# **Investor Relations Presentation Fourth Quarter 2018 (Published March 13, 2019)**





### **Safe Harbor Statement**

The following information contains, or may be deemed to contain, "forward-looking statements" (as defined in the U.S. Private Securities Litigation Reform Act of 1995). The words "believe," "expect," "anticipate," "intend," "estimate" and other expressions that are predictions of or indicate future events and trends and that do not relate to historical matters identify forward-looking statements. You should not place undue reliance on these forward-looking statements. Although forward-looking statements reflect management's good faith beliefs, reliance should not be placed on forward-looking statements because they involve known and unknown risks, uncertainties and other factors, which may cause actual results, performance or achievements to differ materially from anticipated future results, performance or achievements expressed or implied by such forward-looking statements. Forward-looking statements speak only as of the date the statements are made. We undertake no obligation to publicly update or revise any forward-looking statement, whether as a result of new information, future events, changed circumstances or otherwise. These forward-looking statements are subject to numerous risks and uncertainties, including, but not limited to: our participation in markets that are competitive; the highly cyclical industries in which certain of our end users operate; uncertainty in the global regulatory and business environments in which we operate; our ability to prepare for, respond to and successfully achieve our objectives relating to technological and market developments, competitive threats and changing customer needs; the concentration of our net sales in our top five customers and the loss of any one of these; the failure of markets outside North America to increase adoption of fullyautomatic transmissions; U.S. and foreign defense spending; general economic and industry conditions; increases in cost, disruption of supply or shortage of raw materials or components used in our products; the discovery of defects in our products, resulting in delays in new model launches, recall campaigns and/or increased warranty costs and reduction in future sales or damage to our brand and reputation; risks associated with our international operations, including increased trade protectionism; labor strikes, work stoppages or similar labor disputes, which could significantly disrupt our operations or those of our principal customers; risks related to our substantial indebtedness; and our intention to pay dividends and repurchase shares of our common stock.

Allison Transmission cannot assure you that the assumptions made in preparing any of the forward-looking statements will prove accurate or that any long-term financial goals will be realized. All forward-looking statements included in this presentation speak only as of the date made, and Allison Transmission undertakes no obligation to update or revise publicly any such forward-looking statements, whether as a result of new information, future events, or otherwise. In particular, Allison Transmission cautions you not to place undue weight on certain forward-looking statements pertaining to potential growth opportunities, long-term financial goals or the value we currently ascribe to certain tax attributes set forth herein. Actual results may vary significantly from these statements.

Allison Transmission's business is subject to numerous risks and uncertainties, which may cause future results of operations to vary significantly from those presented herein. Important factors that could cause actual results to differ materially are discussed in Allison Transmission's Annual Report on Form 10-K for the year ended December 31, 2018.



# **Business Overview**





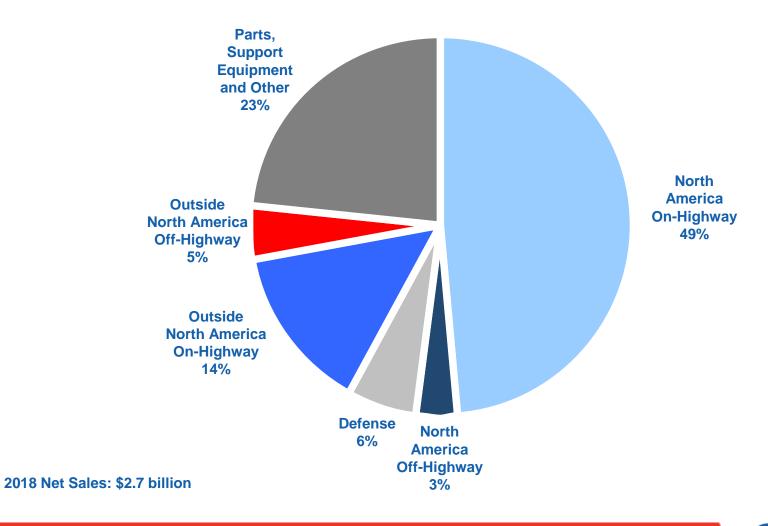
### **Allison Transmission at a Glance**

- World's largest manufacturer of fully-automatic transmissions for medium- and heavy-duty commercial vehicles
  - 60% global market share of fully-automatic transmissions
  - Virtually no exposure to cyclical Class 8 line-haul tractor market
- Allison is the premier fully-automatic transmission brand
  - Premium price component frequently specified by end users
  - Differentiated technology offering superior performance and lower total cost of ownership
- Well positioned for revenue and earnings growth
  - Further adoption outside North America
  - Expanding addressable market
  - Funded growth opportunities in asset light business model
- Strong cash flow generation and well-defined capital allocation policy



### **Allison Transmission at a Glance**

### **2018 Net Sales by End Market**

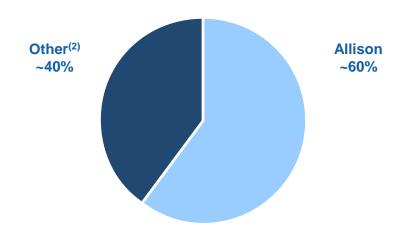




### **Global Market Leader**

- The "de facto" standard in medium- and heavy-duty applications
  - Well established as standard in North America
- Increasing presence in emerging markets which today are predominantly manual
- Virtually no exposure to cyclical Class 8 line-haul tractor market

### Global On-Highway Fully-Automatic Share<sup>(1)</sup>



- (1) 2018 Units. Source: Allison and ACT Research.
- (2) Majority of "Other" volume is in North American Class 4-5 truck and European bus.



### North America On-Highway End Market

		Underserved		Core Addres		Underserved	Class 8	
	Class 1-3	ass 1-3 Class 4-5		School Bus	Class 6-7	Class 6-7 Class 8 Straight		Tractor (Linehaul)
Vehicles	7							
Weight (000s of lbs)	< 14 lbs	14 – 19 lbs	16 – 33 lbs	16 – 33 lbs	19 – 33 lbs	33 lbs+	33 lbs+	33 lbs+
2018 Industry Units Produced	11,850,372	107,274	21,673	36,875	112,551	86,914	74,536	162,840
2018 Allison Share	0%	7%	39%	88%	74%	70%	5%	0%

- ~30-40% of Allison's North America On-Highway market volume is driven by municipal spending, reducing end-market volatility
- Near-term opportunity to further penetrate Class 4/5 with recent medium-duty commercial truck launches by Chevrolet and Navistar, exclusively with the Allison fully-automatic transmission
- Enhanced value proposition for Class 8 Metro<sup>2</sup> and Tractor markets with proprietary FuelSense<sup>®</sup> 2.0 software, and fully-automatic 3000 Series<sup>™</sup> and 4000 Series<sup>™</sup> transmissions

Note: Analysis excludes Allison's Transit/Coach Bus and Electric Hybrid Transit Bus volume.

Source: Class 1-3 from WardsAuto North America Production – December 2018; Core Addressable Market and Class 8 Tractor from Allison and ACT Research.



General Motors previously exited the medium-duty market in 2009.

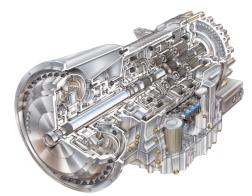
<sup>&</sup>quot;Metro" is a term for tractors that are used in urban environments, currently representing ~30% of the Class 8 tractor market.

# **Strategic Priorities**

- Expand global market leadership
  - Capitalize on improved developed markets demand
  - New vocational offerings
- Emerging markets penetration
  - Vocational ladder strategy
  - Increase number of vehicle releases

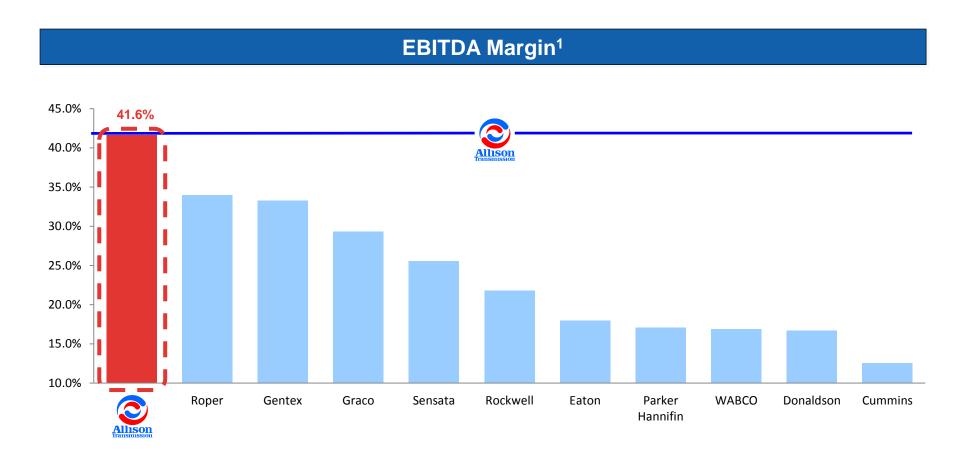


- Address markets adjacent to core
- Leverage core technologies for new products with minimal investment
- Advanced fuel efficient and emissions reduction technologies
- Alternative fuels and electrification initiatives
- Deliver strong financial results
  - Exploit capacity availability and asset light business model
  - Focus on margin sustainment
  - Earnings growth and cash flow generation
  - Well-defined capital allocation policy





# **Exceptional EBITDA Margin**





<sup>1.</sup> Fiscal year 2018 peer EBITDA provided by FactSet. EBITDA included above may not be consistent with such entity's reported EBITDA or Adjusted EBITDA, if available. EBITDA Margin: EBITDA or Adjusted EBITDA divided by net sales.

<sup>\*</sup>See appendix for comments regarding the presentation of non-GAAP financial information.

# **Premier Industrial Company**





- Technology Leadership The Allison Advantage
- **Oiverse End Markets**
- Multiple Organic Growth Opportunities
- Strong Cash Flow Generation with Well-Defined Capital Allocation Policy



# A Recognized Leader and Respected Brand

- Over 100 year history of providing high-quality innovative products and demonstrated value to end users
- The Allison brand is associated with:
  - High Quality
  - Reliability
  - Durability
  - Vocational Value and Expertise
  - Technological Leadership
  - Superior Customer Service
  - Attractive Total Lifecycle Value

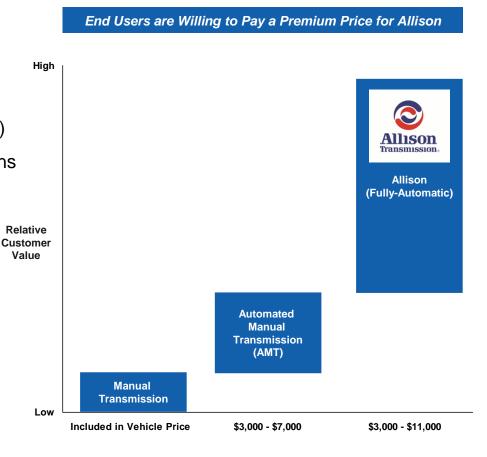


End Users Frequently Request Allison Transmissions by Name and Pay a Premium for Them



### **End User Value Proposition**

- Advantages of a fully-automatic
   Allison Transmission
  - Productivity (acceleration)
  - Maintenance Savings (life cycle costs)
  - Fuel Efficiency and Reduced Emissions
  - Driver Skillset / Wages
  - Training (time, cost)
  - Shift Quality
  - Safety
  - Residual Value



Payback period for a premium Allison Transmission averages less than 3 years



# Technology Leadership – The Allison Advantage

- Allison employs proprietary and patented technology developed over many decades and nearly seven million units
- Technology is matched to the selected engine and optimized for the intended vocation
- Software algorithms are individually tailored to maximize performance in thousands of duty cycles
- Customers benefit from superior performance and lower life cycle costs

**Technology Differentiators** Superior **Proprietary and patented Technology** technology developed over many decades and over 7 million units **Allison Advantage** Customer/ **Lower Vehicle Life Cycle Costs Benefits** Generating **Pull-Through Superior Performance Demand Properly Matched to Selected Engine Engine & Vocation Optimized for Intended Vocation Optimized** 



### **Very Diverse End Markets**

**On-Highway** 



**Emergency** 

**Motorhome** 

**Rugged Duty** 

School/Shuttle Bus

**Transit** 







THOR















SERVICES













**VEOLIA** 

ENVIRONMENTAL













Truck Leasing









Defense

**Aftermarket** 

Global

Medium- and Heavy-**Tactical** 













Parts, **Support Equipment &** Other







### Over 50 Year Relationship with Industry-Leading OEMs

**On-Highway** North America































**Off-Highway** 

### HITACHI PACCAR Schlumberger





**Outside North America** 

**On-Highway** 































**Off-Highway** 





















Defense

Medium- and Heavy-**Tactical** 









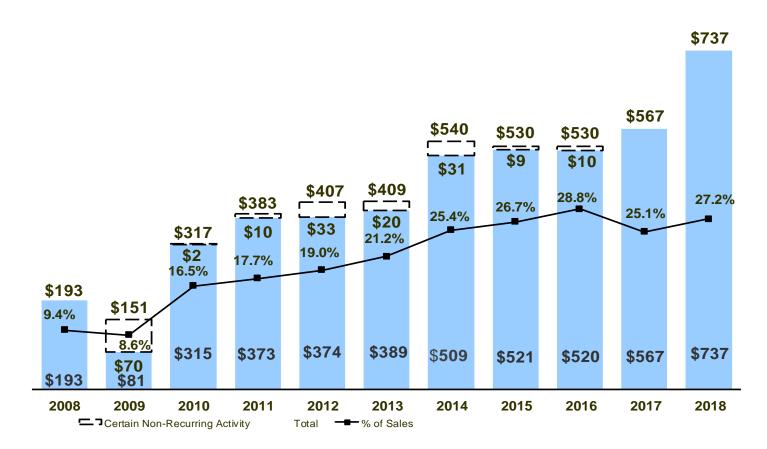




# **Significant Cash Flow Generation**

#### Adj. Free Cash Flow Generation(1)

(\$ in millions)



Note: See appendix for comments regarding the presentation of non-GAAP financial information.

(1) See appendix for a reconciliation of Adjusted Free Cash Flow.

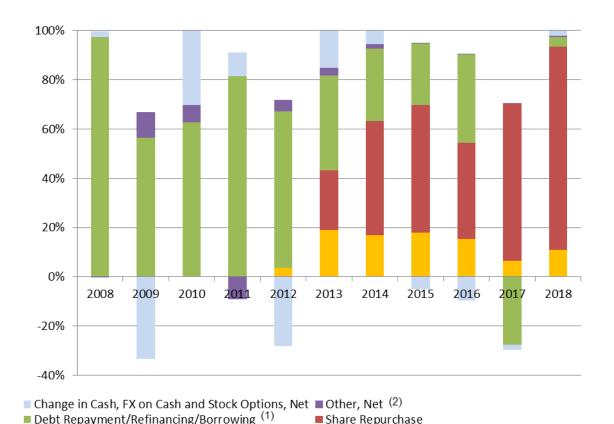


### **Capital Allocation Priorities**

- Organic revenue and earnings growth
- New product and technology development
- Prudent balance sheet management
- Return capital to shareholders
- Low-cost, flexible and pre-payable debt structure with long dated maturities



### Free Cash Flow Utilization



# Well-Defined Capital Allocation Policy

- Realize returns from completed investments in global commercial capabilities, and new product and technology development
- Prudent balance sheet management
- Return capital to shareholders
  - Quarterly dividend
  - \$2.5 billion share repurchase authorization
- Low-cost, flexible and pre-payable debt structure with long dated maturities

Note: See appendix for comments regarding the presentation of non-GAAP financial  $\,$  information.

(1) Net of change in Cash & Cash Equivalents

Dividends

(2) 2009 adjusted for certain non-recurring activity: (a) capitalized accrued interest on Senior Toggle Notes (\$29) million, (b) cash restructuring charge \$51 million, (c) accounts payable early payments \$3 million, (d) delayed accounts receivable receipts \$19 million and (e) Lehman LIBOR swap settlement \$17 million. All periods adjusted for collateral for interest rate derivatives, purchase of available-for-sale securities, proceeds from disposal of assets, investments in technology-related initiatives and license expenses, and fee to terminate services agreement with Sponsors.



# **Multiple Organic Growth Opportunities**





Accelerate Adoption in Emerging Markets

Global Off-Highway Growth Opportunities

Leading Technology and Innovation

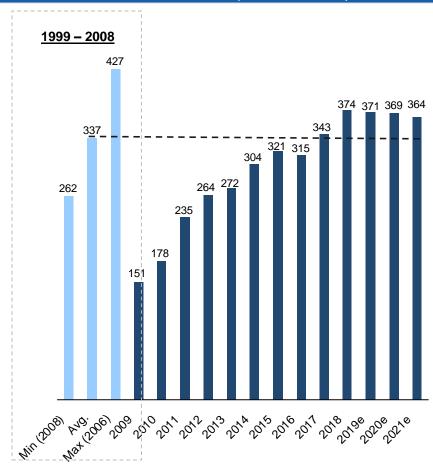
Diverse Propulsion Solutions



### **Developed Markets Opportunities**

- Production has rebounded from cyclical lows with moderate growth fueled by pickup in economic activity
  - Housing recovery, increased construction and energy activities driving greater demand for medium and heavy duty trucks
  - Lack of near term significant EPA emission changes reduces cyclicality
- Allison's growth is also supported by
  - Pent up demand from deferred purchases
  - Continued demand for fuel efficient vehicles
- Near-term opportunity to further penetrate underserved markets
  - GM re-entering Class 4-6 market, exclusively with Allison transmission in late 2018

#### North America Production in Allison's Core Addressable Market (units in 000s)<sup>(1)</sup>



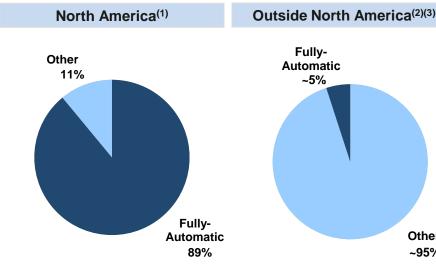
Source: ACT Research, February 2019. Includes: Class 4 thru 8 less Class 8 Tractor & Class 8 Straight with Sleeper. 2018: Total 613,623 less Class 8 Tractor of 237,376 less Class 8 Straight with Sleeper of 2,379.



### Increase Penetration of Fully-Automatic Transmissions

- Ongoing need for productivity improvements
  - Better acceleration and shorter travel time result in increased miles and revenue
  - Improved fuel efficiency and increased vehicle uptime
- Focus on reducing life cycle costs
  - Lower maintenance and fuel expense
  - Increased vehicle residual value
- Micro and demographic trends
  - Ease of operation increases pool of qualified drivers
  - Less driver training, lower turnover and improved safety
- Underserved North America market segments

#### **Penetration of Fully-Automatic Transmissions On-Highway**



#### Source: Allison.



Other

~95%

<sup>(1)</sup> Includes Class 4-7 trucks, Class 8 straight trucks, buses (school, conventional transit, shuttle and coach) and motorhomes.

<sup>(2)</sup> Includes medium- and heavy-duty commercial vehicles.

<sup>(3) 2018</sup> Outside-North America On-Highway Transmission Net Sales by Region: EMEA \$195M, Asia Pacific \$170M and South America \$18M.

### **Accelerate Adoption in Emerging Markets – China**

- Allison is the #1 supplier of fully-automatic transmissions in China as a result of targeting specific vocations
  - Substantial installed base of approximately 75,000 transmissions in China
- Several million commercial vehicles produced annually of which approximately 250,000 are addressable by Allison
  - Allison's existing bus presence serves as entry point for incremental penetration into a market in which Fully-Automatic penetration is less than 5%
- Significant growth opportunities by targeting a wide range of vocational truck applications
  - Government emphasis on equipment modernization for mining, rescue operations, school buses and other applications
  - Construction and energy sectors
- OEM release activities supported by focused end user initiatives resulting in fleets requesting Allison by name

#### Allison's China Truck Vocational Focus







**Terminal Tractor** 

**Airport Services** 

Fire and Emergency









Oil Field

**Crane Carrier** 

**Construction / Dump** 

Refuse

2004 - 2006

2007 - 2010

2011+

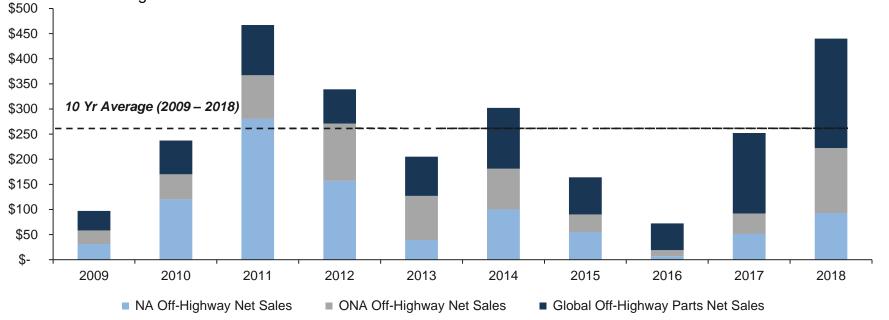


# **Global Off-Highway Growth Opportunities**

- Energy Sectors
  - Considerable end market cyclicality, recovering from trough levels
  - Multiple opportunities in exploration, fracturing and oil & gas support
  - Introduction of new high horsepower hydraulic fracturing transmissions

- Mining and Construction
  - Considerable end market cyclicality, currently at trough levels
  - North America, Europe,
     Middle East, Africa and China
  - Increasing urbanization in emerging markets driving increased construction activity and raw material demand

- High Horsepower Hydraulic Fracturing Transmissions
  - New Oil Field Series (OFS) models based on six decades of industry expertise
  - Addresses global market demand for higher horsepower, extended duty cycles, lower days-to-depth and higher recovery factors





# **Leading Technology and Innovation**

#### FuelSense® 2.0

- Proprietary software launched in 2017, ideally suited for shift dense vocations such as transit, school bus, refuse, construction and distribution
- DynaActive Shifting utilizes learning algorithm to continuously find the ideal balance of fuel economy and performance
- Neutral at Stop trims fuel consumption and emissions by reducing load on the engine when the vehicle is stopped
- Acceleration Rate Management limits vehicle acceleration to a customized calibrated rate

#### **xFE Models**

- New transmissions with redesigned torque converter damper, optimized gear ratios and coupled with FuelSense Max<sup>™</sup> packages
- Represents the latest in fuel savings innovation
  - Fuel savings of up to 7% over comparatively equipped models with FuelSense features
  - Best fuel economy from an automatic transmission
- Available in the 1000, 2000 and 3000 Series fully-automatic transmission models

#### **Nine Speed Transmission**

- New design targeted for global release in 2020, leverages the proven reliability of the Allison six-speed 2000 Series<sup>™</sup>
- New benchmark in fuel efficiency and reduced emissions standards
- Significant fuel savings due to deep first gear ratio, industry leading ratio coverage and advanced engine stop-start capability
- Improved driver comfort and acceleration, allowing for a smoother launch and increased productivity



Average Annual Spend over \$110 Million in Product-Related Research and Development Since 2007

FuelSense is a registered trademark of Allison Transmission Inc.



### **Diverse Propulsion Solutions**

- Allison's addressable market is a complex application space due to vocational fragmentation, requiring a range of propulsion solutions where Allison is a natural supplier
  - Internal Combustion Engines
  - Alternative Fuels with proven performance and a funded infrastructure
  - Electric Hybrid Systems
  - Plug-in Options
  - Full Electric Solutions
- The combination of our Electrification Experience and Expertise, Vocational Knowledge, and Product Planning discipline uniquely positions Allison to have:
  - the right products
  - for the right customers
  - at the right time



# Allison Electric Hybrid 40/50 EP™ Extended Range

- Launched in 2003, Allison's electric hybrid propulsion system for transit buses has proven to be among the most dependable and efficient electric hybrid systems at work anywhere in the world
- Latest generation includes a pure electric extended range for up to 15 kilometers, featuring zeroemissions with engine off, including approaching, during and departing passenger stops for a quieter and healthier environment
- Engineered for regenerative braking, converting a vehicle's kinetic energy into stored electric power to
  propel the vehicle or to provide additional pure electric capabilities for auxiliary operations
- Allison is the lead electrification and system integrator, controlling the entire powertrain including the engine
- To date, Allison has sold more electric hybrid systems for commercial vehicles than any other company in the world
  - Approximately 9,000 Allison Hybrids delivered worldwide
  - Over 41 million gallons of fuel saved
  - Over 400,000 metric tons of CO<sub>2</sub> prevented
- Released with all North American Transit OEMs.
  - Purpose built architecture and design
  - Superior gradeability
  - Real world fuel economy gains and reduced emissions





### **Electrification Initiatives**

- Expanded partnership with Leonardo DRS to develop On-Board Vehicle Power (OBVP) systems for military vehicles
  - Intended for a heavier class of military vehicle, such as the 44-ton Oshkosh Heavy Expanded Mobility Tactical Truck (HEMTT), equipped with Terminal High Altitude Area Defense (THAAD) anti-ballistic missile launchers
  - Latest collaboration involves a fully integrated generator within the housing of an Allison 4500 Specialty Series<sup>™</sup> transmission, installed into the driveline in its original configuration, without affecting vehicle functionality
  - Capability to produce up to 120 kW of electrical power for use on or off-board the vehicle
- EMOSS Mobile Systems' Electric Vehicle with Extender Range (E.V.E.R.) semi-truck, equipped with an Allison 4500 fully automatic transmission to provide customers with reduced emissions solutions
  - Based on a DAF chassis, the E.V.E.R. semi-truck is rated for a gross combination weight of up to 50 metric tons and has a range exceeding 300 miles, currently in testing with pilot customers
  - The Allison transmission provides torque multiplication to reduce demand on the electric motor and the battery pack,
     reducing energy consumption and facilitating the use of less-expensive, lighter and smaller components
  - Calibrated to use six forward gears when fully-laden, the transmission is critical for hauling heavier payloads and navigating challenging topographies, in countries such as Switzerland and Austria
- Terberg fully electric terminal tractor equipped with an Allison 3000 Series transmission
  - 100% electric truck uses an Allison fully automatic transmission to launch with a gross combination weight of up to 65 tons
  - Further utilizes the power take-off provision to drive the hydraulic pump, which saves an additional electric generator
  - Operating throughout Europe since 2015
- Equity stake in Odyne, a leading manufacturer of electric hybrid systems for medium and heavy-duty work trucks
  - Cooperation agreement to develop an exportable power system that can be utilized with Allison's 1000, 2000, 3000, and 4000 Series transmissions
- Multiple on-going OEM programs examining a variety of electrification concepts



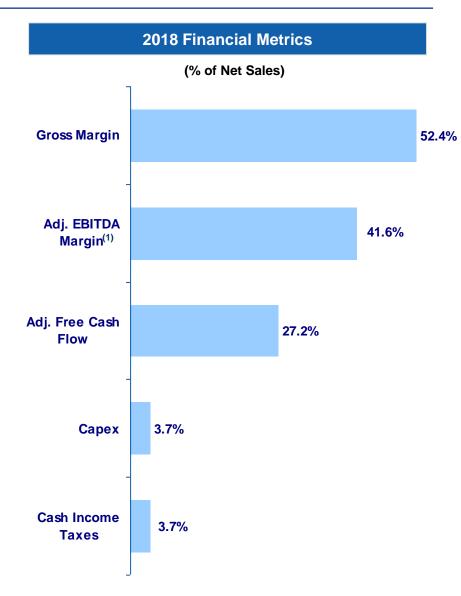
# **Financial Overview**





# **Allison Financial Highlights**

- Solid operating margins
  - End markets diversity
  - Premium vocational pricing model
  - Cost controls and productivity improvements
  - Multi-Tier UAW wage and benefits structure
- Low recurring capital expenditure requirements
- Valuable U.S. income tax shield
  - \$0.2bn present value
- Positioned for long-term cash earnings growth
  - Multiple growth opportunities in asset light business model
- Strong free cash flow



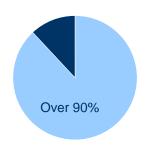
Note: See appendix for comments regarding the presentation of non-GAAP financial information.



<sup>(1)</sup> Adjusted EBITDA margin: Adjusted EBITDA divided by net sales.

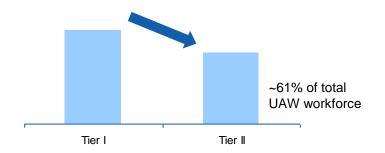
# **Solid Operating Margins**

#### **Long-Term Customer Supply Agreements**



Over 90% of 2018 N.A. On-Highway Unit Volume was covered by long-term customer supply agreements

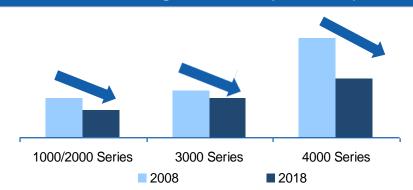
#### **Workforce Optimization (cost/employee)** (1)



Significant savings driven by retirement of Tier I workers; 461 hourly employees are retirement eligible (~30% of workforce)

Source: Allison. (1) As of 12/31/18.

#### Manufacturing Efficiencies (hours/unit)



Hours Per Unit continue to decline

#### **International Manufacturing**

#### India (~\$103mm total investment)

- New facility constructed to better serve Asia-Pacific
- Phase I: In-sourced component manufacturing (2010)
- Phase II: Assembly of 1000/2000 Series (2012)

#### Hungary (~\$17mm total investment)

Relocated assembly of 3000/4000 Series (2011)



### **Income Tax Attributes**

#### **Income Tax Attributes Overview**

- Allison acquired from General Motors in August 2007
  - Asset deal structure
  - Step-up in basis for U.S. federal income tax purposes

Cash In	Cash Income Taxes Paid 2008-2018 (\$ millions)										
2008	2009	<u>2010</u>	<u>2011</u>	<u>2012</u>	<u>2013</u>	<u>2014</u>	<u>2015</u>	<u>2016</u>	<u>2017</u>	<u>2018</u>	
\$4	\$6	\$2	\$6	\$11	\$4	\$5	\$5	\$13	\$96	\$101	

- As of 12/31/2018 Allison had \$1.1bn of unamortized intangible assets
  - Expect annual U.S. federal income tax deductions of \$315mm through 2021 and \$185mm in 2022

(\$ millions)	Total	2019	2020	2021	2022
Annual tax amortization	\$1,130	\$315	\$315	\$315	\$185
(4)					
Cash tax savings <sup>(1)</sup>	240	67	67	67	39

#### Results in present value tax savings of \$203-\$220mm<sup>(2)</sup>



<sup>(1)</sup> Assuming continued profitability and no limitations at an assumed 21% federal and state tax rate.

<sup>(2)</sup> Based on annual discount rate of 5-10%; includes amortization of intangibles.

### **Summary**

- Allison Transmission is the global leader in the markets it serves
  - Premier fully-automatic transmission brand
  - Over 100 year operating history
- Strong financial position
  - Industry leading EBITDA margin
  - Asset light business model
  - Significant free cash flow generation
  - Returning capital to shareholders
- Substantial long-term growth opportunities
  - Expand global leadership
  - Penetrate emerging markets
  - Address underserved markets
  - Continuous product innovation



# **Guidance / Supplemental Financial Data**





# **2019 Guidance - Summary**

(\$ in millions)	Guidance	Commentary
Net Sales	\$2580 to \$2680	Guidance reflects lower demand in the North America Off- Highway and Service Parts, Support Equipment & Other end markets principally driven by hydraulic fracturing applications partially offset by increased demand in the global On-Highway end markets, price increases on certain products and the continued execution of our growth initiatives
Net Income	\$535 to \$585	
Adjusted EBITDA	\$1,000 to \$1,060	
Net Cash provided by Operating Activities	\$710 to \$750	
Adjusted Free Cash Flow	\$550 to \$600	Net Cash Provided by Operating Activities less CapEx
Cash Income Taxes	\$100 to \$110	



### **Historical Financial Summary**

Financial Summary														
In \$ millions	Annual													
	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018				
Net Sales	\$1,767	\$1,926	\$2,163	\$2,142	\$1,927	\$2,127	\$1,986	\$1,840	\$2,262	\$2,713				
% Growth	(14.3%)	9.0%	12.3%	(1.0%)	(10.0%)	10.4%	(6.7%)	(7.3%)	22.9%	19.9%				
Adjusted EBITDA <sup>(1)</sup>	511	619	722	717	633	745	720	644	868	1,128				
% of Net Sales	28.9%	32.1%	33.4%	33.5%	32.8%	35.0%	36.3%	35.0%	38.4%	41.6%				
Effective Cash Tax Rate <sup>(2)</sup>	NM	2.7%	3.9%	4.9%	1.4%	1.4%	1.8%	3.8%	18.2%	12.5%				
Total CapEx	88	74	97	124	74	64	58	71	91	100				
% of Net Sales (3)	5.0%	3.8%	4.5%	5.8%	3.9%	3.0%	2.9%	3.8%	4.0%	3.7%				
Adj. Free Cash Flow	151	317	383	407	409	540	530	530	567	737				
% of Net Sales	8.6%	16.5%	17.7%	19.0%	21.2%	25.4%	26.7%	28.8%	25.1%	27.2%				

- Resiliency through the 2009 downturn, evidenced by increasing EBITDA margins and strong free cash flow generation
- Completed investments in global commercial capabilities, new product development and low-cost country manufacturing
- Strong free cash flow driven by high margins, asset light business model, and income tax attributes

Note: See appendix for comments regarding the presentation of non-GAAP financial information.

<sup>(3) 2011</sup> is 2.7%, 2012 is 2.8%, 2013 is 3.2%, 2014 is 2.9%, 2015 is 2.9%, 2016 is 3.5%, 2017 is 3.6% and 2018 is 3.6% excluding Outside-North America manufacturing expansion and new products and technology programs.



<sup>(1)</sup> Excluding technology-related license expenses: 2009 of \$10 million, 2010 of \$2 million, 2011 of \$10 million, 2012 of \$12 million, 2013 of \$6 million, 2014 of \$6 million.

<sup>(2)</sup> Effective cash tax rate defined as cash income taxes divided by income (loss) before taxes.

# **Allison Quarterly Sales Summary**

Quarterly Net Sales by End Market (\$ millions)															
			2013			2014				2015					
Net Sales	<u>Q1</u>	<u>Q2</u>	<u>Q3</u>	<u>Q4</u>	<u>Total</u>	<u>Q1</u>	<u>Q2</u>	<u>Q3</u>	<u>Q4</u>	<u>Total</u>	<u>Q1</u>	<u>Q2</u>	<u>Q3</u>	<u>Q4</u>	<u>Total</u>
NA On-Highway	\$219	\$243	\$226	\$242	\$930	\$257	\$271	\$279	\$273	\$1,080	\$286	\$297	\$274	\$275	\$1,132
NA Off-Highway	8	8	9	14	39	12	23	30	36	101	22	10	12	11	55
Defense	57	58	52	35	202	34	49	35	38	156	25	29	34	25	113
ONA On-Highway	62	75	70	86	293	64	62	73	65	264	57	73	67	65	262
ONA Off-Highway	21	36	17	14	88	21	24	18	19	82	16	8	4	7	35
Parts, Support Equipment & Other	90	92	93	100	375	106	107	118	113	444	98	94	102	95	389
Total Net Sales	\$457	\$512	\$467	\$491	\$1,927	\$494	\$536	\$553	\$544	\$2,127	\$504	\$511	\$493	\$478	\$1,986
			2016			2017				2018					
Net Sales	<u>Q1</u>	<u>Q2</u>	<u>Q3</u>	<u>Q4</u>	Total	<u>Q1</u>	<b>Q2</b>	<u>Q3</u>	<u>Q4</u>	<b>Total</b>	<u>Q1</u>	<u>Q2</u>	<b>Q3</b>	<u>Q4</u>	<u>Total</u>
NA On-Highway	\$274	\$280	\$232	\$237	\$1,023	\$275	\$314	\$301	\$287	\$1,177	\$339	\$343	\$332	\$303	\$1,317
NA Off-Highway	5	1	1	0	7	1	5	17	28	51	33	31	12	17	93
Defense	25	28	25	37	115	27	30	35	25	117	37	43	42	36	158
ONA On-Highway	70	74	78	83	305	72	85	89	98	344	91	101	96	95	383
ONA Off-Highway	3	3	2	4	12	6	10	14	11	41	12	24	46	47	129
	0.5			400	070	440	400	400	400	F20	454	400	404	4.40	000
Parts, Support Equipment & Other	85	89	96	108	378	118	136	139	139	532	151	169	164	149	633



# **Appendix: Non-GAAP Financial Information**





### **Non-GAAP Financial Information**

We use Adjusted EBITDA and Adjusted EBITDA as a percent of net sales to measure our operating profitability. We believe that Adjusted EBITDA and Adjusted EBITDA as a percent of net sales provide management, investors and creditors with useful measures of the operational results of our business and increase the period-to-period comparability of our operating profitability and comparability with other companies. Adjusted EBITDA as a percent of net sales is also used in the calculation of management's incentive compensation program. The most directly comparable U.S. generally accepted accounting principles ("GAAP") measure to Adjusted EBITDA and Adjusted EBITDA as a percent of net sales is Net income and Net income as a percent of net sales, respectively. Adjusted EBITDA is calculated as the earnings before interest expense, income tax expense, amortization of intangible assets, depreciation of property, plant and equipment and other adjustments as defined by Allison Transmission, Inc.'s, the Company's wholly-owned subsidiary, Term B-3 Loan due 2022. Adjusted EBITDA as a percent of net sales is calculated as Adjusted EBITDA divided by net sales.

We use Adjusted Free Cash Flow to evaluate the amount of cash generated by our business that, after the capital investment needed to maintain and grow our business and certain mandatory debt service requirements, can be used for repayment of debt, stockholder distributions and strategic opportunities, including investing in our business. We believe that Adjusted Free Cash Flow enhances the understanding of the cash flows of our business for management, investors and creditors. Adjusted Free Cash Flow is also used in the calculation of management's incentive compensation program. The most directly comparable GAAP measure to Adjusted Free Cash Flow is Net cash provided by operating activities. Adjusted Free Cash Flow is calculated as Net cash provided by operating activities after additions of long-lived assets.



# Non-GAAP Reconciliations (1 of 3)

Adjusted EBITDA reconciliation											
\$ in millions, Unaudited					For the ye	ar ended D	ecember 31	,			
	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
Net income (GAAP)	(\$328)	(\$324)	\$30	\$103	\$514	\$165	\$229	\$182	\$215	\$504	\$639
plus:											
Interest expense, net	386	235	277	217	151	133	138	114	101	103	121
Income tax expense (benefit)	37	41	54	48	(298)	101	139	107	126	23	166
Technology-related investment expenses	_	_	_	_	14	5	2	_	1	16	3
Trade name impairments	180	190	_	_	_	_	_	80	_	_	_
Impairments of long-lived assets	_	_	_	_	_	_	15	1	_	32	4
Environmental remediation	_	_	_	_	_	_	_	14	_	_	_
Amortization of intangible assets	156	156	154	152	150	105	99	97	92	90	87
Depreciation of property, plant and equipment	107	106	100	104	103	99	94	88	84	80	77
(Gain) loss on redemptions and repayments of long-term debt	(21)	(9)	(3)	16	22	1	1	1	_	_	_
Stockholder activism expenses	_	_	_	_	_	_	_	_	4	_	_
Dual power inverter module extended coverage	2	11	(2)	_	9	(2)	1	(2)	1	(2)	_
UAW Local 933 signing bonus	4	_	_	_	9	_	_	_	_	10	_
UAW Local 933 retirement incentive	_	_	_	_	_	_	_	_	_	_	15
Unrealized (gain) loss on commodity hedge contracts	_	(6)	_	7	(1)	2	(1)	1	(2)	_	_
Unrealized loss on foreign exchange	_	_	_	_	_	2	5	1	1	_	3
Expenses related to long-term debt refinancing	_	_	_	57	_	_	_	25	12	_	_
Restructuring charges	16	48	_	_	_	1	1	_	_	_	_
Stock based compensation expense	7	7	8	8	6	14	15	10	9	12	13
Other, net <sup>(1)</sup>	(2)	46	(1)	_	26	1	1	1	_	_	_
Adjusted EBITDA (non-GAAP)	\$544	\$501	\$617	\$712	\$705	\$627	\$739	\$720	\$644	\$868	\$1,128
Net Sales (GAAP)	\$2,061	\$1,767	\$1,926	\$2,163	\$2,142	\$1,927	\$2,127	\$1,986	\$1,840	\$2,262	\$2,713
Net income as a percent of net sales	-15.9%	-18.3%	1.6%	4.8%	24.0%	8.6%	10.8%	9.2%	11.7%	22.3%	23.6%
Adjusted EBITDA as a percent of net sales	26.4%	28.4%	32.0%	32.9%	32.9%	32.5%	34.7%	36.2%	35.0%	38.4%	41.6%

<sup>(1)</sup> Includes charges or income related to legacy employee benefits, employee disability coverage, shared income with General Motors, benefit plan adjustments, transitional costs to establish Allison as a stand-alone entity, pension curtailment adjustments, termination and service fees paid to Allison's Sponsors, an adjustment for the settlement of litigation which originated with the Predecessor but was assumed by the Company as part of the Acquisition Transaction, public offering expenses and reductions of supply contract liabilities.



# Non-GAAP Reconciliations (2 of 3)

Adjusted Free Cash Flow reconciliation													
\$ in millions, Unaudited	For the year ended December 31,												
	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018		
Net Cash Provided by Operating Activities (GAAP)	\$268	\$169	\$389	\$469	\$498	\$464	\$573	\$580	\$591	\$658	\$837		
(Deductions) or Additions:													
Long-lived assets	(75)	(88)	(74)	(97)	(124)	(75)	(64)	(58)	(71)	(91)	(100)		
Fee to terminate services agreement with Sponsors	_	_	_	_	16	_	_	_	_	_	_		
Technology-related license expenses	_	9	2	10	12	6	6	_	_	_	_		
Stockholder activism expenses	_	_	_	_	_	_	_	_	4	_	_		
Excess tax benefit from stock-based compensation	_	_	_	_	5	14	25	8	6	_	_		
2009 Non-Recurring Activity (1)		61	_	_	_	_	_	_	_	_	_		
Adjusted Free Cash Flow (non-GAAP)	\$193	\$151	\$317	\$383	\$407	\$409	\$540	\$530	\$530	\$567	\$737		

<sup>(1) 2009</sup> adjusted for certain non-recurring activity: (a) capitalized accrued interest on Senior Toggle Notes (\$29) million, (b) cash restructuring charge \$51 million, (c) accounts payable early payments \$3 million, (d) delayed accounts receivable receipts \$19 million and (e) Lehman LIBOR swap settlement \$17 million.



### Non-GAAP Reconciliations (3 of 3)

Guidance reconciliation											
\$ in millions	Guidance										
	Year Ending December 31, 2019										
		Low		High							
Net Income (GAAP)	\$	535	\$	585							
plus:											
Income tax expense		158		168							
Interest expense, net		126		126							
Depreciation and amortization		157		157							
UAW Local 933 retirement incentive		9		9							
Stock-based compensation expense		15		15							
Adjusted EBITDA (Non-GAAP)	\$	1,000	\$	1,060							
Net Cash Provided by Operating Activities (GAAP)	\$	710	\$	750							
Deductions to Reconcile to Adjusted Free Cash Flow:											
Additions of long-lived assets		(160)		(150)							
Adjusted Free Cash Flow (Non-GAAP)	\$	550	\$	600							

Guidance reconciliation

- (a) Represents a charge (recorded in Cost of sales) related to a retirement incentive program for certain employees represented by the International Union, United Automobile, Aerospace and Agricultural Implement Workers of America ("UAW") pursuant to the UAW Local 933 collective bargaining agreement effective through November 2023.
- (b) Represents stock-based compensation expense (recorded in Cost of sales, Selling, general and administrative, and Engineering research and development).
- (c) Represents losses (recorded in Other (expense) income, net) on intercompany financing transactions related to investments in plant assets for our India facility.



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