

March 23, 2021

Via EDGAR

U.S. Securities and Exchange Commission
Division of Corporation Finance
100 F Street, N.E.
Washington, D.C. 20549-3720

Attention: Larry Spirgel
Kathleen Collins
Alexandra Barone
Rebekah Lindsey

**Re: TuSimple Holdings Inc.
Amendment No. 2 to
Draft Registration Statement on Form S-1
Submitted March 8, 2021
CIK No. 0001823593**

Ladies and Gentlemen:

On behalf of TuSimple Holdings Inc. (the “Company”), we submit this letter in response to comments from the staff (the “Staff”) of the Securities and Exchange Commission (the “Commission”) received by letter dated March 19, 2021, relating to the Company’s Draft Registration Statement on Form S-1 submitted March 8, 2021 (the “Company’s Draft Registration Statement”).

On behalf of the Company, we are also electronically transmitting for filing the Company’s Registration Statement on Form S-1 (“Registration Statement”).

In this letter, we have recited the comments from the Staff in italicized, bold type and have followed each comment with the Company’s response. Except as otherwise specifically indicated, page references herein correspond to the pages of the Registration Statement.

Amendment No. 2 to Draft Registration Statement on Form S-1
Prospectus Summary
Our Solution, page 13

1. ***We note your disclosure revisions in response to our prior comment 1. Please revise throughout the filing to disclose the current timeframe in which you expect to begin filling reservations for your trucks. In this regard, you state that your goal is to have factory produced L4 autonomous semi-trucks available at scale in 2024. Please clarify whether “at scale” means you will be able to fill all of the reservations within a short period of time subsequent to achieving this goal or whether it will take a longer period of time subsequent to the achievement of at scale production. If the latter is true, please disclose your current expected timeframe or state that you are not able to estimate such timeframe.***

RESPONSE TO COMMENT 1: The Company advises the Staff that its current goal is to fill reservations over a multi-year period commencing in 2024, with the actual date of delivery based on our customers' specifications. In response to the Staff's comment, the Company has revised its disclosure on pages 16, 25, 40, 113, 123 and 126 of the Registration Statement.

2. ***Your disclosure indicates that the reservation system was established by you and Navistar. Please clarify the following information, where applicable:***
 - ***Whether the customer places the reservation and any related deposit with you or with Navistar. If the customer places the reservation with Navistar, disclose how often you receive updates regarding the total number of outstanding reservations received by Navistar so a reader may ascertain how current this information is.***
 - ***Disclose whether you have collected any deposits thus far and if so, include the amount. If you collect and hold the deposit, revise your liquidity section to disclose the impact that refunds may have on your liquidity and how you anticipate providing refunds of these deposits in the future, if required.***

RESPONSE TO COMMENT 2: The Company advises the Staff that the Company manages the reservations and deposit collections process and has revised its disclosure on pages 16, 113 and 126 of the Registration Statement to clarify this fact.

Additionally, the Company advises the Staff that customers may deliver deposits within 12 months of entering into a reservation agreement. The Company is currently in the process of collecting these deposits to hold in an escrow account. Any cancellations and refunds will be satisfied out of the deposits held in escrow. For reservations holders who are also equity investors, which account for approximately 75% of our current reservations, the deposit requirement has been waived. The Company has revised its disclosure on pages 16, 38, 87, 113 and 126 of the Registration Statement accordingly.

Summary Consolidated Financial Data, page 33

3. ***Please refer to our prior comment 2 and address the following as it relates to your pro forma per share information:***
 - ***Revise the weighted average shares used in computing pro forma net loss per share to include adjustments for share issuances similar to those included in the pro forma column to your capitalization table.***

- ***Include the Class B shares to be issued to your founders in the weighted average shares outstanding or explain your basis for excluding such items from your weighted average shares.***
- ***Revise the numerator for your per share calculations to include adjustments for the compensation expense associated with the RSU and SVA Settlement and the performance-based options that will vest upon effectiveness. Similarly, adjust for other items included in your pro forma accumulated deficit calculations or explain why you believe exclusion here is appropriate. Refer to Rule 11-01(a)(8).***
- ***Considering the number of adjustments included in your pro forma per share calculations, revise to provide a quantified reconciliation of both the numerator and denominator in footnote (1).***

RESPONSE TO COMMENT 3: In response to the Staff's comment, the Company has removed the pro forma per share information and revised its disclosure on page 33 of the Registration Statement accordingly.

Risk Factors

Risks Related to Our Dependence on Third Parties

We rely on our business partners and other industry participants for our AFN..., page 40

4. ***Please revise to address any risks associated with the fact that any product license agreements or long-term cooperation agreements associated with your Navistar and Traton joint development projects will not be negotiated and finalized until completion of the development activities.***

RESPONSE TO COMMENT 4: The Company acknowledges the Staff's comment and has revised its disclosure on page 40 of the Registration Statement to address this risk.

Risks Related to Our International Operations

Changes to trade policy, tariffs, and import/export regulations may have a material adverse effect on our business..., page 61

5. ***We note your response to our prior comment 3. Please further revise your risk factor to make clear that CFIUS has initiated a review of an investor's 2017 investment and the potential ramifications of such a review.***

RESPONSE TO COMMENT 5: In response to the Staff's comment, the Company has revised its disclosure on page 61 of the Registration Statement.

Risks Related to Our Class A Common Stock and This Offering, page 62

6. ***Disclose whether the company expects to be a "controlled company" under the rules of the Nasdaq. If so, please revise throughout the registration statement to disclose such status and the consequences. Also disclose whether the company intends to avail itself to the corporate governance exemptions afforded to a "controlled company" under the rules of Nasdaq.***

RESPONSE TO COMMENT 6: The Company acknowledges the Staff's comment and advises that although the Company's founders will together hold in excess of 50% of the outstanding voting power in the aggregate, neither founder individually will control more than 50% of the total voting power of the Company's outstanding stock. As a result, the Company does not believe that it will be a "controlled company" under the rules of Nasdaq immediately following this offering. The Company has revised its disclosure on page 62 to reflect this.

Capitalization, page 75

7. ***Please revise to include a discussion of all pro forma adjustments and provide quantified information where appropriate. In this regard, based on the pro forma number of shares outstanding, it appears that you have included the issuance of Series E preferred shares in January 2021; the exercise of Series E-2 preferred share warrants in February 2021; and the exercise of Series E warrants assuming that you have received notices of exercise from the holders. Similarly, the pro forma accumulated deficit appears to include adjustments for compensation expense related to performance-based options that will vest upon the offering, compensation related to a separation agreement and a gain related to the expiration of unexercised warrants.***

RESPONSE TO COMMENT 7: In response to the Staff's comment, the Company has revised its disclosure on pages 74 and 75 of the Registration Statement.

Management's Discussion and Analysis of Financial Condition and Results of Operations Components of Results of Operations, page 82

8. ***You state that the warrants outstanding as of December 30, 2020 were exercised prior to the consummation of this offering; however, it appears from your subsequent events disclosure that only Traton exercised their warrant. Please revise to clarify. Also, explain further your change to the Black-Scholes option pricing model as of December 31, 2020. In this regard, tell us how the variability surrounding which series of redeemable convertible preferred stock the warrants are exercised into has been resolved and revise your disclosures as necessary.***

RESPONSE TO COMMENT 8: The Company advises the Staff that when originally issued the warrants were potentially exercisable into an existing or future series of redeemable convertible preferred stock depending on the circumstances. Upon the consummation of the Company's Series E redeemable convertible preferred stock financing, the warrants became exercisable for Series E redeemable convertible preferred stock or a subseries. Additionally, the Navistar warrant was exercised in March 2021. The Company has revised its disclosure on pages 92 and F-20 of the Registration Statement to reflect these clarifications.

Commitments and Contractual Obligations, page 90

9. ***Please revise to include a discussion of the payments that may be required to Navistar under your joint development agreement.***

RESPONSE TO COMMENT 9: In response to the Staff's comment, the Company has revised its disclosure on page 89 of the Registration Statement.

Consolidated Financial Statements

Note 9. Redeemable Convertible Preferred Shares and Preferred Share Warrants, and Shareholders Deficit, page F-24

10. ***Please disclose the number of shares that would be issued under the Navistar warrants if exercised at the balance sheet date. Disclose the fair value of the underlying shares at the balance sheet date for all warrants outstanding, if different than the exercise price. Refer to ASC 480-10-50-2.***

RESPONSE TO COMMENT 10: In response to the Staff's comment, the Company has revised its disclosure on page F-25 of the Registration Statement to provide these figures.

11. ***Please provide us with an analysis of the specific guidance applied or analogized to in accounting for your joint development agreements with Navistar and Traton. Clarify how you considered Traton and Navistar's intentions to enter into future arrangements upon completion of development in your analysis.***

RESPONSE TO COMMENT 11:

Navistar Agreement

In response to the Staff's comment, the Company advises that it accounts for the joint development agreement with Navistar under the guidance of ASC 808 *Collaborative Arrangements* ("ASC 808"). ASC 808-10-20 specifies that a collaborative arrangement involves a joint operating activity under which each of the parties are (i) active participants and (ii) exposed to significant risks and rewards dependent on the commercial success of the activity. The Company determined that each party is an active participant, in-line with the guidance of ASC 808-10-15-8, as each party performs significant research and development activities, holds a contractual right to any intellectual property it creates utilizing its existing technology, jointly owns any intellectual property created utilizing new technology arising from the development activities, and participates on a steering committee comprised of an equal number of members from each party. Additionally, the Company determined that each party is exposed to significant risks and rewards as each party will commit significant resources to the project, holds a contractual right to intellectual property created as a result of the project and is subject to penalties for early termination of the project. Upon successful completion of the development activities, the parties intend, but are under no obligation, to continue joint efforts to commercialize the developed products. As of the date of this letter, there remained uncertainty as to whether the remaining development activities will ultimately be successful and extension of the arrangement was not considered probable.

Under the arrangement, the Company will reimburse Navistar up to \$10.0 million for expenses incurred. The Company considered whether these reimbursements indicate that Navistar is not exposed to significant risks per ASC 808-10-15-11, concluding that the time and effort involved in performing the development activities under the agreement has an organizational cost to Navistar which significantly exceeds the amounts reimbursed and does not remove the risk of failure to Navistar.

Per the guidance of ASC 808-10-15-5A, collaborative arrangements within the scope of ASC 808 may be partially within the scope of other topics, including, but not limited to ASC 606 *Revenue from Contracts with Customers* ("ASC 606"). The Company determined that the arrangement is not within the scope of ASC 606 since Navistar is not a customer. The Company's monetization strategy is to sell freight capacity and provide access to TuSimple's Autonomous Freight Network for fleet owners, including shippers, carriers, and railroads and out-licensing of intellectual property to third parties is not considered within the scope of the Company's ordinary activities.

Per ASC 808-10-15-5C, collaborative arrangements that are wholly or partially outside the scope of other topics should be accounted for based on analogy to authoritative accounting literature. The Company analogized to the guidance over research and development costs under ASC 730-10-25-1 and charged the reimbursements to expense as incurred. Additionally, costs incurred for the Company's development activities are charged to expense as incurred. As of the date of this letter, expenses incurred by Navistar for reimbursement under the arrangement are immaterial.

Traton Agreement

The Company accounts for the development agreement under the guidance of ASC 808 as each party is an active participant and exposed to significant risks and rewards dependent on the commercial success of the activity. Each party under the agreement performs research and development activities, holds a contractual right to any intellectual property it creates utilizing its existing technology, and jointly owns any intellectual property created utilizing new technology arising from the development activities. Upon successful completion of the agreement, the parties intend, but are under no obligation, to continue joint efforts to commercialize the developed products. As of the date of this letter, there remained uncertainty as to whether the remaining development activities will ultimately be successful and extension of the arrangement was not considered probable.

Each party is responsible for funding its own development costs and no payments are made from one party to another for development activities performed. The Company determined the arrangement is not within the scope of ASC 606 since Traton is not a customer. Costs incurred for the Company's development activities are expensed as incurred under the guidance over research and development costs under ASC 730-10-25-1.

General

12. ***Please revise the graphics at the forefront of the registration statement to accurately depict the company's truck reservations. Specifically, we note that you include a metric for 5,700+ purpose-built fully autonomous trucks reserved in first four months. Please revise this graphic in light of your disclosure in the registration statement that your reservations are only to secure a priority position to order and purchase a truck and that reservations may never result in actual purchase agreements. Refer to Securities Act Forms C&DI 101.02.***

RESPONSE TO COMMENT 12: The Company acknowledges the Staff's comment and has updated the referenced graphic at the forefront of the Registration Statement to clarify that reservations may not result in the execution of actual purchase agreements.

TuSimple Holdings Inc.
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Please contact the undersigned at (650) 463-5335 or jvetter@gunder.com if you have any questions with respect to this response or the Registration Statement.

Very truly yours,

/s/ Jeffrey R. Vetter
Jeffrey R. Vetter, Esq.

cc: Cheng Lu
Patrick Dillon
James Mullen, Esq.
TuSimple Holdings Inc.

Zhen Liu, Esq.
Richard Chang, Esq.
Colin Conklin, Esq.
Gunderson Dettmer Stough Villeneuve Franklin & Hachigian, LLP

Richard Truesdell, Esq.
Stephen Byeff, Esq.
Davis Polk & Wardwell, LLP

Jean Stadwiser
KPMG LLP