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COMMERCIAL VEHICLES || STATE OF THE INDUSTRY

NORTH AMERICA CLASSES 5-8 VEHICLES

REPORT VERSION PUBLISHED OCTOBER 2019

2019 LAWRENCE R. KLEIN BLUE CHIP AWARD WINNER

Contributor to Blue Chip Economic Indicators and WSJ Economic Forecast Panel

SAMPLE REPORT OVERVIEW:

Thank you for your interest in ACT Research and our work. The objective of this sample report is to share an understanding of the market, economy, and insight to analysis at the time of publication. We share this report from 2017 for market context, an assessment of our historical and current data recordings, and a look into the market indicators we gather from the OEMs.

State of the Industry: N.A. Classes 5-8 Vehicles

This monthly report breaks down the truck and bus markets, backlogs, fuel pricing, North American original equipment manufacturer Classes 5-7 Build Plans, and other relevant information related to Classes 5-8 North American commercial vehicles.

The *State of the Industry: N.A. Classes 5-8 Vehicles* is a monthly report providing an in-depth overview of current commercial vehicle market activity and factors influencing demand. The foundation of this report is the monthly data provided to ACT Research by the OEMs. This direct access to the manufacturers is critical to the report's success and insights into the current market. ACT receives the monthly data on the second business day of the month, releasing preliminary numbers the next day. Finalized numbers based from the OEMs is released mid-month in the complete report.

This report is complete with:

- Monthly market indicators for Class 5 and Classes 6-7 chassis and Class 8 trucks and tractors: backlog, build, inventory, new orders, cancellations, net orders, and retail sales.
- Class 5 and Classes 6-7 segmented by trucks, buses, RVs, and step vans, Class 8 segmented by tractors with and without sleepers and trucks with and without sleepers.
- Executive Summary
- Rolling six-month industry build plan
- Backlog timing analysis
- Historical data (1996 to current)
- PowerPoint graph pack
- Preliminary net orders for the previous month published

Coverage of the bus, RV is critical for full market understanding. Not all production is trucks, thus this coverage allows for a better, more clearly define scope of the market. One of the most important aspects of this report is the accompanying database. Historical data is available in Excel documents dating from 1996 to the present. With the monthly data provided by the OEMs, this report offers a rich data history that aids in model building, market intelligence for various companies.

Click the buttons below to access more!

REPORT VIDEO

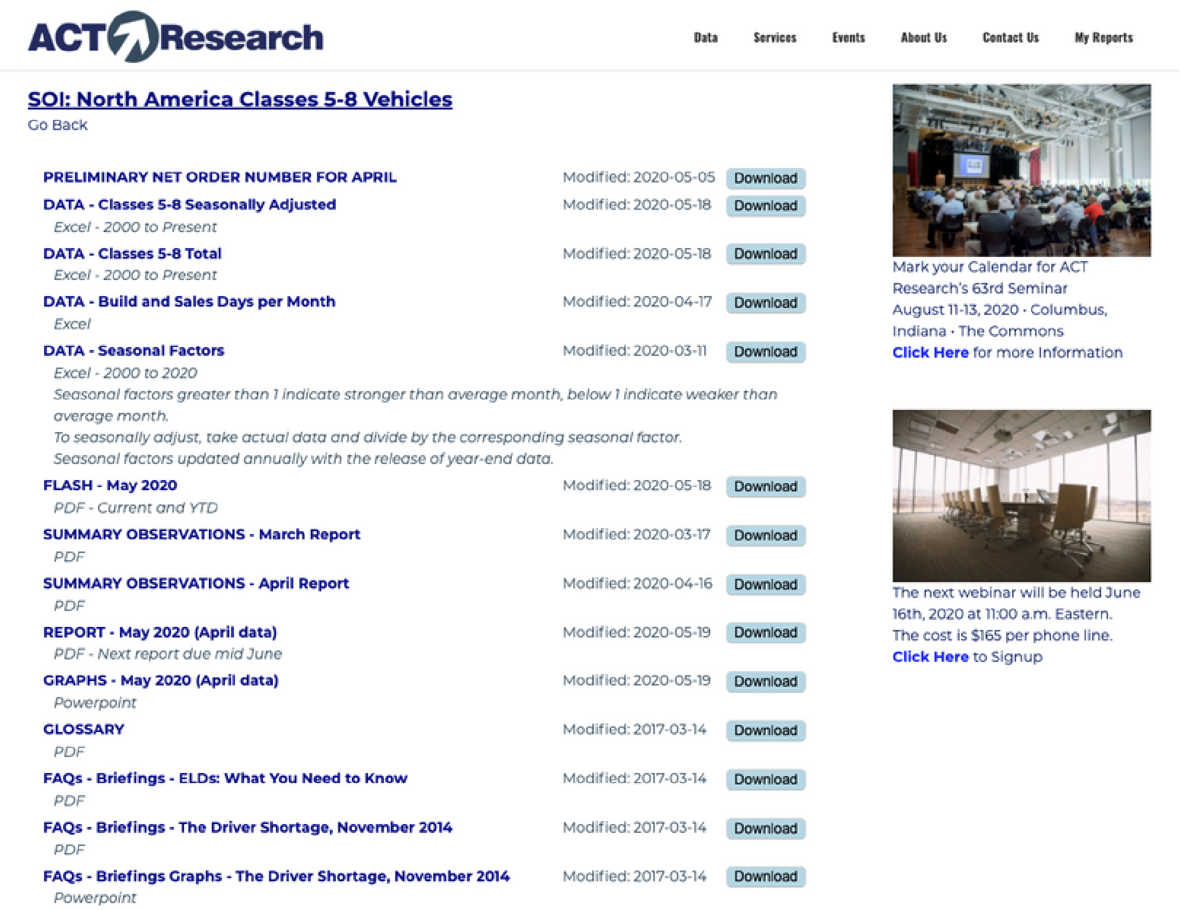
GRAPH PACK

DATA TABLES

Report Dashboard Overview:

With your subscription to the ***State of the Industry: N.A. Classes 5-8 Vehicles***, you will gain access to our report dashboard. Below is a listing, as well as a screenshot, of this dashboard and the support material you will receive with your report.

1. PDFs of:
   a. Current & YTD Flash
   b. Summary Observations of previous two reports
   c. Current report
2. Tables including:
   a. Classes 5-8 Seasonally Adjusted
   b. Classes 5-8 Total
   c. Build & Sales Days per Month
   d. Seasonal Factors
3. Graph pack complete with 115+ graphs covering:
   a. Total Class 5
   b. Total Classes 6-7
   c. Total Classes 5-7
   d. Total Class 8
   e. Backlog Analysis
   f. Fuel Analysis
   g. Classes 6-7 Trucks, Bus, RV Class 8 Tractor/ Straight Truck w/ Sleeper, Day Cab
4. Glossary of Terms and Definitions, FAQs



ACT SOI: N.A. Classes 5-8 Vehicles. - Sample Report Overview

Report Distribution & FAQs

When is the report published?
The *SOI: N.A. Classes 5-8 Vehicles* is published mid-month.

How many individuals in my company may access the report?
ACT Research allows for a maximum distribution of 4 users per report. Additional access may be purchased at $60 per person, per report.

Can the individuals with report access be changed?
Yes, we understand that change in staff may occur. Simply call or email our team and we'll help you manage this process. There is no charge for changing users.

How do I become aware of the release of the latest publication?
A notice, via email, will be sent to those users on your distribution list upon the publication and availability of the *SOI: N.A. Classes 5-8 Vehicles*. Users can then access the report via dashboard login.

Is support for ACT Research analyst available should questions arise?
Yes, we highly encourage our subscribers to call or email our staff with questions or concerns. Our analysts take great pride in being accessible and are willing to answer questions as needed.

May I utilize aspects of the report within my organization?
Yes, but we do request that all tables, graphs, charts, or analysis cite ACT Research as the source.

May I utilize aspects of the report for external presentations? (conferences, trade organizations, etc.)
Yes. ACT's copyright policy requires that any external presentations utilizing ACT data be sourced and cited appropriately. Furthermore, we request that external sourcing be limited to charts and/or graphs. If you are uncertain if your presentation meets our copyright requirements, contact us at 812.379.2085 or trucks@actresearch.net to inquire.

"I would recommend ACT Research to anyone that's looking for in-depth insight into what's happening in the commercial vehicle markets. The expertise and knowledge that goes into the service they provide, there's not a better solution, in my opinion, for commercial vehicle data than ACT Research."
- Jeff Trent, Mahle

State of the Industry: N.A. Classes 5-8 Vehicles

Contents

BUILD LOCATION: The geography of a built unit reflects the market for which it is destined, NOT the country in which the actual production takes place. Current N.A. OEM build occurs in the United States, Canada, and Mexico.

STATE OF THE INDUSTRY: NORTH AMERICAN CLASSES 5-8 VEHICLES

Summer Freight Respite Short-Lived: After less negative freight data early in Q3, the data has softened further since the September 1st tariff impositions, which didn't include a grace period for goods in-transit. While the delay of the October 15th tariff increases removed a piece of impending bad news, skepticism on trade still seems like the right stance. The US industrial downturn appears to be deepening, with rail volume weakness spreading to nearly all segments and declines worsening into October. Perhaps more concerning as consumers remain the primary engine of the economic growth outlook, US retail sales stumbled a bit in September, falling 0.1% m/m ex-autos, and confidence measures are off their highs. But with a healthy balance sheet and retail sales still up ~4% y/y, the worst scenarios for heavy vehicle demand remain unlikely.

After freight data became "less bad" in July and August, they have returned to "worse" recently, as the freight recession shows signs of broadening:

- ATA's TL Load Index rose 4.3% y/y in August, after 4.1% growth in July.
- ACT's 15-variable Class 8 Tractor Dashboard improved to a less-dismal -5 in July and August from -8 in June, partly on pre-tariff shipping.
- ACT's For-Hire Volume Index returned to negative in August, after jumping in July.
- NA rail carloads deteriorated to -5.8% y/y so far in October from -5.5% in September and -3.4% in August, pressured by the GM strike.
- DAT spot rate aggregate (net fuel) improved to -14% y/y in September on easier comps; contract -6% y/y.
- Cass Shipments Index fell to -3.3% y/y in September from -3.0% in August, the ninth consecutive negative.
- Supply-side: ACT's U.S. U-11 tractor population was up 7.3% y/y in September.

CLASS 8: In concert with weak/deteriorating freight volumes and rates, forward-looking indicators continued to erode, even as mid and downstream data points remain robust. The current situation of weak orders and strong builds is unsustainable. Meanwhile, September NA Cl8 retail sales reached a new record in SA terms.

- As a preface, since entering 2019 with a near-record 297k-unit backlog, truckers have not been in a hurry to order all year. Net orders fell 70% y/y, to 12,692 units (14.8k SA), in Sept; past 6-month SAAR = 164k.
  - Moderate cancellations trend continued: 3,267 units and 2.5% of backlog (10-yr average 2.0%).
- Build was down from the June-July peak, but remained elevated at 1,399 upd/359k SAAR. The past 6-months build rate is 1,480 upd, with full-month build at 27,982 units, 400 units below build plans (p20). YTD production is at a 247.8k/1,466 upd average.
  - Q4 build plans are down 14k units since June, and the Q1 plan has been lowered 4k m/m.
- The order-to-build imbalance keeps backlog falling, down 17.8k m/m, to 132,977 units. YTD is down 164k. Seasonal order relief in Q4 should cushion further BL declines. Despite the lower Sept build rate, the BL/BU fell 47bps, to 4.5 months/95 days.
- The backlog analysis (p9) shows the Q4'19 build plan at 86% filled vs. 10-year avg. at 79%; Q1 is filled to 62% of plan vs. 41% average.
- Sales surged in September, as follow-through remains solid at 32,739 units (32.5k SA). Three-month sales tracking is at 355k SAAR.
  - We attribute sales strength to still-strong carrier profits and desirable new vehicle specs that are helping to offset margin compression.
- Inventories: This is the first drop after five straight all-time records. Total Class 8 inventory was down 5.0k, to 81.0k, and IN/RS (SA) to 2.4 months, from 3.0 last month (ACT ideal IN/RS = 2.2 months).

CLASSES 5, 6-7: MD demand metrics remain in better balance, but there are signs of modest fraying on weak NO, relative BU strength and excessive IN.

- MD orders fell 24% below year-ago levels, a ninth consecutive decline, and fell 7% from August, to 18,528 units (18.4k SA). The six-month order SAAR continues to experience incremental erosion, slipping to 255k. Cancellations were low at 2.0% of backlog.
- Build rates fell to 1,175 upd, down 6% from August. Actual build fell 14% m/m, to 23,509 units, on a thinning backlog and two fewer build days. Build plans (pgs13-14) anticipate build averaging 1,036 upd in Q4, boosting FY to 283.3k. The Q1'20 plan was trimmed 6 upd, to 1,075upd/68.9k.
- Backlog fell 5.3k units, to 60,200 units. A lower build rate partly offsets the decline, as BL/BU falls 6bps to a 21-month low of 2.4 months/51 days.
- Robust RS continued, with 23,365 units sold (23.4k SA). Steady RS trending just over 282k units SAAR. IN jumped to a 70.0k cycle peak, up 500 units m/m, and IN/RS rose 10bps, to 3.0 months/63 days.

TRUCK, BUS, and RV INDUSTRY MANAGEMENT STATISTICS*
NORTH AMERICA
September 2019

CURRENT MONTH STATISTICS

VARIABLE	Cl. 5 TRUCK	Cl. 5 BUS	Cl. 5 RV	Cl. 5 STEP VAN	Cl. 5 TOTAL	Cl. 6-7 TRUCK	Cl. 6-7 BUS	Cl. 6-7 RV	Cl. 6-7 STEP VAN	Cl. 6-7 TOTAL	Cl. 8 TRACTOR SLEEPER	Cl. 8 TRACTOR DAY CAB	Cl. 8 TRUCK SLEEPER	Cl. 8 TRUCK DAY CAB	Cl. 8 OTHER	Cl. 8 TOTAL
. Backlog	15,408	60	457	2,152	**18,077**	31,116	8,373	1,353	1,278	**42,120**	59,509	38,380	1,961	32,577	550	**132,977**
. Build	8,826	30	227	762	**9,845**	9,062	3,565	859	178	**13,664**	12,471	7,706	292	7,138	375	**27,982**
. Inventory	25,169	106	829	1,362	**27,466**	34,685	5,393	1,531	1,015	**42,624**	30,987	17,093	1,029	31,718	175	**81,002**
. New Orders	8,742	32	190	403	**9,367**	5,677	3,707	765	230	**10,379**	6,681	4,179	172	4,617	394	**16,043**
. Orders Cancel	576	2	-	-	**578**	470	147	17	6	**640**	2,142	342	23	825	19	**3,351**
. Net Orders	8,166	30	190	403	**8,789**	5,207	3,560	748	224	**9,739**	4,539	3,837	149	3,792	375	**12,692**
. Retail Sales	7,287	30	211	449	**7,977**	10,027	4,359	793	209	**15,388**	14,521	8,702	163	8,978	375	**32,739**
MEMO: Sales of Japanese Imports					**949**					**974**						

MONTHLY PERFORMANCE:

September — **20** Build Days; **21** Order/Sales Days

VARIABLE	Cl. 5 TRUCK	Cl. 5 BUS	Cl. 5 RV	Cl. 5 STEP VAN	Cl. 5 TOTAL	Cl. 6-7 TRUCK	Cl. 6-7 BUS	Cl. 6-7 RV	Cl. 6-7 STEP VAN	Cl. 6-7 TOTAL	Cl. 8 TRACTOR SLEEPER	Cl. 8 TRACTOR DAY CAB	Cl. 8 TRUCK SLEEPER	Cl. 8 TRUCK DAY CAB	Cl. 8 OTHER	Cl. 8 TOTAL
. Build: units/day	441	2	11	38	**492**	453	178	43	9	**683**	624	385	15	357	19	**1,399**
. Net Orders: un/dy.	389	1	9	19	**419**	248	170	36	11	**464**	216	183	7	181	18	**604**
. Retail Sales:un/dy.	347	1	10	21	**380**	477	208	38	10	**733**	691	414	8	428	18	**1,559**
. Orders Cancel: % BL	3.7%	3.3%	0.0%	0.0%	**3.2%**	1.5%	1.8%	1.3%	0.5%	**1.5%**	3.6%	0.9%	1.2%	2.5%	3.5%	**2.5%**
. Backlog/Build @ rate in months**	1.7	1.9	1.9	2.7	**1.7**	3.3	2.2	1.5	6.8	**2.9**	4.5	4.7	6.4	4.3	1.4	**4.5**
. Inventory/R.S. @ rate in months**	3.5	3.5	3.9	3.0	**3.4**	3.5	1.2	1.9	4.9	**2.8**	2.1	2.0	6.3	3.5	0.5	**2.5**

*Actual data not seasonally adjusted.
** Backlog to Build and Inventory to Retail Sales Ratios are normalized to 21 days.

Class 8 Other includes Autocar, Oshkosh, and Terex Advance Mixer.

TRUCK, BUS, and RV INDUSTRY MANAGEMENT STATISTICS*
NORTH AMERICA
September 2019

YEAR-TO-DATE STATISTICS

VARIABLE	Cl. 5 TRUCK	Cl. 5 BUS	Cl. 5 RV	Cl. 5 STEP VAN	Cl. 5 TOTAL	Cl. 6-7 TRUCK	Cl. 6-7 BUS	Cl. 6-7 RV	Cl. 6-7 STEP VAN	Cl. 6-7 TOTAL	Cl. 8 TRACTOR SLEEPER	Cl. 8 TRACTOR DAY CAB	Cl. 8 TRUCK SLEEPER	Cl. 8 TRUCK DAY CAB	Cl. 8 OTHER	Cl. 8 TOTAL
. Backlog	15,408	60	457	2,152	**18,077**	31,116	8,373	1,353	1,278	**42,120**	59,509	38,380	1,961	32,577	550	**132,977**
. Build	73,826	276	2,880	3,882	**80,864**	95,971	32,970	10,058	2,340	**141,339**	126,514	76,440	2,401	66,218	4,166	**275,739**
. Inventory	25,169	106	829	1,362	**27,466**	34,685	5,393	1,531	1,015	**42,624**	30,987	17,093	1,029	31,718	175	**81,002**
. New Orders	75,625	294	2,908	4,822	**83,649**	70,809	34,097	10,341	2,702	**117,949**	57,799	45,686	1,943	45,057	4,374	**154,859**
. Orders Cancel	4,166	18	-	204	**4,388**	5,760	832	242	43	**6,877**	20,011	7,199	167	5,699	208	**33,284**
. Net Orders	71,459	276	2,908	4,618	**79,261**	65,049	33,265	10,099	2,659	**111,072**	37,788	38,487	1,776	39,358	4,166	**121,575**
. Retail Sales	66,568	277	2,455	3,166	**72,466**	90,478	33,297	9,371	2,064	**135,210**	115,363	72,647	1,883	62,477	4,166	**256,536**
MEMO: Sales of Japanese Imports					**8,179**					**9,328**						

YEAR-TO-DATE PERFORMANCE:

September — **189** Build Days; **192** Order/Sales Days

VARIABLE	Cl. 5 TRUCK	Cl. 5 BUS	Cl. 5 RV	Cl. 5 STEP VAN	Cl. 5 TOTAL	Cl. 6-7 TRUCK	Cl. 6-7 BUS	Cl. 6-7 RV	Cl. 6-7 STEP VAN	Cl. 6-7 TOTAL	Cl. 8 TRACTOR SLEEPER	Cl. 8 TRACTOR DAY CAB	Cl. 8 TRUCK SLEEPER	Cl. 8 TRUCK DAY CAB	Cl. 8 OTHER	Cl. 8 TOTAL
. Build: units/day	391	1	15	21	**428**	508	174	53	12	**748**	669	404	13	350	22	**1,459**
. Net Orders: un/dy.	372	1	15	24	**413**	339	173	53	14	**579**	197	200	9	205	22	**633**
. Retail Sales:un/dy.	347	1	13	16	**377**	471	173	49	11	**704**	601	378	10	325	22	**1,336**
. Orders Cancel: % BL	27.0%	30.0%	0.0%	9.5%	**24.3%**	18.5%	9.9%	17.9%	3.4%	**16.3%**	33.6%	18.8%	8.5%	17.5%	37.8%	**25.0%**
. Backlog/Build @ rate in months**	1.9	2.0	1.4	5.0	**2.0**	2.9	2.3	1.2	4.9	**2.7**	4.2	4.5	7.4	4.4	1.2	**4.3**
. Inventory/R.S. @ rate in months**	3.4	3.4	3.0	3.9	**3.4**	3.5	1.5	1.5	4.4	**2.8**	2.4	2.1	4.9	4.6	0.4	**2.8**

*Actual data not seasonally adjusted.
** Backlog to Build and Inventory to Retail Sales Ratios are normalized to 21 days.

Class 8 Other includes Autocar, Oshkosh, and Terex Advance Mixer.

TRUCK, BUS, and RV INDUSTRY MANAGEMENT STATISTICS*
NORTH AMERICA
September 2019

UNIT & PERCENT CHANGE: CURRENT MONTH VS. PAST MONTH

	Cl. 5 TRUCK	Cl. 5 BUS	Cl. 5 RV	Cl. 5 STEP VAN	Cl. 5 TOTAL	Cl. 6-7 TRUCK	Cl. 6-7 BUS	Cl. 6-7 RV	Cl. 6-7 STEP VAN	Cl. 6-7 TOTAL	Cl. 8 TRACTOR SLEEPER	Cl. 8 TRACTOR DAY CAB	Cl. 8 TRUCK SLEEPER	Cl. 8 TRUCK DAY CAB	Cl. 8 OTHER	Cl. 8 TOTAL
BACKLOG:																
a.CURRENT MO.	15,408	60	457	2,152	**18,077**	31,116	8,373	1,353	1,278	**42,120**	59,509	38,380	1,961	32,577	550	**132,977**
b.PAST MO.	16,065	60	494	2,507	**19,126**	35,221	8,338	1,534	1,266	**46,359**	69,010	42,848	2,100	36,221	550	**150,729**
UNIT CHANGE a-b	(657)	-	(37)	(355)	**(1,049)**	(4,105)	35	(181)	12	**(4,239)**	(9,501)	(4,468)	(139)	(3,644)	-	**(17,752)**
% CHANGE	-4.1%	0.0%	-7.5%	-14.2%	**-5.5%**	-11.7%	0.4%	-11.8%	0.9%	**-9.1%**	-13.8%	-10.4%	-6.6%	-10.1%	0.0%	**-11.8%**
BUILD:																
a.CURRENT MO.	8,826	30	227	762	**9,845**	9,062	3,565	859	178	**13,664**	12,471	7,706	292	7,138	375	**27,982**
b.PAST MO.	10,981	31	293	578	**11,883**	10,764	3,747	939	148	**15,598**	13,586	8,843	311	7,312	431	**30,483**
UNIT CHANGE a-b	(2,155)	(1)	(66)	184	**(2,038)**	(1,702)	(182)	(80)	30	**(1,934)**	(1,115)	(1,137)	(19)	(174)	(56)	**(2,501)**
% CHANGE	-19.6%	-3.2%	-22.5%	31.8%	**-17.2%**	-15.8%	-4.9%	-8.5%	20.3%	**-12.4%**	-8.2%	-12.9%	-6.1%	-2.4%	-13.0%	**-8.2%**
INVENTORY:																
a.CURRENT MO.	25,169	106	829	1,362	**27,466**	34,685	5,393	1,531	1,015	**42,624**	30,987	17,093	1,029	31,718	175	**81,002**
b.PAST MO.	23,582	106	813	1,050	**25,551**	35,721	5,723	1,465	1,072	**43,981**	33,424	17,663	923	33,783	175	**85,968**
UNIT CHANGE a-b	1,587	-	16	312	**1,915**	(1,036)	(330)	66	(57)	**(1,357)**	(2,437)	(570)	106	(2,065)	-	**(4,966)**
% CHANGE	6.7%	0.0%	2.0%	29.7%	**7.5%**	-2.9%	-5.8%	4.5%	-5.3%	**-3.1%**	-7.3%	-3.2%	11.5%	-6.1%	0.0%	**-5.8%**
NET ORDERS:																
a.CURRENT MO.	8,166	30	190	403	**8,789**	5,207	3,560	748	224	**9,739**	4,539	3,837	149	3,792	375	**12,692**
b.PAST MO.	10,226	30	206	135	**10,597**	4,993	2,881	943	450	**9,267**	4,253	2,391	104	3,940	431	**11,119**
UNIT CHANGE a-b	(2,060)	-	(16)	268	**(1,808)**	214	679	(195)	(226)	**472**	286	1,446	45	(148)	(56)	**1,573**
% CHANGE	-20.1%	0.0%	-7.8%	198.5%	**-17.1%**	4.3%	23.6%	-20.7%	-50.2%	**5.1%**	6.7%	60.5%	43.3%	-3.8%	-13.0%	**14.1%**
CANCELLATION RATE:																
a.CURRENT MO.	6.6%	6.3%	0.0%	0.0%	**6.2%**	8.3%	4.0%	2.2%	2.6%	**6.2%**	32.1%	8.2%	13.4%	17.9%	4.8%	**20.9%**
b.PAST MO.	5.2%	6.3%	0.0%	5.6%	**5.1%**	9.4%	1.6%	2.1%	0.0%	**5.9%**	25.6%	31.4%	29.7%	14.0%	4.6%	**22.7%**
PP CHANGE	1.4	-	-	(5.6)	**1.1**	(1.1)	2.4	0.1	2.6	**0.2**	6.4	(23.2)	(16.4)	3.9	0.2	**(1.8)**
RETAIL SALES:																
a.CURRENT MO.	7,287	30	211	449	**7,977**	10,027	4,359	793	209	**15,388**	14,521	8,702	163	8,978	375	**32,739**
b.PAST MO.	8,657	31	218	244	**9,150**	9,253	5,981	838	119	**16,191**	12,014	8,355	254	6,781	431	**27,835**
UNIT CHANGE a-b	(1,370)	(1)	(7)	205	**(1,173)**	774	(1,622)	(45)	90	**(803)**	2,507	347	(91)	2,197	(56)	**4,904**
% CHANGE	-15.8%	-3.2%	-3.2%	84.0%	**-12.8%**	8.4%	-27.1%	-5.4%	75.6%	**-5.0%**	20.9%	4.2%	-35.8%	32.4%	-13.0%	**17.6%**

*Actual data not seasonally adjusted.

TRUCK, BUS, and RV INDUSTRY MANAGEMENT STATISTICS*
NORTH AMERICA
September 2019

UNIT & PERCENT CHANGE: CURRENT MONTH VS. SAME MONTH ONE YEAR AGO

	Cl. 5 TRUCK	Cl. 5 BUS	Cl. 5 RV	Cl. 5 STEP VAN	Cl. 5 TOTAL	Cl. 6-7 TRUCK	Cl. 6-7 BUS	Cl. 6-7 RV	Cl. 6-7 STEP VAN	Cl. 6-7 TOTAL	Cl. 8 TRACTOR SLEEPER	Cl. 8 TRACTOR DAY CAB	Cl. 8 TRUCK SLEEPER	Cl. 8 TRUCK DAY CAB	Cl. 8 OTHER	Cl. 8 TOTAL
BACKLOG:																
a.CURRENT MO.	15,408	60	457	2,152	**18,077**	31,116	8,373	1,353	1,278	**42,120**	59,509	38,380	1,961	32,577	550	**132,977**
b.SAME 1 YR. AGO	17,858	60	604	985	**19,507**	50,210	8,607	1,701	1,295	**61,813**	146,328	75,824	2,157	64,208	550	**289,067**
UNIT CHANGE a-b	(2,450)	-	(147)	1,167	**(1,430)**	(19,094)	(234)	(348)	(17)	**(19,693)**	(86,819)	(37,444)	(196)	(31,631)	-	**(156,090)**
% CHANGE	-13.7%	0.0%	-24.3%	118.5%	**-7.3%**	-38.0%	-2.7%	-20.5%	-1.3%	**-31.9%**	-59.3%	-49.4%	-9.1%	-49.3%	0.0%	**-54.0%**
BUILD:																
a.CURRENT MO.	8,826	30	227	762	**9,845**	9,062	3,565	859	178	**13,664**	12,471	7,706	292	7,138	375	**27,982**
b.SAME 1 YR. AGO	6,590	30	460	626	**7,706**	8,859	3,921	1,359	157	**14,296**	13,676	7,694	300	6,703	447	**28,820**
UNIT CHANGE a-b	2,236	-	(233)	136	**2,139**	203	(356)	(500)	21	**(632)**	(1,205)	12	(8)	435	(72)	**(838)**
% CHANGE	33.9%	0.0%	-50.7%	21.7%	**27.8%**	2.3%	-9.1%	-36.8%	13.4%	**-4.4%**	-8.8%	0.2%	-2.7%	6.5%	-16.1%	**-2.9%**
INVENTORY:																
a.CURRENT MO.	25,169	106	829	1,362	**27,466**	34,685	5,393	1,531	1,015	**42,624**	30,987	17,093	1,029	31,718	175	**81,002**
b.SAME 1 YR. AGO	17,225	107	591	326	**18,249**	29,196	5,324	1,122	586	**36,228**	24,007	11,992	621	25,965	175	**62,760**
UNIT CHANGE a-b	7,944	(1)	238	1,036	**9,217**	5,489	69	409	429	**6,396**	6,980	5,101	408	5,753	-	**18,242**
% CHANGE	46.1%	-0.9%	40.3%	317.8%	**50.5%**	18.8%	1.3%	36.5%	73.2%	**17.7%**	29.1%	42.5%	65.7%	22.2%	0.0%	**29.1%**
NET ORDERS:																
a.CURRENT MO.	8,166	30	190	403	**8,789**	5,207	3,560	748	224	**9,739**	4,539	3,837	149	3,792	375	**12,692**
b.SAME 1 YR. AGO	6,943	30	430	164	**7,567**	12,215	3,000	1,356	362	**16,933**	20,851	11,782	237	9,464	447	**42,781**
UNIT CHANGE a-b	1,223	-	(240)	239	**1,222**	(7,008)	560	(608)	(138)	**(7,194)**	(16,312)	(7,945)	(88)	(5,672)	(72)	**(30,089)**
% CHANGE	17.6%	0.0%	-55.8%	145.7%	**16.1%**	-57.4%	18.7%	-44.8%	-38.1%	**-42.5%**	-78.2%	-67.4%	-37.1%	-59.9%	-16.1%	**-70.3%**
CANCELLATION RATE:																
a.CURRENT MO.	6.6%	6.3%	0.0%	0.0%	**6.2%**	8.3%	4.0%	2.2%	2.6%	**6.2%**	32.1%	8.2%	13.4%	17.9%	4.8%	**20.9%**
b.SAME 1 YR. AGO	4.9%	6.3%	0.0%	0.0%	**4.5%**	20.2%	3.2%	2.0%	0.3%	**16.0%**	19.5%	6.5%	0.4%	9.8%	4.7%	**13.9%**
PP CHANGE	1.7	-	-	-	**1.7**	(11.9)	0.8	0.2	2.3	**(9.8)**	12.6	1.7	13.0	8.1	0.1	**7.0**
RETAIL SALES:																
a.CURRENT MO.	7,287	30	211	449	**7,977**	10,027	4,359	793	209	**15,388**	14,521	8,702	163	8,978	375	**32,739**
b.SAME 1 YR. AGO	6,479	30	580	607	**7,696**	8,216	4,974	1,531	301	**15,022**	14,050	8,280	223	6,230	447	**29,230**
UNIT CHANGE a-b	808	-	(369)	(158)	**281**	1,811	(615)	(738)	(92)	**366**	471	422	(60)	2,748	(72)	**3,509**
% CHANGE	12.5%	0.0%	-63.6%	-26.0%	**3.7%**	22.0%	-12.4%	-48.2%	-30.6%	**2.4%**	3.4%	5.1%	-26.9%	44.1%	-16.1%	**12.0%**

*Actual data not seasonally adjusted.

TRUCK, BUS, and RV INDUSTRY MANAGEMENT STATISTICS*
NORTH AMERICA
September 2019

UNIT & PERCENT CHANGE: CURRENT 3 MONTHS VS. SAME 3 MONTHS ONE YEAR AGO

	Cl. 5 TRUCK	Cl. 5 BUS	Cl. 5 RV	Cl. 5 STEP VAN	Cl. 5 TOTAL	Cl. 6-7 TRUCK	Cl. 6-7 BUS	Cl. 6-7 RV	Cl. 6-7 STEP VAN	Cl. 6-7 TOTAL	Cl. 8 TRACTOR SLEEPER	Cl. 8 TRACTOR DAY CAB	Cl. 8 TRUCK SLEEPER	Cl. 8 TRUCK DAY CAB	Cl. 8 OTHER	Cl. 8 TOTAL
BACKLOG:																
a.CURRENT MO.	15,408	60	457	2,152	**18,077**	31,116	8,373	1,353	1,278	**42,120**	59,509	38,380	1,961	32,577	550	**132,977**
b.SAME 1 YR. AGO	17,858	60	604	985	**19,507**	50,210	8,607	1,701	1,295	**61,813**	146,328	75,824	2,157	64,208	550	**289,067**
UNIT CHANGE a-b	(2,450)	-	(147)	1,167	**(1,430)**	(19,094)	(234)	(348)	(17)	**(19,693)**	(86,819)	(37,444)	(196)	(31,631)	-	**(156,090)**
% CHANGE	-13.7%	0.0%	-24.3%	118.5%	**-7.3%**	-38.0%	-2.7%	-20.5%	-1.3%	**-31.9%**	-59.3%	-49.4%	-9.1%	-49.3%	0.0%	**-54.0%**
BUILD:																
a.CURRENT 3 MO.	27,997	94	906	1,846	**30,843**	29,814	10,703	2,546	541	**43,604**	41,425	25,474	849	21,434	1,259	**90,441**
b.SAME 1 YR. AGO	21,623	90	1,325	1,248	**24,286**	27,981	11,656	4,429	1,271	**45,337**	43,359	23,605	694	20,122	1,409	**89,189**
UNIT CHANGE a-b	6,374	4	(419)	598	**6,557**	1,833	(953)	(1,883)	(730)	**(1,733)**	(1,934)	1,869	155	1,312	(150)	**1,252**
% CHANGE	29.5%	4.4%	-31.6%	47.9%	**27.0%**	6.6%	-8.2%	-42.5%	-57.4%	**-3.8%**	-4.5%	7.9%	22.3%	6.5%	-10.6%	**1.4%**
INVENTORY:																
a.CURRENT MO.	25,169	106	829	1,362	**27,466**	34,685	5,393	1,531	1,015	**42,624**	30,987	17,093	1,029	31,718	175	**81,002**
b.SAME 1 YR. AGO	17,225	107	591	326	**18,249**	29,196	5,324	1,122	586	**36,228**	24,007	11,992	621	25,965	175	**62,760**
UNIT CHANGE a-b	7,944	(1)	238	1,036	**9,217**	5,489	69	409	429	**6,396**	6,980	5,101	408	5,753	-	**18,242**
% CHANGE	46.1%	-0.9%	40.3%	317.8%	**50.5%**	18.8%	1.3%	36.5%	73.2%	**17.7%**	29.1%	42.5%	65.7%	22.2%	0.0%	**29.1%**
NET ORDERS:																
a.CURRENT 3 MO.	26,663	90	770	1,098	**28,621**	14,478	8,867	2,418	1,090	**26,853**	10,076	9,869	434	12,471	1,259	**34,109**
b.SAME 1 YR. AGO	24,058	90	1,240	474	**25,862**	28,271	9,160	4,118	1,089	**42,638**	72,943	39,649	985	33,453	1,409	**148,439**
UNIT CHANGE a-b	2,605	-	(470)	624	**2,759**	(13,793)	(293)	(1,700)	1	**(15,785)**	(62,867)	(29,780)	(551)	(20,982)	(150)	**(114,330)**
% CHANGE	10.8%	0.0%	-37.9%	131.6%	**10.7%**	-48.8%	-3.2%	-41.3%	0.1%	**-37.0%**	-86.2%	-75.1%	-55.9%	-62.7%	-10.6%	**-77.0%**
CANCELLATION RATE:																
a.CURRENT 3 MO.	5.7%	6.3%	0.0%	0.7%	**5.4%**	10.6%	4.3%	2.2%	0.5%	**7.5%**	40.5%	17.1%	15.1%	14.2%	4.8%	**24.5%**
b.SAME 1 YR. AGO	4.7%	6.3%	0.0%	0.0%	**4.4%**	16.3%	4.0%	2.9%	0.2%	**12.4%**	16.6%	7.3%	0.3%	7.2%	4.7%	**12.0%**
PP CHANGE	1.1	-	-	0.7	**1.0**	(5.8)	0.3	(0.7)	0.4	**(4.9)**	23.9	9.8	14.8	7.0	0.0	**12.5**
RETAIL SALES:																
a.CURRENT 3 MO.	23,747	96	706	985	**25,534**	29,680	14,295	2,486	474	**46,935**	39,620	25,789	658	23,100	1,259	**90,426**
b.SAME 1 YR. AGO	20,365	92	1,219	1,307	**22,983**	25,610	14,082	4,264	1,244	**45,200**	40,457	23,585	582	18,329	1,409	**84,362**
UNIT CHANGE a-b	3,382	4	(513)	(322)	**2,551**	4,070	213	(1,778)	(770)	**1,735**	(837)	2,204	76	4,771	(150)	**6,064**
% CHANGE	16.6%	4.3%	-42.1%	-24.6%	**11.1%**	15.9%	1.5%	-41.7%	-61.9%	**3.8%**	-2.1%	9.3%	13.1%	26.0%	-10.6%	**7.2%**

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TRUCK, BUS, and RV INDUSTRY MANAGEMENT STATISTICS*
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UNIT & PERCENT CHANGE: YEAR-TO-DATE VS. YEAR-TO-DATE ONE YEAR AGO

	Cl. 5 TRUCK	Cl. 5 BUS	Cl. 5 RV	Cl. 5 STEP VAN	Cl. 5 TOTAL	Cl. 6-7 TRUCK	Cl. 6-7 BUS	Cl. 6-7 RV	Cl. 6-7 STEP VAN	Cl. 6-7 TOTAL	Cl. 8 TRACTOR SLEEPER	Cl. 8 TRACTOR DAY CAB	Cl. 8 TRUCK SLEEPER	Cl. 8 TRUCK DAY CAB	Cl. 8 OTHER	Cl. 8 TOTAL
BACKLOG:																
a.CURRENT MO.	15,408	60	457	2,152	**18,077**	31,116	8,373	1,353	1,278	**42,120**	59,509	38,380	1,961	32,577	550	**132,977**
b.SAME 1 YR. AGO	17,858	60	604	985	**19,507**	50,210	8,607	1,701	1,295	**61,813**	146,328	75,824	2,157	64,208	550	**289,067**
UNIT CHANGE a-b	(2,450)	-	(147)	1,167	**(1,430)**	(19,094)	(234)	(348)	(17)	**(19,693)**	(86,819)	(37,444)	(196)	(31,631)	-	**(156,090)**
% CHANGE	-13.7%	0.0%	-24.3%	118.5%	**-7.3%**	-38.0%	-2.7%	-20.5%	-1.3%	**-31.9%**	-59.3%	-49.4%	-9.1%	-49.3%	0.0%	**-54.0%**
BUILD:																
a.CURRENT YTD	73,826	276	2,880	3,882	**80,864**	95,971	32,970	10,058	2,340	**141,339**	126,514	76,440	2,401	66,218	4,166	**275,739**
b.PAST YTD	65,048	270	3,452	3,149	**71,919**	85,544	33,789	13,727	2,363	**135,423**	109,257	66,284	1,789	59,633	3,945	**240,908**
UNIT CHANGE a-b	8,778	6	(572)	733	**8,945**	10,427	(819)	(3,669)	(23)	**5,916**	17,257	10,156	612	6,585	221	**34,831**
% CHANGE	13.5%	2.2%	-16.6%	23.3%	**12.4%**	12.2%	-2.4%	-26.7%	-1.0%	**4.4%**	15.8%	15.3%	34.2%	11.0%	5.6%	**14.5%**
INVENTORY:																
a.CURRENT MO.	25,169	106	829	1,362	**27,466**	34,685	5,393	1,531	1,015	**42,624**	30,987	17,093	1,029	31,718	175	**81,002**
b.SAME 1 YR. AGO	17,225	107	591	326	**18,249**	29,196	5,324	1,122	586	**36,228**	24,007	11,992	621	25,965	175	**62,760**
UNIT CHANGE a-b	7,944	(1)	238	1,036	**9,217**	5,489	69	409	429	**6,396**	6,980	5,101	408	5,753	-	**18,242**
% CHANGE	46.1%	-0.9%	40.3%	317.8%	**50.5%**	18.8%	1.3%	36.5%	73.2%	**17.7%**	29.1%	42.5%	65.7%	22.2%	0.0%	**29.1%**
NET ORDERS:																
a.CURRENT YTD	71,459	276	2,908	4,618	**79,261**	65,049	33,265	10,099	2,659	**111,072**	37,788	38,487	1,776	39,358	4,166	**121,575**
b.PAST YTD	68,206	270	3,524	3,049	**75,049**	105,819	34,602	13,542	2,913	**156,876**	186,345	107,466	3,169	96,184	3,944	**397,108**
UNIT CHANGE a-b	3,253	6	(616)	1,569	**4,212**	(40,770)	(1,337)	(3,443)	(254)	**(45,804)**	(148,557)	(68,979)	(1,393)	(56,826)	222	**(275,533)**
% CHANGE	4.8%	2.2%	-17.5%	51.5%	**5.6%**	-38.5%	-3.9%	-25.4%	-8.7%	**-29.2%**	-79.7%	-64.2%	-44.0%	-59.1%	5.6%	**-69.4%**
CANCELLATION RATE:																
a.CURRENT YTD	5.5%	6.1%	0.0%	4.2%	**5.2%**	8.1%	2.4%	2.3%	1.6%	**5.8%**	34.6%	15.8%	8.6%	12.6%	4.8%	**21.5%**
b.PAST YTD	4.8%	6.3%	0.0%	0.0%	**4.4%**	8.2%	4.9%	2.6%	1.4%	**6.9%**	12.3%	7.5%	4.3%	5.9%	4.8%	**9.4%**
PP CHANGE	0.7	(0.1)	-	4.2	**0.8**	(0.1)	(2.5)	(0.2)	0.2	**(1.1)**	22.3	8.3	4.3	6.8	(0.0)	**12.1**
RETAIL SALES:																
a.CURRENT 3 MO.	66,568	277	2,455	3,166	**72,466**	90,478	33,297	9,371	2,064	**135,210**	115,363	72,647	1,883	62,477	4,166	**256,536**
b.SAME 1 YR. AGO	62,756	275	3,181	3,360	**69,572**	79,458	33,307	13,408	2,415	**128,588**	101,483	63,716	1,754	55,030	3,945	**225,928**
UNIT CHANGE a-b	3,812	2	(726)	(194)	**2,894**	11,020	(10)	(4,037)	(351)	**6,622**	13,880	8,931	129	7,447	221	**30,608**
% CHANGE	6.1%	0.7%	-22.8%	-5.8%	**4.2%**	13.9%	0.0%	-30.1%	-14.5%	**5.1%**	13.7%	14.0%	7.4%	13.5%	5.6%	**13.5%**

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TRUCK, BUS, and RV INDUSTRY MANAGEMENT STATISTICS*
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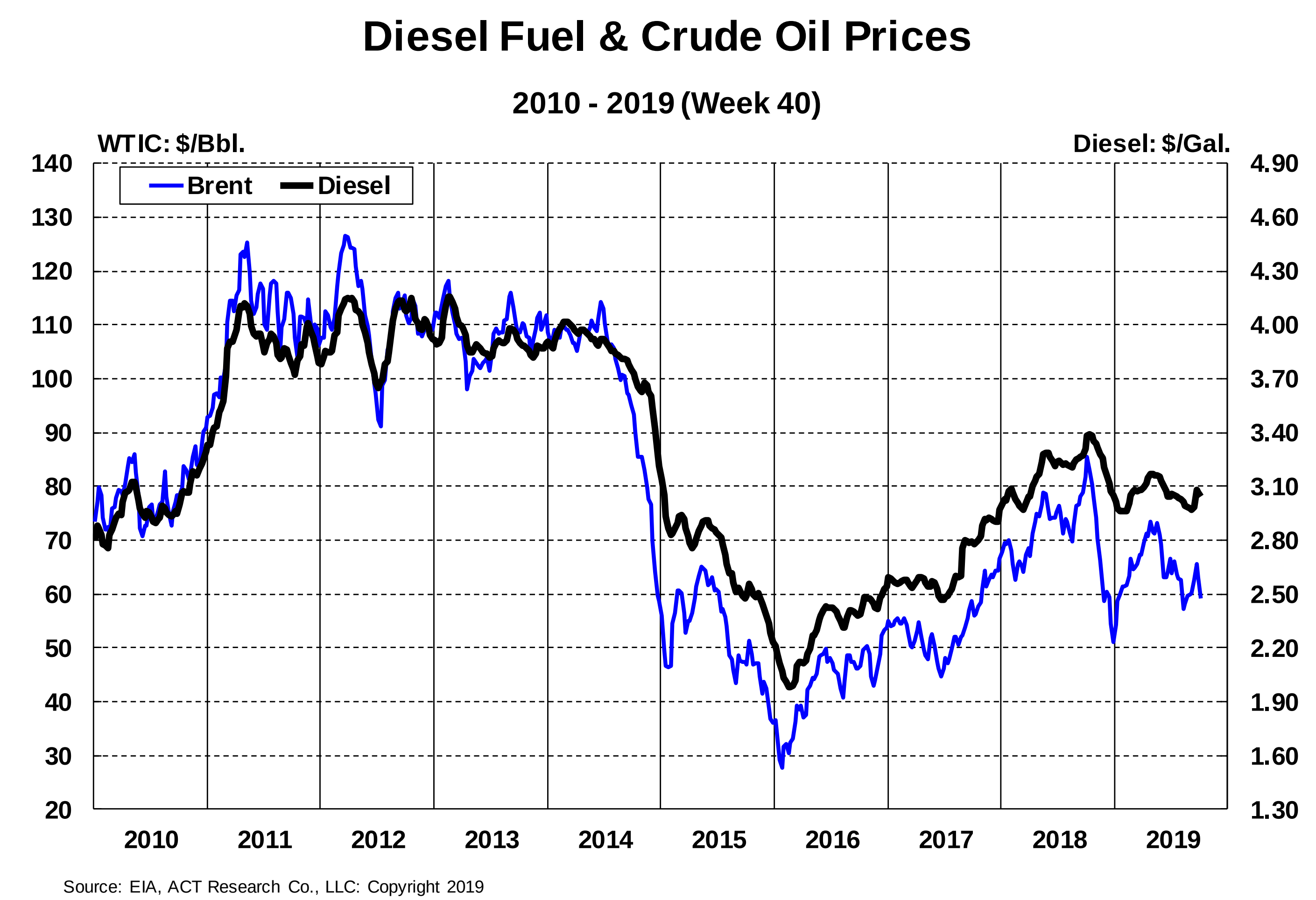
SELECT PERIODS: ANNUALIZED

	Cl. 5 TRUCK	Cl. 5 BUS	Cl. 5 RV	Cl. 5 STEP VAN	Cl. 5 TOTAL	Cl. 6-7 TRUCK	Cl. 6-7 BUS	Cl. 6-7 RV	Cl. 6-7 STEP VAN	Cl. 6-7 TOTAL	Cl. 8 TRACTOR SLEEPER	Cl. 8 TRACTOR DAY CAB	Cl. 8 TRUCK SLEEPER	Cl. 8 TRUCK DAY CAB	Cl. 8 OTHER	Cl. 8 TOTAL
BACKLOG:**																
. CURRENT MO.	15,408	60	457	2,152	**18,077**	31,116	8,373	1,353	1,278	**42,120**	59,509	38,380	1,961	32,577	550	**132,977**
. 3 MO AGO	16,859	64	593	2,883	**20,399**	46,528	9,927	1,635	756	**58,846**	92,974	55,410	2,369	42,486	550	**193,789**
. 6 MO AGO	16,486	60	747	1,763	**19,056**	57,308	10,315	1,390	1,060	**70,073**	127,941	69,948	2,278	54,622	550	**255,339**
. 12 MO AGO	17,858	60	604	985	**19,507**	50,210	8,607	1,701	1,295	**61,813**	146,328	75,824	2,157	64,208	550	**289,067**
BUILD:																
. CURRENT MO.	105,912	360	2,724	9,144	**118,140**	108,744	42,780	10,308	2,136	**163,968**	149,652	92,472	3,504	85,656	4,500	**335,784**
. PAST 3 MO.	111,988	376	3,624	7,384	**123,372**	119,256	42,812	10,184	2,164	**174,416**	165,700	101,896	3,396	85,736	5,036	**361,764**
. PAST 6 MO.	108,090	372	3,580	5,688	**117,730**	125,392	47,082	11,628	2,996	**187,098**	172,208	103,814	3,290	88,182	5,268	**372,762**
. PAST 12 MO.	96,804	366	3,652	4,835	**105,657**	122,994	41,448	13,860	3,623	**181,925**	164,614	100,203	2,993	85,926	5,546	**359,282**
INVENTORY:**																
. CURRENT MO.	25,169	106	829	1,362	**27,466**	34,685	5,393	1,531	1,015	**42,624**	30,987	17,093	1,029	31,718	175	**81,002**
. 3 MO AGO	20,983	107	629	537	**22,256**	34,810	8,188	1,458	965	**45,421**	29,719	16,414	893	32,765	175	**79,966**
. 6 MO AGO	18,623	107	705	674	**20,109**	33,689	6,356	1,608	873	**42,526**	26,028	14,528	858	32,010	175	**73,599**
. 12 MO AGO	17,225	107	591	326	**18,249**	29,196	5,324	1,122	586	**36,228**	24,007	11,992	621	25,965	175	**62,760**
NET ORDERS:																
. CURRENT MO.	97,992	360	2,280	4,836	**105,468**	62,484	42,720	8,976	2,688	**116,868**	54,468	46,044	1,788	45,504	4,500	**152,304**
. PAST 3 MO.	106,652	360	3,080	4,392	**114,484**	57,912	35,468	9,672	4,360	**107,412**	40,304	39,476	1,736	49,884	5,036	**136,436**
. PAST 6 MO.	104,982	372	3,000	6,400	**114,754**	68,672	42,664	12,102	3,652	**127,090**	45,314	41,850	2,536	50,698	5,268	**145,666**
. PAST 12 MO.	93,845	366	3,505	5,961	**103,677**	100,050	40,932	13,747	3,708	**158,437**	82,129	63,103	2,723	61,095	5,546	**214,596**
CANCELLATION RATE:																
. CURRENT MO.	6.6%	6.3%	0.0%	0.0%	**6.2%**	8.3%	4.0%	2.2%	2.6%	**6.2%**	32.1%	8.2%	13.4%	17.9%	4.8%	**20.9%**
. PAST 3 MO.	5.7%	6.3%	0.0%	0.7%	**5.4%**	10.6%	4.3%	2.2%	0.5%	**7.5%**	40.5%	17.1%	15.1%	14.2%	4.8%	**24.5%**
. PAST 6 MO.	5.4%	6.1%	0.0%	0.6%	**5.1%**	10.3%	3.1%	2.3%	0.5%	**7.0%**	37.3%	17.2%	7.0%	12.6%	4.8%	**23.0%**
. PAST 12 MO.	5.8%	6.2%	0.0%	3.3%	**5.5%**	9.0%	2.4%	2.5%	1.2%	**6.6%**	30.2%	16.4%	5.9%	12.7%	4.8%	**21.1%**
RETAIL SALES:																
. CURRENT MO.	87,444	360	2,532	5,388	**95,724**	120,324	52,308	9,516	2,508	**184,656**	174,252	104,424	1,956	107,736	4,500	**392,868**
. PAST 3 MO.	94,988	384	2,824	3,940	**102,136**	118,720	57,180	9,944	1,896	**187,740**	158,480	103,156	2,632	92,400	5,036	**361,704**
. PAST 6 MO.	95,280	374	3,332	4,286	**103,272**	120,992	49,466	11,808	2,646	**184,912**	159,664	101,534	2,596	90,166	5,268	**359,228**
. PAST 12 MO.	89,061	367	3,414	3,796	**96,638**	117,667	41,494	13,449	3,154	**175,764**	157,426	97,635	2,554	82,281	5,546	**345,442**

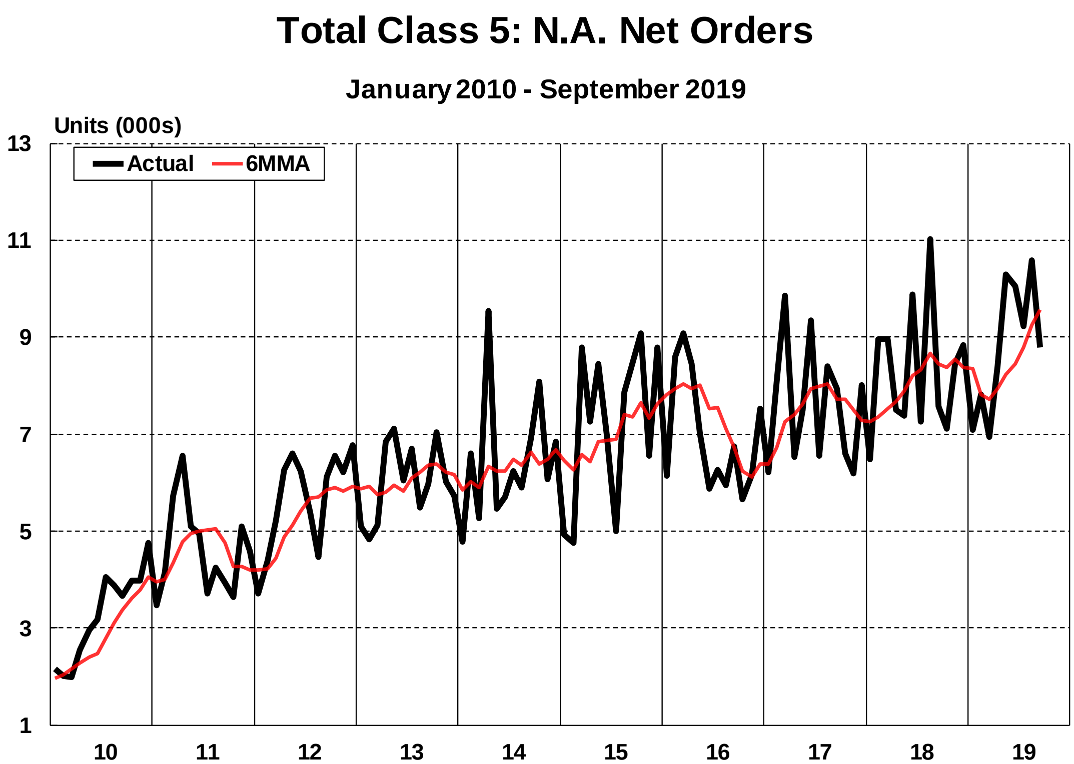
*Actual data not seasonally adjusted.
** Since BACKLOG and INVENTORY are non-additive, 3, 6, and 12 month data points are actuals.

Build Timing of Units in Backlog as of September 2019							
CLASS 8	YTD 2019	Q4'19 Oct-Dec	Q1'20 Jan-Mar	Q2'20 Apr-Jun	Q3'20 Jul-Sep	Beyond	TOTALS
BACKLOG DISTRIBUTION		61,823	29,783	18,097	22,082	1,192	132,977
. Mix by scheduled build date		46.5%	22.4%	13.6%	16.6%	0.9%	
							2019
Actual/OEM BUILD PLAN (pp 20)	275,739	71,948	79,262	--	--	--	347,687
. Open build slots		10,125	49,479	--	--	--	
. % Open		14.1%	62.4%	--	--	--	
Production Days	189	59	59				248
UPD	1,459	1,219	1,343				1,402

Of September's orders, 6,700 were booked into Q4. At the end of September, the Q4 build plan was 86% full versus the 79% historical average. The 38% fill rate for Q1'20 is a bit behind the 41% historical average.

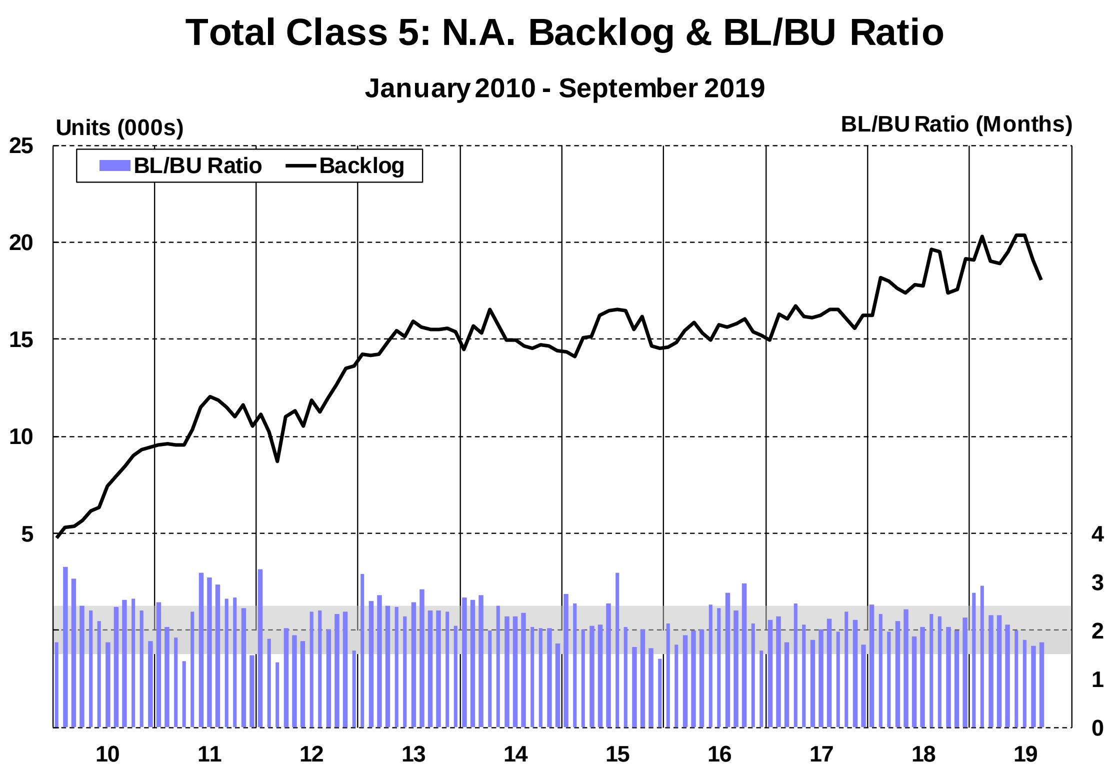


Crude prices fell back to $53 per barrel in week 40. Despite increased Mideast geopolitical risk, slower global demand and increased US production are pressuring prices. Diesel was up 8c m/m, at $3.05/gal.



Source: ACT Research Co., LLC: Copyright 2019

Demand at the light end of MD fell 17% from August, but at 8,789 units, September Class 5 orders rose 16% y/y on an easy comparison. After a slow start, ytd orders are up 5.6% y/y, at 79.3k units.

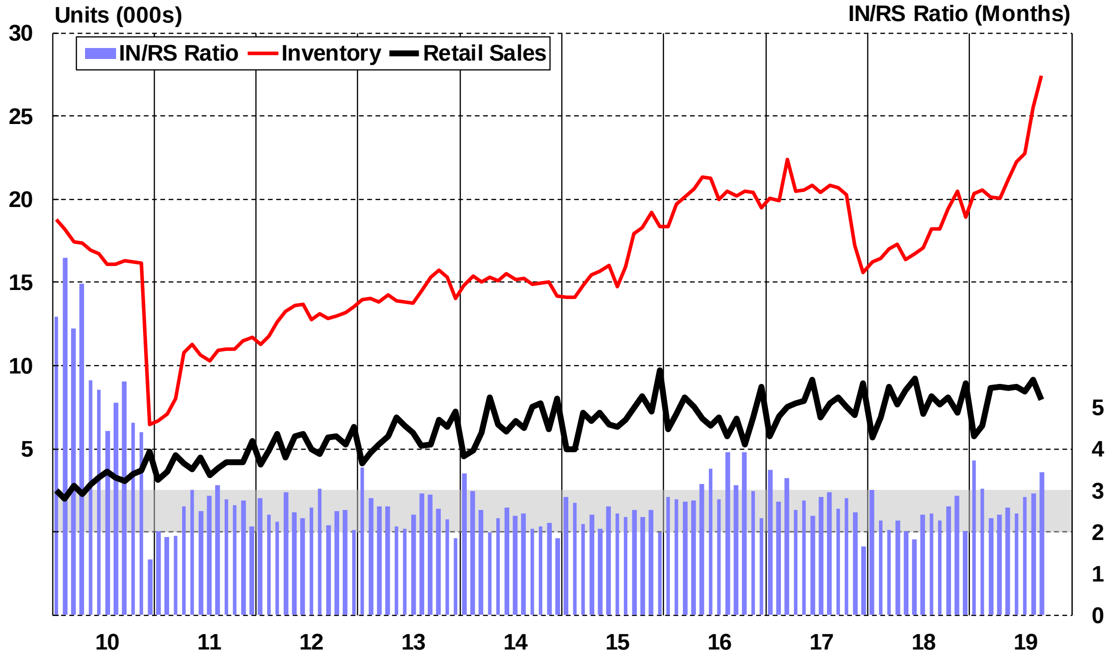


Source: ACT Research Co., LLC: Copyright 2019

The softer orders led to a 1,050-unit drop in the backlog, to 18,100 units, even as build fell m/m. The Class 5 BL/BU ratio remains in dangerous territory at 1.7 months, up 5bps from August.

Total Class 5: N.A. Inventory/Retail Sales Ratio

January 2010 - September 2019

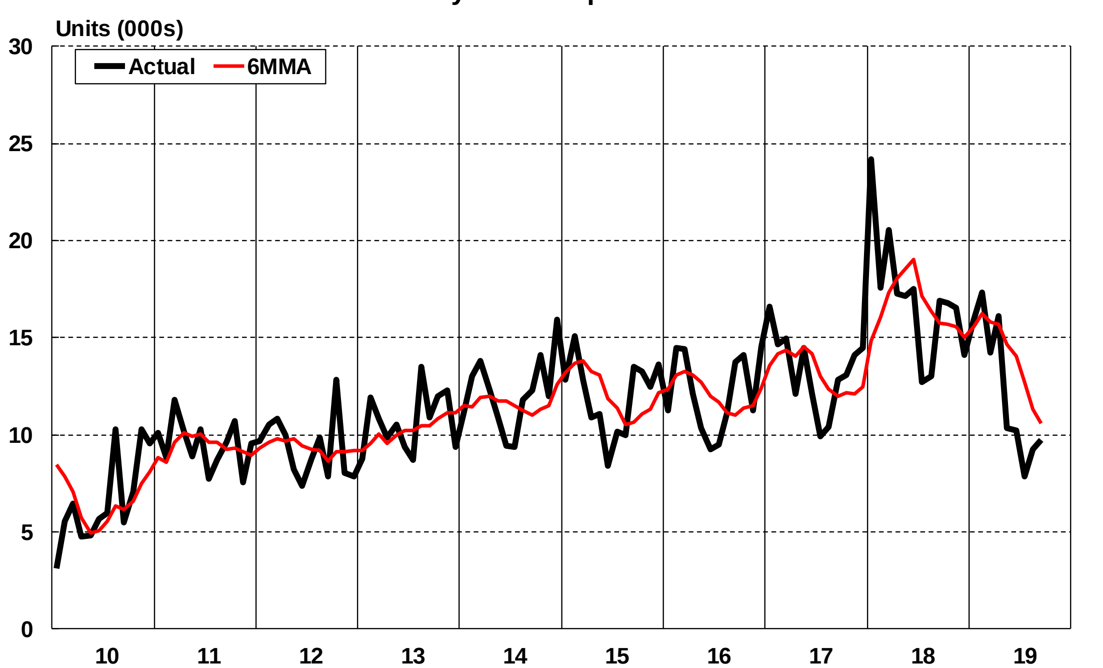


Source: ACT Research Co., LLC: Copyright 2019

Lower retail sales and rising inventories drove another large increase in the IN/RS ratio: September 2019 clocks in at 3.4 months, up from 2.9 months in August and 2.3 months one year ago.

Total Classes 6-7: N.A. Net Orders

January 2010 - September 2019

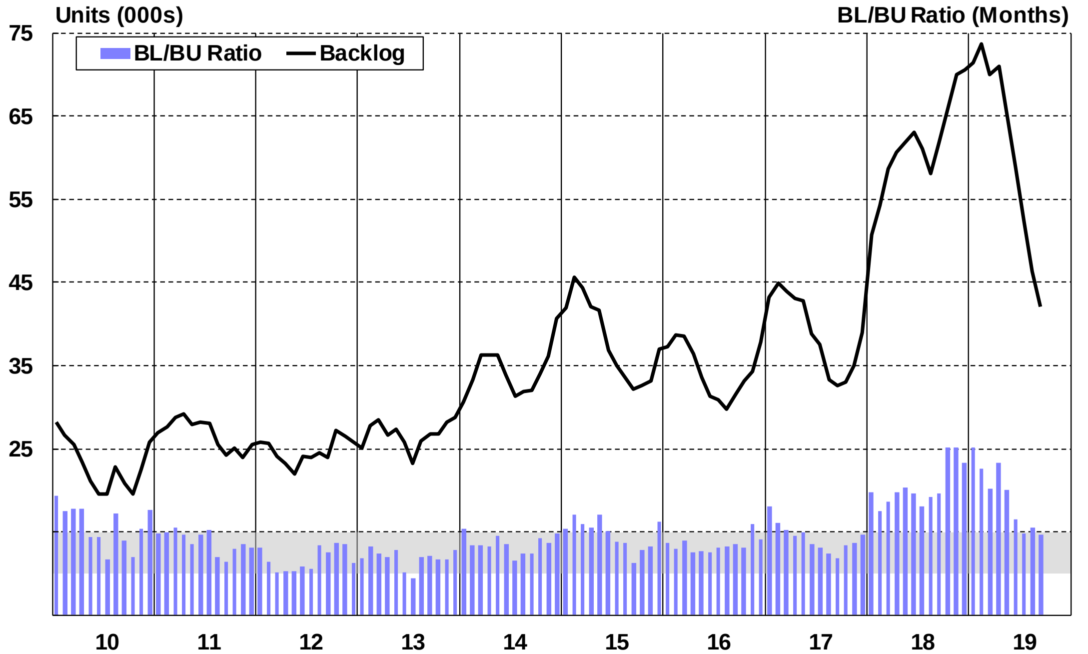


Source: ACT Research Co., LLC: Copyright 2019

Classes 6-7 net orders remain weak: September rose 5.0% m/m, to 9,739 units, but was 42.5% lower than a year ago. The past four months were the weakest since the three months ending Jan'13.

Total Classes 6-7: N.A. Backlog & BL/BU Ratio

January 2010 - September 2019

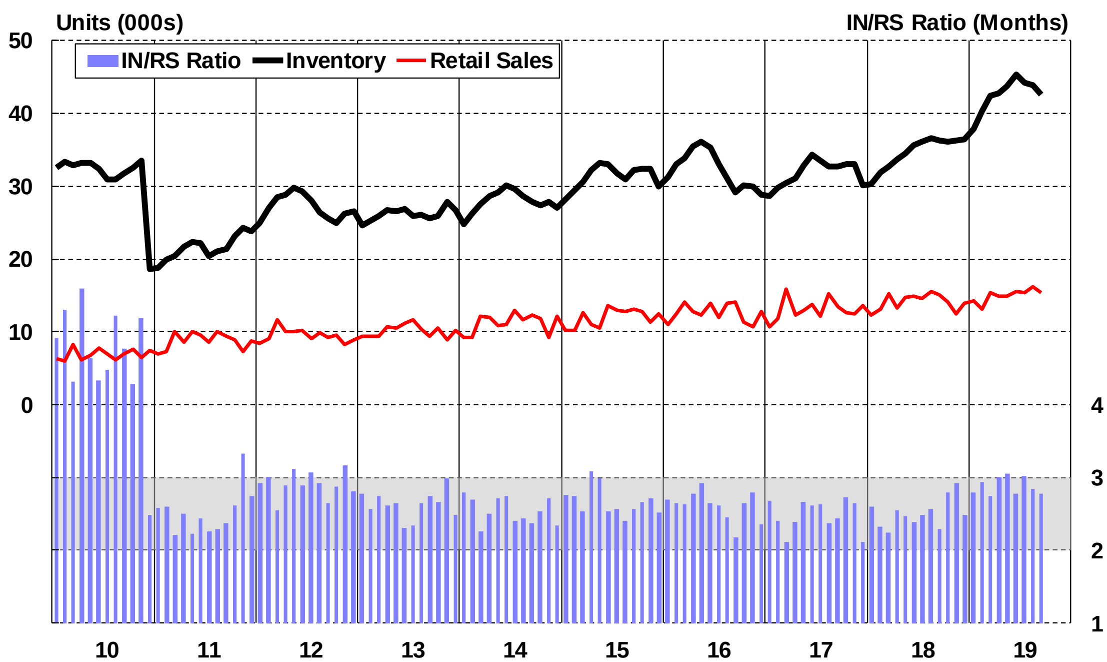


Source: ACT Research Co., LLC: Copyright 2019

Classes 6-7 backlogs fell 4,200 units m/m on weak orders, to 42,100 units, a little slower than the 6.2k/month burn rate since May. Despite lower build, the BL/BU ratio fell 20bps m/m, to 2.9 months.

Total Classes 6-7: N.A. Inventory/Retail Sales Ratio

January 2010 - September 2019



Source: ACT Research Co., LLC: Copyright 2019

Modestly lower inventory and stable per-day sales helped to lower the IN/RS ratio for the second straight month. The ratio declined 8bps m/m, from 2.85 to 2.77 months.

NORTH AMERICAN TRUCK OEMs' CLASSES 5-7 TRUCK AND SCHOOL/URBAN BUS BUILD PLANS: 2019
SIX MONTH FORECASTS AND ACTUAL BUILD BY MONTH & QUARTER
SEPTEMBER 2019

	JAN	FEB	MAR	QI	APR	MAY	JUN	QII	JUL*	AUG*	SEP	QIII	OCT	NOV	DEC	QIV	YEAR
CLASSES 5-7 BUILD:	A	A	A	A	A	A	A	A	A	A	A	A	F	F	F	F	F
TRUCK	17,758	16,974	20,204	54,936	19,161	20,655	21,069	60,885	18,899	22,471	18,828	60,198	19,534	16,732	14,530	50,796	**226,815**
SCHOOL/URBAN BUS	2,821	3,262	3,436	9,519	3,957	4,452	4,521	12,930	3,424	3,778	3,595	10,797	2,258	2,488	2,548	7,294	**40,540**
RECREATIONAL VEHICLE	1,512	1,919	1,903	5,334	1,429	1,489	1,234	4,152	1,134	1,232	1,086	3,452	1,185	955	880	3,020	**15,958**
TOTAL CLASSES 5-7	**22,091**	**22,155**	**25,543**	**69,789**	**24,547**	**26,596**	**26,824**	**77,967**	**23,457**	**27,481**	**23,509**	**74,447**	**22,977**	**20,175**	**17,958**	**61,110**	**283,313**
Days	22	20	21	63	22	22	20	64	17	22	20	59	23	19	17	59	**245**
Units per day	1,004	1,108	1,216	1,108	1,116	1,209	1,341	1,218	1,380	1,249	1,175	1,262	999	1,062	1,056	1,036	**1,156**
PREVIOUS BUILD PLANS:																	
TOTAL CLASS 5-7: MONTHS FROM ACTUAL																	
7 MONTHS	-	-	23,094	68,092	-	-	-	-	-	-	-	-	-	-	18,794	63,658	**272,931**
6	-	21,845	23,680	69,518	24,345	24,407	23,165	72,929	18,980	25,286	23,323	67,845	24,365	20,528	17,848	61,609	**273,750**
5	23,153	22,205	23,388	68,520	24,345	24,913	23,125	72,591	18,847	25,437	22,563	65,754	24,336	19,977	17,998	61,214	**278,107**
4	23,633	21,865	23,388	68,620	24,851	24,733	23,285	72,975	19,085	24,719	22,563	65,676	23,784	20,167	18,022	61,218	**282,337**
3	23,267	21,925	23,871	70,069	24,733	24,885	23,325	73,203	18,472	24,715	22,083	64,385	23,049	20,243	17,958	61,110	**283,313**
2	23,307	22,385	23,741	68,117	24,805	25,009	22,665	71,503	18,398	24,152	22,283	69,137	22,953	20,175	-	-	**-**
1	23,813	22,285	23,797	68,043	24,869	24,291	22,665	73,808	18,150	23,397	22,425	73,363	22,977	-	-	-	**-**
ACTUAL	22,091	22,155	25,543	69,789	24,547	26,596	26,824	77,967	23,457	27,481	23,509	74,447	-	-	-	-	**-**

NOTE: A = actual build; F = forecast build plans. Data is not seasonally adjusted. "Most likely" adjustments are made by the editor.
* Reflects factory shutdowns where applicable

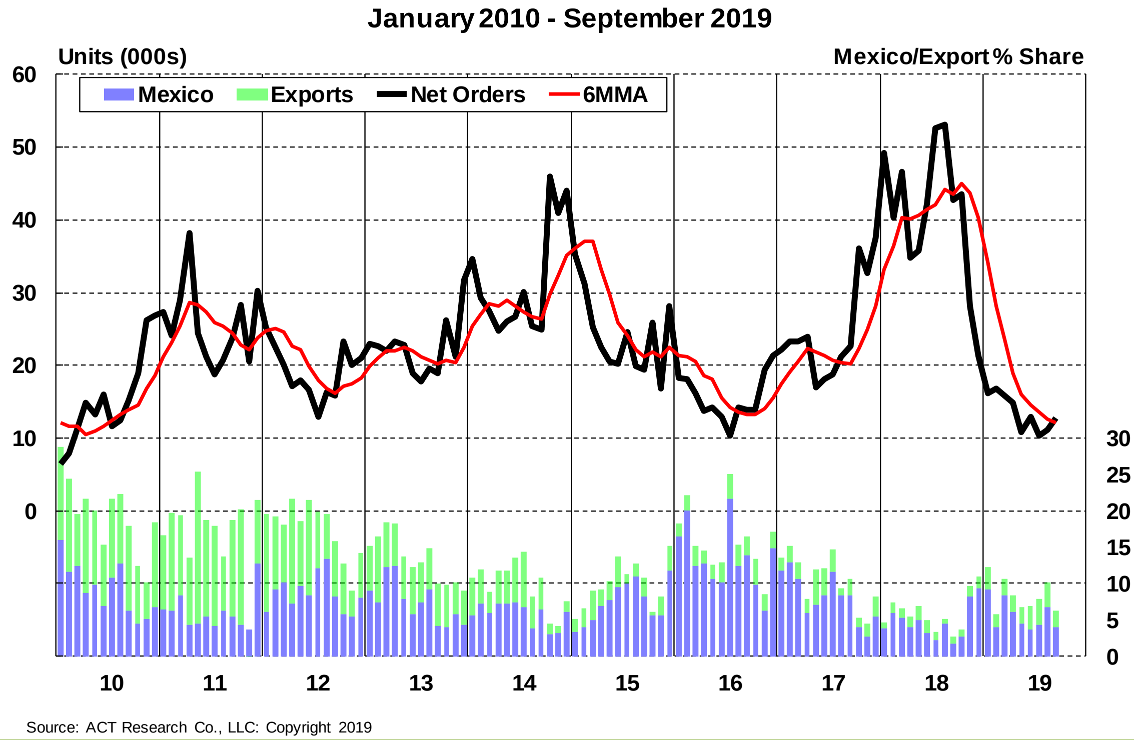
N.A. BUILD	**2017**					**2018**				
	Q1	Q2	Q3	Q4	YEAR	Q1	Q2	Q3	Q4	YEAR
CLASSES 5-7 TRUCKS	47,683	48,246	45,295	43,137	184,361	49,896	54,085	52,123	52,237	208,341
CL. 5-7 SCHOOL/URBAN BUS	10,112	13,005	11,473	8,052	42,642	9,649	12,664	11,746	8,568	42,627
CLASSES 5-7 RV (est.)	5,881	5,517	5,224	5,100	21,722	5,752	5,673	5,754	4,574	21,753
TOTAL CLASSES 5-7	**63,676**	**66,768**	**61,992**	**56,289**	**248,725**	**65,297**	**72,422**	**69,623**	**65,379**	**272,721**
BUILD DAYS	63	63	60	58	244	61	64	60	61	246
BUILD PER DAY	1,011	1,060	1,033	971	1,019	1,070	1,132	1,160	1,072	1,109

NORTH AMERICAN TRUCK OEMs' CLASSES 5-7 TRUCK AND SCHOOL/URBAN BUS BUILD PLANS: 2020
SIX MONTH FORECASTS AND ACTUAL BUILD BY MONTH & QUARTER
SEPTEMBER 2019

	JAN	FEB	MAR	QI	APR	MAY	JUN	QII	JUL	AUG	SEP	QIII	OCT	NOV	DEC	QIV	YEAR
CLASSES 5-7 BUILD:	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F
TRUCK	19,470	17,559	19,203	56,232	-	-	-	-	-	-	-	-	-	-	-	-	**56,232**
SCHOOL/URBAN BUS	2,598	3,088	3,588	9,274	-	-	-	-	-	-	-	-	-	-	-	-	**9,274**
RECREATIONAL VEHICLE	1,130	1,060	1,130	3,320	-	-	-	-	-	-	-	-	-	-	-	-	**3,320**
TOTAL CLASSES 5-7	**23,198**	**21,707**	**23,921**	**68,826**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**68,826**
Days	22	20	22	64	21	20	22	63	17	21	21	59	22	19	18	59	**245**
Units per day	1,054	1,085	1,087	1,075	-	-	-	-	-	-	-	-	-	-	-	-	**281**
PREVIOUS BUILD PLANS:																	
TOTAL CLASSES 5-7: MONTHS FROM ACTUAL																	
7 MONTHS	-	-	24,105	69,154	-	-	-	-	-	-	-	-	-	-	-	-	**-**
6	-	21,777	23,921	68,826	-	-	-	-	-	-	-	-	-	-	-	-	**-**
5	23,272	21,707	-	-	-	-	-	-	-	-	-	-	-	-	-	-	**-**
4	23,198	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	**-**
3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	**-**
2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	**-**
1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	**-**
ACTUAL	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	**-**

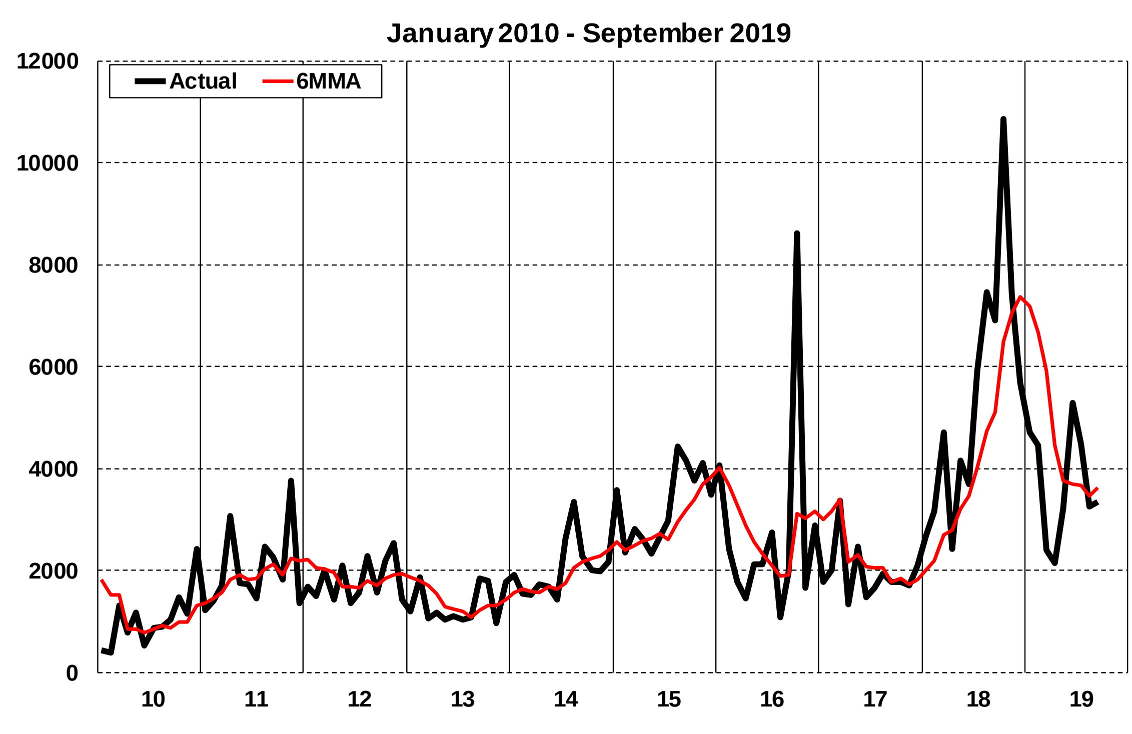
NOTE: A = actual build; F = forecast build plans. Data is not seasonally adjusted. "Most likely" adjustments are made by the editor.

Total Class 8: N.A. Net Orders



Class 8 net orders remained in the middle of the 10k-15k range of the past six months in September, rising to 12,692 units, up 14% m/m but down 70% y/y. The three-month order SAAR is 160k.

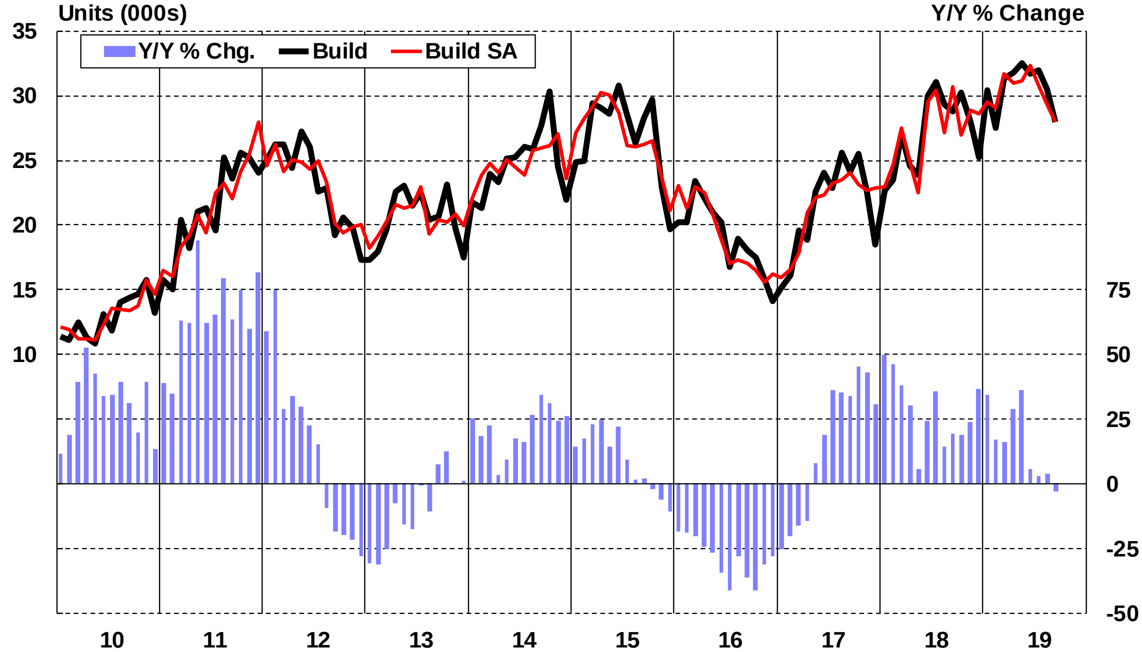
Total Class 8: N.A. Cancellations



Cancellations were stable in September, at 3,351 units. But as a fraction of backlog, cancellations moved up 30bps, to 2.5%, at the high end of the 1.5%-2.5% target range, on a smaller denominator.

Total Class 8: N.A. Build

January 2010 - September 2019

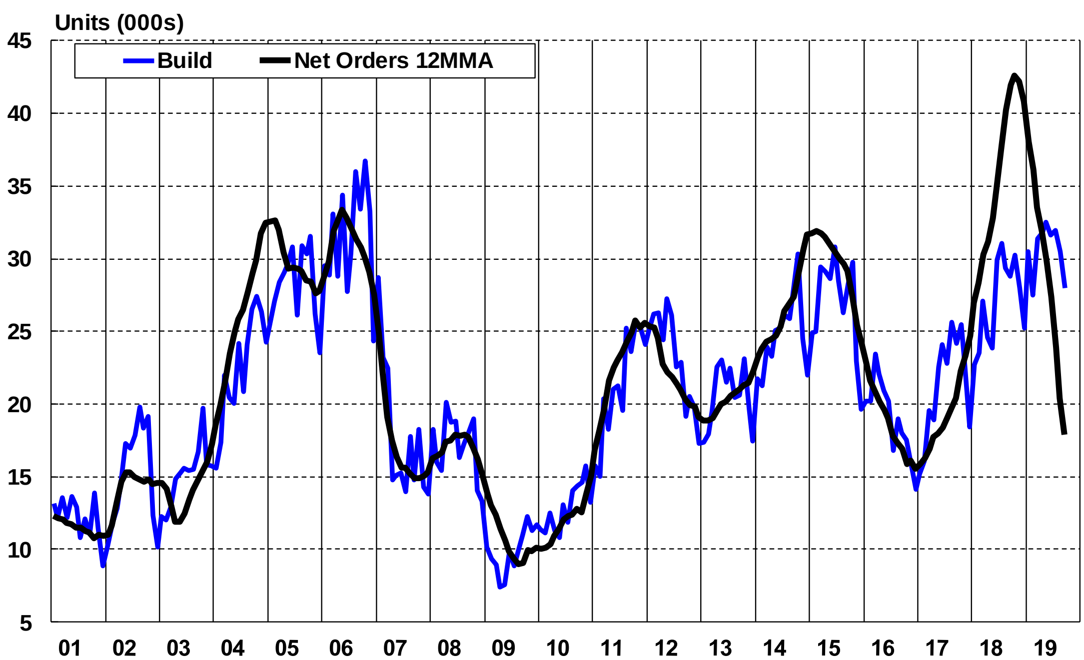


Source: ACT Research Co., LLC: Copyright 2019

Class 8 build inflected to a 3% y/y decline in September, the first drop after a 29-month stretch of growth. September build of 27,982 units translates to a 335k SAAR, below the 365k ytd SAAR.

Total Class 8 N.A.: Net Orders 12 Mo. Avg. & Build

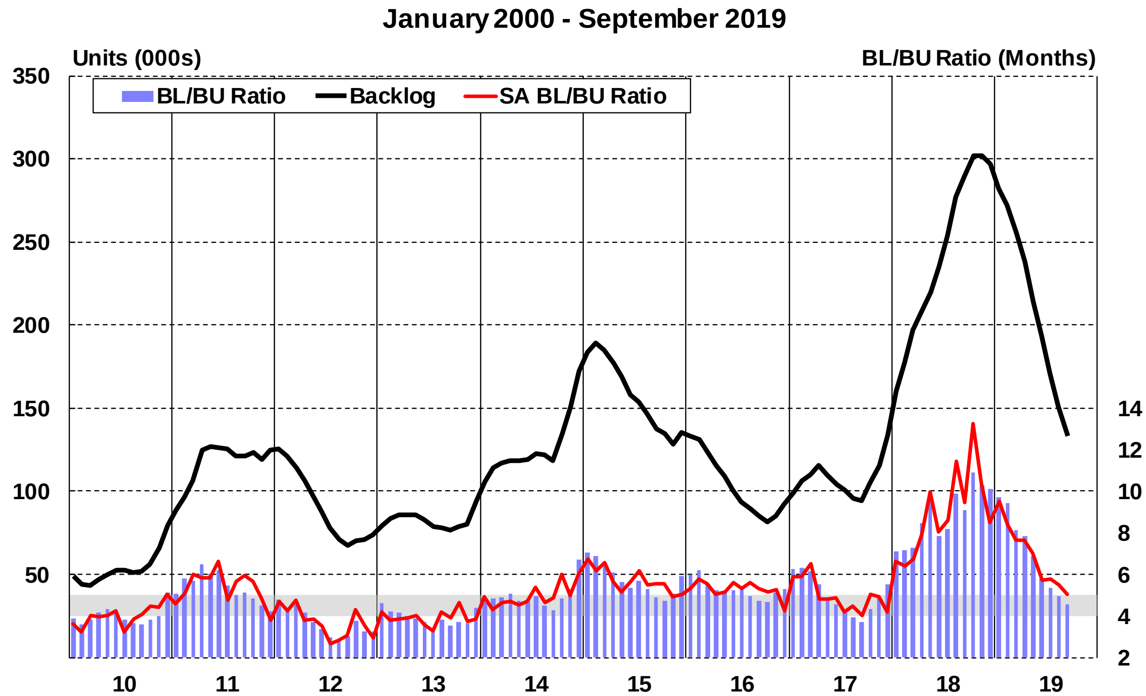
January 2001 - September 2019



Source: ACT Research Co., LLC: Copyright 2019

In a key signal of lower prospective builds, the 12MMA of Class 8 net orders continued to fall. The 12MMA fell to 18k in September and still includes the 31k/month rate in Q4'19.

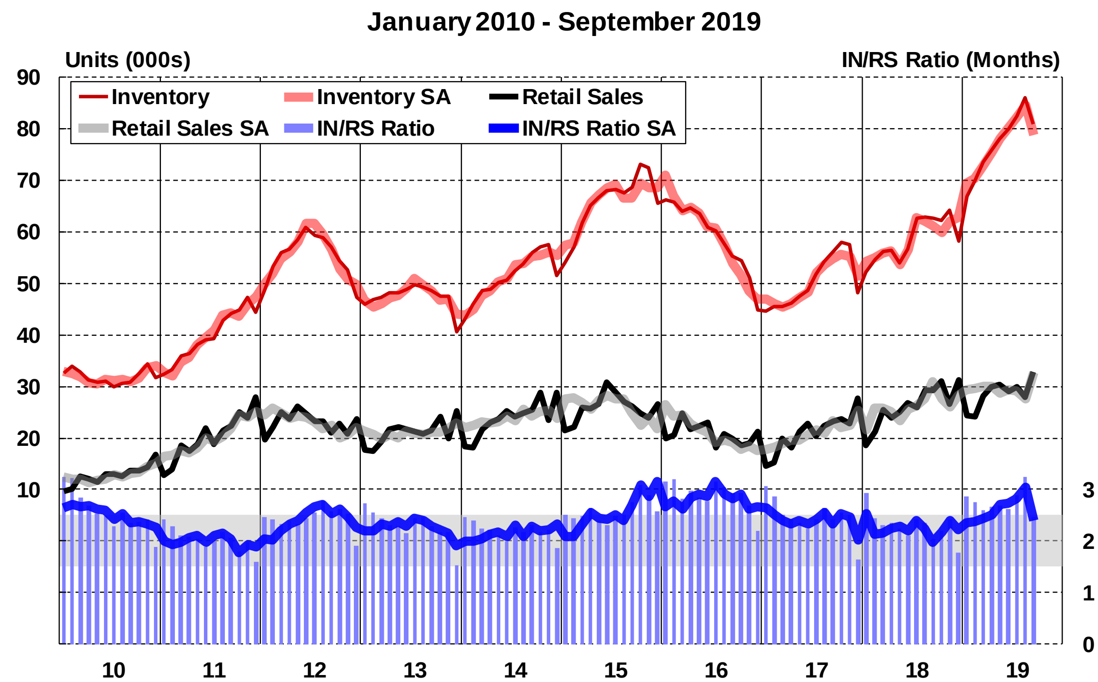
Total Class 8: N.A. Backlog & BL/BU Ratio



Source: ACT Research Co., LLC: Copyright 2019

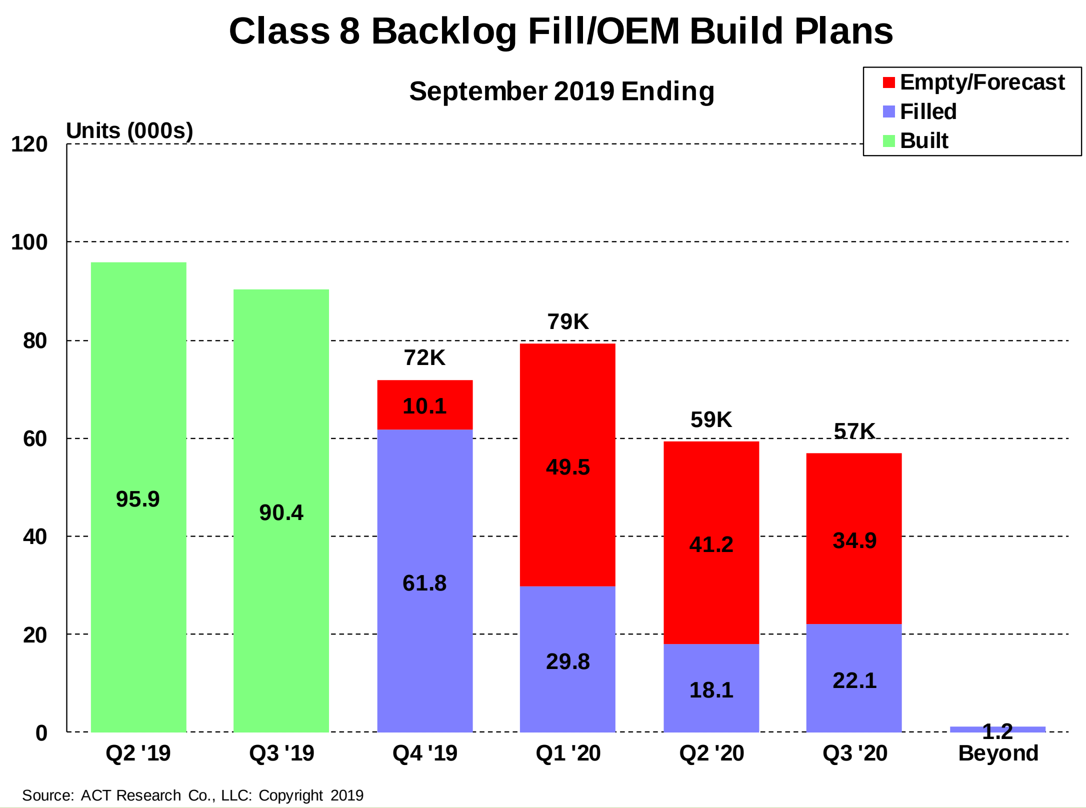
The Class 8 backlog shed 17,800 units last month and 164k units since the beginning of 2019. BL/BU dropped to 4.5 months, but this is partly seasonal. On a SA basis, BL/BU is 5.0 months.

Total Class 8: N.A. Inventory/Retail Sales Ratio

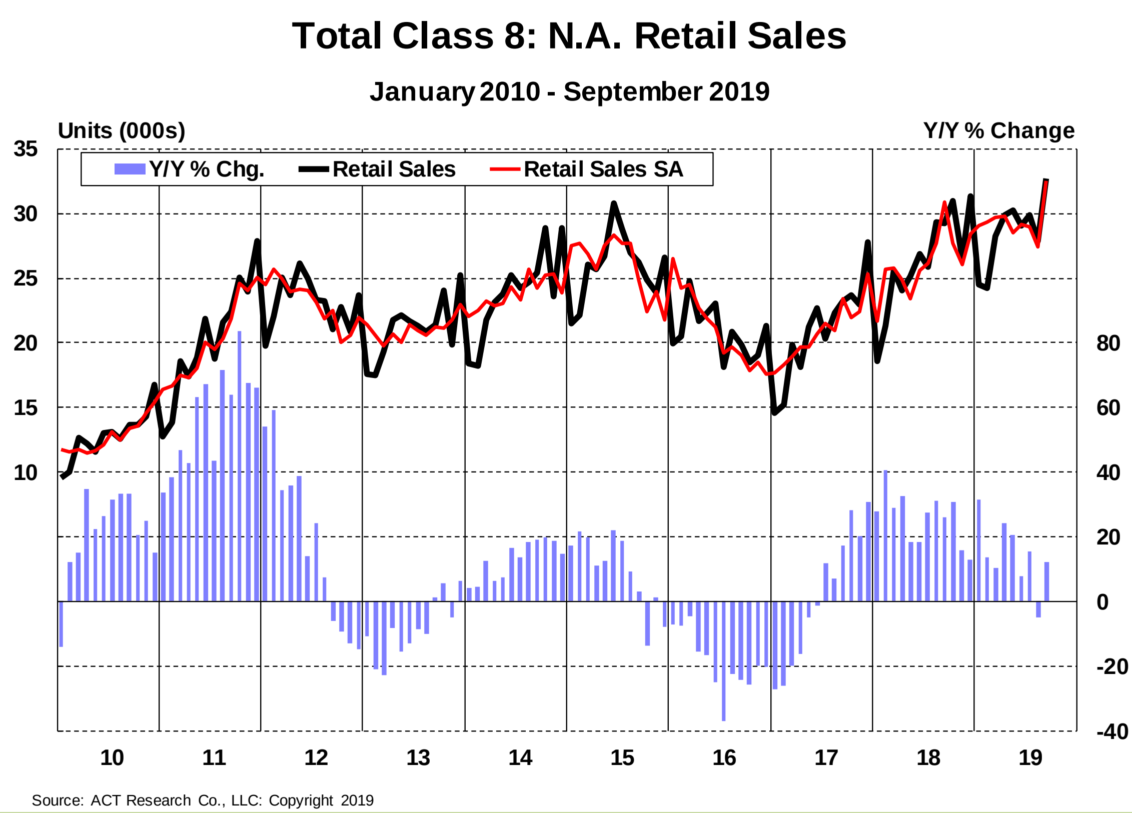


Source: ACT Research Co., LLC: Copyright 2019

Inventories fell 5.0k units m/m, to 81.0k units (78.8k SA, -5.7k m/m), from the August record level and after adding 28k units ytd. With record sales, the IN/RS (SA) ratio fell to 2.4 months, from 3.0 in August.



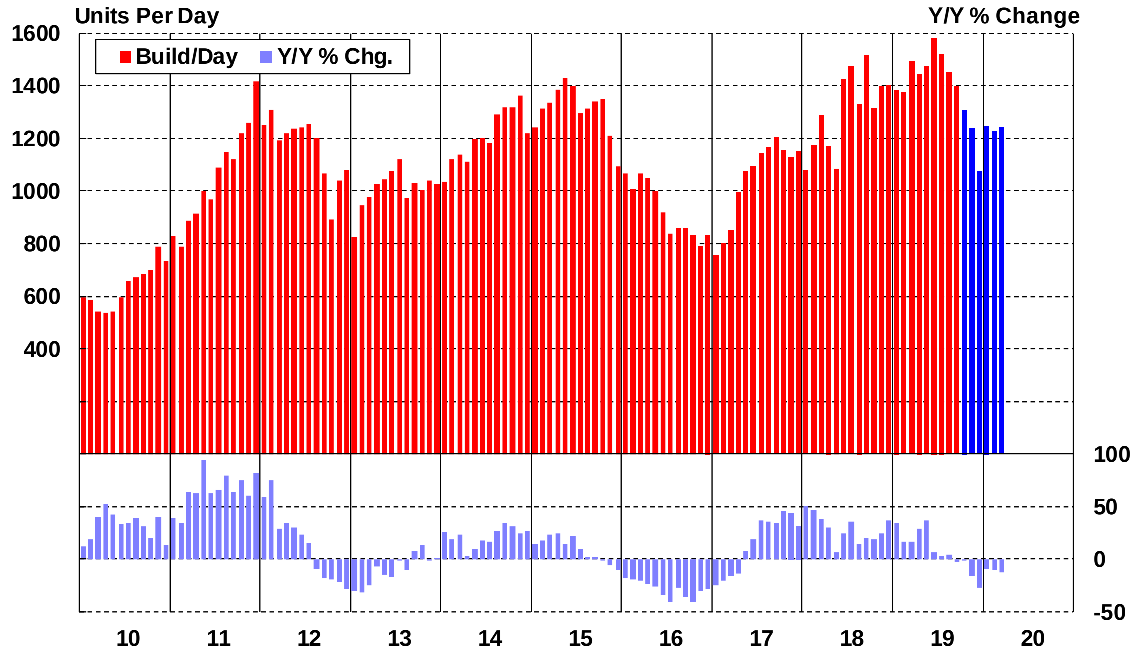
At the end of Q3, the Q4'19 build plan had 10.1k open slots (14%, below the 21% historic average). At 38%, the Q1'20 plan is filling slower than the 41% 10-yr average, perhaps a denominator issue.



September Class 8 retail sales of 32,739 were the 4th highest on record, and on a seasonally adjusted basis; 32.8k *broke the 2006 record* (390k SAAR). September RS rose 12% y/y. Year-to-date, Class 8 RS are tracking at a SAAR of 352k.

Total Class 8: N.A. Build Per Day

January 2010 - March 2020

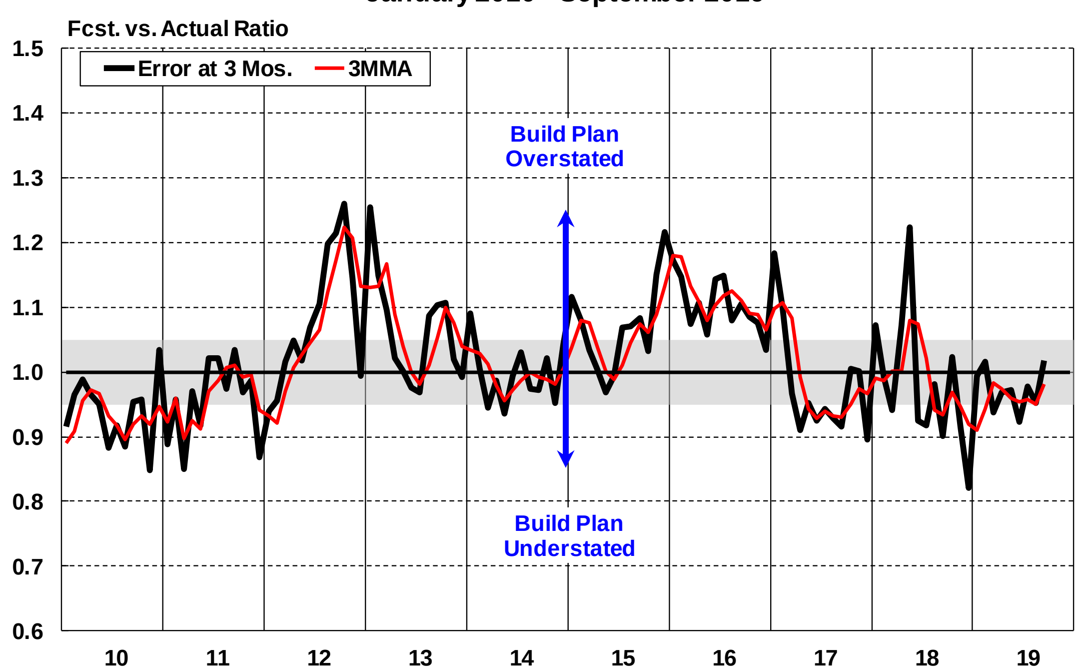


Source: ACT Research Co., LLC: Copyright 2019

Per-day build fell 52 upd m/m, to 1,399 units, versus the past six months' average of 1,480 upd. OEM plans project 1,219 upd in Q4'19 and 1,238 in Q1'20.

Total Class 8: N.A. Build Plan Deviation - 3 Mos. From Actual

January 2010 - September 2019



Source: ACT Research Co., LLC: Copyright 2019

At 27,982 units, September build was 500 units/2% below the plan from three months out. The trend toward overstated plans seems likely to continue.

NORTH AMERICAN TRUCK OEMs' CLASS 8 BUILD PLANS: 2019
SIX MONTH FORECASTS AND ACTUAL BUILD BY MONTH & QUARTER
SEPTEMBER 2019

	JAN	FEB	MAR	QI	APR	MAY	JUN	QII	JUL*	AUG*	SEP	QIII	OCT	NOV	DEC	QIV	YEAR
CLASS 8 BUILD:	A	A	A	A	A	A	A	A	A	A	A	A	F	F	F	F	F
TRACTOR	22,481	19,578	22,884	64,943	23,381	24,166	23,565	71,112	24,293	22,429	20,177	66,899	22,518	17,456	13,720	53,694	**256,648**
STRAIGHT TRUCK	7,981	7,940	8,494	24,415	8,371	8,354	8,103	24,828	7,683	8,054	7,805	23,542	7,646	6,042	4,566	18,254	**91,039**
TOTAL CLASS 8	**30,462**	**27,518**	**31,378**	**89,358**	**31,752**	**32,520**	**31,668**	**95,940**	**31,976**	**30,483**	**27,982**	**90,441**	**30,164**	**23,498**	**18,286**	**71,948**	**347,687**
Days	22	20	21	63	22	22	20	64	21	21	20	62	23	19	17	59	**248**
Units per day	1,385	1,376	1,494	1,418	1,443	1,478	1,583	1,499	1,523	1,452	1,399	1,459	1,311	1,237	1,076	1,219	**1,402**
PREVIOUS BUILD PLANS:																	
TOTAL CLASS 8: MONTHS FROM ACTUAL																	
7 MONTHS	-	-	28,823	85,212	-	-	-	-	-	-	-	-	-	-	24,792	86,262	**358,255**
6	-	27,450	28,191	83,854	29,750	30,879	28,630	89,868	31,397	29,926	28,667	89,895	32,923	27,708	21,393	80,493	**354,163**
5	28,939	26,848	28,722	86,461	30,029	31,055	29,407	91,851	30,815	29,839	28,522	89,481	33,762	25,774	20,863	79,670	**353,394**
4	28,815	27,474	29,245	88,027	30,183	31,671	29,939	92,802	31,389	29,717	28,522	89,071	33,326	26,135	19,002	74,368	**350,509**
3	30,265	27,972	29,396	88,472	30,773	31,644	29,202	92,265	31,242	28,999	28,487	88,372	32,672	24,435	18,286	71,948	**347,687**
2	30,810	28,112	30,490	89,495	31,219	31,675	29,242	92,711	31,550	28,907	28,482	88,426	30,931	23,498	-	-	**-**
1	30,964	28,543	30,448	88,428	31,388	31,717	29,292	93,564	30,978	27,968	28,384	90,843	30,164	-	-	-	**-**
ACTUAL	30,462	27,518	31,378	89,358	31,752	32,520	31,668	95,940	31,976	30,483	27,982	90,441	-	-	-	-	**-**

NOTE: A = actual build; F = forecast build plans. Data is not seasonally adjusted. The North American Class 8 build plans are a compilation of actual and estimated build plans from vehicle manufacturers. "Most likely" adjustments are made by the editor.
* Reflects factory shutdowns where applicable

N.A. BUILD	**2017**					**2018**				
	Q1	Q2	Q3	Q4	YEAR	Q1	Q2	Q3	Q4	YEAR
CLASS 8 TRACTOR	33,517	44,226	52,385	46,456	176,584	51,442	57,135	66,964	61,863	237,404
CLASS 8 STRAIGHT TRUCK	17,315	21,337	20,250	20,104	79,006	21,838	21,304	22,225	21,680	87,047
TOTAL CLASS 8	**50,832**	**65,563**	**72,635**	**66,560**	**255,590**	**73,280**	**78,439**	**89,189**	**83,543**	**324,451**
BUILD DAYS	63	62	62	58	245	62	64	62	61	249
BUILD PER DAY	807	1,057	1,172	1,148	1,043	1,182	1,226	1,439	1,370	1,303

NORTH AMERICAN TRUCK OEMs' CLASS 8 BUILD PLANS: 2020
SIX MONTH FORECASTS AND ACTUAL BUILD BY MONTH & QUARTER
SEPTEMBER 2019

CLASS 8 BUILD:	JAN F	FEB F	MAR F	QI F	APR F	MAY F	JUN F	QII F	JUL F	AUG F	SEP F	QIII F	OCT F	NOV F	DEC F	QIV F	YEAR F
TRACTOR	20,406	18,151	19,734	58,291	-	-	-	-	-	-	-	-	-	-	-	-	**58,291**
STRAIGHT TRUCK	7,013	6,390	7,568	20,971	-	-	-	-	-	-	-	-	-	-	-	-	**20,971**
TOTAL CLASS 8	**27,419**	**24,541**	**27,302**	**79,262**	-	-	-	-	-	-	-	-	-	-	-	-	**79,262**
Days	22	20	22	64	21	20	22	63	21	20	21	62	22	19	18	59	**248**
Units per day	1,246	1,227	1,241	1,238	-	-	-	-	-	-	-	-	-	-	-	-	**320**
PREVIOUS BUILD PLANS:																	
TOTAL CLASS 8: MONTHS FROM ACTUAL																	
7 MONTHS	-	-	29,241	83,389	-	-	-	-	-	-	-	-	-	-	-	-	-
6	-	25,788	27,302	79,262	-	-	-	-	-	-	-	-	-	-	-	-	-
5	28,360	24,541	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
4	27,419	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ACTUAL	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

NOTE: A = actual build; F = forecast build plans. Data is not seasonally adjusted. The North American Class 8 build plans are a compilation of actual and estimated build plans from vehicle manufacturers. "Most likely" adjustments are made by the editor.

NORTH AMERICA CLASSES 5-8 VEHICLES

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Contributor to Blue Chip Economic Indicators and WSJ Economic Forecast Panel

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