relied on Musk and Tesla's promises that all Tesla vehicles came equipped with the hardware necessary to support fully autonomous self-driving. Acting in reliance on these statements, Plaintiff Waller bought a 2020 Tesla Model S at a total price (including optional features) of $88,790 and paid Tesla $7,000 for the "Full Self-Driving Capability" feature. Plaintiff would not have purchased his Tesla or the "FSD Capability" Feature if Musk and Tesla had not represented the Class Vehicles as equipped with the hardware necessary to support fully autonomous self-driving.

12. Tesla subsequently began to reveal that its previous hardware configurations are incapable of supporting FSD with the release of its "Hardware 4" package. On a January 2025 earnings call, Musk was asked, "is it expected that Tesla will need to upgrade hardware 3 vehicles and if so, what is the timeline?" Musk responded:

> I mean, I think the honest answer is that we're going to have to upgrade people's hardware 3 computer for those that have bought full self driving. And that is the honest answer. And that's going to be painful and difficult, but we'll get it done. Now I'm kind of glad than not that many people bought the FSD package.[6]

13. Musk subsequently confirmed on an April 2026 earnings call that Tesla vehicles equipped with Hardware 3 and previous configurations are incapable of achieving Tesla's promised Full Self Driving capacity. On Tesla's Q1 FY 2026 call, Musk revealed that "Hardware 3 simply does not

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[5] Tesla (TSLA) Q1 2017 Earnings Call Transcript (May 3, 2017), *available at* https://seekingalpha.com/article/4068889-tesla-tsla-q1-2017-results-earnings-call-transcript.

[6] The Motley Fool Transcripts, "Tesla (TSLA) Q4 2024 Earnings Call Transcript,"(Jan. 29, 2025) https://www.fool.com/earnings/call-transcripts/2025/01/29/tesla-tsla-q4-2024-earnings-call-transcript/.

have the capability to achieve unsupervised FSD."[7] Musk stated that Tesla would "offer[] the ability to upgrade the car to replace the computer, and you also need to replace the cameras, unfortunately, to go to Hardware 4." Musk admitted that doing this would require Tesla "to set up micro factories or small factories in major metropolitan areas in order to do it efficiently. Because if it's done just at the service center, it is extremely slow to do so and inefficient. We basically need many production lines to make the change."[8]

14. The promised retrofittings (whether or not accompanied by "micro factories") have never been implemented.

II. JURISDICTION AND VENUE

15. This Court has subject matter jurisdiction over this action under the Class Action Fairness Act of 2005 ("CAFA"), 28 U.S.C. § 1332(d), as Plaintiff seeks damages and other relief on a behalf of a class consisting of hundreds of thousands of individuals. This action meets CAFA's jurisdictional requirements because the sum or value of the relief sought exceeds $5,000,000 exclusive of interest and costs, and because at least one Class member is a citizen of a state different from Defendants under § 1332(d)(2)(A) and/or a citizen of a foreign state under § 1332(d)(2)(B).

16. This Court has personal jurisdiction over Defendants because they have conducted and continue to conduct substantial business in California, and have sufficient minimum contacts with California in that (1) from the beginning of the Class Period (as defined herein) until December 2021, Defendant Tesla, Inc. was headquartered in Palo Alto, California, and thus designed, developed, manufactured, tested, and marketed its vehicles and ADAS technology at issue in this action in California throughout that period; (2) throughout the Class Period, Tesla, Inc. tested and manufactured a substantial percentage of the Class Vehicles (as defined herein) at its factory in Fremont, California; (3) the vehicle that Plaintiff Waller purchased from Tesla was manufactured by Tesla at its Fremont, California factory; (4) Tesla employs approximately 20,000 people at its Fremont, California factory, which amounts to about one-sixth of its entire workforce, and is equal,

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[7] yahoo!finance, Tesla, Inc. (TSLA) Q1 FY 2026 earnings call transcript, (April 22, 2026) https://finance.yahoo.com/quote/TSLA/earnings/TSLA-Q1-2026-earnings_call-547944.html.

[8] *Id.*

if not greater, to the number of people it employs at its current headquarters; (5) Plaintiff Waller purchased his Tesla in reliance on statements made by Tesla and its CEO, Elon Musk, from its corporate headquarters in Palo Alto and other locations in California; (6) throughout the Class Period, Tesla, Inc. has been the direct or indirect owner and operator of dozens of retail Tesla stores in California (accounting for more than a quarter of Tesla stores nationwide) that market and sell or lease new Tesla vehicles, including a substantial percentage of Class Vehicles; (7) throughout the Class Period, California has been by far the largest U.S. market for sales and leases of new electric vehicles, including sales and leases of new Tesla vehicles and Class Vehicles; (8) throughout the Class Period, Defendants developed the marketing scheme at issue in this action in California and targeted California consumers with that marketing scheme, including deceptive and misleading statements about Tesla's vehicles and ADAS technology on Tesla's website and Musk's Twitter feed (the latter of which has been an official source of Tesla corporate information since at least 2013); (9) Tesla, Inc. is registered with the California Secretary of State to do business in the State of California, and is licensed by the California Department of Motor Vehicles as a vehicle dealer and a vehicle manufacturer; and (10) Defendants Tesla Finance LLC and Tesla Lease Trust have their principal places of business in California.

Tesla's 5.3 million square foot factory in Fremont, California.

17. Venue is proper in the United States District Court for the Northern District of California under 28 U.S.C. § 1391(b)(1) because Defendants are subject to the Court's personal jurisdiction with respect to this action and therefore reside in this District for purposes of venue, under § 1391(b)(2) because a substantial part of the events and omissions giving rise to Plaintiff's claims occurred in this District and under § 1391(b)(2) because a substantial part of the property that is the subject of this action is situated in this District.

III. PARTIES

A. Plaintiff David Waller

18. Plaintiff David Waller is and at all relevant times has been a resident of Frankfort, Kentucky. Mr. Waller purchased a 2020 Tesla Model S on the Tesla.com website on or about June 29, 2020. Mr. Waller paid $81,790.00 for the vehicle and optional features, plus a further $7,000 for "Full Self-Driving Capability" ("FSD Capability"). According to its VIN number, Tesla manufactured Mr. Waller's Model S at its factory in Fremont, California. Mr. Waller decided to purchase this vehicle and FSD Capability after researching, reviewing, and relying on Tesla's and Musk's online and other public statements that Tesla vehicles sold with Hardware 1, 2, 2.5, and 3 came equipped with the hardware necessary to support full self-driving.

19. In particular, at the time of his purchase of his Class Vehicle and decision to pay an additional $7,000 for FSD Capability, Mr. Waller was aware of and relied on Tesla, Inc.'s and Tesla CEO Elon Musk's claims that all cars made before the date of his purchase had all the hardware required to become Full Self-Driving and to become part of a fleet of "Robotaxis" by the end of 2020 through software updates from reviewing the following sources:

- The product purchase page for Mr. Waller's Tesla Model S, which represented his vehicle as available for purchase with "Full Self-Driving Capability" for an additional charge of $7,000.
- Roberto Baldwin, "Elon Musk Says Tesla Robotaxis Will Still Be Ready in 2020," CarandDriver.com (April 16, 2020) https://www.caranddriver.com/news/a32159871/tesla-robo-taxis-still-coming-2020/

- Fred Lambert, "Tesla to deploy more functionality quicker after Autopilot core rewrite coming soon, says Elon Musk," Electrek.com (Mar. 20, 2020) https://electrek.co/2020/03/02/tesla-deploy-functionality-quicker-after-autopilot-core-rewrite-coming-soon-elon-musk/#more-124696
- Jameson Dow, "Tesla to release more self-driving features in March – city street autopilot?", Electrek.com (Mar. 4, 2020) https://electrek.co/2020/03/04/tesla-self-driving-features-march-city-street-autopilot/
- Fred Lambert, "Your Telsa could soon drop you off and go find its own parking spot," Electrek.com (Mar. 4, 2020) https://electrek.co/2020/03/04/tesla-car-find-larking-spot-reverse-summon/#more-125094
- Fred Lambert, "Watch Tesla Autopilot automatically stop at red light for the first time" Electrek.com (Mar. 26, 2020) https://electrek.co/2020/03/26/tesla-autopilot-automatically-stop-red-light-video/#more-128041
- Fred Lambert, "Tesla self-driving traffic light and stop-sign interaction explained in leaked manual," Eletrek.com (Mar. 30, 2020) https://electrek.co/2020/03/30/tesla-self-driving-traffic-light-stop-sign-explained-leaked-manual/#more-128256
- Fred Lambert, "Tesla is aiming to release Autopilot for intersections in just weeks in the US, will take months for other markets," Electrek.com (April 3, 2020) https://electrek.co/2020/04/03/tesla-release-autopilot-intersection-navigation-weeks-us-months-worldwide/#more-129080
- Fred Lambert, "Tesla prepares to increase the price of 'Full Self-Driving' again with new features," Electrek.com (April 7, 2020) https://electrek.co/2020/04/07/tesla-increase-price-full-self-driving-again/#more-129413
- Fred Lambert, "Tesla's robotaxi plan is still on for this year—pending regulatory approval, says Elon Musk," Electrek.com (April 12, 2020) https://electrek.co/2020/04/12/tesla-robotaxi-plan-2020-pending-regulatory-approval/#more-130026

- Fred Lambert, "Tesla's latest self-driving visualization comes to life in this impressive picture," Electrek.com (April 15, 2020); https://electrek.co/2020/04/15/tesla-self-driving-visualization-impressive-picture/#more-130410
- Fred Lambert, "Tesla vehicles are going to drop you off and park themselves later this year, says Musk," (April 16, 2020) https://electrek.co/2020/04/16/tesla-vehicles-drop-off-park-themselves/#more-130510
- Fred Lambert, "Tesla releases impressive vides of cars avoiding running over pedestrians," (April 21, 2020) https://electrek.co/2020/04/21/tesla-videos-autopilot-avoid-pedestrian-crashes/#more-131143
- Fred Lambert, "Tesla releases new, highly anticipated Traffic Light and Stop Sign Control features," (April 24, 2020) https://electrek.co/2020/04/24/tesla-autopilot-traffic-light-and-stop-sign-control-feature/#more-131553
- Fred Lambert. "Tesla to increase 'Full Self-Driving' price as Elon Musk sees value rise to >$100K," (May 18, 2020) https://electrek.co/2020/05/18/tesla-increase-full-self-driving-price-elon-musk-value/#more-134329

20. Mr. Waller's purchase agreement included an Agreement to Arbitrate that gave Mr. Waller the option to "opt out of arbitration within 30 days after signing this Agreement by sending a letter to: Tesla, Inc.; P.O. Box 15430; Fremont, CA 94539-7970, stating your name, Vehicle Identification Number, and intent to opt out of the arbitration provision." P. Ex. O. Mr. Waller opted out of the Arbitration Agreement by duly notifying Tesla on July 6, 2020. Pl. Ex. P.

B. Defendants

21. Defendant Tesla, Inc. is a Delaware corporation that had its principal place of business in Palo Alto, California, from approximately 2003 until December 1, 2021, at which point it moved its principal place of business to Austin, Texas. Respondent designs, develops, manufactures, tests, markets, distributes, sells, and leases electric vehicles under the brand name "Tesla." Respondent also offers services related to those vehicles, including designing, developing, and periodically sending over-the-air updates for the self-driving software in Tesla vehicles.

22. Tesla, Inc. has a vertically integrated business model. For example, instead of using traditional dealerships, Tesla has vertically integrated "Stores" and "Galleries" where customers can see vehicles before ordering them through the Tesla website. More specifically: (a) Tesla designs, develops, manufactures, and tests its electric vehicles and the ADAS technology on those vehicles. This includes all versions of Tesla's ADAS technology (e.g., Autopilot, Enhanced Autopilot, FSD), which were and are designed, developed, manufactured, and tested by Tesla in the State of California at its Palo Alto offices, Fremont factory, and other California offices and facilities. On information and belief, the ADAS technology in Class Vehicles (as defined herein) was developed and tested in California. (b) Tesla markets its vehicles on its website, in marketing materials, in its brick-and mortar galleries and showrooms, and through the tweets, media interviews, news conferences, earnings calls, conferences, forums, and other public events and statements by its representatives and agents, including CEO Elon Musk, all of which are intended and designed to generate media coverage, and have been historically successful at doing so. (c) Tesla sells and leases its electric vehicles directly to consumers, including through its website and retail stores, which Tesla owns and operates.

23. Tesla, Inc. does not use conventional advertising. Instead, the company's marketing strategy relies on Musk's high public profile and Musk's activity on his Twitter account to generate buzz for its products. (Twitter was renamed "X" in July 2023 but it is referred to herein as Twitter.) Musk's Twitter account has been an official source of Tesla corporate information since at least 2013 and has long had tens of millions of followers, reaching 100 million followers as of June 2022 and over 185 million followers today. Musk is a widely known public persona whose public statements, including those alleged herein, routinely are the subject of significant media coverage by a great variety of online, television, radio, and print media, resulting in Musk's statements reaching an enormous audience on a virtually daily basis. At all times relevant herein, Musk has been by far Tesla, Inc.'s largest shareholder (exceeding even institutional holdings), giving him an enormous personal financial stake in the company's success. Today, Musk owns more than 15% of the company's shares.

24. Defendant Tesla Lease Trust is a Delaware statutory trust, and its initial beneficiary is

Tesla Finance LLC. Tesla Lease Trust is the title holder to the Tesla vehicles that are leased under a leasing program managed by Tesla Finance LLC. Tesla Lease Trust has its principal place of business in Palo Alto, California.

25. Defendant Tesla Finance LLC is a wholly owned subsidiary of Tesla, Inc., and is the beneficial owner of the leasing assets held in Trust by Tesla Lease Trust and, as an agent of the Tesla Lease Trust, originates, services, administers, and collects leases for Tesla Lease Trust. Tesla Finance LLC is incorporated in Delaware and has its principal place of business in Palo Alto, California.

IV. AGENCY, JOINT VENTURE, AIDING AND ABETTING, AND CONSPIRACY

26. On information and belief, Plaintiff alleges that at all relevant times herein, Defendants conspired with currently unidentified co-conspirators in carrying out the wrongful conduct alleged herein, and that all such unidentified co-conspirators were Defendants' agents, employees, and/or joint venturers, and were at all times acting within the course and scope of said agency, employment, and/or joint venture.

27. Each Defendant and unidentified co-conspirators took actions that aided and abetted, encouraged, and rendered substantial assistance in accomplishing the wrongful conduct, wrongful goals, and other wrongdoing alleged herein. In taking these actions, each Defendant and unidentified co-conspirator acted with an awareness of his/her primary wrongdoing and realized his/her conduct would substantially assist the accomplishment of the wrongful conduct, wrongful goals, and other wrongdoing. In addition, each act and omission comprising the aforementioned wrongful conduct, wrongful goals, and other wrongdoing was made known to, and ratified by, each of the Defendants

28. Each Defendant and unidentified co-conspirator conspired with each other and with others to perpetrate the unlawful scheme on Plaintiff and Class members, as alleged herein. In doing so, each Defendant and unidentified co-conspirator have committed acts and omissions, including but not limited to making materially false, misleading, and deceptive statements and omissions, while acting within the scope and in furtherance of the conspiracy alleged herein, and with full knowledge of the goals of that conspiracy.

29. Plaintiff reserves the right to amend this Complaint when he learns the identities of currently unidentified co-conspirators, and Plaintiff intends to sue each Defendant and co-conspirator as participants, alter egos, agents, and conspirators with one another in the wrongful acts, omissions, plans, schemes, and transactions alleged herein.

V. FACTUAL ALLEGATIONS

A. The Technology of Autonomous Vehicles

30. SAE International, formerly the Society of Automotive Engineers, is a U.S.-based professional association and standards development organization founded in the early 20th century. In 2014, SAE International took a leading role in the development of autonomous vehicle technology standards by publishing the initial version of SAE J3016 Recommended Practice: Taxonomy and Definitions for Terms Related to Driving Automation Systems for On-Road Motor Vehicles, commonly referred to as the SAE Levels of Driving Automation ("SAE Levels"). Following this, SAE International published revised versions of the SAE Levels in 2016, 2018, and 2021.[9]

31. The SAE Levels provide a taxonomy of vehicle driving automation systems with detailed definitions for six levels for driving automation, ranging from no driving automation (SAE Level 0) to full driving automation (SAE Level 5). The SAE Levels can be summarized as follows: **Level 0: No Driving Automation**. The human driver performs all driving tasks (steering, acceleration, braking, etc.), although vehicles may have safety features like automatic emergency braking and forward collision warning. **Level 1: Driver Assistance**. The vehicle has features that provide a small degree of automation over the vehicle's acceleration, braking, or steering (e.g., adaptive cruise control, lane-keeping assistance). **Level 2: Partial Driving Automation.** The vehicle can perform multiple driving tasks (e.g., acceleration, steering) but remains under the human driver's constant supervision, responsibility, and control. **Level 3: Conditional Driving Automation.** The vehicle can take full control of certain driving tasks such that the human driver need not remain constantly alert but must be ready to intervene upon request from the vehicle. **Level 4: High**

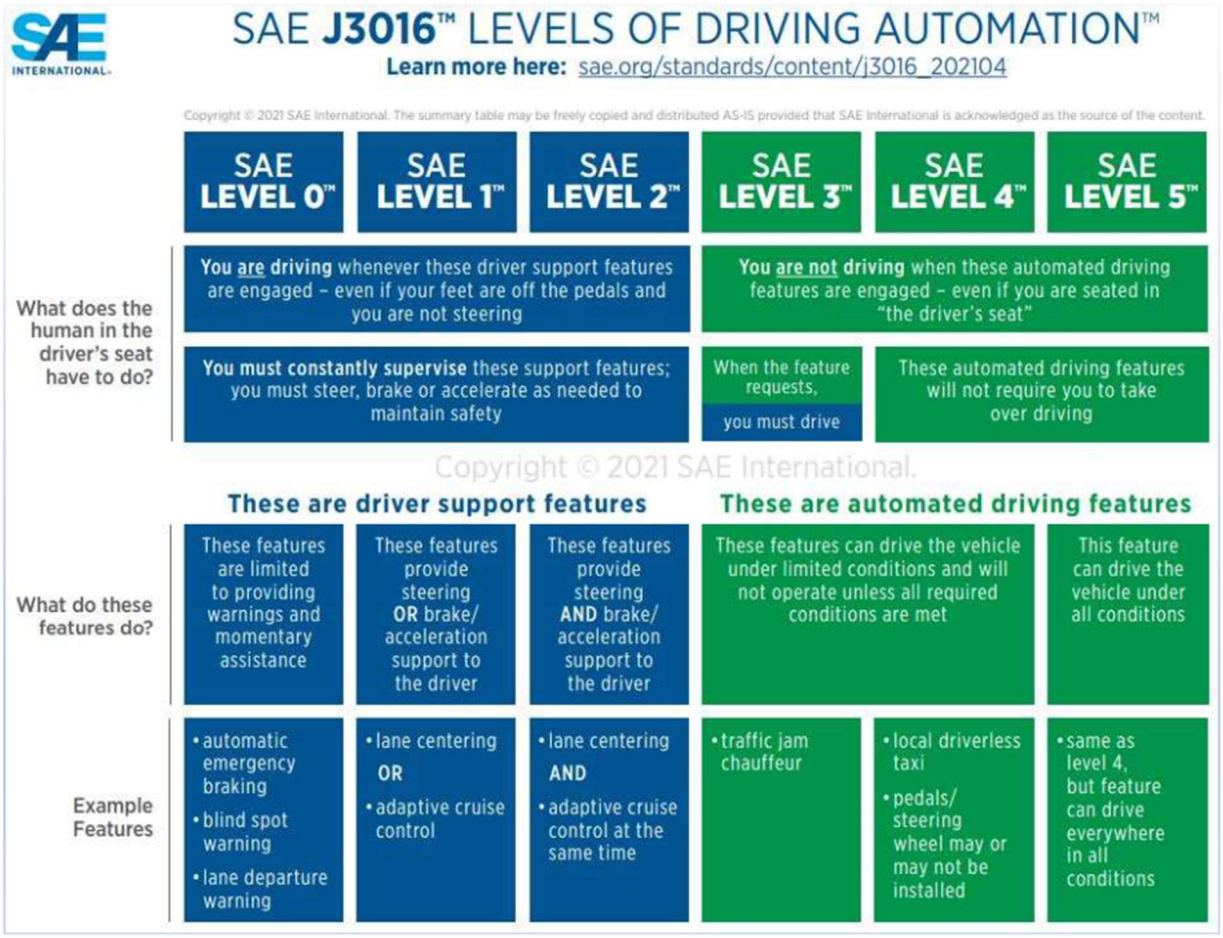
[9] *See* SAE International, *Taxonomy and Definitions for Terms Related to Driving Automation Systems for OnRoad Motor Vehicles* (revised Apr. 30, 2021), https://www.sae.org/standards/content/j3016_ 202104.

Driving Automation. The vehicle can perform all driving tasks in specific locations or environments, but human override is still an option. **Level 5: Full Driving Automation.** The vehicle can perform all driving tasks under all conditions, with zero human attention or interaction required.

32. The SAE Levels are a widely accepted international standard and have been adopted by regulatory agencies such as the National Transportation Safety Board ("NTSB"), National Highway Traffic Safety Administration ("NHTSA"), and U.S. Department of Transportation.

33. SAE International refers to SAE Level 1 and 2 technologies as systems or features that provide "driver support" (see below in blue), whereas it refers to SAE Level 3, 4, and 5 technologies as systems or features that provide "automated driving" (see below in green). When SAE International published the current version of the SAE Levels in 2021, it summarized the revised SAE Levels in the following graphic, which emphasizes that for SAE Level 2 driver-support features, "You are driving whenever these driver support features are engaged" and "You must constantly supervise these support features."[10]

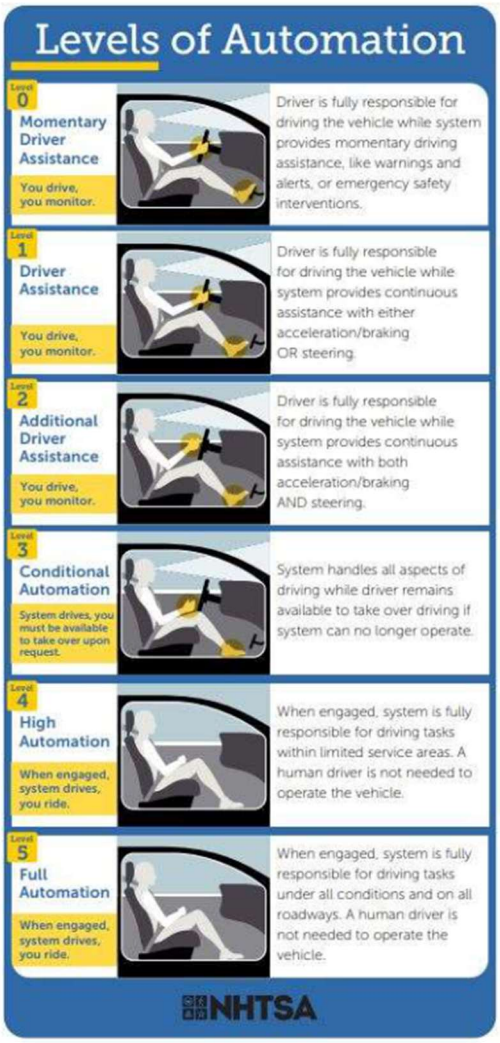
[10] SAE International, "SAE Levels of Driving Automation Refined for Clarity and International Audience" (May 3, 2021), https://www.sae.org/blog/sae-j3016-update.



33.

34. In May 2022, the NHTSA published the following graphic summarizing the SAE Levels, which drives home many of the same points as the 2021 SAE International graphic—i.e., that at SAE Levels 0 to 2, the driver is fully responsible for driving the car ("You drive, you monitor"), whereas autonomous technology does not begin until SAE Level 3 ("System drives, you must be able to take over upon request"), and fully self-driving technology does not occur until SAE Levels 4 and 5 ("system drives, you ride"). [11]

[11] NHTSA, "Levels of Automation" (May 2022), available at https://www.nhtsa.gov/sites/nhtsa.gov/files/2022-05/Level-of-Automation-052522-tag.pdf.



35. While Tesla and Musk have routinely promised Tesla's SAE Level 2 ADAS technology (including Autopilot and FSD) would rapidly advance to SAE Level 5 abilities within a year or other short period of time, Tesla's technology has never advanced beyond SAE Level 2.

B. Tesla Misrepresents Its Vehicles' Capacity for Driverless Operation for a Decade

36. For a decade, Tesla persistently misrepresented its ADAS technology as having achieved, or as close to having achieved, SAE Level 5 (fully automated, driverless operation)

37. Tesla markets its advanced driver assistance systems ("ADAS") technology as autonomous driving technology using the names "Autopilot," "Enhanced Autopilot," and "Full Self-Driving Capability" ("FSD"). Tesla Autopilot is a driver-assistance system for Tesla vehicles that uses a set of sensors and an onboard computer to steer Tesla vehicles.

38. Beginning with the release of its Model S vehicles in October 2014, Tesla has used the designation "Hardware" followed by a numeral to refer to successive generations of its ADAS technology.

39. Tesla has introduced a series of changes to the sensor and computer array comprising its Hardware systems since their release in October 2014. "Hardware 2" was released in October 2016, "Hardware 2.5" in August 2017, "Hardware 3" in April 2019, and "Hardware 4" in January 2023.

40. On March 19, 2015, WIRED magazine published an interview with Tesla CEO Elon Musk in which Musk said the next Tesla Model S software update would add auto-steering that would make cars "largely autonomous on the highway." By claiming that only a software update was needed, Musk's comment misleadingly implied that the Model S already came equipped with the hardware features necessary to achieve full-self driving. WIRED also reported Tesla claiming that Model S vehicles built since Oct. 2014 had radar, sonar, and other hardware "needed" for the feature.[12]

41. TechCrunch reported on September 29, 2015, comments by Musk that Tesla cars should have "full autonomy" in "approximately three years." Musk claimed that unspecified "regulatory approval" could cause implementation delays.[13]

42. In December 2015, Musk stated publicly that Tesla vehicles equipped with the Autopilot system would drive themselves within about two years. He told Fortune magazine, "I think we have all the pieces, and it's just about refining those pieces, putting them in place, and making sure they work across a huge number of environments—and then we're done. It's a much easier problem than people think it is."

43. In January 2016, Musk announced on a conference call with reporters that Autopilot was "probably better" than a human driver. He stated that Tesla vehicles would be able to drive significantly better than humans within two to three years, and that within approximately two years,

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[12] Alex Davies, "Elon Wants to Make Your Tesla Drive Itself. Is That Legal?" Wired.com (Mar. 19, 2015); https://www.wired.com/2015/03/elon-wants-make-tesla-drive-legal.

[13] Connie Loizos, "Elon Musk Says Tesla Cars Will Reach 620 Miles on a Single Chare "Within A Year or Two," Be Fully Autonomous in "Three Years," Techcrunch.com, (Sept. 29, 2016), https://techcrunch.com/2015/09/29/elon-musk-says-tesla-cars-will-reach-620-miles-on-a-single-charge-within-a-year-or-two-have-fully-autonomous-cars-in-three-years/

drivers would be able to use Tesla's "Summon" feature, which allows drivers to remotely instruct their vehicle to drive to a specified location, up to and including the ability to summon a vehicle from the other side of the country.[14]

44. Less than a month later, on June 2, 2016, Musk announced that "autonomous driving" was "basically a solved problem," and that Tesla's Autopilot software was already safer than a human driver on highways. "I think we're basically less than two years away from complete autonomy—complete," Musk said.

45. On July 20, 2016, Tesla's official blog published a post by Musk, in which he misleadingly suggests that lack of regulatory approval (as opposed to technical incapacity) was a major challenge Tesla was facing in bringing to market fully self-driving vehicles: "When true self-driving is approved by regulators, it will mean that you will be able to summon your Tesla from pretty much anywhere. Once it picks you up, you will be able to sleep, read or do anything else enroute to your destination. You will also be able to add your car to the Tesla shared fleet just by tapping a button on the Tesla phone app and have it generate income for you while you're at work or on vacation."[15]

1. Tesla Releases Hardware 2.0, Claiming It Achieves "Full-Self-Driving-Capability"

46. On October 19, 2016, Tesla released its Autopilot 2.0 software and announced that all

[14] *See* Consolidated Third Amended Complaint, *Losavio v. Tesla Inc.* No. 3:22-05240-RFL, [hereinafter *Losavio* TAC], ¶ 46 n. 16 (Dkt. 102) (June 5, 2024).
[15] Elon Musk, "Master Plan, Part Deux," https://www.tesla.com/blog/master-plan-part-deux (July 20, 2016).

new Tesla cars would come with a new suite of hardware (called Autopilot Hardware 2.0) comprised of eight cameras, twelve ultrasonic sensors, and a forward-facing radar unit, which Tesla claimed would allow the cars to soon become capable of SAE Level 5 autonomy.[16]

47. To access the hardware, owners would have to pay $5,000 for an "Enhanced Autopilot" feature and another $3,000 for the right to activate Tesla's promised "Full Self-Driving Capability." The Enhanced Autopilot package provided drivers most or all of the features in the FSD package, except for the right to unlimited access to Tesla's soon-to-arrive full self-driving technology, and potential early access to FSD Beta updates Tesla might release on its way to perfecting that technology.

48. On October 20, 2016, the day after the release of Enhanced Autopilot and FSD, Musk tweeted that Tesla's "Summon" feature was capable of autonomously driving itself to pick up its owner "even if you are on the other side of the country."[17]

49. WIRED magazine reported that by October 24, 2016, the product-ordering page for Tesla vehicles on Tesla's website featured a checkbox for "Full Self-Driving Capability" and featured the claim that "all you will need to do is get in and tell your car where to go."[18] While the website featured disclaimers that implementation was dependent on "software validation" and "regulatory approval," the statements implied that the vehicles came with the hardware needed for FSD.[19]

50. At a press conference on October 19, 2016, CEO Musk announced that "the foundation is laid for the cars to be fully autonomous at a safety level we believe to be at least twice that of a person, maybe better!"[20] Musk claimed specifically:

> Basic news is that all cars exiting the factory have hardware necessary for Level 5 Autonomy so that's in terms of Cameras, Compute Power, it's in every car we make

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[16] *See* Alex Nishimoto, "All New Tesla Models Will Feature Level 5-Capable Autopilot Hardware," Motor Trend (Oct. 20, 2016), available at https://www.motortrend.com/news/new-tesla-models-will-feature-level-5-capable-autopilot-hardware (Pl. Ex. N).

[17] Elon Musk, https://twitter.com/elonmusk/status/789022017311735808 (Oct. 20, 2016, 1:34 AM) (quoted in *Losavio* TAC, ¶ 62 n. 43).

[18] Jack Stewart, 'Tesla's Self-Driving Car Plan Seems Insane, But It Just Might Work." Wired.com (Oct. 24, 2016) https://www.wired.com/2016/10/teslas-self-driving-car-plan-seems-insane-just-might-work/ (Pl. Ex.

[19] *Id.*

[20] Iqtadar Ali, "Transcript: Elon Musk's Autopilot 2.0 Conference Call," Autoworld.com, https://xautoworld.com/news/trasncript-elon-musk-autopilot-2-conference call/ (last accessed May 30, 2026) (Pl. Ex. A).

> on the order of 2,000 cars a week are shipping now with Level 5 literally meaning hardware capable of full self-driving for driver-less capability.[21]

51. Tesla's website pages advertising its FSD capability claimed that "[a]ll Tesla vehicles produced in our factory, including Model 3, have the hardware needed for full self-driving capability at a safety level substantially greater than that of a human driver." [22]

52. A November 2016 newsletter distributed by Tesla and October 2016 post on Tesla's blog similarly represented that "All Tesla vehicles produced in our factory now have full self-driving hardware."[23]

53. From approximately 2017 to 2019, the page on Tesla's website explaining its "Full Self-Driving Capability" feature promised that consumers who purchased or leased cars with the FSD version of its ADAS technology would receive cars capable of "full self-driving in almost all circumstances," including being able to "conduct short and long distance trips with no action required by the person in the driver's seat" and with a "probability of safety at least twice as good as the average human driver."[24] On the same webpage, Tesla went on to state:

> **All you will need to do is get in and tell your car where to go.** If you don't say anything, the car will look at your calendar and take you there as the assumed destination or just home if nothing is on the calendar. **Your Tesla will figure out the optimal route, navigate urban streets (even without lane markings), manage complex intersections with traffic lights, stop signs and roundabouts, and handle densely packed freeways with cars moving at high speed.[25]**

54. On a May 3, 2017 earnings call, Musk reiterated his assurances from his October 19, 2016 press conference that all Tesla vehicles were already equipped with the necessary hardware and that only a software upgrade was needed to achieve fully autonomous self-driving capability in these

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[21] *Id.*
[22] Tesla.com, "Full Self-Driving Hardware on All Cars," *available at* https://web.archive.org/web/20170126073829/tesla.com/autopilot (Pl. Ex. B).
[23] *See* Consolidated Third Amended Complaint Ex. D, *In re Tesla Advanced Driver Assistance Sys. Litig.*, No. 3:22-cv-05240-RFL (N.D. Cal. Sept. 14, 2022]), (Dkt. 102 at 114-119) (Pl. Ex. C); Declaration of Julie L. Fieber Ex. 5, *In re Tesla Advanced Driver Assistance Sy. Litig.,* No. 3:22-cv-05240-RFL (Dkt. 138-7 at 2) (Pl. Ex. D).
[24] Tesla.com, "Full Self-Driving Hardware on All Cars," *available at* https://web.archive.org/web/20170126073829/tesla.com/autopilot (Pl. Ex. E).
[25] *Id.*

vehicles: "The sensor hardware and compute power required for at least level 4 to level 5 autonomy has been in every Tesla produced since October of last year."[26]

55. When asked in June 2017 about whether Tesla would provide a demonstration of its vehicles' purported ability to drive coast-to-coast autonomously, Musk said it was "still on" for end of year and "just software limited," adding that any Tesla with at least Hardware 2—all cars built since Oct. 2016—"will be able to do this."[27]

56. Tesla's Form 2017 and 2018 10-K (signed by CEO Musk on February 22, 2018 and February 19, 2019, respectively) both told the U.S. Securities and Exchange Commission that "[i]n October 2016, we began equipping all Tesla vehicles with hardware needed for full self-driving capability, including cameras that provide 360 degree visibility, updated ultrasonic sensors for object detection, a forward-facing radar with enhanced processing, and a powerful new onboard computer."[28]

57. In April 2018, Musk appeared on the national morning news show *CBS This Morning* to discuss Autopilot with co-host Gayle King and take her on a ride in a Tesla vehicle to demonstrate how it worked. During the demonstration, Musk was driving and King was in the passenger seat. Musk repeatedly took his hands off the steering wheel and kept his hands off the wheel while the car was moving with Tesla's ADAS technology engaged, reinforcing the notion that a Tesla vehicle is fully capable of driving itself.[29]

58. In December 2018, Musk appeared on the CBS show *60 Minutes* in a segment with co-host Leslie Stahl. As part of the segment, Musk took Stahl on a ride in a Tesla vehicle to demonstrate the Tesla's ADAS technology, with Musk driving and Stahl in the passenger seat. Just as he had earlier in the year on *CBS This Morning*, Musk repeatedly took his hands off the steering wheel and kept

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[26] Tesla (TSLA) Q1 2017 Earnings Call Transcript (May 3, 2017), *available at* https://seekingalpha.com/article/4068889-tesla-tsla-q1-2017-results-earnings-call-transcript. (Pl. Ex. F).

[27] Mario Herger, "Tesla Starts Massive Data Collection Activity on Customer Cars via Autopilot Hardware Kit 2," (June 14, 2017) https://thelastdriverlicenseholder.com/2017/06/14/tesla-starts-massive-data-collection-activity-on-customer-cars-via-autopilot-hardware-kit-2

[28] Tesla, Inc. Form 10-K for the Fiscal Year Ended December 31, 2018, Item 1, p. 5 (Feb. 19, 2019), sec.gov (Pl. Ex. G); Tesla, Inc., Form 10-K for the Fiscal Year Ended December 21, 2019, Item 1, p. 4 (Feb. 13, 2020), sec.gov (Pl. Ex. H).

[29] Gayle King, "Elon Musk says Tesla's autopilot system will 'never be perfect,'" CBS This Morning (Apr. 13, 2018), https://www.youtube.com/watch?v=AO33rOofFpg.

them off the wheel while the car was moving with Tesla's ADAS technology engaged, reinforcing the notion that a Tesla vehicle is fully capable of driving itself.[30]

59. Fox Business and other media outlets reported Musk's comments to an investor podcast on February 19, 2019, that "I think we will be feature complete – full self-driving – this year, meaning the car will be able to find you in a parking lot, pick you up and take you all the way to your destination without an intervention, this year," Musk said, before adding: "I would say I am certain of that, that is not a question mark."[31]

60. CEO Musk announced on his Twitter account in early March 2020 that progress on Tesla's Autopilot system was advancing: "functionality will happen quickly. Not long now."[32]

2. Tesla Releases "Hardware 3," Promising It Provides the Hardware Platform Needed for Level 5 Autonomy

61. Tesla announced the release of its "Hardware 3" platform in all Tesla vehicles in April 2019. The "Hardware 3" platform consisted of an upgraded microprocessing chip and a sensor array consisting of eight cameras with 1.2 megapixel resolution and radar.

62. In April 2019, Tesla announced it was "making significant progress in the development of its autonomous driving software and hardware, including our FSD ["Full-Self Driving"] computer, which is currently in production and which will enable full-self driving via future over-the-air software updates."[33] At an investor conference held in the same month, CEO Musk announced Tesla's new hardware platform would enable it to operate a fleet of robo-taxis within the next year, and would even enable Tesla owners to rent out their vehicles as self-driving taxis, with Tesla

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[30] Leslie Stahl, "Tesla CEO Elon Musk: The 60 Minutes Interview," 60 Minutes (Dec. 9, 2018), https://www.cbsnews.com/news/tesla-ceo-elon-musk-the-2018-60-minutes-interview/; *see also* Jack Stewart, "Even Elon Musk Abuses Tesla's Autopilot," Wired (Dec. 10, 2018), available at https://www.wired.com/story/elonmusk-tesla-autopilot-60-minutes-intervie

[31] Thomas Barrabi, "Tesla's Elon Musk: Full self-driving technology nearly complete," Foxbusiness.com, (Feb. 19, 2019) https://www.foxbusiness.com/business-leaders/teslas-elon-musk-full-self-driving-technology-ready-by-2019.

[32] Fred Lambert, "Tesla to deploy more functionality quicker after Autopilot core rewrite coming soon, says Elon Musk," Electrek.com (Mar. 2, 2020); https://electrek.co/2020/03/02/tesla-deploy-functionality-quicker-after-autopilot-core-rewrite-coming-soon-elon-musk/#more-124696

[33] Tesla Investor Relations, Press Releases, "Tesla To Host Autonomy Investor Day" (April 3, 2019) https://ir.tesla.com/press-release/tesla-host-autonomy-investor-day.

taking 25 or 30 percent of the revenue (with the owner pocketing the remainder) and allowing the company to compete with popular ride-hailing services like Uber and Lyft.[34]

63. At the same investor event in April 2019, Musk announced that "[a]ll cars being produced all have the hardware necessary — computer and otherwise — for full self-driving. All you need to do is improve the software."[35] Musk said Tesla expected to be "feature-complete in self-driving" in 2019, and that people would not need to touch the wheel and could look out the window while the vehicle drove itself "probably around the second quarter of next year."[36] Musk further announced that the achievement of FSD-capable hardware in Tesla vehicles would allow it to release a fleet of "Robotaxis" (autonomously operating passenger vehicles): "If you fast forward a year, maybe a year and three months, but next year for sure, we will have over a million robo-taxis on the road," which Musk stated would be operating at "[SAE] Level 5 without a geofence." Musk continued: "I feel very confident predicting autonomous robo-taxis for Tesla next year. … I'm confident we'll have at least regulatory approval somewhere, literally next year." Musk further stated that the Robotaxis would be a way for Tesla owners to make money when they aren't using their vehicles, with Tesla taking 25 or 30 percent of the revenue and allowing the company to compete with popular ride-hailing services like Uber and Lyft.[37] Musk also took to his Twitter account, posting on April 12, 2020 in response to a question about the deployment of Tesla's Robotaxis that

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[34] Insider Tech, "Watch Elon Musk Unveil Plans For A Tesla Ride-Hailing App," (Apr. 22, 2019), https://www.youtube.com/watch?v=YiWbdZ8ItRs Matt McFarland; "Elon Musk says Tesla will have robo-taxis operating next year," CNN Business, (Apr. 22, 2019) https://www.cnn.com/2019/04/22/tech/tesla-robotaxis.

[35] Kirsten Korosec, "Tesla's full self-driving computer is now in all new cars and a next-gen chip is already 'halfway done,'" Techcrunch.com, (April 22, 2019), https://techcrunch.com/2019/04/22/teslas-computer-is-now-in-all-new-cars-and-a-next-gen-chip-is-already-halfway-done/ (Pl. Ex. I).

[36] Carlton Reid, "There's a Very Simple Pattern to Elon Musk's Broken Promises," Wired.com (May 27, 2025) https://www.wired.com/story/theres-a-very-simple-pattern-to-elon-musks-broken-promises

[37] Video of Tesla Autonomy Day at 1:55:48-1:56:01 (Apr. 22, 2019), available at https://vimeo.com/331892012; R. Baldwin, "Tesla promises 'one million robo-taxis' in 2020," Engadget (Apr. 22, 2019), https://www.engadget.com/2019-04-22-tesla-elon-musk-self-driving-robo-taxi.html.; Tech Insider, "Watch Elon Musk Unveil Plans For A Tesla Ride-Hailing App," https://www.youtube.com/watch?v=YiWbdZ8ItRs (Apr. 22, 2019); Matt McFarland, "Elon Musk says Tesla will have robo-taxisoperating next year," CNN Business, https://www.cnn.com/2019/04/22/tech/tesla-robotaxis (Apr. 22, 2019).

"[f]unctionality [is] still looking good for this year," but blamed "[r]egulatory approval" for delays.[38]

64. On a second-quarter earnings call for FY 2019, held July 24, 2019, Musk confirmed that all Tesla models were hardware-ready for full-self driving: "Just like Model 3, Model S and X have the hardware needed for future of full self driving capability."[39]

65. As of June 29, 2020, the product-ordering page of Tesla's website continued to advertise "Full Self-Driving Capability" as available for optional purchase, with a price tag of $7,000.[40] The page assured purchasers that only a *software* update was necessary for their car to achieve FSD: "[a]s these self-driving features evolve, your car will be continuously upgraded through over-the-air software updates."[41]

66. In a series of contemporary and subsequent statements, Musk continued to confirm or imply that all Tesla vehicles equipped with Hardware 3 had the sensors and computer system needed to drive themselves without user intervention, and that the complementary software necessary to implement this feature was about to be released:

(a) On a quarter-four FY 2019 earnings call, held January 29, 2020, Musk said Tesla "might be feature-complete in a few months," defining that as "some chance" the car could go from home to work "with no interventions."[42]

(b) On April 12, 2020, in response to the question, "How long for the first robotaxi release/deployment? 2023?," Musk responded that "Functionality still looking good for this

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[38] Elon Musk (@elonmusk), Twitter.com. April 12, 2020), *quoted in* Roberto Baldwin, "Elon Musk Says Tesla Robotaxis Will Still BE Ready in 2020," CarandDriver.com. https://www.caranddriver.com/news/a32159871/tesla-robo-taxis-still-coming-2020/ (April 16, 2020).

[39] The Motley Fool Transcripts, Tesla, Inc. (TSLA) Q2 2019 Earnings Call Transcript (July 24, 2019), https://www.fool.com/earnings/call-transcripts/2019/07/24/tesla-inc-tsla-q2-2019-earnings-call-transcript.aspx (Pl. Ex. J).

[40] Internet Archive Wayback Machine, Tesla.com, https://ww/tesla.com/models/design; https:///web/archive.org/web/20200600602183125/https://tesla.com/models/design#battery (captured June 28, 2020) (Pl. Ex. M).

[41] *Id.*

[42] The Motley Fool Transcripts, Tesla, Inc. (TSLA) Q2 2019 Earnings Call Transcript (July 24, 2019) https://www.fool.com/earnings/call-transcripts/2020/01/30/tesla-inc-tsla-q4-2019-earnings-call-transcript.aspx

year. Regulatory approval is the big unknown."[43] Musk's comments implied that Tesla had the technical capacity to implement full-self driving in 2023.

(c) Musk announced on May 18, 2020 that Tesla would implement a price increase for its "Full Self-Driving Capability" feature from $7,000 to $8,000. By way of explanation for price hike, Musk implied that FSD was close to being implemented and would dramatically increase the value of vehicles equipped with it: "The FSD price will continue to rise as the software gets closer to full self-driving capability with regulatory approval. It [sic.] that point, the value of FSD is probably somewhere in excess of $100,000."[44]

(d) CEO Musk was quoted in July 2020 as representing on a Q2, 2020 earnings call: ". . . I personally tested the latest alpha build of full self-driving software when I drive my car and it is really I think profoundly better than people realize. It's like amazing. So it's almost getting to the point where I can go from my house to work with no interventions, despite going through construction and widely varying situations. So this is why I am very confident about full self-driving functionality being complete by the end of this year, is because I'm literally driving it."[45]

(e) In December 2020, Musk gave an interview to Business Insider in which he promised that Tesla would achieve Level 5 before the end of the following year, stating "I'm extremely confident that Tesla will have level five next year, extremely confident, 100%."[46]

(f) On a second-quarter earnings call for FY 2020, held July 22, 2020, Musk said Tesla's latest FSD software was "profoundly better," was getting close to home-to-work

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[43] @elonmusk, X (1:38 AM, April 12, 2020), *quoted in* Fred Lambert, "Tesla's robotaxi plan is still on for this year—pending regulatory approval,, says Elon Musk," Electrek.co (April 12, 2020), https://electrek.co/2020/04/12/tesla-robotaxi-plan-2020-pending-regulatory-approval/#more-130026.

[44] Fred Lambert, "Tesla to increase 'Full Self-Driving ' price as Elon Musk sees value rise to >$100k," Electrek.co (May 18, 2020), https://electrek.co/2020/05/18/tesla-increase-full-self-driving-price-elon-musk-value/#more-134329.

[45] Fred Lambert, "Elon Musk on Tesla Self-Driving: 'I can almost go from my house to work with no intervention,' Electrek.co, (July 23, 2020) https://electrek.co/2020/07/23/tesla-self-driving-elon-musk-house-to-work/.

[46] Mathias Döpfner, "Elon Musk reveals Tesla's plan to be at the forefront of a self-driving-car revolution," Business Insider (Dec. 5, 2020) https://www.businessinsider.com/elon-musk-interview-axel-springer-tesla-accelerate-adventof-sustainable-energy

driving "with no interventions," and that he was "extremely confident" Tesla would have full self-driving functionality complete by the end of 2020.[47]

(g) On a fourth-quarter 2020 earnings call for FY 2020, held January 27, 2021, Musk announced that due to the development of a "beta" version of its FSD software, "it's now actually more -- it's more common than not for the car to have no interventions, even on a complex drive."[48] Musk framed the achievement of Level 5 vehicle autonomy as a question of perfecting Tesla's *software*, thus continuing to maintain that the vehicles' *hardware* system was already adequate:

> Martin Viecha – *Senior Director of Investor Relations:*
> The next question is, why are you confident Tesla will achieve Level 5 autonomy in 2021?
>
> Elon Musk – *Founder and Chief Executive Officer*
>
> I'm confident based on my understanding of the technical roadmap and the progress that we're making between each beta iteration. Yes. As I'm saying, it's not remarkable at all for the car to completely drive you from one location to another through a series of complex intersections. It's now about just improving the corner case reliability and getting it to 99.9999% reliable with respect to an accident.[49]

(h) Musk affirmed again on a January 26, 2021 earnings call that Tesla had made "massive progress on Full Self-Driving," and that it "will become obvious later this year" that "Tesla Autopilot is capable of full self-driving."[50] Musk also stated, "I'm highly confident the car will drive itself for the reliability in excess of a human this year. This is a very big deal."[51] On July 26, 2021, on a quarterly earnings call, Musk told journalists that he was confident FSD-equipped Tesla vehicles would soon "be able to drive themselves with

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[47] The Motley Fool Transcripts, Tesla (TSLA) Q2 2020 Earnings Call Transcript (July 22, 2020) https://www.fool.com/earnings/call-transcripts/2020/07/23/tesla-tsla-q2-2020-earnings-call-transcript.aspx
[48] The Motley Fool Transcripts, Tesla (TSLA) Q4 2020 Earnings Call Transcript (Jan. 27, 2021) https://www.fool.com/earnings/call-transcripts/2021/01/27/tesla-tsla-q4-2020-earnings-call-transcript/
[49] *Id.*
[50] The Motley Fool Transcripts, Tesla (TSLA) Q4 2020 Earnings Call Transcript (Jan. 27, 2021), https://www.fool.com/earnings /call-transcripts/2021/01/27/tesla-tsla-q4-2020-earnings-call-transcript/.
[51] *Id.*

the safety levels substantially greater than that of the average person." [52]On a December 31, 2021 earnings call, Musk affirmed that a fully self-driving Tesla fleet would be achieved "by a software update."[53]

(i) On an October 19, 2022 earnings call, Musk said Tesla expected wide FSD Beta release in North America and that, excluding regulatory approval, the car would be able to drive from home to work, a friend's house, or the grocery store "without you touching the wheel."[54]

(j) On a January 25, 2023 earnings call, Musk said every car Tesla sold had the ability, "just from uploading software," to have FSD enabled.[55]

3. Tesla Knew That Its Hardware Could Not Support Full-Self Driving

67. Multiple sources, including regulatory inquiries, public disclosures from Tesla employees, consumer protection organizations, and high-profile crashes involving vehicles using Tesla's purported "self-driving" features, contradicted Tesla's ongoing assertions that its vehicles were capable of anything close to SAE Level 5 operation. As these warnings mounted, Tesla knew that the camera, computer, and sensor array of its Hardware 2-3 systems could not support anything close to the promised "full self-driving" capacity. Nonetheless, Tesla continued to represent its vehicles equipped with these hardware systems as capable of supporting full-self driving.

68. In February 2016, Consumer Reports tested Tesla's new Summon feature, which Tesla claimed makes the car able to drive itself for short distances without anyone in the car, such as to enter or leave a parking space or garage. Although Consumer Reports had previously given Tesla vehicles rave reviews (scoring Tesla's Model S a 99 out of 100 and calling it "the best car we have ever tested" in 2013, and scoring another version of the Model S even higher in 2015), this time Consumer Reports' testing revealed that the Summon feature failed to detect "several large objects

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[52] The Motley Fool Transcripts, Tesla (TSLA) Q2 2021 Earnings Call Transcript (July 26, 2021) https://www.fool.com/earnings/call-transcripts/2021/07/27/tesla-tsla-q2-2021-earnings-call-transcript/

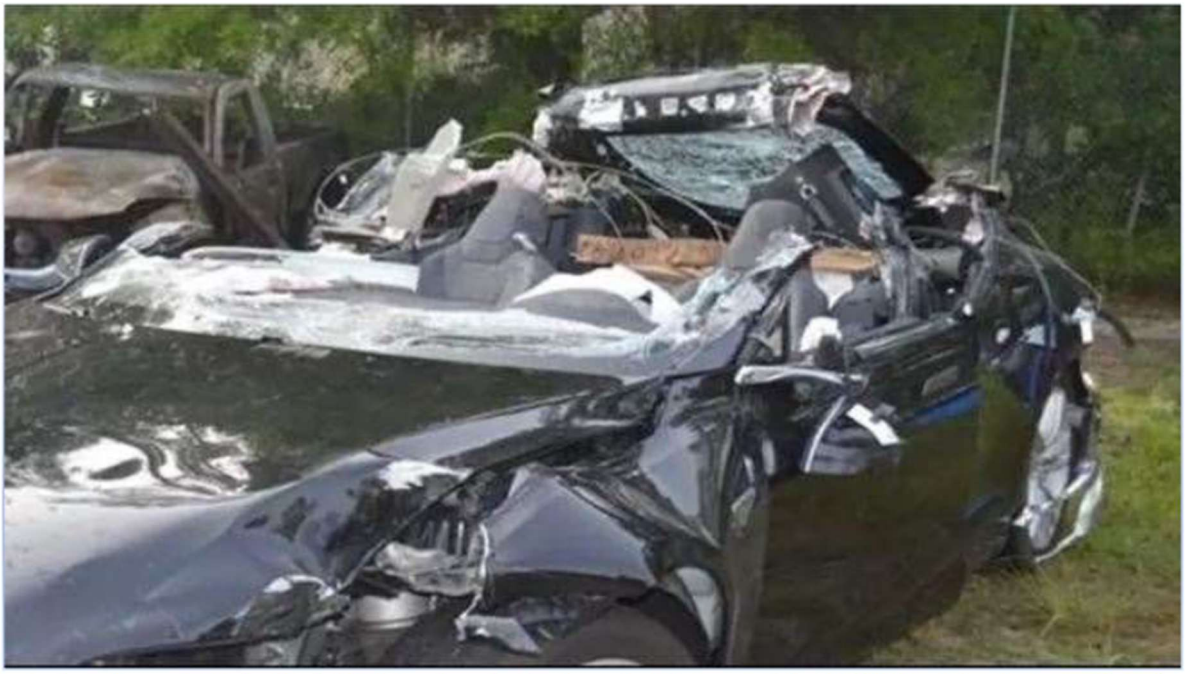
[53] The Motley Fool Transcripts, Tesla (TSLA) Q4 2021 Earnings Call Transcript (Dec. 31, 2021) https://www.fool.com/earnings/call-transcripts/2022/01/27/tesla-tsla-q4-2021-earnings-call-transcript/

[54] The Motley Fool Transcripts, Tesla (TSLA) Q3 2022 Earnings Call Transcript (Oct. 19, 2022) https://www.fool.com/earnings/call-transcripts/2022/10/20/tesla-tsla-q3-2022-earnings-call-transcript/

[55] The Motley Fool Transcripts, Tesla (TSLA) Q4 2022 Earnings Call Transcript (Dec. 31, 2022) (Pl. Ex. K). https://www.fool.com/earnings/call-transcripts/2023/01/26/tesla-tsla-q4-2022-earnings-call-transcript/

that a homeowner might leave in a driveway or on the floor of a garage—such as a duffel bag and bicycle—and the car failed to stop before hitting them." Consumer Reports' testers also encountered other problems related to difficulties they had remotely stopping the car, which resulted in damage to one of the car's wheels and raised significant safety concerns.[56]

69. On May 7, 2016, Tesla driver Joshua Brown was killed in Florida when the Autopilot 17 on his Tesla Model S failed to recognize a tractor-trailer crossing in front his car, which resulted in Brown's car striking and passing under the trailer at 74 mph.[57] Several months later, in September 2016, Tesla would announce it was confident it had fixed the issue by increasing the Autopilot system's reliance on radar so that it "would see a large metal object across the road."[58]



Joshua Brown's Tesla Model S following the fatal crash. Photograph by NTSB/Florida Highway Patrol.

[56] Jake Fisher, "Tesla to Fix Self-Parking Feature After Consumer Reports Raises Safety Concern," Consumer Reports (Feb. 10, 2016), available at https://www.consumerreports.org/car-safety/tesla-fixes-self-parkingfeature-after-consumer-reports-raises-safety-concern/.

[57] TSB, Investigation No. HWY16FH018, Dkt. No. 2, "Crash Summary Report" (June 19, 2017), available at https://data.ntsb.gov/Docket/Document/docBLOB?ID=40453253&FileExtension=.PDF&FileName=Crash%20Summary-Master.PDF

[58] Neal Boudette, "Elon Musk Says Pending Tesla Updates Could Have Prevented Fatal Crash," The New York Times (Sept. 11, 2016), available at https://www.nytimes.com/2016/09/12/business/elon-musk-says-pendingtesla-updates-could-have-prevented-fatal-crash.h

70. On July 14, 2016, Consumer Reports took the unusual step of publicly calling on Tesla to take certain actions. It urged Tesla to "change the name of the Autopilot feature because it promotes a potentially dangerous assumption that the Model S is capable of driving on its own." Instead of using the "misleading" name Autopilot, Consumer Reports urged Tesla to "name automated features with descriptive, not exaggerated, titles."[59]

71. In August 2016, after a Tesla driver with Autopilot engaged crashed into a parked vehicle on a Beijing highway and later stated publicly that the Tesla had misrepresented Autopilot's capabilities and misled buyers, Tesla removed from its China website a term that translates as "self-driving" and replaced it with a term that translate as "self-assisted driving."[60] Tesla did not make any similar changes to its U.S. website.

72. On or about October 16, 2016, German regulators sent Tesla a formal letter reading, "In order to prevent misunderstanding and incorrect customers' expectations, we demand that the misleading term Autopilot is no longer used in advertising the system." The German government also reminded Tesla vehicle owners that Tesla's ADAS technology required, and could only be safely operated with, constant driver attention and supervision.[61]

73. After the release on Tesla's website of its blog-post in the run-up to the October 19, 2016 conference, multiple Tesla Autopilot employees who had worked on a video purporting to show a Tesla driving without input from the person seated in the driver's seat stepped forward to report that the route taken by the car had been charted ahead of time by software that created a three-dimensional digital map of the route (a feature unavailable to Tesla owners), and that the video did not accurately show how the car operated during filming. For example, the car kept executing driving tasks poorly and engineers had to run the pre-programmed route over and over again to get video that would make it appear the car was capable of driving itself. At one point during filming,

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[59] Consumer Reports, "Consumer Reports Calls on Tesla to Disable and Update Auto Steering Function, Remove 'Autopilot' Name" (July 14, 2016), available at https://www.consumerreports.org/media-room/press-releases/2016/07/consumer-reports-calls-on-tesla-to-disable-and-update-auto-steering-function-removeautopilot-name/.

[60] Jake Spring & Alexandria Sage, "Tesla removes 'self-driving' from China website after Beijing crash," Reuters (Aug. 15, 2016), https://www.reuters.com/article/us-tesla-china-crash-idUSKCN10Q0L4.

[61] Reuters Staff, "Germany says Tesla should not use 'Autopilot' in advertising," Reuters (Oct. 16, 2016), available at https://www.reuters.com/article/idUSKBN12G0KS.

the car crashed into a fence while on Autopilot and had to be repaired. None of these facts were referenced in the video or otherwise disclosed by Tesla. [62] Still, the video was later used to promote Autopilot's purported abilities, and was removed from the company's website only after it was cited in litigation against it.

74. According to reporting by multiple outlets, including *The Wall Street Journal* and *The New York Times*, Tesla's decision to promise that its Hardware 2.0 technology would be able to provide "Full Self Driving" and Musk's statements at the news conference "took the Tesla engineering team by surprise, and some felt that Musk was promising something that was not possible." Sterling Andereson, who was the head of Tesla's Autopilot program at that time, "told Tesla's sales and marketing teams that they should not refer to the company's technology as 'autonomous' or 'self-driving' because this would mislead the public."[63] In a meeting after the October announcement, someone asked Mr. Anderson how Tesla could defend branding the product "Full Self-Driving," to which he responded, "This was Elon's decision." Two months later, in December 2016, Mr. Anderson resigned.[64]

75. In March 2018—one month before Musk's appearance on *CBS This Morning*—Apple engineer Walter Huang was killed when the Autopilot on his Tesla Model X became confused at a fork in the highway and caused the car to veer sharply to the left and crash into a concrete barrier in Mountain View, California (pictured below)

[62] Cade Metz & Neal E. Boudette, "Inside Tesla as Elon Musk Pushed an Unflinching Vision for Self-Driving Cars," The New York Times (Dec. 6, 2021), available at https://www.nytimes.com/2021/12/06/technology/teslaautopilot-elon-musk.html;

[63] Metz & Boudette, supra note 62.

[64] Ianthe Jeanne Dugan & Mike Spector, "Tesla's Push to Build a Self-Driving Car Sparked Dissent Among Its Engineers," The Wall Street Journal (Aug. 24, 2017), available at https://www.wsj.com/articles/teslas-push-tobuild-a-self-driving-car-sparks-dissent-among-its-engineers-1503593742.

Photograph by NTSB

76. One month after Musk's *CBS This Morning* appearance, a Tesla vehicle with Autopilot engaged struck and killed a pedestrian in Japan.

77. In March 2019, Jeremy Banner was killed when his 2018 Tesla Model 3 with Autopilot engaged drove under a tractor-trailer in Florida. The Banner accident were eerily similar to the 2016 accident that killed Joshua Brown when his car drove under a tractor-trailer, and that led Tesla to announce in September 2016 that the company was confident it had fixed the issue by increasing its ADAS software's reliance on radar. The Banner accident indicated that Tesla had not fixed this significant flaw in its ADAS technology in September 2016, and still had not done so two-and-a-half years later.

78. Consumer Reports published reviews in May and October of 2019 of Tesla's "Navigate" and "Smart Summon" features, both of which purported to allow Tesla owners to use an app to cause their Teslas to drive themselves to the owner's location. The reviewers found that vehicles operating with these features cut off other cars without leaving enough space, failed to pass in the correct lane, struggled to merge into traffic, [65] and had difficult negotiating a parking lot, with the

[65] See Keith Barry, "Tesla's Updated Navigate on Autopilot Requires Significant Driver Intervention," Consumer Reports (May 22, 2019), available at https://www.consumerreports.org/autonomous-driving/teslanavigate-on-autopilot-automatic-lane-change-requires-significant-driver-intervention/.

summoned car crossing lines and wandering erratically "like a drunken or distracted driver."[66] This was nearly four years after Musk's January 2016 tweet that Tesla was two years away from its customers being able to use Summon to have their car come to them even if it was thousands of miles away.[67]

79. In December 2019, Jenna Monet was killed when the Model 3 she was in crashed into the back of a parked fire truck in Indiana while Autopilot was engaged.

80. In February 2020, the NTSB called on NHTSA to set stricter standards on Autopilot, citing the high number of Autopilot-related collisions and deaths.

81. In August 2020, a couple was killed in Saratoga, California, after their Tesla veered off a highway while Autopilot was active.

82. In September 2020, Consumer Reports published the first in a series of evaluations of Tesla's "Full Self-Driving Capability" technology, finding that the technology caused vehicles to engage in unusual and unsafe behavior, such as stopping at green lights, driving through stop signs, slamming on the brakes for yield signs when the merge was clear, and stopping at every exit while going around a traffic circle.[68]

83. In October 2020, Tesla informed some owners who had previously purchased an FSD package that their vehicles would require a $1,000 hardware upgrade to be compatible with Tesla's FSD technology.

84. On November 20, 2020, Tesla attorneys sent the California Department of Motor Vehicles ("DMV") a letter (later released via Public Records Act request) in response to the DMV's questions about the FSD "City Streets" feature that was about to be released to some Tesla owners in a software update. Tesla's legal counsel wrote, "For context, as we've previously discussed, City

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[66] Jeff Plungis, "Tesla's Smart Summon Performance Doesn't Match Marketing Hype," Consumer Reports (Oct. 8, 2019), available at https://www.consumerreports.org/automotive-technology/teslas-smart-summonperformance-doesnt-match-marketing-hype/.

[67] Musk, *supra* note 62.

[68] *See* Mike Monticello & Keith Barry, "Tesla's 'Full Self-Driving Capability' Falls Short of Its Name: The pricey option doesn't make the car self-driving, and now Tesla's promises are under scrutiny by state regulators in California," Consumer Reports (Sept. 4, 2020) (last updated May 19, 2021), available at https://www.consumerreports.org/autonomous-driving/tesla-full-self-driving-capability-review-falls-short-of-its-namea1224795690/.

Streets continues to firmly root the vehicle in SAE Level 2 capability." The letter goes on to explain in detail FSD's limitations and to admit that the system is nowhere near being fully autonomous or fully self-driving:

> City Streets' capabilities with respect to the object and event detection and response (OEDR) sub-task are limited, as there are circumstances and events to which the system is not capable of recognizing or responding. These include static objects and road debris, emergency vehicles, construction zones, large uncontrolled intersections with multiple incoming ways, occlusions, adverse weather, complicated or adversarial vehicles in the driving path, unmapped roads. As a result, the driver maintains responsibility for this part of the dynamic driving task (DDT). In addition, the driver must supervise the system, monitoring both the driving environment and the functioning of City Streets, and he is responsible for responding to inappropriate actions taken by the system. The feature is not designed such that a driver can rely on an alert to draw his attention to a situation requiring response. There are scenarios or situations where an intervention from the driver is required but the system will not alert the driver. In the case of City Streets (and all other existing FSD features), because the vehicle is not capable of performing the entire DDT, a human driver must participate.[69]

85. On December 28, 2020, during the same month in which Musk told *Business Insider* he was "extremely confident that Tesla will have level five next year, extremely confident, 100%,"[70] Tesla legal counsel again reiterated to California DMV the SAE Level 2 nature and limitations of Tesla's FSD technology:

> Full Self-Driving (FSD) Capability is an additional optional suite of features that builds from Autopilot and is also representative of SAE L2. Features that comprise FSD Capability are Navigate on Autopilot, Auto Lane Change, Autopark, Summon, Smart Summon, Traffic and Stop Sign Control, and, upcoming, Autosteer on City Streets (City Streets). While we designed these features to become more capable over time through over-the-air software updates, currently neither Autopilot nor FSD Capability is an autonomous system, and currently no comprising feature, whether singularly or collectively, is autonomous or makes our vehicles autonomous. This includes the limited pilot release of City

[69] Letter from Eric Williams (Tesla) to Miguel Acosta (DMV) Re: City Streets – Pilot Release at 1 (Nov. 20, 2020), available at https://www.plainsite.org/documents/242a2g/california-dmv-tesla-robotaxi-ADAS-emails/.

[70] Mathias Döpfner, "Elon Musk reveals Tesla's plan to be at the forefront of a self-driving-car revolution," Business Insider, https://www.businessinsider.com/elon-musk-interview-axel-springer-tesla-accelerate-adventof-sustainable-energy (Dec. 5, 2020)

Streets.[71]

86. During the same month that Tesla's lawyers were assuring California regulators that the most advanced version of its ADAS technology was still at SAE Level 2 and suggesting it was likely to remain at Level 2 for the foreseeable future, Elon Musk gave an interview to Business Insider in which he promised that Tesla would achieve Level 5 before the end of the following year, stating "I'm extremely confident that Tesla will have level five next year, extremely confident, 100%."[72]

87. Six weeks later on a March 9, 2021 phone call with California DMV regulators, Tesla's director of Autopilot software, CJ Moore, contradicted Musk. According to an internal DMV memo memorializing the call (released via Public Records Act request), "DMV asked CJ to address, from an engineering perspective, Elon's messaging about L5 [Level 5] capability by the end of the year. Elon's tweet does not match engineering reality per CJ."[73] In response to a question from DMV regulators about "how Tesla evaluates the potential advancement of levels of autonomy," Tesla representatives "indicated they are still firmly in L2 [Level 2]."

88. Following up on the March 9, 2021 phone call, the California DMV wrote to Tesla: "Notwithstanding other public messaging from Tesla about developing vehicles capable of full driving automation, Tesla reiterated that the City Streets feature is currently a Society of Automotive Engineers (SAE) level two (2) Advanced Driver-Assistance feature and that Tesla will continue to monitor how participants interact with the feature and make improvements. As mentioned in your [prior] correspondence and per California regulations,

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[71] Letter from Eric Williams (Tesla) to Miguel Acosta (DMV) Re: Autonomous Mode Disengagements for Reporting Year 2020 at 1-2 (Dec. 14, 2020), available at https://www.plainsite.org/documents/242a2g/california-dmv-tesla-robotaxi-ADAS-emails/; see also David Silver, "Tesla Emails To The California DMV Emphasize Continued Reliance On Maps," Forbes (Mar. 9, 2021), available at https://www.forbes.com/sites/davidsilver/2021/03/09/tesla-emails-to-the-california-dmv-emphasize-continued-reliance-on-maps/?sh=2c0884c957e6.

[72] Mathias Döpfner, "Elon Musk reveals Tesla's plan to be at the forefront of a self-driving-car revolution," Business Insider, https://www.businessinsider.com/elon-musk-interview-axel-springer-tesla-accelerate-adventof-sustainable-energy (Dec. 5, 2020)

[73] Memorandum to File by Miguel Acosta (DMV) Re: Tesla AP City Streets Update (Mar. 9, 2021), available at https://www.plainsite.org/documents/28jcs0/california-dmv-tesla-robotaxi-ADAS-notes/

should Tesla develop technology features characterized as SAE level 3 or higher, Tesla will seek the appropriate regulatory permitting from the DMV before autonomous vehicles are operated on public roads."[74]

89. In May 2021, Tesla began building new Tesla vehicles bound for the North America market without radar, as part of the company's move toward achieving a fully self-driving car using only cameras (and neural network machine learning). No longer including radar in new Tesla vehicles has reduced Tesla's manufacturing costs, but it is contrary to the industry-standard view that a combination of sensors—i.e., at minimum, cameras, radar, and lidar—is necessary to achieve technology capable of SAE Level 3, 4, or 5 functionality. Tesla's decision to change the hardware mix by excluding radar and relying heavily or solely on cameras also means that Tesla's ADAS technology cannot now and likely will never be able to function safely in weather conditions with reduced visibility, such as heavy rain and fog.[75]

90. On August 13, 2021, NHTSA's Office of Defects Investigation opened a "Preliminary Evaluation" investigation to assess the performance of Tesla's Autopilot system, which was prompted by at least 11 incidents in which Tesla vehicles using Autopilot crashed into parked emergency vehicles that had their lights on and flashing, killing one person and injuring 17.[76] The investigation was reported to be "the broadest look yet at Autopilot and at potential flaws that could make it and the Teslas that operate on it dangerous."[77] As alleged below, NHTSA significantly expanded this investigation in June 2022.

91. Later in August 2021, two U.S. Senators called for the Federal Trade Commission to

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[74] Letter from Miguel Acosta (DMV) to Eric Williams (Tesla) (Apr. 21, 2021), available at https://www.plainsite.org/documents/28jcs0/california-dmv-tesla-robotaxi-ADAS-notes/.

[75] See Kirsten Korosec, "Tesla is no longer using radar sensors in Model 3 and Model Y vehicles built in North America," TechCrunch (Mar. 25, 2021), https://techcrunch.com/2021/05/25/tesla-is-no-longer-using-radarsensors-in-model-3-and-model-y-vehicles-built-in-north-america/; Hyunjoo Jin, "Explainer: Tesla dropsradar; is Autopilot System safe?," Reuters (June 2, 2021), https://www.reuters.com/business/autos-transportation/tesla-drops-radar-is-autopilot-system-safe-2021-06-02/.

[76] NHTSA, Investigation PE 21-020, ODI Resume (Aug. 13, 2021), available at https://static.nhtsa.gov/odi/inv/2021/INOA-PE21020-1893.PDF.

[77] Neal Boudette & Niraj Chokshi, "U.S. Will Investigate Tesla's Autopilot System Over Crashes With Emergency Vehicles," The New York Times (Aug. 16, 2021), available at https://www.nytimes.com/2021/08/16/business/tesla-autopilot-nhtsa.html

investigate what they referred to as Tesla's potentially deceptive marketing practices surrounding its FSD technology, including Tesla's use of the phrase "full self-driving" to describe and market a set of features that does not make the vehicle fully self-driving.

92. On August 31, 2021, NHTSA ordered Tesla to produce documents and information regarding the design of its FSD technology, crashes involving that technology, and marketing materials that make representations about that technology. On the date that was the deadline for compliance, Tesla submitted only a partial response to NHTSA, claiming that the documents and information it had requested was confidential business information.

93. In September 2021, Tesla announced it was aiming for a wider release of FSD Beta by the end of that month. In response, NTSB Chair Jennifer Homendy made public comments stating that Tesla should address "basic safety issues" before expanding the availability of FSD. Regarding Tesla's use of the term "full self-driving," Homendy called it "misleading and irresponsible," and further stated that Tesla "has clearly misled numerous people to misuse and abuse the technology."

94. On October 24, 2021, Tesla pulled back the release of version 10.3 of its ADAS software, which the company had already made available for drivers to use on public roads, because of problems the software was having making left turns at traffic lights.

95. On October 25, 2021, NTSB Chair Homendy sent Musk a letter expressing concern that Tesla was rolling out FSD software updates without having implemented recommendations about improving the safety of Tesla's ADAS technology that NTSB had made years earlier following fatal crashes involving Tesla's ADAS technology. The following day, Homendy appeared on the CNBC show Squawk Box to share her concerns about Tesla's anticipated rollout of FSD beta to a larger group of Tesla vehicle owners.

> My biggest concern is that Tesla is rolling out Full Self-Driving technology in beta on city streets with untrained drivers, and they [Tesla] have not addressed our [NTSB's] recommendations that we've issued as a result of numerous investigations of Tesla crashes.
>
> … The NTSB, and I specifically, meet people on the worst day of their lives after a crash, after they've lost a loved one. That is part of our job at the NTSB. And our job is to determine what happened, why it happened, and prevent a crash from happening again. We conduct a thorough investigation, and at the end of that investigation, we issue

> findings of probable cause and safety recommendations, and then we work extensively with the recipients of those recommendations to ensure they're implemented because it's not until they're implemented that safety is truly improved. And in this case, we haven't received a response from Tesla in four years, yet we've reiterated those recommendations numerous times.

96. The show's host then asked Chair Homendy about Tesla's statements that Tesla drivers "need to be engaged when [they're] behind the wheel—that's not enough [to ensure safety]?" Chair Homendy unequivocally responded that it was not, in part because Tesla's marketing of its ADAS technology as "Full Self-Driving" is inherently misleading:

> No, that's not enough. It's clear that if you're marketing something as Full Self-Driving, and it is not full self-driving, and people are misusing the vehicles and the technology, that you have a design flaw, and you have to prevent that misuse. And part of that is how you talk about your technology. It is not full self-driving. … It isn't full self-driving technology. It's misleading.[78]

97. In October 2021, after an update to the FSD Beta software, there was a major increase in "phantom braking" incidents, in which the software identifies a non-existent threat that triggers the vehicle's emergency braking system. The result is that Tesla vehicles, traveling at various speeds, were suddenly slamming on the brakes for no apparent reason. Tesla initially claimed it had identified the source of the problem and fixed it with a software update released on October 25, 2021, but subsequently issued a formal recall over the issue for vehicles using the FSD Beta software in a reported effort to head off adverse action by U.S. regulators.[79] Tesla's claims of having fixed the problem, however, turned out to be false, as driver complaints about "phantom braking" issues soared to 107 NHTSA complaints in the three-month period of November 2021 through January 2022 (compared with only 34 such complaints in the preceding 22 months). Owner complaints to NHTSA included everything from phantom braking incidents that were "happening with NOTHING

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[78] Michael Wayland, "NTSB head criticizes Tesla's self-driving features, calls them 'misleading,'" CNBC (Oct. 26, 2021), https://www.cnbc.com/2021/10/26/ntsb-head-criticizes-teslas-self-driving-features-calls-themmisleading.html.

[79] Tom Krisher, "Tesla software recall may head off fight with US regulators," Associated Press (Nov. 2, 2021), available at https://apnews.com/article/technology-business-software-d3e2107435f432fd9b36ba14898166a0.

present in front of my vehicle, and sometimes with nothing around me at all," to an incident where Tesla software slammed on the brakes in response to a plastic bag.[80] Many industry experts have opined that the increase in "phantom braking" incidents is a predictable result of removing radar from new Tesla vehicles in favor of relying more heavily or entirely on cameras.[81]

98. On November 18, 2021, CNN Business reported that it spent a morning testing Tesla's FSD technology on the streets of New York City and "watched the software nearly crash into a construction site, try to turn into a stopped truck and attempt to drive down the wrong side of the road." The FSD software reportedly "needed plenty of human interventions to protect us and everyone else on the road," including a driver intervention "every couple of blocks or so" and multiple instances in which the driver "quickly jerked the wheel to avoid a crash."[82]

99. On December 6, 2021, *The New York Times* published an article about its investigation into the failures of Tesla's "Autopilot" technology based on interviews with 19 Tesla employees who had worked on design, developing, and testing that technology at Tesla over the prior decade. The article reported that interviews with the employees indicated that Musk "repeatedly misled buyers" about the abilities of Tesla's technology.[83]

100. In April 2022, the NHTSA opened two defect investigations into Autopilot. In reporting on this development, Bloomberg News spoke on the record with several current and former top federal officials responsible for roadway safety under various administrations, all of whom singled out Tesla and its Autopilot and FSD software as cause for concern. According to the article, NTSB Chair Jennifer Homendy "describe[d] Tesla's deployment of features marketed as

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[80] Faiz Siddiqui & Jeremy B. Merrill, "Tesla drivers report a surge in 'phantom braking,'" The Washington Post (Feb. 2, 2022), available at https://www.washingtonpost.com/technology/2022/02/02/tesla-phantom-braking/.

[81] See, e.g., Jonathan M. Gitlin, "Tesla's radar-less cars investigated by NHTSA after complaints spike: Tesla's safety camera system has a real problem with false positives," ArsTechnica (Feb. 18, 2022), https://arstechnica.com/cars/2022/02/teslas-radar-less-cars-investigated-by-nhtsa-after-complaints-spike/.

[82] Matt McFarland, "We tried Tesla's 'full self-driving.' Here's what happened," CNN Business, https://www.cnn.com/2021/11/18/cars/tesla-full-self-driving-brooklyn/index.html (Nov. 18, 2021); CNN, "CNN tests a 'full self-driving' Tesla," https://www.youtube.com/watch?v=2PMu7MD9GvI (Nov. 18, 2021).

[83] Metz & Boudette, supra note 62.

Autopilot and Full Self-Driving as artificial-intelligence experiments using untrained operators of 5,000-pound vehicles," and said "It is a disaster waiting to happen." David Friedman, a former deputy and acting administrator of NHTSA from 2013 to 2015, told reporters that Tesla's approach to automated driving features "sticks out like a sore thumb" in the industry and "has for years." Heidi King, a deputy and acting administrator of NHTSA during the Trump administration, similarly stated for the article: "I really dislike a lot of what Tesla has done, and at the top of the list in bright, bold letters, is Elon Musk's habit of making false public claims, and using his podium in a way that creates safety risks." King continued: "We all admire his [Musk's] visionary attributes. But visionary exaggerations about a consumer product can be very, very dangerous.[84]

101. In June 2022, the NHTSA announced it was upgrading its August 2021 "Preliminary Evaluation" into Tesla's Autopilot system into an "Engineering Analysis"—a significant expansion of the investigation.[85] The announcement was welcomed by many roadway safety organizations, including the Governors Highway Safety Association, whose executive director told *The New York Times* that his organization had been "asking for closer scrutiny of Autopilot for some time," and that the product names Autopilot and Full Self-Driving "confuse people into thinking they can do more than they are actually capable," and that "[a]t a minimum they should be renamed."[86]

102. On July 13, 2022, the Dawn Project, an organization dedicated to increasing the software safety, published a white paper regarding its testing of a Tesla Model 3 equipped with FSD Beta 10.12.2 (released on June 1, 2022). The purpose of the testing was to determine the FSD software's safety in terms of its ability to detect and avoid hitting small children. The testing was performed on a closed racetrack with the Tesla driving itself between a long row of cones with a child-sized mannequin placed in plain view at the end of

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[84] Craig Trudell & Keith Laing, "Tesla Autopilot Stirs U.S. Alarm as 'Disaster Waiting to Happen,'" Bloomberg News (Apr. 18, 2022), https://www.bloomberg.com/news/articles/2022-04-18/tesla-autopilot-stirsu-s-alarm-as-disaster-waiting-to-happen.

[85] NHTSA, Investigation EA 22-002, ODI Resume (June 8, 2022), available at https://static.nhtsa.gov/odi/inv/2022/INOA-EA22002-3184.PDF.

[86] Neal E. Boudette, "Federal safety agency expands its investigation of Tesla's Autopilot system," The New York Times (June 9, 2022), available at https://www.nytimes.com/2022/06/09/business/tesla-autopilot-nhtsainvestigation.html.

the row—i.e., conditions significantly less complex and more favorable to the FSD software than those that would be encountered in the real world. Nevertheless, the testing found that Tesla's FSD software consistently failed to detect the stationary child-size mannequins and "d[id] not avoid the child or even slow down," but instead "repeatedly struck the child mannequin in a manner that would be fatal to an actual child."[87]

103. On July 14, 2022, the editor-in-chief of Electrek, a website that covers electric vehicles, published a review of Tesla's FSD Beta software based on his experience of using it over the course of two months. His conclusion was that, despite years of development and updates by Tesla, FSD Beta's "decision-making is still the equivalent of a 14-year-old who has been learning to drive for the last week and sometimes appears to consume hard drugs."[88]

104. In August 2022, Tesla announced that the price of FSD on new Tesla cars would increase from $12,000 to $15,000, effective September 5, 2022.

105. On July 28, 2022, following a year-long investigation, the California DMV, which licenses motor vehicle manufacturers and dealerships in California (including Tesla's Fremont factory and dozens of Tesla retail stores), brought two related administrative enforcement actions against Tesla for "untrue," "misleading," and "deceptive" marketing of its Autopilot and FSD technology. The DMV specifically alleged that Tesla's use of the product labels "Autopilot" and "Full Self-Driving Capability," as well as statements about those technologies that appeared on Tesla's website in 2022, "represent that vehicles equipped with those ADAS features will operate as an autonomous vehicle, but vehicles equipped with those ADAS features could not at the time of those advertisements, and cannot now, operate as autonomous vehicles." For relief, the DMV seeks restitution and the revocation or suspension of Tesla's California vehicle manufacturer license and vehicle

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[87] The Dawn Project, In Scientific Test, Tesla "Full Self-Driving" Technology Consistently Strikes Child-Sized Mannequins (July 13, 2022), available at https://dawnproject.com/wpcontent/uploads/2022/08/The_Dawn_Project___Tesla_ADAS_Test__8_.pdf.

[88] Fred Lambert, "Elon Musk does the impossible and manages expectations on Tesla's next Full Self-Driving update," Electrek (July 14, 2022), https://electrek.co/2022/07/14/elon-musk-manages-expectations-tesla-nextbig-full-self-driving-update/.

dealer license. *See In the Matter of the Accusation Against Tesla Inc. dba Tesla Motors, Inc., a Vehicle Manufacturer*, Case No. 21-02188, Accusation (July 28, 2022); *In the Matter of the Accusation Against Tesla Inc. dba Tesla Motors, Inc.*, a Vehicle Dealer, Case No. 21-02189, Accusation (July 28, 2022).

106. On December 15, 2025, the California DMV adopted the decision of an administrative law judge finding that Tesla's use of the terms "autopilot" and "Full Self-Driving Capability" to describe its vehicles' Advanced Driving Assistance Features (ADAS) is misleading and violates state law.[89] The DMV's decision adopted the ALJ's findings regarding violations, stayed the ALJ's thirty-day suspension of Tesla's manufacturer's license, and gave Tesla 60 days to take action regarding its use of the term "Autopilot." In response to the California DMV's cas, Tesla discontinued use of the term "Full Self-Driving Capability," "instead specifying that the system requires driver supervision by using the term 'Full Self-Driving (Supervised),'"[90] and has renamed its "Autopilot" system "Traffic Aware Cruise control.[91]

107. On October 25, 2022, Reuters reported that the U.S. Department of Justice had launched a criminal investigation against Tesla, Inc. regarding the company's claims that its vehicles could drive themselves. As part of the investigation, "Justice Department prosecutors in Washington and San Francisco are examining whether Tesla misled consumers, investors and regulators by making unsupported claims about its driver assistance technology's capabilities." One of the article's sources provided information indicating that the criminal probe "is competing with two other DOJ investigations involving Tesla" but did not elaborate on the subject matter of those other ongoing

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[89] California Department of Motor Vehicles, "DMV Finds Tesla Violated California State Law," (Dec. 16, 2025), *available at* https://www.dmv.ca.gov/portal/news-and-media/news-releases/dmv-finds-tesla-violated-california-state-law/

[90] *Id.*

[91] Caleb Miller, "Tesla Drops 'Autopilot' Name After Legal Pressure from California, Caranddriver.com (Feb. 19, 2026) https://www.caranddriver.com/news/a70420085/tesla-drops-autopilot-name-california/?link_source=ta_first_comment&taid=699c6b84ae7f440001a39e57&utm_campaign=trueanthemFBCDphoto&utm_content=699c608c64807e000141288a&utm_medium=social&utm_source=facebook

investigations.[92]

4. Tesla Introduces "Hardware 4" in 2023, Replacing Hardware 3 in New Vehicles

108. Tesla introduced its "Hardware 4" sensor and onboard computer package in January 2023. By the middle of 2023, all new Tesla Model S, Model X and Model 3 vehicles came equipped with the Hardware 4 package. The Hardware 4 package came with more powerful, high-resolution 5-megapixel cameras and an upgraded radar system.

109. With the release of Hardware 4, Tesla attempted an awkward balance between promoting its new hardware system while maintaining that it was unnecessary to achieve FSD. On a January 25, 2023 earnings call, Musk announced,

> [W]ith respect to upgrading cars on -- that have Hardware 3, I don't think that will be needed. Hardware 3 will not be as good as Hardware 4, but I'm confident that Hardware 3 will so far exceed the average -- the safety of the average human. So [Inaudible] how do we get ultimately to -- let's say, for argument's sake, if Hardware 3 can be, say, 200% or 300% safer than human, Hardware 4 might be 500% or 600%. It will be Hardware 5 beyond that.

110. At the same time, Tesla continued to represent Hardware 3 as capable of achieving FSD. On the same January 25, 2023 earnings call, Musk reaffirmed that

> [E]very time we sell a car, it has the ability, just from uploading software, to have full self-driving enabled, and full self-driving is obviously getting better very rapidly. So that's actually a tremendous upside potential because all of those cars, with a few exceptions -- I mean, only a small percentage of cars don't have Hardware 3. So that means that there's millions of cars where full self-driving can be sold at essentially 100% gross margin.[93]

5. Tesla Admits "Hardware 3" is Incapable of Full Self Driving

111. Tesla began to reveal that its previous hardware configurations are incapable of supporting FSD after the release of its "Hardware 4" package. On a January 2025 earnings call, Musk was asked, "is it expected that Tesla will need to upgrade hardware 3 vehicles and if so, what is the timeline?" Musk responded:

> I mean, I think the honest answer is that we're going to have to upgrade people's hardware 3 computer for those that have bought full self driving. And that is the

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[92] Mike Spector & Dan Levine, "Exclusive: Tesla faces U.S. criminal probe over self-driving claims," Reuters (Oct. 26, 2022), https://www.reuters.com/legal/exclusive-tesla-faces-us-criminal-probe-over-self-drivingclaims-sources-2022-10-26/.

[93] The Motley Fool Transcripts, Tesla (TSLA) Q4 2022 Earnings Call Transcript (Jan. 25, 2023), https://www.fool.com/earnings/call-transcripts/2023/01/26/tesla-tsla-q4-2022-earnings-call-transcript/ (Pl. Ex. L).

> honest answer. And that's going to be painful and difficult, but we'll get it done. Now I'm kind of glad than not that many people bought the FSD package.[94]

112. Tesla finally admitted the truth on April 22, 2026. On Tesla's Q1 FY 2026 earnings call, Musk revealed that "Hardware 3 simply does not have the capability to achieve unsupervised FSD."[95] Musk also stated that Tesla would "offer[] the ability to upgrade the car to replace the computer, and you also need to replace the cameras, unfortunately, to go to Hardware 4." Musk suggested that doing this would require Tesla "to set up micro factories or small factories in major metropolitan areas in order to do it efficiently. Because if it's done just at the service center, it is extremely slow to do so and inefficient. We basically need many production lines to make the change."[96]

113. The promised retrofittings (whether or not accompanied by "micro factories") have never been implemented.

C. Tolling of the Statutes of Limitations

114. As alleged herein, Tesla, Inc., systematically misrepresented Tesla vehicles as being equipped with hardware necessary to support fully autonomous self-driving functionality, and concealed the material fact that its vehicles lack the necessary hardware until no earlier than January 2025. Even then, Tesla continued to suggest falsely that the deficiency in its hardware could be fixed by an upgrade.

115. Tesla, Inc., through its CEO Musk, misrepresented Tesla vehicles as having the hardware necessary to support FSD, and concealed their lack of this hardware, with the expectation and intention of inducing Plaintiff and other purchasers of Tesla vehicles to buy Tesla vehicles and/or to pay additional amounts to buy "FSD Capability."

116. Tesla, Inc. knew, while stating that Tesla vehicles are equipped with hardware necessary to support FSD, that Tesla's hardware in the Class Vehicles was and is inadequate to support this capability.

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[94] The Motley Fool Transcripts, *supra* n. 6.
[95] yahoofinance!, *supra* 7.
[96] *Id.*

117. Plaintiff, as an ordinary consumer with no specialized knowledge of or access to Tesla, Inc.'s design of its hardware and knowledge of its hardware's capabilities, lacked knowledge and the means of knowing the truth of Tesla, Inc.'s statements.

118. Plaintiff acted in reliance on Musk and Tesla' Inc.'s representations concerning its vehicles' capacity for FSD by purchasing a Class Vehicle and by paying $7,000 in addition to the purchase price for "FSD Capability." After making his purchase, Plaintiff continued to review and monitor Tesla and Musk's statements that Tesla was close to completing the software necessary to support FSD on his Model S. It was not until Musk's highly publicized admission in April 2026 that Plaintiff became aware that Tesla and Musk's previous representations were false and that his Model S lacked the hardware configuration necessary to support FSD.

119. Plaintiff would not have purchased his Model S, or would have paid substantially less for it, and would not have purchased the "FSD Capability," if he had known the truth underlying Tesla, Inc.'s misrepresentations.

VI. CLASS ACTION ALLEGATIONS

120. Plaintiff brings this lawsuit individually and as a class action under Federal Rule of Civil Procedure 23, seeking declaratory relief, restitution, damages, and other relief specified herein, for Counts I, III, IV, and V, on behalf of a proposed Nationwide Ex-California Arbitration Opt-Out Class and a proposed Nationwide Ex-California Pre-Arbitration Class, or, in the alternative, on behalf of an Arbitration Opt-Out Subclass and a Pre-Arbitration Subclass, defined as follows:

> **Nationwide Arbitration Opt-Out Class:** All persons who purchased or leased from Tesla, Inc. (or any entity it directly or indirectly owns or controls, including but not limited to Tesla Lease Trust and Tesla Finance LLC) a Tesla vehicle sold with Tesla's Hardware 1, 2, 2.5, or 3 configurations, and paid a separate amount, either through purchase or subscription, for the Full Self- Driving technology package (collectively, a "Class Vehicle") at any time from May 19, 2017, to the present ("Class Period"), and who either purchased or leased that vehicle in the United States (except in California) or who currently reside in the United States (except in California), who opted out of Tesla's arbitration agreement.
>
> **Nationwide Pre-Arbitration Class**: All persons who purchased or leased from Tesla, Inc. (or any entity it directly or indirectly owns or controls, including but not limited to Tesla Lease Trust and Tesla Finance LLC) a Tesla vehicle sold with Tesla's Hardware 1, 2, 2.5, or 3 configurations, and paid a separate amount, either

through purchase or subscription, for the Full Self-Driving technology package (collectively, a "Class Vehicle") at any time before May 19, 2017 ("Pre-Arbitration Class Period"), and who either purchased or leased that vehicle in the United States (except in California) or who currently reside in the United States (except in California).

Arbitration Opt-Out Subclass: All persons who purchased or leased from Tesla, Inc. (or any entity it directly or indirectly owns or controls, including but not limited to Tesla Lease Trust and Tesla Finance LLC) a Tesla vehicle sold with Tesla's Hardware 1, 2, 2.5, or 3 configurations, and paid a separate amount, either through purchase or subscription, for the Full Self- Driving technology package (collectively, a "Class Vehicle") at any time from May 19, 2017, to the present ("Class Period"), and who either purchased or leased that vehicle in a Covered State or who currently reside in a Covered State, who opted out of Tesla's arbitration agreement.

Pre-Arbitration Class: All persons who purchased or leased from Tesla, Inc. (or any entity it directly or indirectly owns or controls, including but not limited to Tesla Lease Trust and Tesla Finance LLC) a Tesla vehicle sold with Tesla's Hardware 1, 2, 2.5, or 3 configurations, and paid a separate amount, either through purchase or subscription, for the Full Self-Driving technology package (collectively, a "Class Vehicle") at any time before May 19, 2017 ("Pre-Arbitration Class Period"), and who either purchased or leased that vehicle in a Covered State, or who currently reside in a Covered State.

121. For purposes of the "Arbitration Opt-Out Subclass" and "Pre-Arbitration Class," the term "Covered State" shall mean the following States: Alaska, Arizona, Arkansas, Colorado, Connecticut, Delaware, Florida, Iowa, Kentucky, Maine, Maryland, Massachusetts, Michigan, Mississippi, Montana, Nebraska, New York, North Carolina, Ohio, Oklahoma, Oregon, Rhode Island, South Dakota, Tennessee, Texas, Utah, Washington, and Wyoming.

122 Plaintiff brings this lawsuit individually and as a class action under Federal Rule of Civil Procedure 23, seeking declaratory relief, restitution, damages, and other relief specified herein, for Count II only, and in the alternative for the remaining Counts, on behalf of a "Kentucky Arbitration Opt-Out Class" and a "Kentucky Pre-Arbitration Class," as follows:

Kentucky Arbitration Opt-Out Class: All persons who purchased or leased from Tesla, Inc. (or any entity it directly or indirectly owns or controls, including but not limited to Tesla Lease Trust and Tesla Finance LLC) a Tesla vehicle sold with Tesla's Hardware 1, 2, 2.5, or 3 configurations (collectively, "Class Vehicles"), and paid a separate amount, either through purchase or subscription, for the Full Self-Driving technology package at any time from May 19, 2017, to the present ("Class Period"), and who either purchased or leased that vehicle in Kentucky or who currently reside in the Kentucky, who opted out of Tesla's arbitration agreement.

> **Kentucky Pre-Arbitration Class:** All persons who purchased or leased from Tesla, Inc. (or any entity it directly or indirectly owns or controls, including but not limited to Tesla Lease Trust and Tesla Finance LLC) a Tesla vehicle and paid a separate amount, either through purchase or subscription, for the Full Self- Driving technology package at any time before May 19, 2017 ("Pre-Arbitration Class Period"), and who either purchased or leased that vehicle in Kentucky or who currently reside in Kentucky, who opted out of Tesla's arbitration agreement.

123. The following persons are excluded from the proposed Class: Defendants; any entity that Defendants directly or indirectly own or control; Defendants' officers, directors, employees, agents, legal representatives, and attorneys; and the Court and its employees.

124. Plaintiff reserves the right under Rule 23 to amend or modify the proposed Class definitions and to add one or more subclasses based on information obtained during this litigation.

125. This action is brought and may be properly maintained as a class action against Defendants under the following provisions of Rule 23:

a. **Numerosity (Rule 23(a)(1)):** The members of the Class are so numerous that their individual joinder is impracticable. Defendants sold or leased tens of thousands of Class Vehicles during the Class Period. The identities of Class members may be identified through business records regularly maintained by Defendants and their employees, agents, and subsidiaries, and through the media. If necessary, Class members can be notified of this action by e-mail, mail, and supplemental published notice.

b. **Commonality and Predominance (Rules 23(a)(2) and 23(b)(3)):** Many questions of law and fact are common to the Class. These common questions predominate over any questions affecting only individual Class members. These common questions include, but are not limited to:

i. Whether Defendants and their agents (collectively, "Defendants") engaged in the conduct alleged herein;

ii. Whether the Class Vehicles were sold with hardware capable of supporting fully autonomous self-driving;

iii. Whether Defendants knew at the time of its public statements that the Class Vehicles did not have hardware capable of supporting fully autonomous self-driving;

iv. Whether Defendants were under a duty to disclose to consumers that the Class vehicles did not have hardware capable of supporting fully autonomous self-driving at the time of sale;

v. Whether Defendants made express warranties in connection with the sale of the Class Vehicles that the Class Vehicles had hardware capable of supporting fully autonomous self-driving at the time of sale;

vi. Whether Defendants breached express warranties that the Class Vehicles had hardware capable of supporting fully autonomous self-driving at the time of sale;

vii. Whether Defendants' conduct alleged herein was unfair, misleading, or deceptive;

viii. Whether Defendants' obtained and withheld wrongful benefits from the Class in selling the Class Vehicles subject to the representations that they were sold with hardware capable of supporting fully autonomous self-driving;

ix. Whether Plaintiff and the Class are entitled to damages, restitution, or other relief requested herein.

c. **Typicality (Rule 23(a)(3)):** Plaintiff's claims are typical of the other Class members' claims because: Defendants' wrongful acts and omissions alleged herein were substantially the same with respect to Plaintiff and all other Class members, Defendants' wrongful acts and omissions alleged herein caused Plaintiff and all other Class members comparable injury, Plaintiff is advancing the same claims and legal theories on behalf of himself and all other Class members, and there are no defenses that are unique to Plaintiff.

d. **Predominance and Superiority (Rule 23(b)(3)):** Certification under Rule 23(b)(3) is appropriate because questions of law and fact common to the Class predominate over the questions affecting only individual Class members, and because a class action is superior to other available methods for the fair and efficient adjudication of this controversy, including consideration of the following: (i) the relatively limited interests of Class members in individually controlling the prosecution of separate actions; (ii) the limited extent and nature of any litigation concerning this controversy already begun by Class members; (iii) the desirability of concentrating the litigation of he claims in this forum; and (iv) the relatively minor difficulties likely to arise in managing the

proposed class action. Class action treatment is superior here because the monetary harms suffered by individual Class members are small compared to the burden and expense of bringing and prosecuting individual actions against Defendants to address their complex misconduct against the consuming public. A class action allows for the adjudication of a significant number of claims that would otherwise go unaddressed because of the significant practical difficulties and relative expense of bringing and maintaining an individual action, and also provides economies of scale and other significant potential benefits that can be realized only by resolving this controversy in a single adjudication with comprehensive supervision by a single court. By contrast, individualized litigation also presents a potential for inconsistent or contradictory judgments, would increase the delay and expense to all parties and the court system due to the complex legal and factual issues involved in this controversy, and would make it virtually impossible for individual Class members to redress effectively the harm done to them by Defendants.

126. **Issue Certification (Rule 23(c)(4)):** Certification of particular issues in this action, including issues of liability and relief sought, is appropriate under Rule 23(c)(4) because these issues are common to all Class members, and because resolution of these common issues on a classwide basis will materially advance the disposition of the litigation as a whole.

127. The Class is ascertainable from Defendants' own records, and there is a well-defined community of interest in the questions of law and fact alleged herein since the rights of each Class member were infringed or violated by Defendants in the same or similar fashion.

VII. CLAIMS FOR RELIEF

COUNT I
BREACH OF EXPRESS WARRANTY
Ky. Rev. Stat.. § 355.2-313 (West)
(On Behalf of the Nationwide Classes or, in the alternative, on behalf of the Kentucky Classes)

128. Plaintiff incorporates and realleges the foregoing paragraphs as though fully set forth herein.

129. Kentucky Revised Statutes § 355.2-313 provide that "[e]xpress warranties by the seller are created" by

(a) Any affirmation of fact or promise made by the seller to the buyer which relates to the goods and becomes part of the basis of the bargain creates an express warranty that the goods shall conform to the affirmation or promise.

(b) Any description of the goods which is made part of the basis of the bargain creates an express warranty that the goods shall conform to the description.

Ky. Rev. Stat. Ann. § 355.2-313(a)-(b).

130. Tesla, Inc., by making the affirmations of fact and descriptions of its vehicles alleged herein, expressly warranted that the Class Vehicles are equipped with hardware necessary to support fully autonomous self-driving.

131. Plaintiff reasonably relied on the statements by Tesla and its CEO that the Class Vehicle was sold with a hardware package capable of supporting FSD. Plaintiff would not have purchased the Class Vehicle, or would have paid substantially less for it, and would not have purchased the "Full Self-Driving Capability" in connection with his purchase, if he had known that it does not have the hardware necessary to support fully autonomous self-driving.

COUNT II
VIOLATIONS OF THE KENTUCKY CONSUMER PROTECTION ACT
Ky. Rev. Stat. § 367.170 *et seq.*
(On Behalf of the Kentucky Classes)

132. Plaintiff incorporates and realleges the foregoing paragraphs as though fully set forth herein.

133. Kentucky Revised Statutes § 367.170 makes it unlawful to engage in any "[u]nfair, misleading, or deceptive acts or practices in the conduct of any trade or commerce[.]" Ky. Rev. Stat. Ann. § 367.170(1).

134. Plaintiff purchased the Class Vehicle for personal, family, and household purposes.

135. Tesla, Inc., engaged in unfair, false, misleading, and deceptive acts and practices in connection with the sale of the Class Vehicle, as alleged herein.

136. Plaintiff suffered an ascertainable loss of money because of Tesla, Inc.'s practices, in that he would not have purchased the Class Vehicle or would have paid substantially less for it, and would not have purchased the purported "Full Self-Driving Capability," had he known that the Class Vehicle is not equipped with hardware capable of supporting FSD.

COUNT III
FRAUD BY MISREPRESENTATION
(On Behalf of the Nationwide Classes or, in the alternative, on behalf of the Kentucky Classes)

137. Plaintiff incorporates and realleges the foregoing paragraphs as though fully set forth herein.

138. Tesla, Inc., made material misrepresentations to Plaintiff by representing the Class Vehicles as equipped with the hardware necessary to support FSD.

139. Tesla, Inc.'s,, representations were false, because Tesla's Hardware versions 1-3 are incapable of supporting FSD.

140. Tesla, Inc. knew or recklessly disregarded the falsity of its representations that Hardware 3 supported FSD.

141. Tesla, Inc., through its CEO Musk, intended that consumers should rely on its representations that Hardware versions 1-3 supported FSD in deciding to purchase Tesla vehicles and/or in deciding to purchase "Full Self-Driving Capability" as an add-on to their purchase.

142. Plaintiff relied reasonably on Tesla, Inc.'s assertions, which uniformly represented that Hardware versions 1-3 were capable of supporting FSD.

143. Plaintiff was injured by his reliance, as he would not have purchased the Class Vehicle, would have paid substantially less for it, and would not have purchased "Full Self-Driving Capability," had he known the truth.

COUNT IV
FRAUD BY OMISSION
(On Behalf of the Nationwide Classes or, in the Alternative, on Behalf of the Kentucky Classes)

144. Plaintiff incorporates and realleges the foregoing paragraphs as though fully set forth herein.

145. Tesla, Inc. was under a duty to disclose the material fact that Hardware versions 1-3 are incapable of supporting FSD by virtue of (a) its superior knowledge of the capabilities of Hadware versions 1-3 and (b) its incomplete disclosure of the material fact that Hardware versions 1-3 are incapable of supporting FSD prior to Plaintiff's purchase of the Class Vehicle.

146. Tesla, Inc., failed to fully disclose this material fact at any time before April 22, 2026.

147. Tesla, Inc.'s failure to disclose this material fact induced Plaintiff to purchase the Class Vehicle.

148. Plaintiff suffered actual damages, as alleged herein, by virtue of Tesla, Inc.'s failure to disclose the material fact.

COUNT V
UNJUST ENRICHMENT
(On Behalf of the Nationwide Classes or, in the Alternative, on Behalf of the Kentucky Classes)

149. Plaintiff incorporates and realleges the foregoing paragraphs as though fully set forth herein.

150. Plaintiff conferred a benefit upon Tesla, Inc., by paying through the Tesla website the amount of the purchase price of the Class Vehicle and the add-on charge for "Full Self-Driving Capability."

151. Tesla, Inc., appreciated the benefit conferred by Plaintiff by receiving the amounts Plaintiff paid.

152. Retention by Tesla, Inc., of Plaintiff's purchase monies would be inequitable under the circumstances without restoring its value to Plaintiff.

VII. PRAYER FOR RELIEF

153. Plaintiff, on behalf of himself and all other Class members, prays for judgment against Defendants and the following relief:

A. An award of all recoverable actual, general, special, incidental, compensatory, consequential, statutory, and punitive damages, as well as civil penalties, in an amount to be determined at trial;

B. An order awarding Plaintiff and the Class restitution and disgorgement in an amount to be determined at trial;

C. An award of reasonable attorneys' fees and costs;

D. Pre- and post-judgment interest at the maximum rate provided by law; and

E. Such other and further relief as the Court may deem proper.

VII. DEMAND FOR JURY TRIAL

154. Plaintiff demands jury trial on all issues so triable.

Dated: June 4, 2026

Respectfully submitted,

s/*Matthew A. Smith*

Matthew A. Smith (SBN 309392)
MIGLIACCIO & RATHOD, LLP

Attorneys for Plaintiff & the Putative Class

EXHIBIT A

Transcript: Elon Musk's Autopilot 2.0 Conference Call

Full Transcript: Elon Musk answers all questions about Level 5 Self-Driving and Hardware 2.0 to details about the future of latest Tesla developments.

By **Iqtidar Ali < https://xautoworld.com/author/iqtidar/>**

November 30, 2016 < https://xautoworld.com/news/transcript-elon-musk-autopilot-2-conference-call/>

On *Oct 19, 2016* Tesla/SpaceX CEO, Elon Musk did a press conference about the release of Autopilot 2.0 release and gave out intricate details about the hardware and software of this level 5 self driving capability. Journalists from major media outlets asked him several questions and he replied in detail.

I thought it would be very beneficial to have a text version of this conversation at hand with some visuals along the audio/video in understanding your next

Tesla vehicle and its features. You can scroll to the end of the transcript to listen to the audio version of the conference call.

Transcript

Elon Musk: Basic news is that all cars exiting the factory have hardware necessary for Level 5 Autonomy so that's in terms of Cameras, Compute Power, it's in every car we make on the order 2,000 cars a week are shipping now with Level 5 literally meaning hardware capable of full self-driving for driver-less capability.

So it'll take us some time you know in the future to complete validation of the software and to get through required regulatory approval, but the important thing is that the foundation is laid for the cars to be fully autonomous at a safety level we believe to be at least twice that of a person, may be better!

So I think that it's probably unexpected by most that it's happening right now. So we are pretty excited about that, that's also essentially part 2 of the Model 3 announcement which is that Model 3 will also have hardware necessary for full autonomy, infact all cars Tesla makes from here & now will have the hardware needed to be fully autonomous or driver-less, that's where things are.

Autopilot Full Self-Driving Hardware (Neighborhood Short)

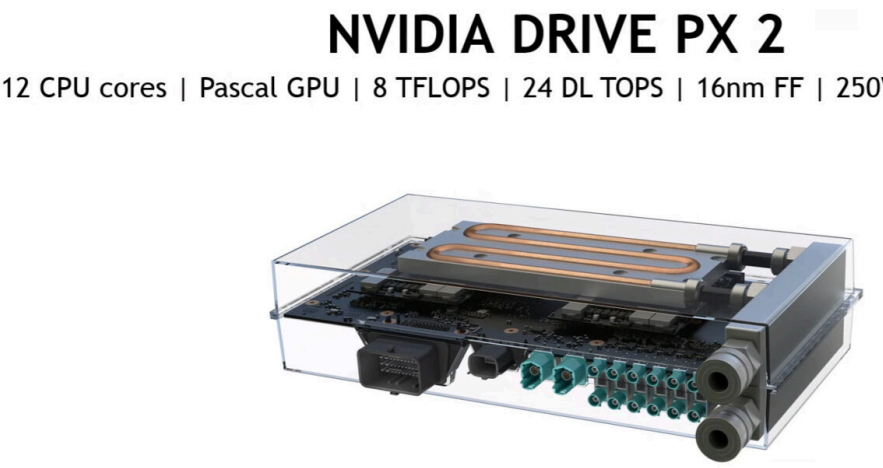
Tesla

02:08

This is all Tesla vision, this software, so we are not using any third-party software or anything forward for the vision processig, this is Tesla developed **neural-net < https://en.wikipedia.org/wiki/Artificial_neural_network>** and yeah although it's somewhat hardware independent we could potentially run this on Nvidia, AMD or Intel. We did pick in the Nvidia Titan GPU as the aimed chip for the neural-net, it was a pretty tight call between AMD & Nvidia but ultimately put Nvidia had the better hardware.

That's I think pretty big news, with that we can go with questions.

Update: Looks like Elon made a mistake in the press call about the GPU, Tesla later corrected this information & will be using the more advanced **Nvidia Drive PX 2 < http://www.nvidia.com/object/drive-px.html>** not the Titan.



Nvidia Drive PX 2 – World's first AI Supercomputer for Self Driving Cars

Q: Autopilot has proven very reliable thus far with minimal problems with safety but I am asking if Tesla will be offering indemnity against crashes involving fully autonomous autopilot mode in much the same way as Volvo is promising to do when Level 5 Autonomy is activated on your vehicle?

Elon Musk: No I think it will be up to the individual's insurance I mean just like if there is something demek to our design, certainly we would take responsibility for that but then you know I think what you do about autonomous parts like an elevator in a building , does **Otis < http://www.otisworldwide.com/>** take responsibility for private elevators around the world? No they don't.

So what really matters here is what is the absolute safety level? One thins is I should mention that's been quite disturbing to me is the degree of media coverage of autopilot crashes which basically is almost none relative to the **paucity < http://www.merriam-webster.com/dictionary/paucity>** of the media coverage of the 1.2 million people that die every year in manual crashes is something that I think does not reflect well upon the media, really doesn't.

You really need to think carefully think about this because if in writing some articles that negative you effectively dissuade people from using autonomous vehicle, you're killing people. Next question!

Q: How you see this rollout of autonomous features happening once these cars start to become enabled? The press release says the new features will become available bit-by-bit. How do you see that, we're going to see full city driving straight away or more limited feature set?

Elon Musk: Yes, this is a new platform, although we've been spending more than a year in testing, the feature-set initially will be disabled say well at least for the first few months. The cars with hardware 2.0 which is full autonomous suite will actually have fewer features than cars with Hardware 1.0.

So we expect to reach feature parodies following field validation of hardware 2.0 probably in December *(2016)* so maybe two or three months from now. So for two or three months is actually hardware 1.0 car will be better than a hardware 2.0 car and then approximately every two or three months thereafter is when we expect to release significant improvement in autonomous capability.

I feel pretty good about this goal is that we will be able to demonstrate a demonstrtion drive of our full autonomy all the way from LA to New York. So basically from home in LA to let's say dropping you off in Times Square, NY and then having the car parking itself by the end of next year *(2017)* without the need for a single touch including the charger.

Q: What is happening to autopilot in the vehicles with the new hardware, can you speak specifically that?

Elon Musk: The new hardware is what will enable Self-Driving which is different from autopilot, you know autopilot is a term been used for more than half a century as 'flying assistant' in aircraft for pilots, that's why we chose to use it, it does not represent self-driving any more than autopilot makes an aircraft self-flying.

Q: So I am trying to understand that the autopilot which is been associated with your advanced assistant driver systems technology up until now, what happens to that system, what happens to that name if you will as you go forward with this new hardware? it's not clear from the release & I just want to understand how you're handling that?

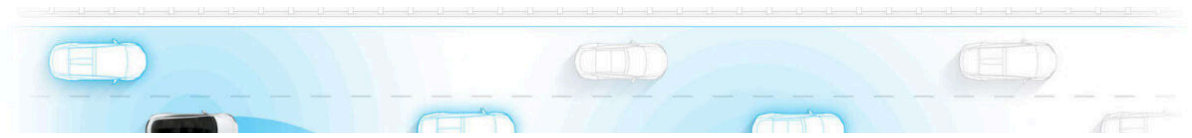
Elon Musk: Yeah basically there will be two options for buying our cars, one is called Enhanced Autopilot which is kind of quite similar towards the Autopilot what we have been offering except it has redundant forward cameras and it has a left rear camera and a right rear camera as well as significantly improved Ultrasonic Sonar and much more computing power.

Autopilot Hardware 2.5 Tesla Vehicles – Full Self-Driving Capability Infographic

The net effective with enhanced autopilot you should be able to go from freeway on-ramp to exit as well as transitioning between multiple freeways & passing and maneuvring around the cars without touching anything.

Then there is Full Self-Driving capability which will take care of the much more complex situations in urban environments. There gonna be two options that people can pick in buying a car either basically an improved version of Autopilot or Full Self-Driving. So one has got 4 cameras the other has got 8 cameras *(respectively)*. Yeah that's sort of what will happen.

Now the Hardware 1.0 autopilot vehicles will continue to improve with improved software, with fleet learning as we accumulate more miles it will continue to get better & better but it is limited by the fundamental hardware that's on the Hardware 1.0 cars in that there's only one forward camera, the ultrasonic that half the range & resolution has the radar and so within the context of that sensor suite the Hardware 1.0 cars will continue to get better over time.



Enhanced Auto Pilot – Enhanced Autopilot adds these new capabilities to the Tesla Autopilot driving experience. Your Tesla will match speed to traffic conditions, keep within a lane, automatically change lanes without requiring driver input, transition from one freeway to another, exit the freeway when your destination is near, self-park when near a parking spot and be summoned to and from your garage. (Tesla)

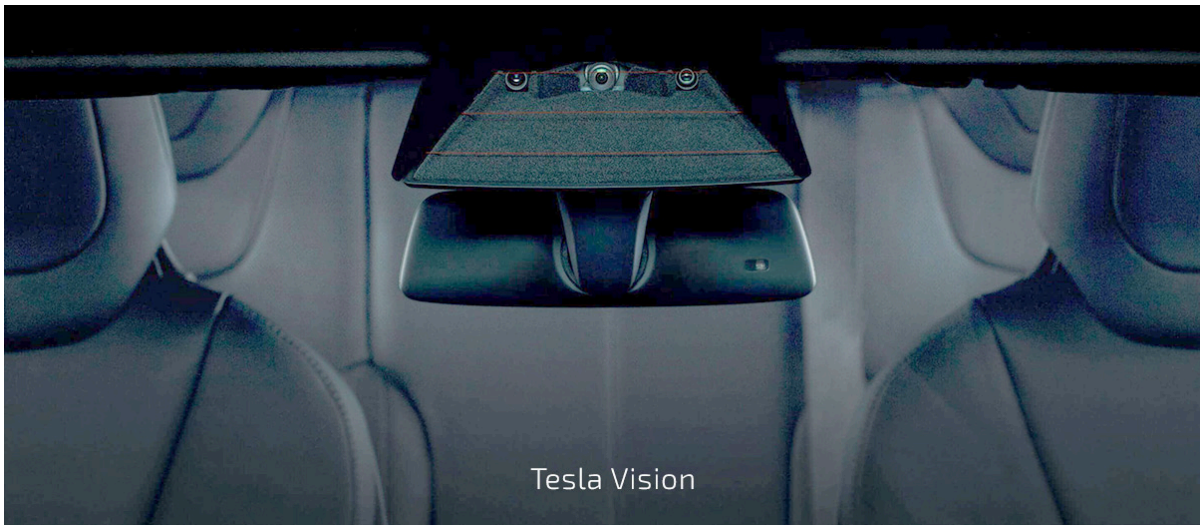
Enhanced Auto Pilot – Enhanced Autopilot adds these new capabilities to the Tesla Autopilot driving experience. Your Tesla will match speed to traffic conditions, keep within a lane, automatically change lanes without requiring driver input, transition from one freeway to another, exit the freeway when your destination is near, self-park when near a parking spot and be summoned to and from your garage. (Tesla)

Q: Could you walk us through the differences between the hardware suite on the existing autopilot cars that are out there and this new suite, in other words you're talking about more cameras other sensors range, could you just detail each of those changes?

Elon Musk: So we go from 1 camera to 8 Cameras and 3 of which are forward cameras so we ever done is redundancy in the forward camera, it's so important looking forward and we have 360 degree coverage around the car so that's a pretty big upgrade.

The compute power increases by a factor of 40 (40x increase in compute power), it's such a gigantic increase in computing power, infact the computer is capable of 12 trillion operations per second, so basically a Super Computer in a car and then the ultrasonic sensors are next generation Ultrasonic Sonar which have about twice the range & resolution of the current sonar and that's also 360 degrees.

There are also minor things like the GPS is more accurate & provides more frequent updates and the other some minor sensor improvements on the **IMU < https://en.wikipedia.org/wiki/Inertial_measurement_unit>** (Inertial Measurement Unit) and few other areas.



To make use of a camera suite this powerful, the new hardware introduces an entirely new and powerful set of vision processing tools developed by Tesla. Built on a deep neural network, Tesla Vision deconstructs the car's environment at greater levels of reliability than those achievable with classical vision processing techniques.

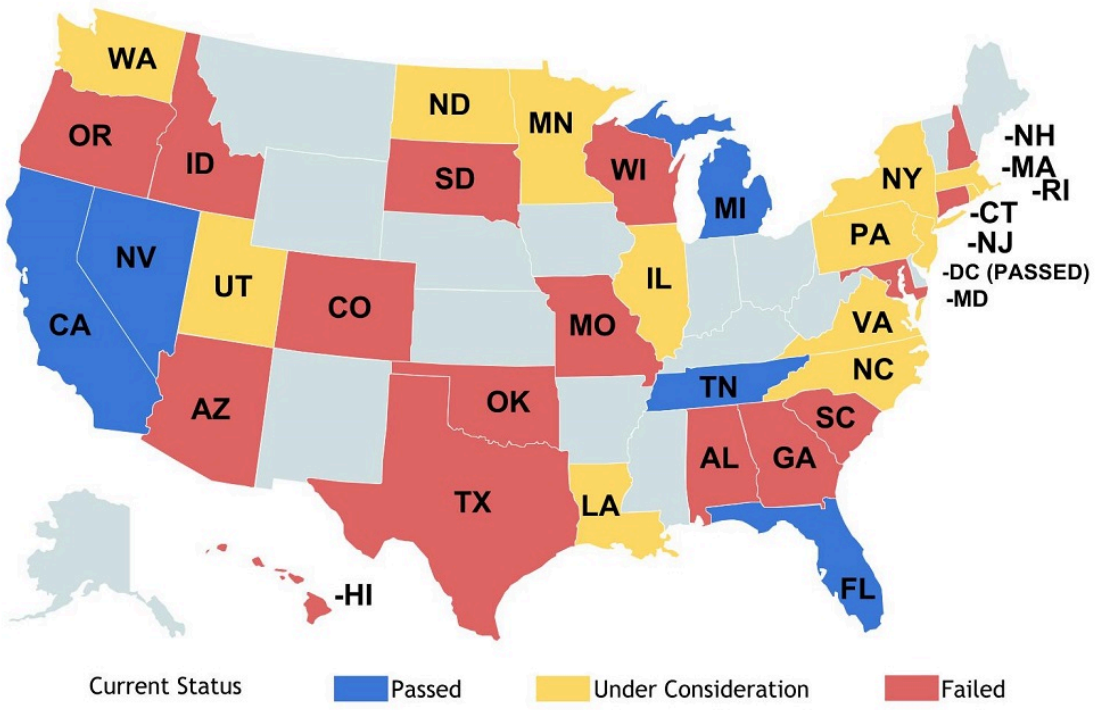
Q: Hey Elon, I am just wondering what are your thoughts on the regulations around this, is it going to be limited based you know in Texas you can do this and in California you can do that, it's going to be different or you're just going to say everyone everywhere can do it? what are you thinking on the regulatory set?

Elon Musk: Well it's not up to us it's up to the regulators and hopefully in U.S. things to not become vulcanized so that it's different in every state, So I think that would be detrimental to the U.S. consumer. And I think in EU it's like the confidence will be a uniform standard.

So it's really a question of what the public thinks is appropriate, what your regulators think is appropriate and gathering enough data because the system will always be operating in shadow mode so we can gather a large volume of statistical data to show the false positives and false negatives, when would the computer acted and with that have prevented an accident or if the computers would have acted and that would have produced an accident.

We think that operating in shadow mode so we can send say when would it have incorrectly acted or not acted & compare that to what should've been done in the real world, that point which it is a statistically significant result that shows material improvements of the accident rates for many of the driven cars.

I think at that point regulators like to be comfortable approving it but that approval process really could be radically different from one part of the world to another, this is not something within our control.



Current Status for Regulatory Approval of Self Driving Cars – Nov 2016 – Click to Zoom-In. Source: Stanford research.

Q: You talk about rolling new features every two to three months with the regulatory environment in the U.S. or the EU or wherever, hold you back from rolling out those improvements or will you roll them out and then you know ask forgiveness than permission if you think that it's safer?

Elon Musk: Well I mean we've always rolled out our autonomous functionality within the regulatory framework of any given country, this is not a you know reading forgiveness of permission it's what we look carefully at the regulations and make sure that what we do is in line with those. Yeah we can't do anything other than that because they're gonna blow.

Q: I am wondering, is this there now that you're moving on to Hardware 2.0 and you're going to keep working with Hardware 1.0, is there are point at which you can cut that you'll reach a maximum of potential for Hardware 1.0 and then you need to you know the older will need to upgrade to the next to a newer car to get the full self-driving capability you offer.

Elon Musk: Self-Driving will definitely need Hardware 2.0 which is what we're currently shipping out as of this week, it's just because you can't do this with one camera, you need 8 cameras for self-driving, you also need a lot more computing power to run the Vision AI.

The stock upgrading car with Hardware 1.0 is not realistic, you know it would be like in the car spinal cord transplant, not wise, so even if possible we would've avoided it but I should tell the people that have Hardware 1.0 cars should bear in mind that their car will actually have more functionality than a Hardware 2.0 car at least until December or may be later and it's probably some time next year before the Hardware 2.0 functionality exceeds Hardware 1.0.

And there is also a higher cost for the autonomous functionality you know there is a higher price to pay for the full self-driving suite is $8,000 dollars as compared to Hardware 1.0 autopilot which is 3,000 dollars. It's a painful price difference and the car with Hardware 1.0 will have more functionality for at least next several months.

I wish there was another way to do it, it's just I don't know how to go into all cars and install another 7 cameras and new wiring harness. We wish there was some other way but there isn't, so...

Q: I was wondering if you plan on making this kit that other car makers could use?

Elon Musk: I think it's very hard to turn it to a kit, because it requires a tight integration of software, sensors and computing power as well as the ability to

do large scale over the air update. It's not just a kit that you can add on to a car.

One thing we've also done with our system is if you really see some videos hopefully later tonight or tomorrow morning, demonstrating the cars, car's operation but you actually can't get it unless you look closely you can't even tell that a car is Hardware 1.0 or Hardware 2.0 because we've been so careful about each of the cameras being a part of the frame of the car such that like nothing sticking out, nothing like this in no way makes the car ugly, so there are no weird protuberances, it's all incredibly subtle. We put a lot of effort into not affecting the purity of the car, the car is as beautiful with hardware 2.0 as it is with hardware 1.0.

It's not like a kit you can put in another car, not realistic.

Q: I was interested in your thoughts, if you can expand your thoughts a little bit about the safety issue, how statistics aren't collected at how safe a car is, only how dangerous it is, so how do you communicate the idea that your semi autonomous cars are in fact safer.

Elon Musk: It's not that difficult, I mean you know how many miles have been driven and how many deaths, serious injuries meaning like an unrecoverable

injury or minor accidents for their outfit, there are many more sort of minor accidents yet and serious accident and there are fatalities that provide a much richer statistical sample set for comparing the relative safety of autonomy vs not-autonomy and we see consistently & significantly better results with autonomy than without and that just gets better over time as the system is further refined.

Q: I have a quick question about inclement weather and how has Hardware 2.0 has improved over Hardware 1.0? Anytime say there is potential for condensation or precipitation on the cameras tends to be a problem, how you dealt with that?

Elon Musk: Yeah there are heater element s on around on all of the cameras/sensors actually we had this on hardware 1.0 as well, this automatically heated up to prevent the night and then the positioning of the cameras is in a location where there's unlikely to be such accumulation.

So the triple cameras/all three forward cameras are in front of the rear view mirror and in the wipe zone of the car and then the sideways looking cameras in the B pillar they are so high up in the B pillar the pillar between the front passenger and the rear passengers and then there is the rear tools that's the left-rear and the right-rear, those are nested in the side repeaters and so they're out of the flow of the rain and what not.

The rear camera is located above the license plate but sort of tucked under, you actually have to look carefully to see any of the cameras but they're all in places where it's quite difficult for water and snow to accumulate. If one of them is blocked the system can actually tell that it has some opacity reduction and can look(ask) the occupant of the car to clean up the camera.

Q: You mentioned this is related to Model 3 & part 2 unveiling, I just kinda wanted to focus a little bit more of that and how it really applies to Model 3 and is this all gonna come standard on Model 3? Will there be a way to upgrade like there is now from what is included as far as software standard and what's paid?

Elon Musk: Yeah the full autonomy hardware suite will be standard on all vehicles that Tesla makes from here on out. We'll continue to make improvements and those improvements will affect the probability of an accident but we feel pretty confident that the hardware suite will be at least twice as good as people on average.

In the long term we want to try to attempt a 10x improvement and for that we require ongoing requirements of the hardware and let's say something like a trick improvement would be pretty incredible I mean if that were the five* accross-the-board two cars to all the vehicles in the world, you go from 1.2 million deaths to 600,000 deaths, that'll be a lot of life saved and not to mention all the you know serious injuries that happen that aren't in the fatality stattistics, so I think this whole a lot of American trying to go from twice as safe to 10 times as safe.

But I should be clear that every car from now getting out will the full autonomy capability including Model 3.

Q: What kind of testing are you doing to be confident at each stage that this system is safe or is functioning enough to be confident to put it in there, because it's difficult to come up with I mean maybe it's not difficult, what sort of testing you do to ensure that these systems are working well?

Elon Musk: Yeah it's actually not all that difficult, we thought of obviously testing with Tesla you know the Tesla QA team. We are testing initially on a closed track with our test engineers, they all broaden it to a very limited set of a kind of alpha users including me so I usually have the latest software update about it day after our QA team has it.

And I am personally testing each element of the car then it goes to a local early access program which about a thousand customers/distributors around the world who are technically savvy and don't mind you know or want to use the early software cognitive of potential issues you know so many different environments throughout the world, it's just not possible for QA team to cover them all.

If that's looking good then we will roll it out initially in shadow mode through the whole fleet by Shadow Mode actually means that the car is not actually not taking any action but it's registering when it would take an action and when it would not take an action and when you compare that to cases where let's say some body had and accident but you look at the vehicle logs and say well if the car had been in autonomous mode that accident would've been avoided, okay obviously is a plus and you can also say okay the car would have send something that would have resulted in an accident in that case it's in the shadow mode and then that's an issue that needs to be corrected.

And then you get into statistics and use the calls for false positives and false negatives, you gather enough of those over time until there is clearly a statistically significant sample set and at the point which is unequivocal that turning on an autonomy feature would improve safety, that is the point at which we allow to act to actually take action before that we do not the computer to take action.

Q: Are you talking about the new Hardware 2.0 being **Level 4 or Level 5 < https://en.wikipedia.org/wiki/Autonomous_car>** and just to be clear on Hardware 1.0 is there going to be any disabling that technology at this point or is it just continuing it to run?

Elon Musk: It will be Hardware 2.0 is capable of Level 5 autonomy, the hardware is capable of highest level of autonomy and Hardware 1.0 will continue to improve as we improve the software tat operates the car I mean

with already with 7.0 it was unequivocally safer than manually driven cars and with 8.0 that has improved even more. So it would be crazy to turn-off something that is preventing accidents.

Q: Just quickly the 40x Super computer you describe is it separate from all the vehicle system technology or is it integrated with other vehicle technologies?

Elon Musk: It is isolated from the rest of the vehicle, so infotainment, entertainment, instrument panel, center-cluster anything from entertainment to web browsing is isolated from the vehicle control computer.

Huh, definitely dont' want the car crashes results going to the wrong website !

Participants: hahahaha... Thanks !

Press Conference Audio With Visuals

Disclaimer: Although I have taken great care and spent significant amount of time preparing the transcript with attention to detail, there are chances of mistakes still, if you find any mistake please let me know by emailing to xautoworld@gmail.com

Done with Passion for Tesla by **Iqtidar Ali < http://www.souldesigns.net>** (Tesla/Car Enthusiast, Web/UX Designer)

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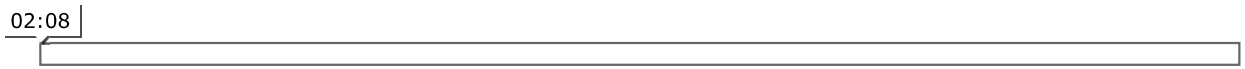
To the top ↑

EXHIBIT B



Advanced Sensor Coverage

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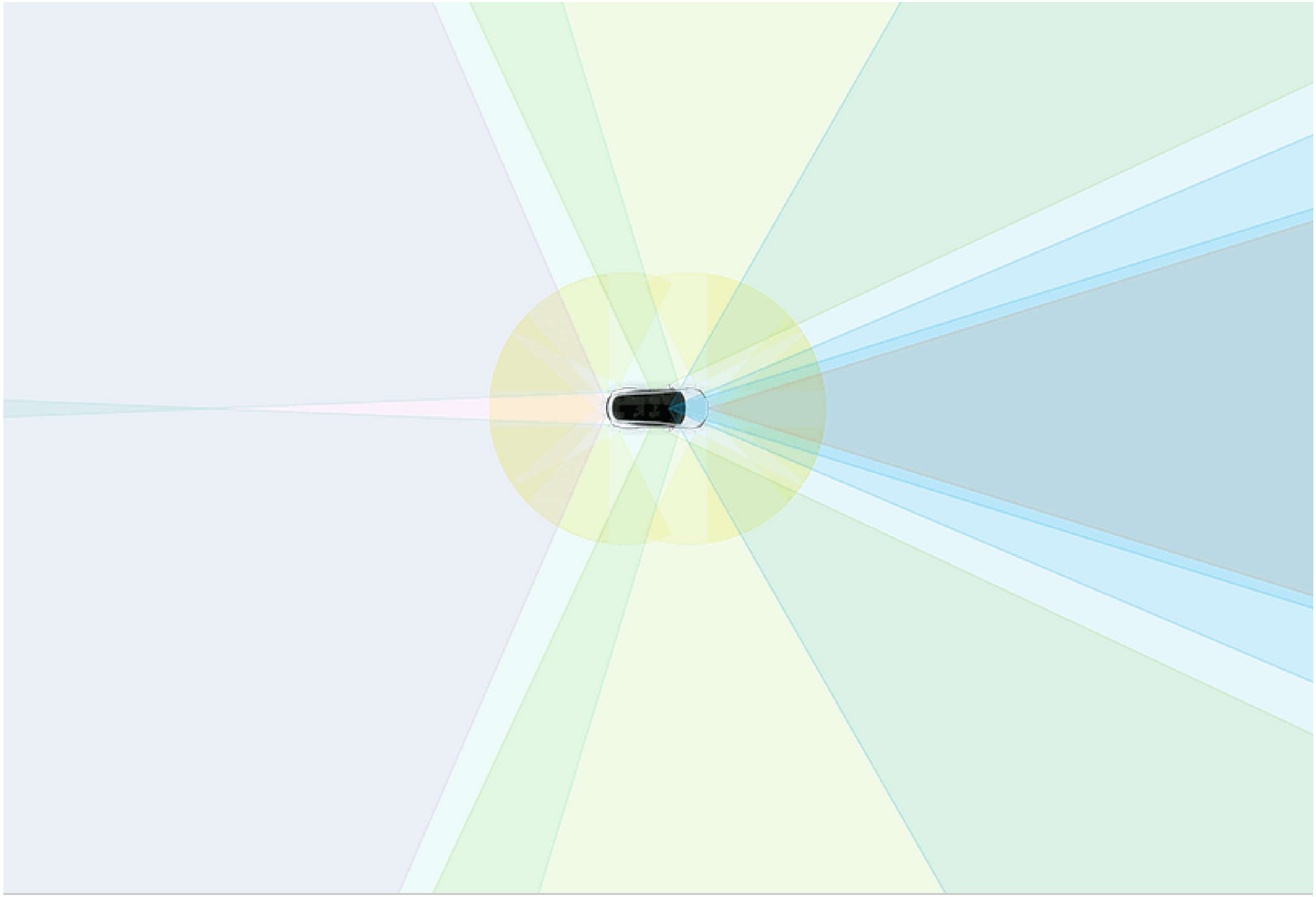

Autopilot

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Learn more about Camera Views, Radar and Ultrasonics

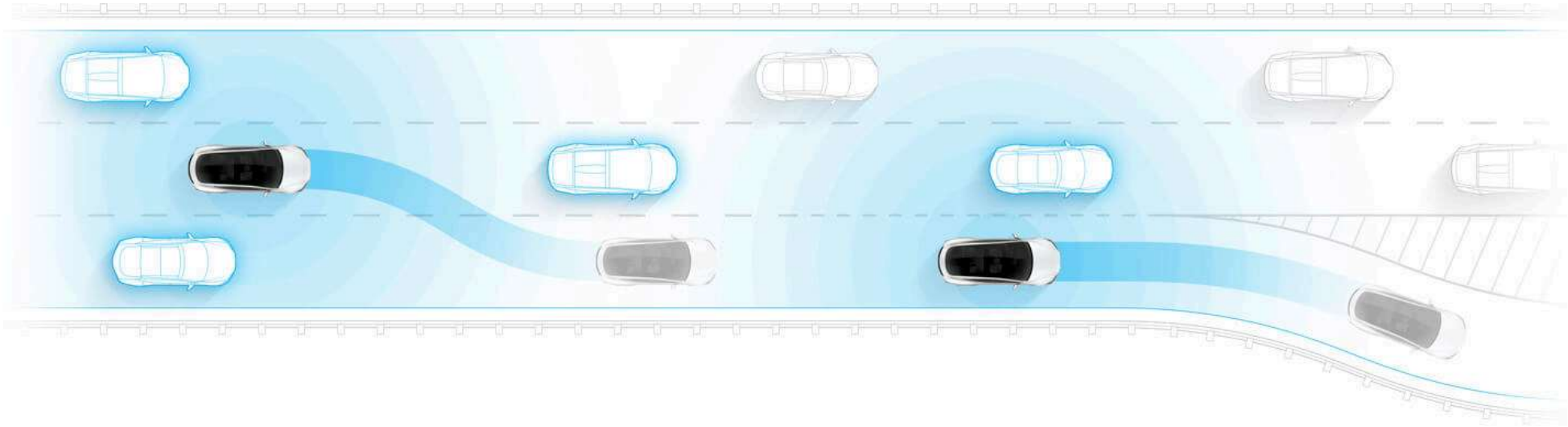
Processing Power Increased 40x

To make sense of all of this data, a new onboard computer with over 40 times the computing power of the previous generation runs the new Tesla-developed neural net for vision, sonar and radar processing software. Together, this system provides a view of the world that a driver alone cannot access, seeing in every direction simultaneously, and on wavelengths that go far beyond the human senses.

Enhanced Autopilot

Enhanced Autopilot adds these new capabilities to the Tesla Autopilot driving experience. Your Tesla will match speed to traffic conditions, keep within a lane, automatically change lanes without requiring driver input, transition from one freeway to another, exit the freeway when your destination is near, self-park when near a parking spot and be summoned to and from your garage.

Tesla's Enhanced Autopilot software has begun rolling out and features will continue to be introduced as validation is completed, subject to regulatory approval.



On-ramp to Off-ramp

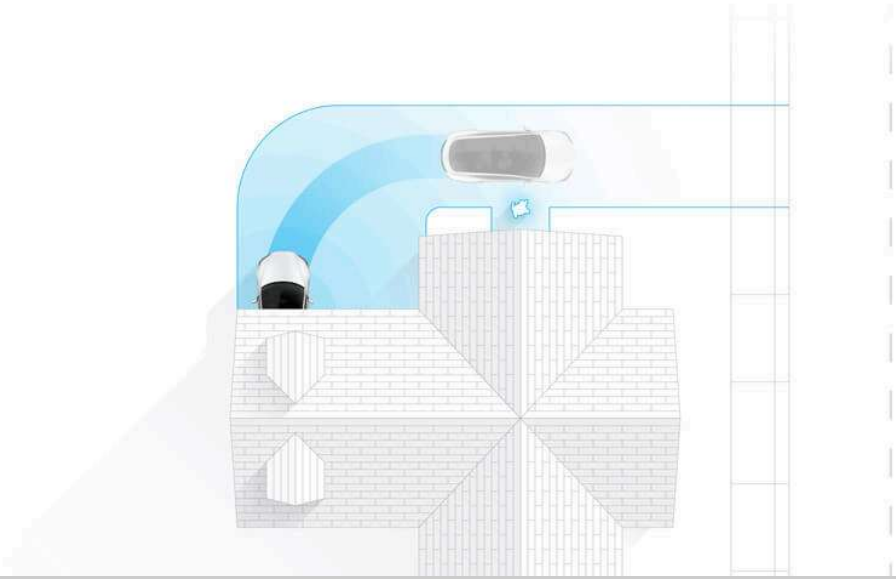
Once on the freeway, your Tesla will determine which lane you need to be in and when. In addition to ensuring you reach your intended exit, Autopilot will watch for opportunities to move to a faster lane when you're caught behind slower traffic. When you reach your exit, your Tesla will depart the freeway, slow down and transition control back to you.

Autosteer+

With the new Tesla Vision cameras, sensors and computing power, your Tesla will navigate tighter, more complex roads.

Smart Summon

With Smart Summon, your car will navigate more complex environments and parking spaces, maneuvering around objects as necessary to come find you.



Full Self-Driving Capability

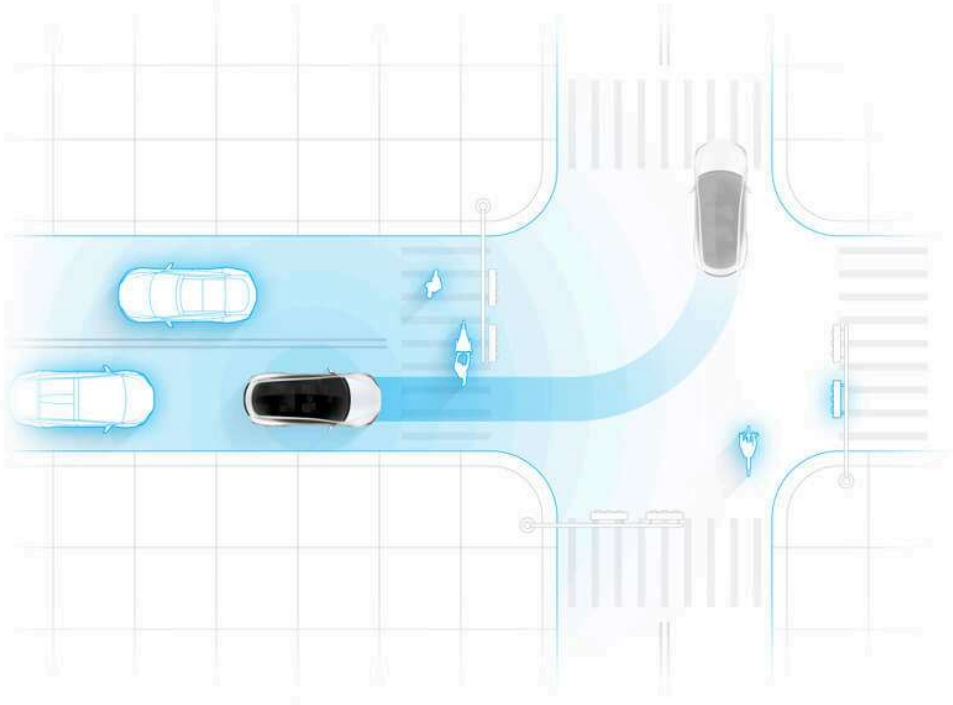
Build upon Enhanced Autopilot and order Full Self-Driving Capability on your Tesla. This doubles the number of active cameras from four to eight, enabling full self-driving in almost all circumstances, at what we believe will be a probability of safety at least twice as good as the average human driver. The system is designed to be able to conduct short and long distance trips with no action required by the person in the driver's seat. For Superchargers that have automatic charge connection enabled, you will not even need to plug in your vehicle.

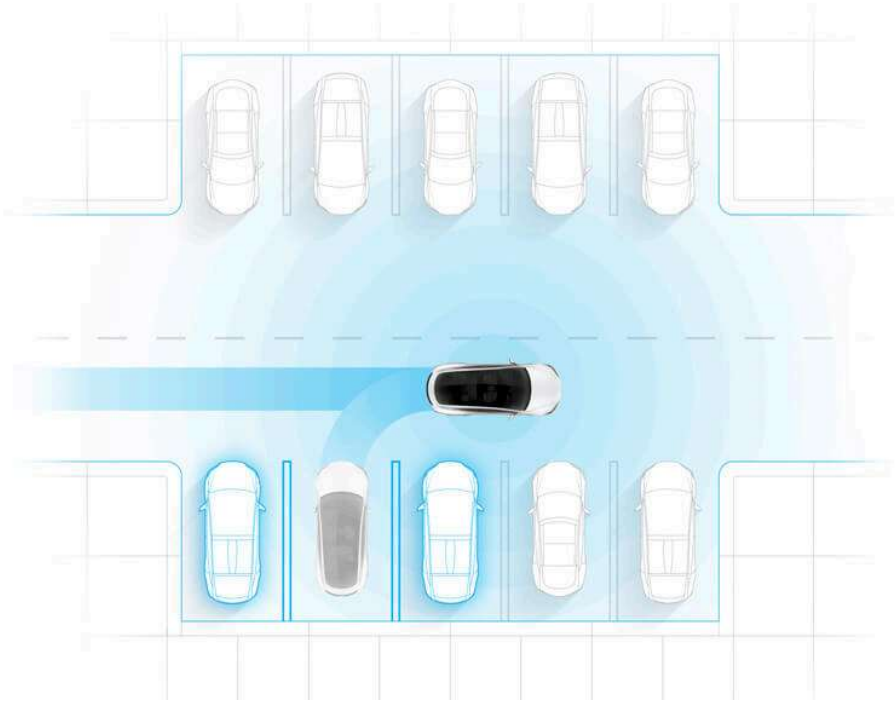
All you will need to do is get in and tell your car where to go. If you don't say anything, the car will look at your calendar and take you there as the assumed destination or just home if nothing is on the calendar. Your Tesla will figure out the optimal route, navigate urban streets (even without lane markings), manage complex intersections with traffic lights, stop signs and roundabouts, and handle densely packed freeways with cars moving at high speed. When you arrive at your destination, simply step out at the entrance and your car will enter park seek mode, automatically search for a spot and park itself. A tap on your phone summons it back to you.

Please note that Self-Driving functionality is dependent upon extensive software validation and regulatory approval, which may vary widely by jurisdiction. It is not possible to know exactly when each element of the functionality described above will be available, as this is highly dependent on local regulatory approval. Please note also that using a self-driving Tesla for car sharing and ride hailing for friends and family is fine, but doing so for revenue purposes will only be permissible on the Tesla Network, details of which will be released next year.

From Home

All you will need to do is get in and tell your car where to go. If you don't say anything, your car will look at your calendar and take you there as the assumed destination. Your Tesla will figure out the optimal route, navigating urban streets, complex intersections and freeways.





To your Destination

When you arrive at your destination, simply step out at the entrance and your car will enter park seek mode, automatically search for a spot and park itself. A tap on your phone summons it back to you.

Standard Safety Features

These active safety technologies, including collision avoidance and automatic emergency braking, have begun rolling out through over-the-air updates

Automatic Emergency Braking

Designed to detect objects that the car may impact and applies the brakes accordingly

Front Collision Warning

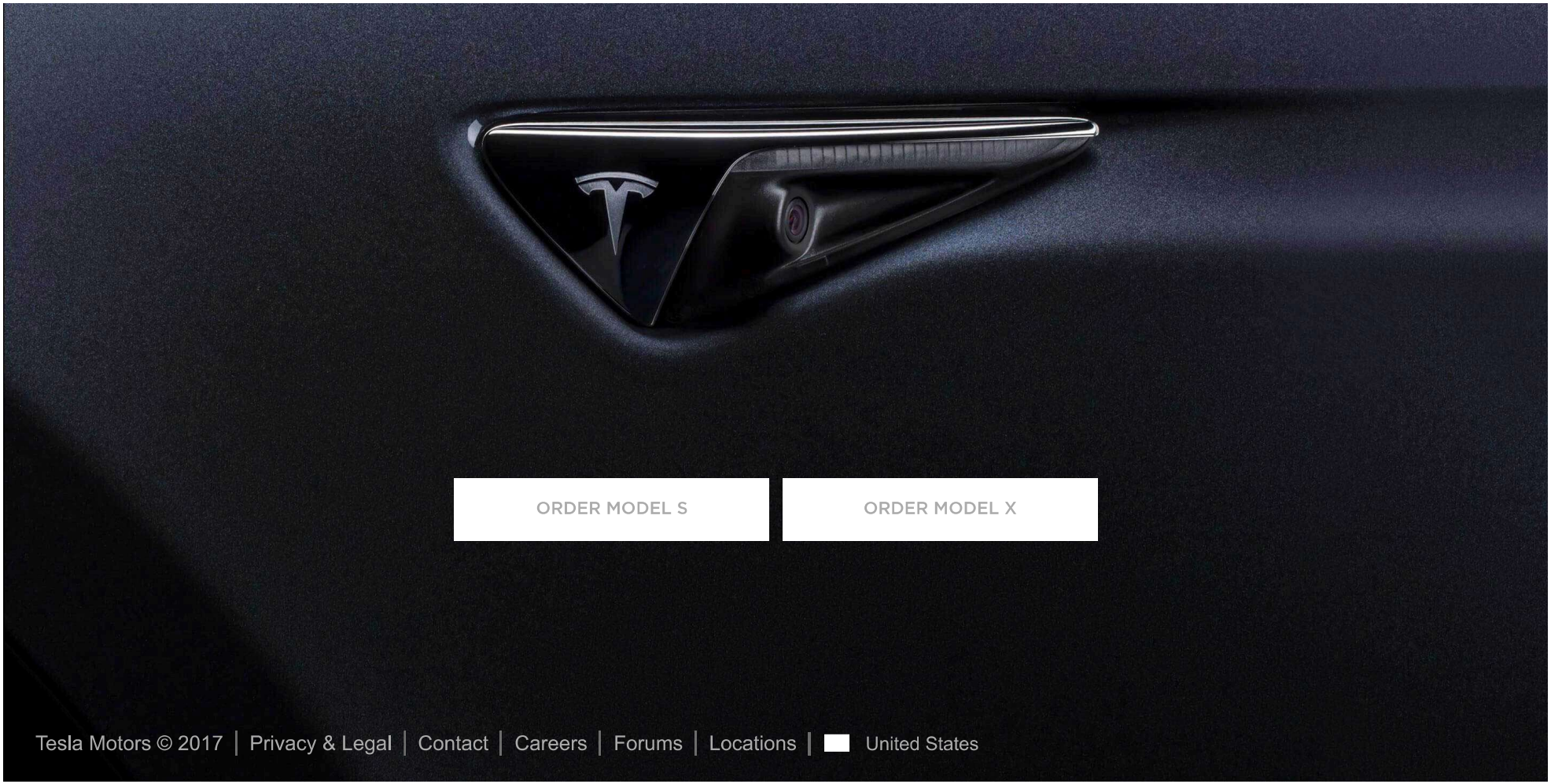
Helps warn of impending collisions with slower moving or stationary cars

Side Collision Warning

Warns the driver of potential collisions with obstacles alongside the car

Auto High Beams

Adjusts high/low beams as required



Autopilot

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EXHIBIT C

Tesla <newsletter@tesla.com> 11/12/2016 2:58 AM

Tesla Update - November 2016

To tlosavio@comcast.net

An Update to our Supercharger Program

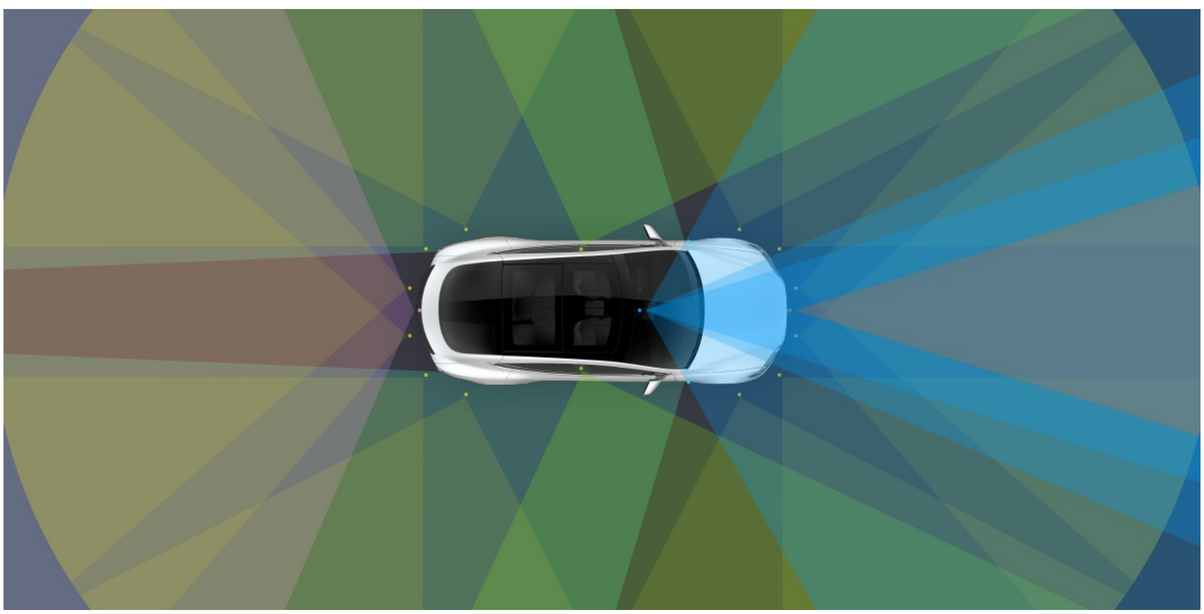
Four years ago, Tesla introduced the Supercharger Network – the world's fastest charging solution – to enable convenient long distance travel. Today, more than 4,600 Superchargers allow over 160,000 Tesla owners to drive all over the world.

We recently announced a change to the economics of Supercharging – one that allows us to reinvest in the network, accelerate its growth and bring all owners, current and future, the best Supercharging experience.

Any Tesla ordered by December 31, 2016 will continue to benefit from free unlimited Supercharging. For Model S and Model X vehicles ordered after January 1, 2017, 400 kWh of free Supercharging credits (roughly 1,000 miles) will be included annually so that owners can continue to enjoy free Supercharging during travel. Read the blog.

ORDER NOW

SUPERCHARGING



All Tesla Cars Now With Full Self-Driving Hardware

All Tesla vehicles produced in our factory now have full self-driving hardware, enabling a rapidly expanding set of new Autopilot features to be introduced over time. While active safety features continue to come standard in all Tesla vehicles, customers can now choose from two new Autopilot packages: Enhanced Autopilot, which is an advanced suite of driver-assistance features, and Full Self-Driving Capability which will ultimately take you from home to work and find a parking space for you on its own.

Self-driving vehicles will play a crucial role in improving transportation safety and accelerating the world's transition to a sustainable future. Once the software is extensively validated and there is regulatory approval, full autonomy will enable a Tesla to be substantially safer than a human driver. It will also lower the financial cost of transportation for those who own a car, while providing low-cost on-demand mobility for those who do not.

Read the blog.

ORDER NOW

VALUE MY TRADE

LEARN MORE

Price Increase for Model S 60

On November 22, 2016 the base price of Model S 60 will be increasing by $2,000. Now is the time to get behind the wheel of a Tesla for as low as $737/month (details here). The Model S 60 can drive up to 218 miles on a single charge and accelerates from zero to 60 mph in just 5.5 seconds.

ORDER NOW

TEST DRIVE

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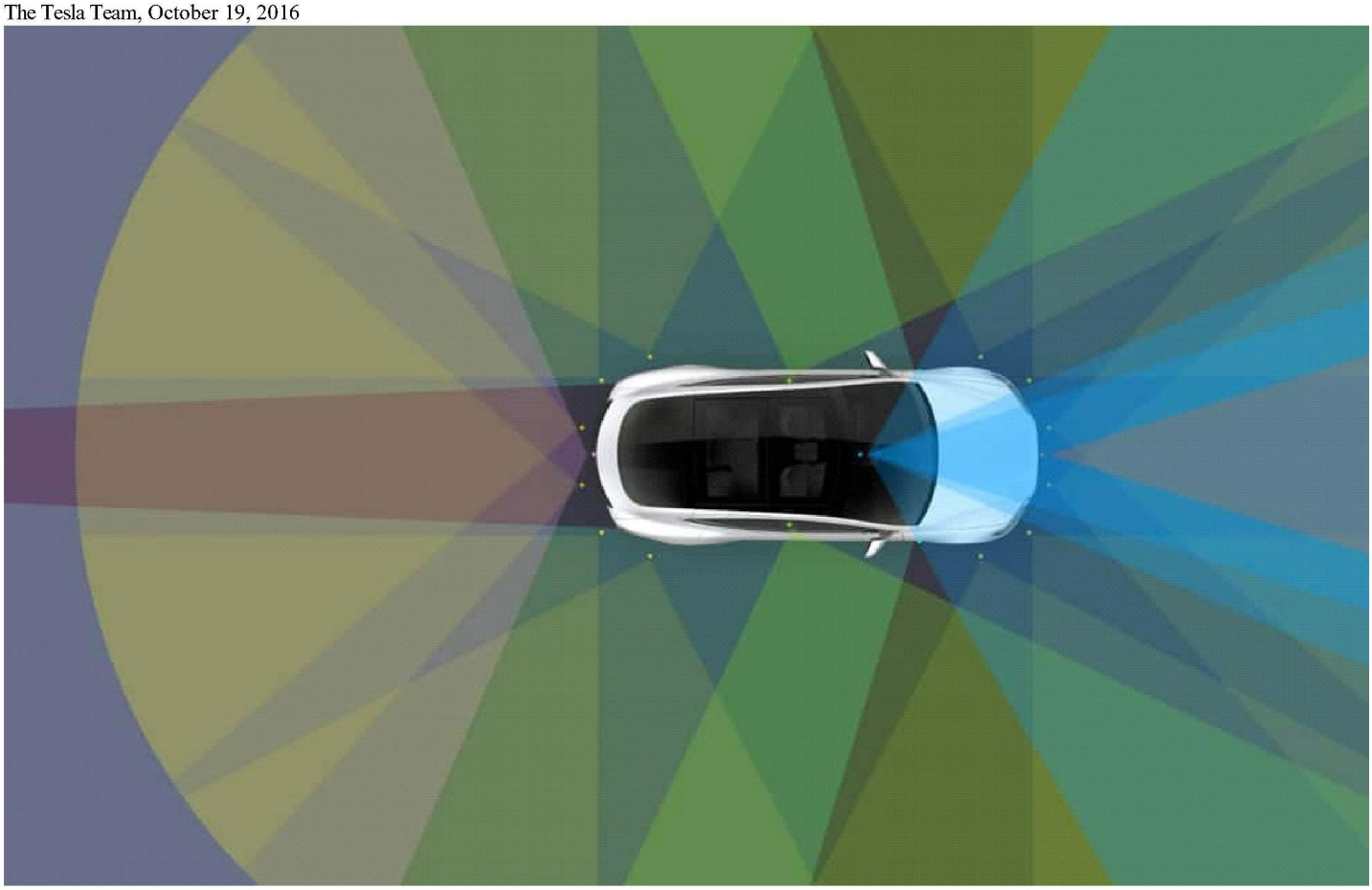
EXHIBIT D

All Tesla Cars Being Produced Now Have Full Self-Driving Hardware

The Tesla Team, October 19, 2016



Self-driving vehicles will play a crucial role in improving transportation safety and accelerating the world's transition to a sustainable future. Full autonomy will enable a Tesla to be substantially safer than a human driver, lower the financial cost of transportation for those who own a car and provide low-cost on-demand mobility for those who do not.

We are excited to announce that, as of today, all Tesla vehicles produced in our factory – including Model 3 – will have the hardware needed for full self-driving capability at a safety level substantially greater than that of a human driver. Eight surround cameras provide 360 degree visibility around the car at up to 250 meters of range. Twelve updated ultrasonic sensors complement this vision, allowing for detection of both hard and soft objects at nearly twice the distance of the prior system. A forward-facing radar with enhanced processing provides additional data about the world on a redundant wavelength, capable of seeing through heavy rain, fog, dust and even the car ahead.

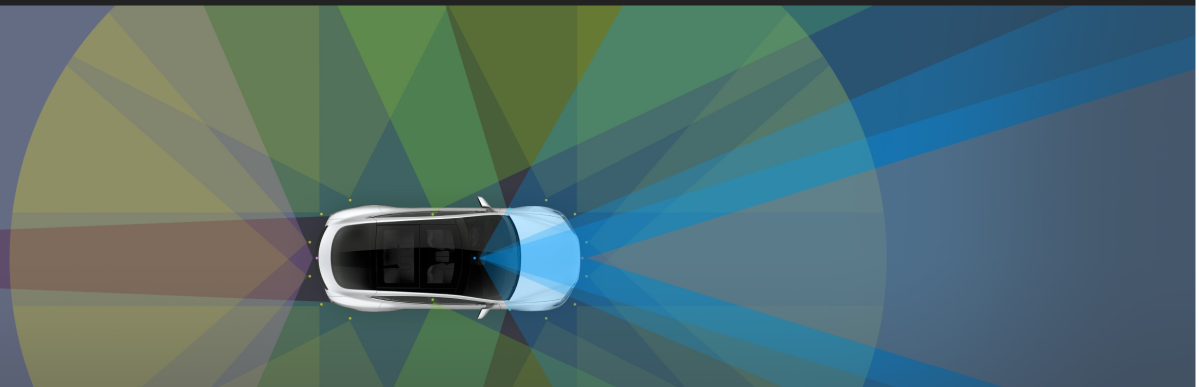
To make sense of all of this data, a new onboard computer with more than 40 times the computing power of the previous generation runs the new Tesla-developed neural net for vision, sonar and radar processing software. Together, this system provides a view of the world that a driver alone cannot access, seeing in every direction simultaneously and on wavelengths that go far beyond the human senses.

Model S and Model X vehicles with this new hardware are already in production, and customers can purchase one today.

Before activating the features enabled by the new hardware, we will further calibrate the system using millions of miles of real-world driving to ensure significant improvements to safety and convenience. While this is occurring, Teslas with new hardware will temporarily lack certain features currently available on Teslas with first-generation Autopilot hardware, including some standard safety features such as automatic emergency braking, collision warning, lane holding and active cruise control. As these features are robustly validated we will enable them over the air, together with a rapidly expanding set of entirely new features. As always, our over-the-air software updates will keep customers at the forefront of technology and continue to make every Tesla, including those equipped with first-generation Autopilot and earlier cars, more capable over time.

EXHIBIT E

TESLA MODEL S MODEL X MODEL 3 ENERGY CHARGING UPDATES SUPPORT FIND US SHOP MY TESLA



Full Self-Driving Hardware on All Cars

All Tesla vehicles produced in our factory, including Model 3, have the hardware needed for full self-driving capability at a safety level substantially greater than that of a human driver.

ORDER MODEL S ORDER MODEL X

Advanced Sensor Coverage

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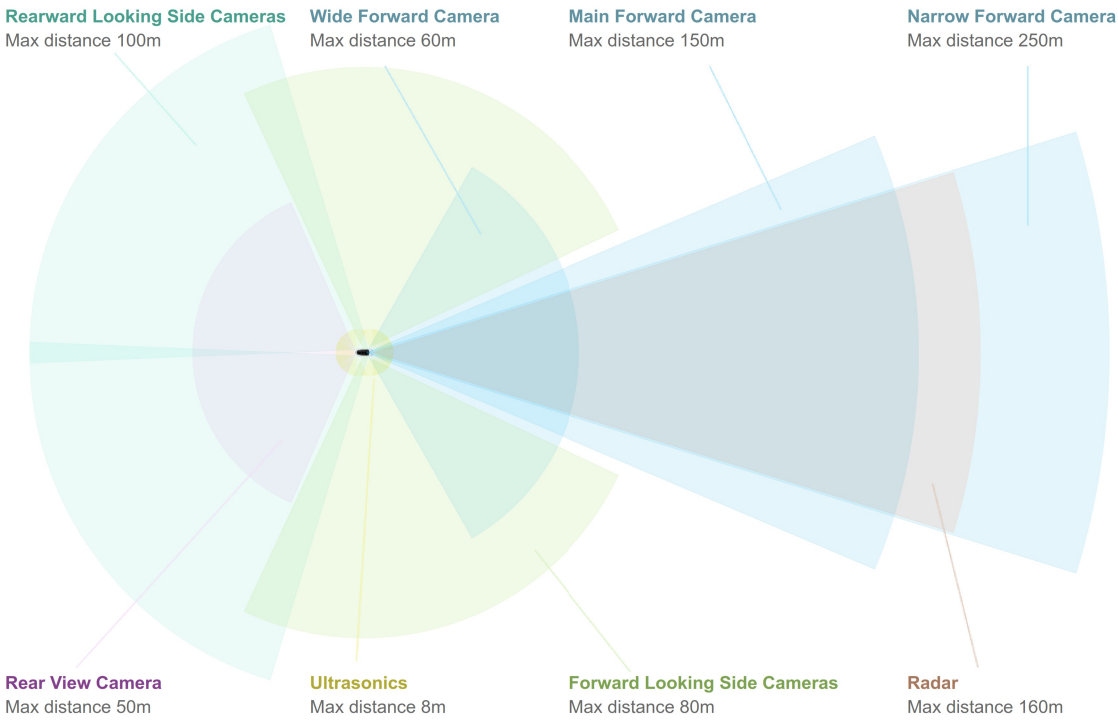
Autopilot example@email.com SIGN UP ORDER



Learn more about Camera Views, Radar and Ultrasonics

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Tesla Vision

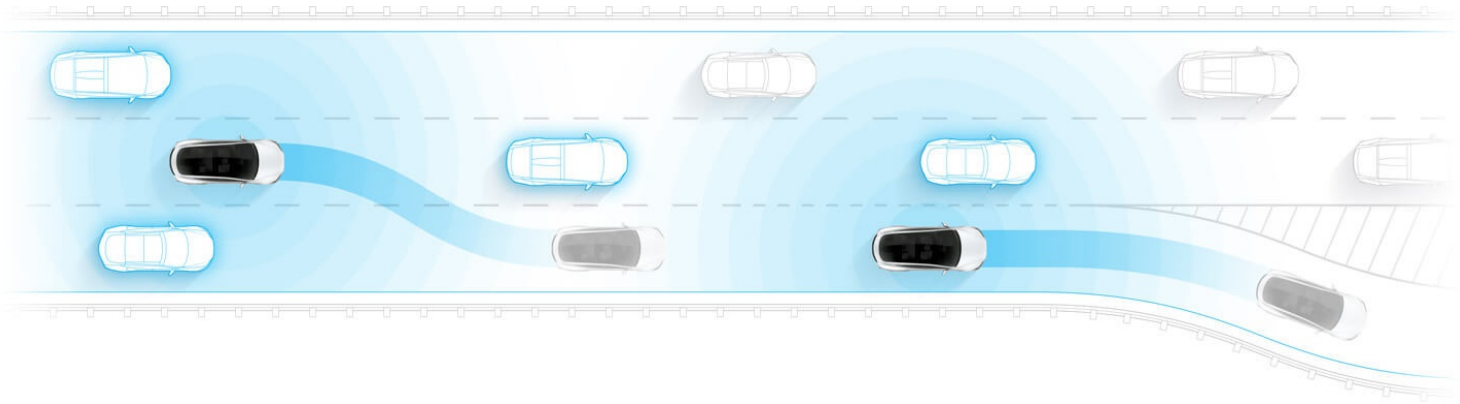
To make use of a camera suite this powerful, the new hardware introduces an entirely new and powerful set of vision processing tools developed by Tesla. Built on a deep neural network, Tesla Vision deconstructs the car's environment at greater levels of reliability than those achievable with classical vision processing techniques.

Autopilot ORDER

Enhanced Autopilot

Enhanced Autopilot adds these new capabilities to the Tesla Autopilot driving experience. Your Tesla will match speed to traffic conditions, keep within a lane, automatically change lanes without requiring driver input, transition from one freeway to another, exit the freeway when your destination is near, self-park when near a parking spot and be summoned to and from your garage.

Tesla's Enhanced Autopilot software has begun rolling out and features will continue to be introduced as validation is completed, subject to regulatory approval.



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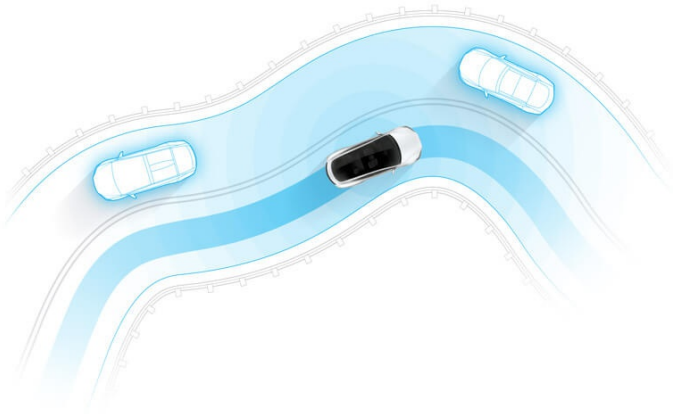

Autosteer+

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Autopilot ORDER

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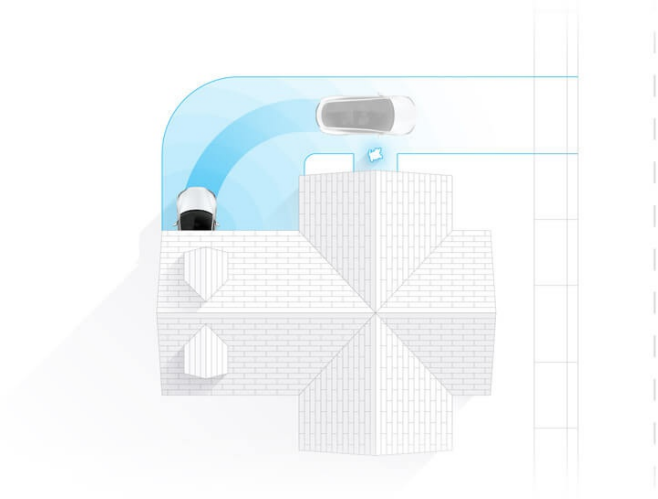

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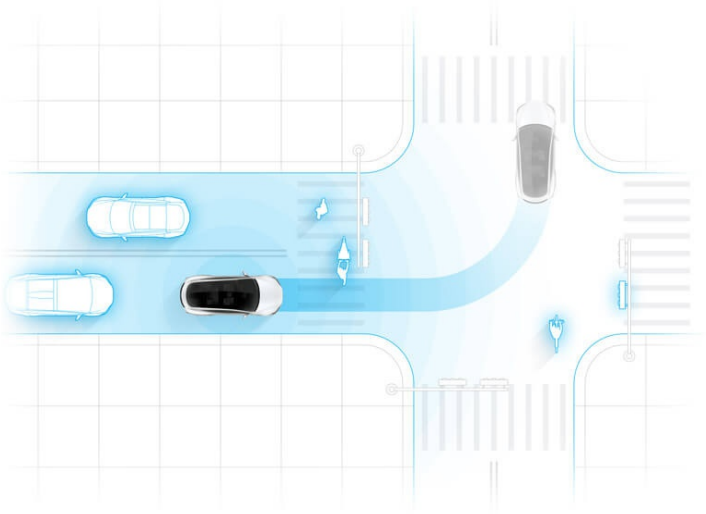
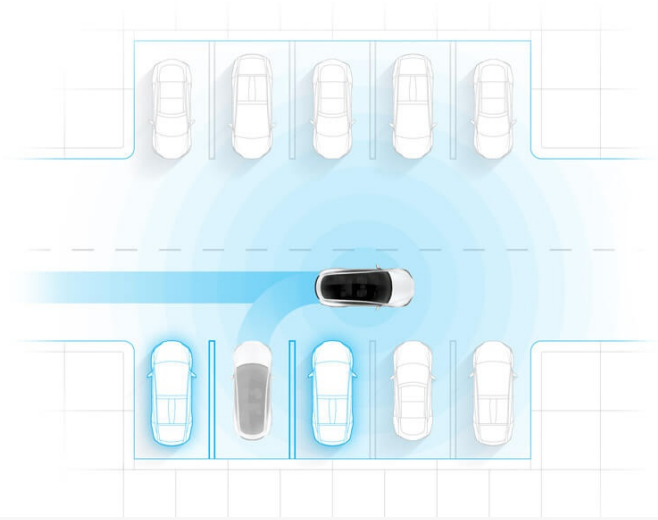


Autopilot ORDER



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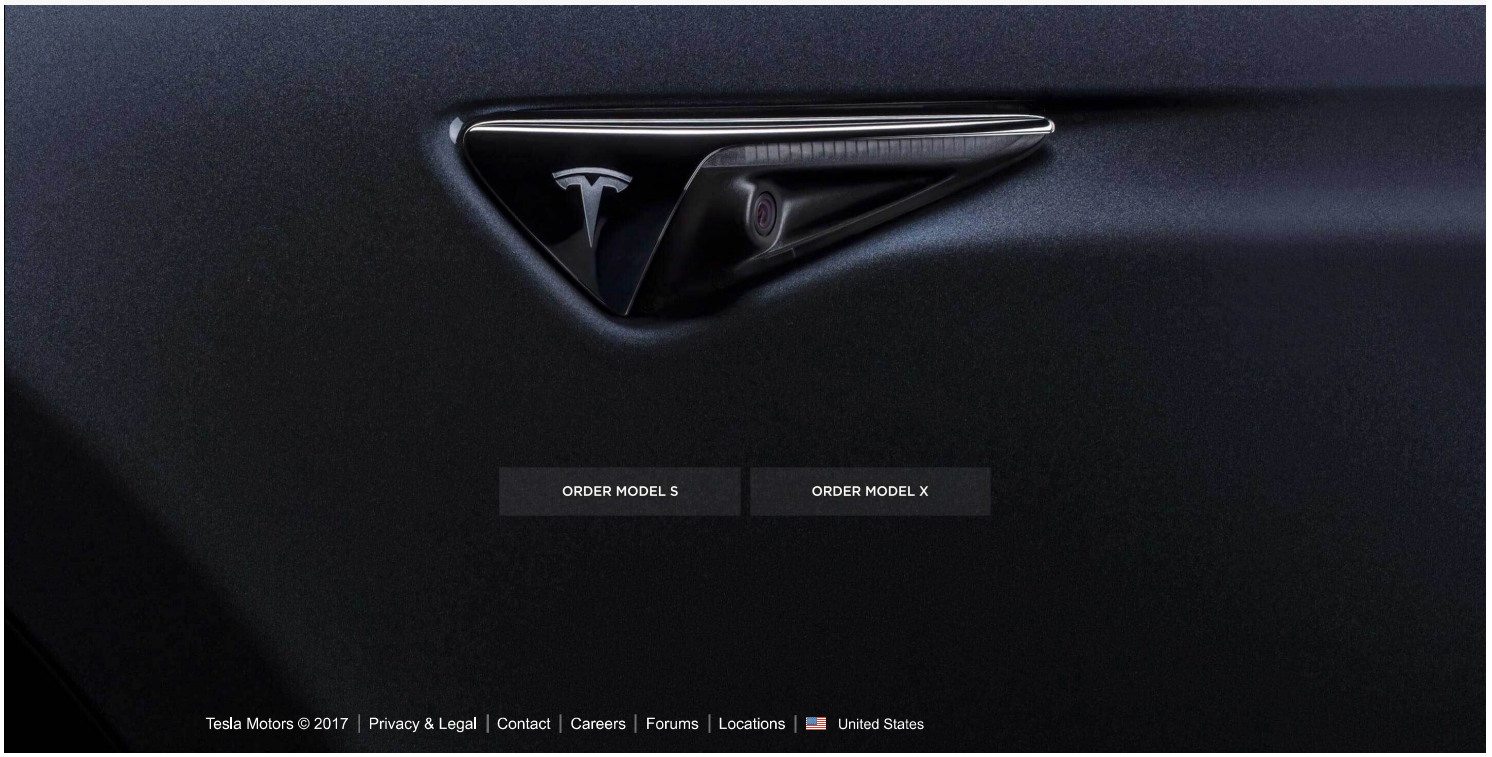

Autopilot

ORDER