

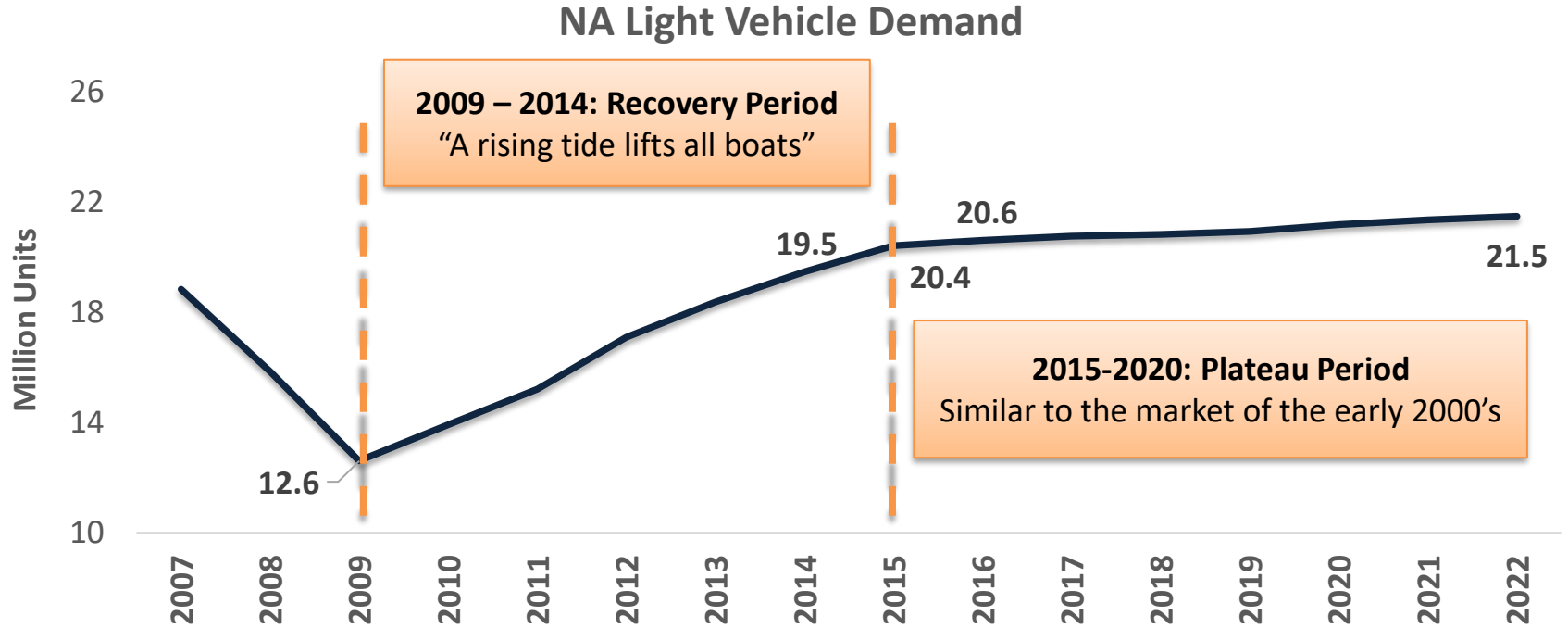


Tooling Capacity Challenges – Best Practices for the New Reality

Presented By: James Ricci
Managing Director
Dec. 15, 2015

We are at an Inflection Point, Driven by Demand

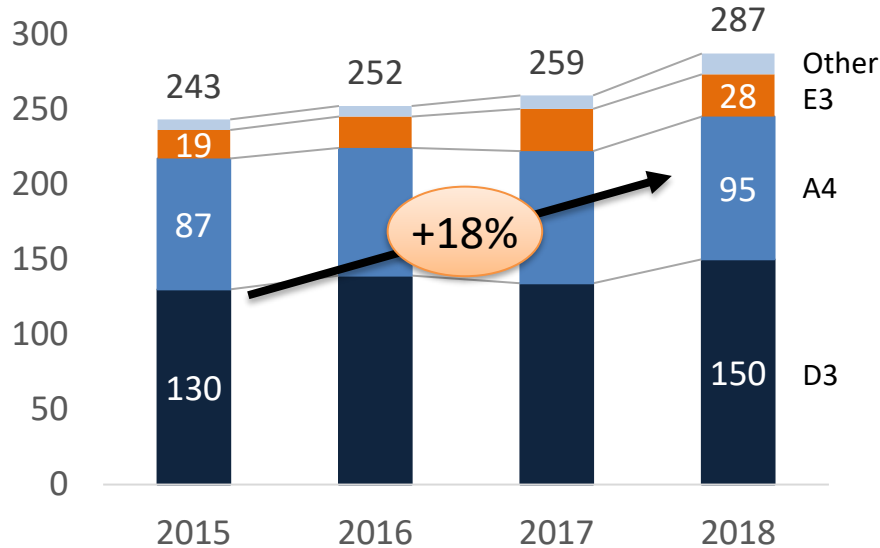
Dynamics of the Market May Change Dramatically



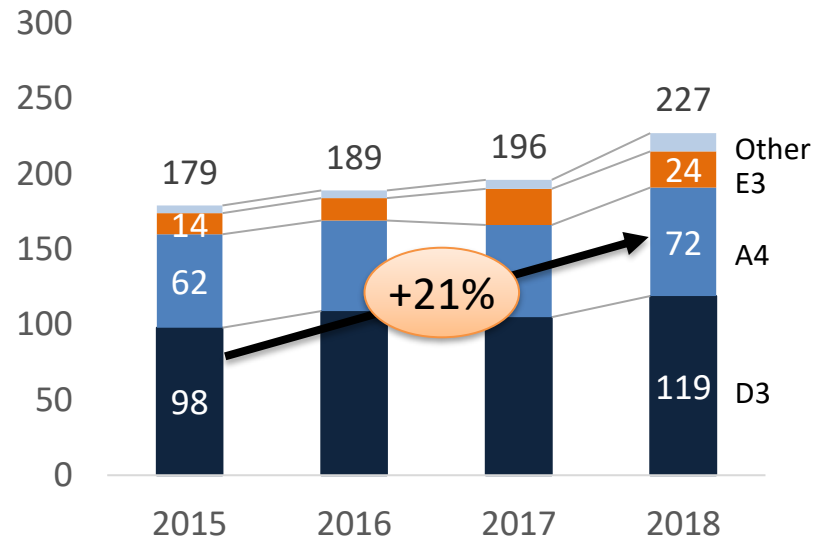
Source: LMC Automotive, WardsAuto

At the Same Time Mix is Increasing

No. of N.A. Models in Production



No. of N.A. Models <100K Units



Above models mean over 800 trim levels on the market by 2018

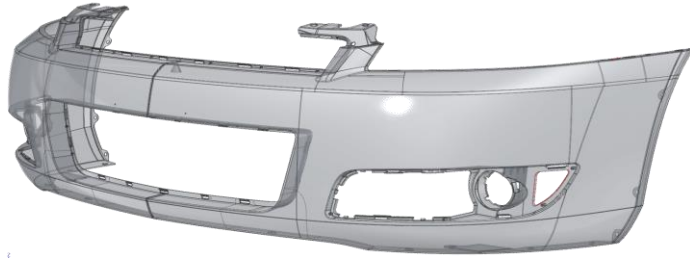
Source: LMC Automotive

Purchasing Implications

- Plateauing volumes
 - Shrinks profitability creating more pressure for purchasing cost reductions
 - Reduces suppliers' ability to provide cost reductions
- Mix increases
 - Adds cost to manage the complexity
 - Reduces the big new programs that can be leveraged for cost reductions when they are being sourced.

Product is Becoming More Complex

2005 Model



7 molds

3 actions

Part weight = X

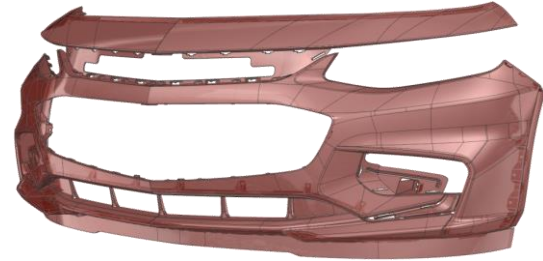
Mold weight = Y

Fewer, lower-detail attachment points

Visible parting lines



2015 Same Model



12 molds

14 actions

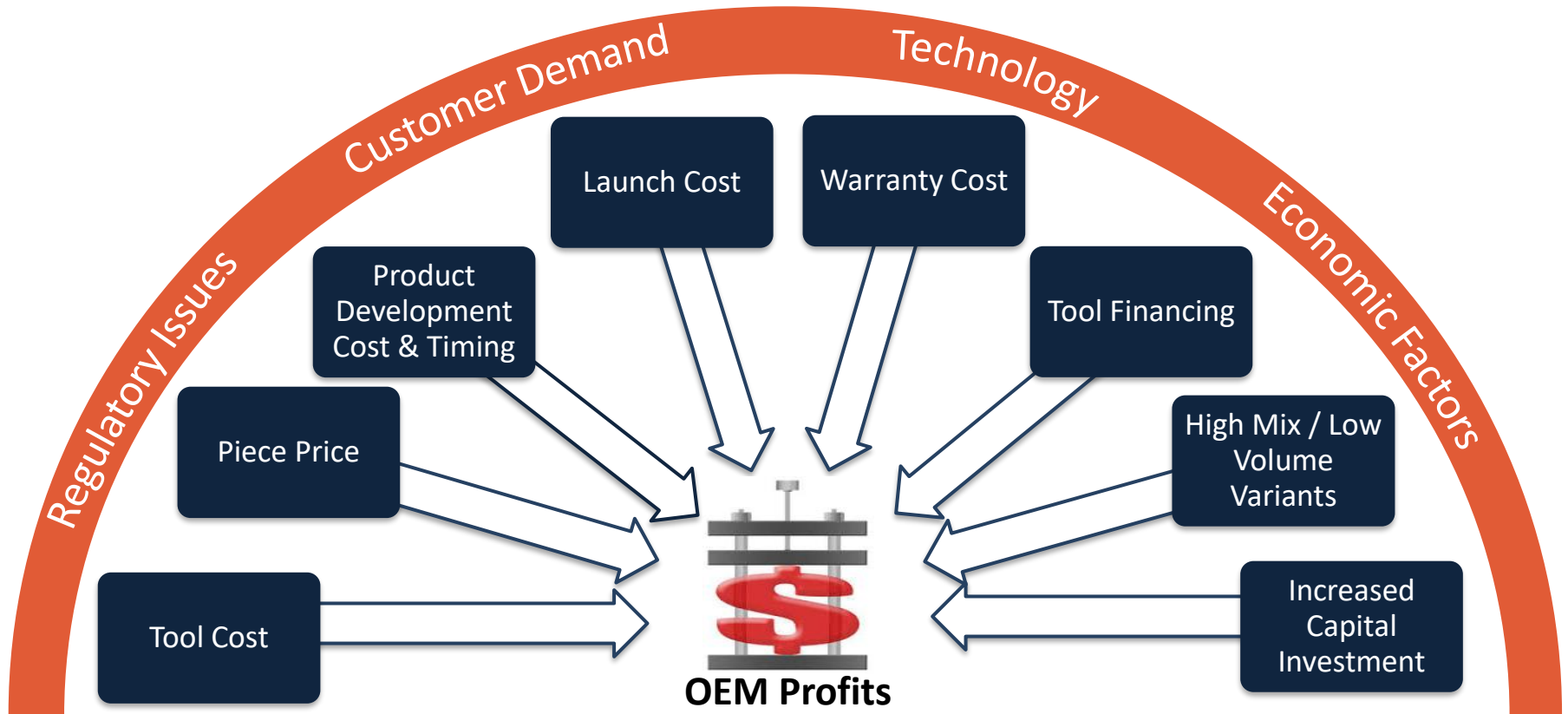
Part weight = X + 1.4 lbs

Mold weight = Y + 6000 lbs

More, complex attachment points

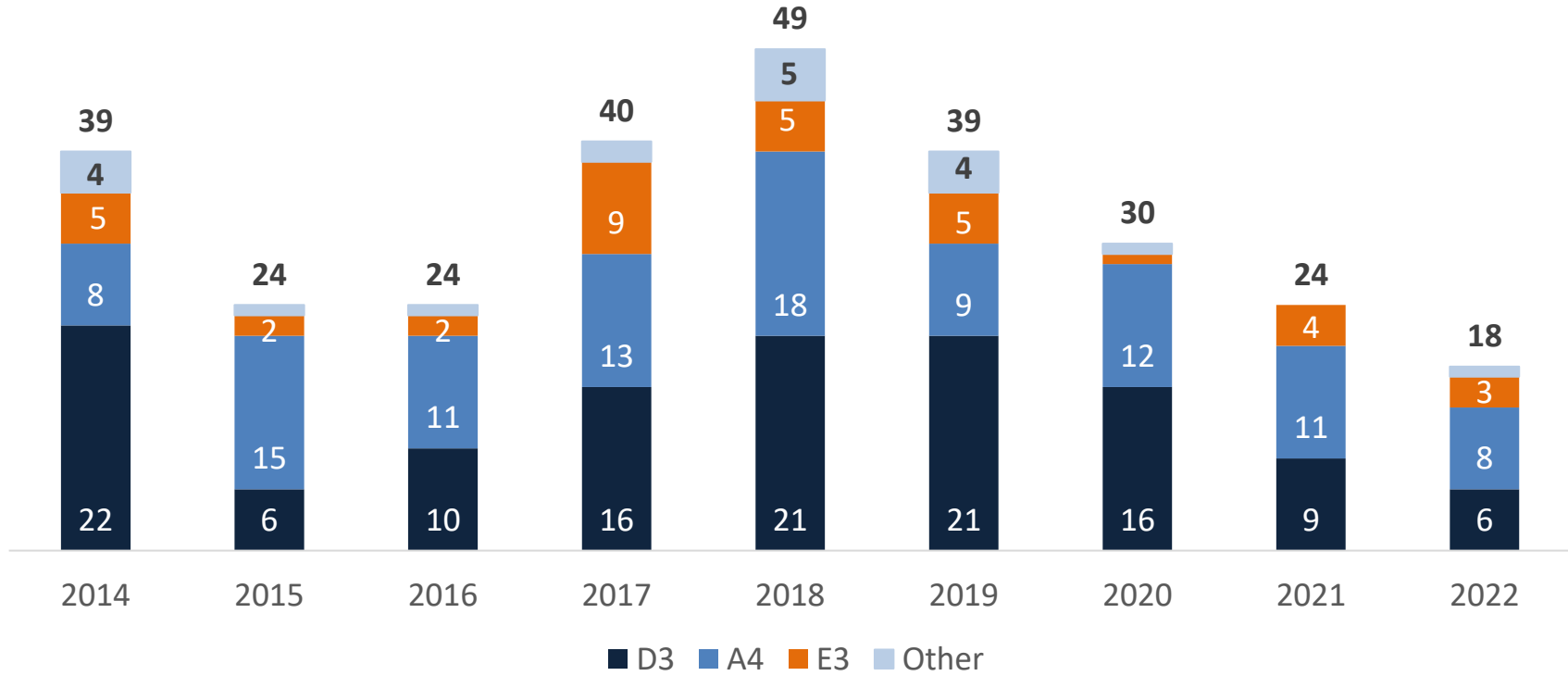
Hidden parting lines

Why are OEM Profits at Risk?



N.A. New Vehicle Launches Remain Strong

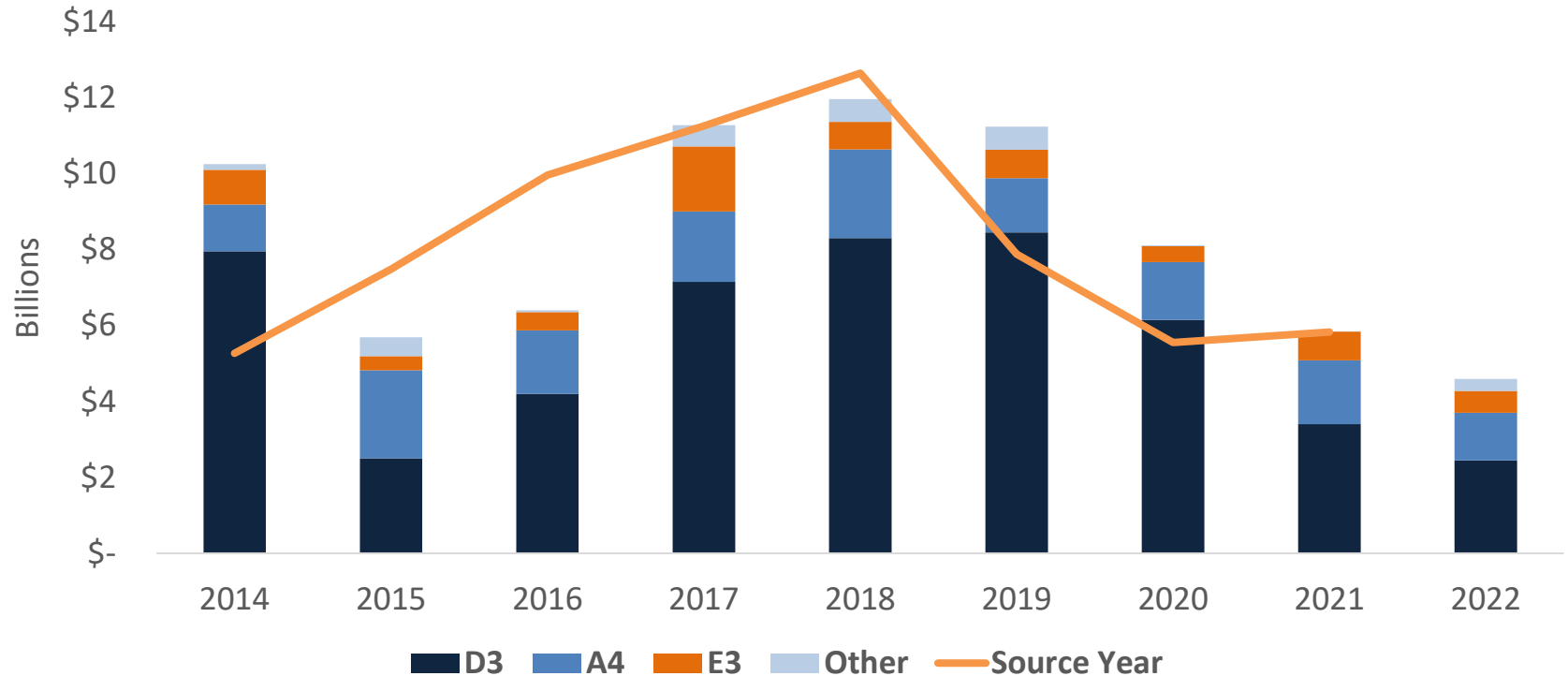
New Entry and Redesign – SOP Launch Year



Source: LMC Automotive

Launches Drive Tooling Demand and OEM Spend

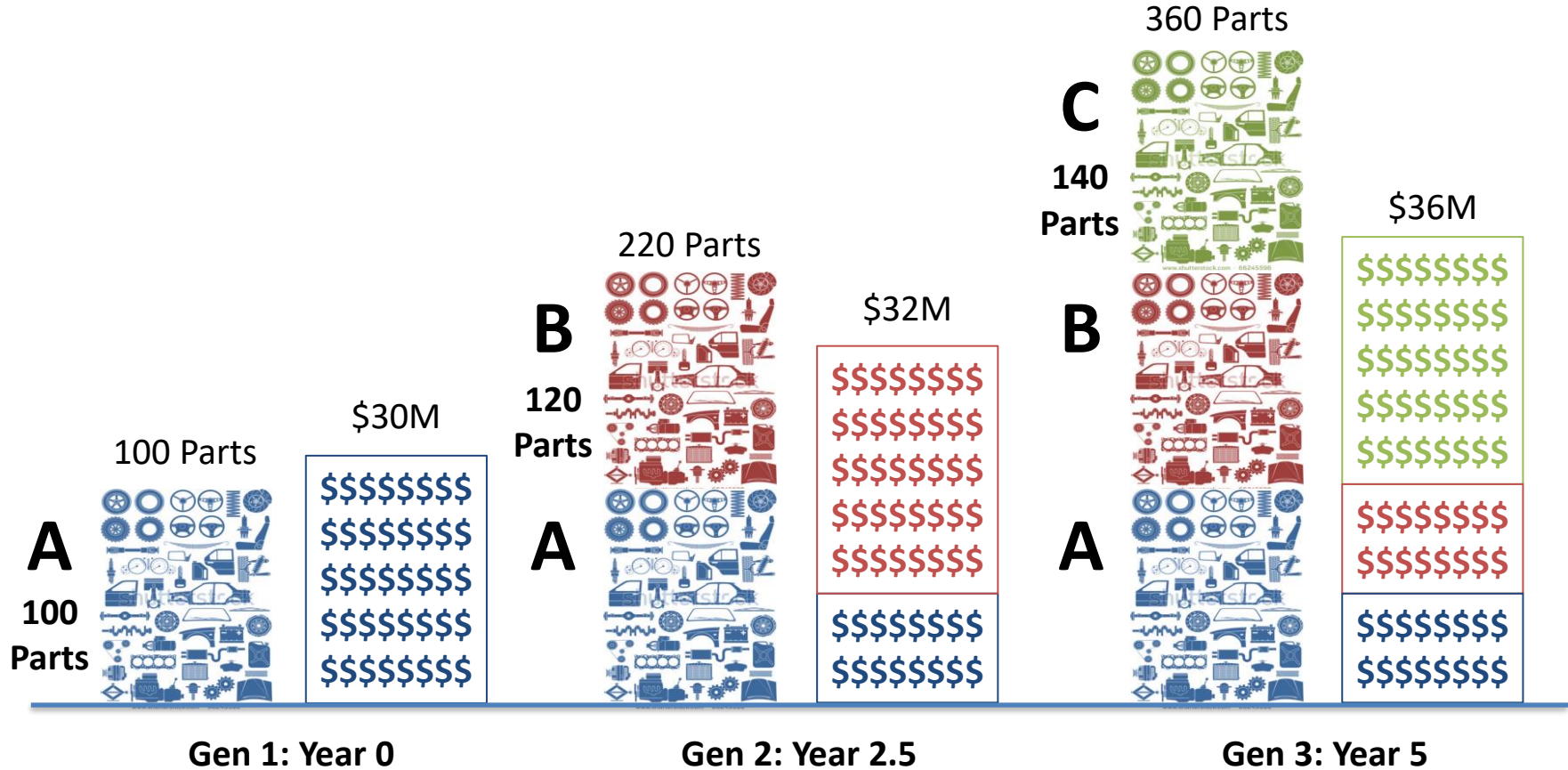
New Entry and Redesign – SOP Launch Year



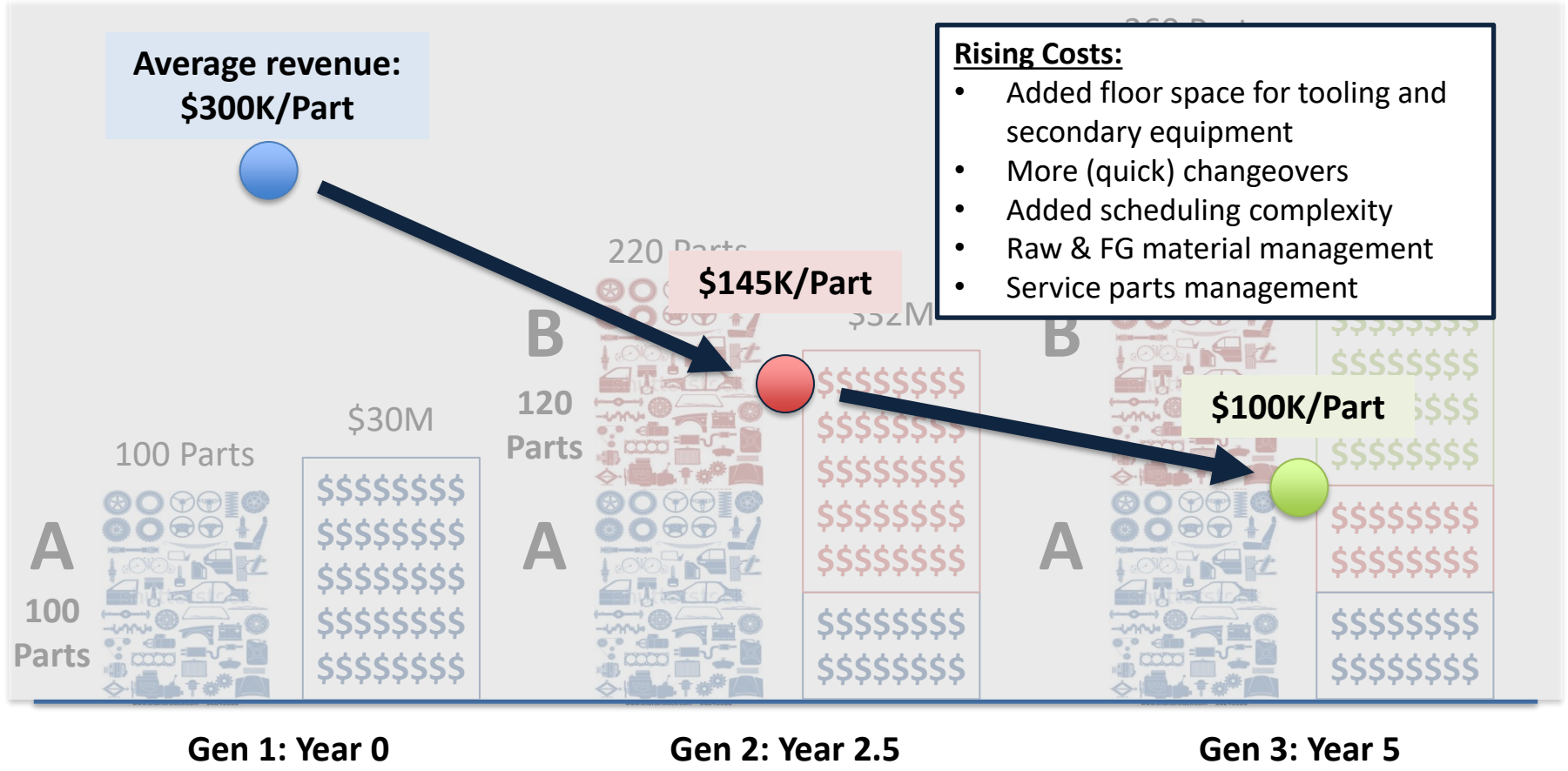
Source: LMC Automotive

Future Demand = based on current spend and estimated N.A. model launches SOP (new entry and redesign)

Supply Chain Costs are Growing



Supply Chain Costs are Growing



- ▶ Know what impact this may have to your company and your spend:
 - ▶ Interior trim parts will be greatly impacted
 - ▶ Powertrain chassis less so



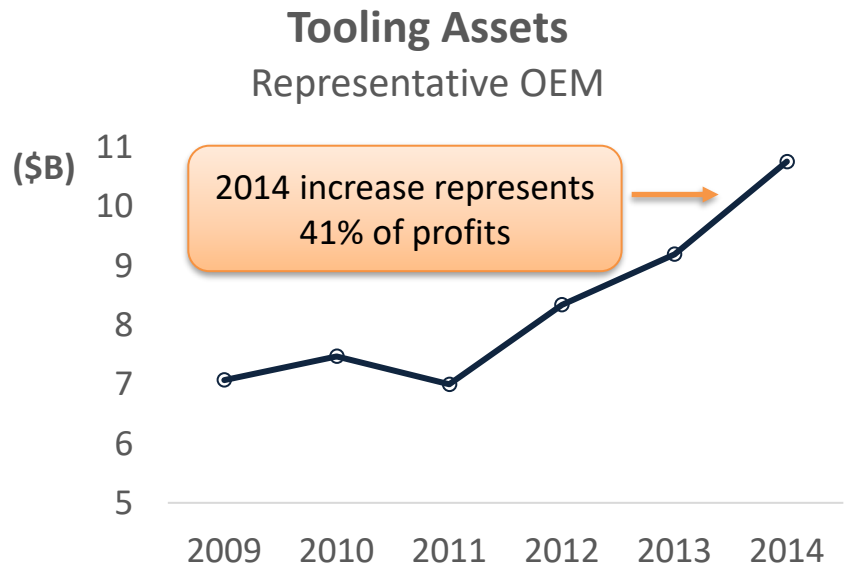
- ▶ If you are highly impacted:
 - ▶ You need a strategy to manage the complexity
 - ▶ You could be facing headcount/budget constrains



- ▶ What do you think the impact will be to your supply base:
 - ▶ Minimal
 - ▶ No Change
 - ▶ Great

Continued Tooling Spend Increase is Untenable

Factors presented have driven a sharp rise in OEM tooling spend



OEMs will use a variety of tactics to decrease tooling costs:

- Increasingly intense pricing pressure on Tiers and Tooling Suppliers
- Cut future programs
- Source tools overseas (LCC)
- Commonize platforms and components to harmonize tooling
- Use alternative tooling materials
- Create a low volume supply base
- ...and many other tactics

Source: Company Financials; Net of Amortization

Poll

- Are your customers currently employing any of the following
 - Increasingly intense pricing pressure on Tiers and Tooling Suppliers
 - Cut future programs
 - Source tools overseas (LCC)
 - Commonize platforms and components to harmonize tooling
 - Use alternative tooling materials
 - Create a low volume supply base
 - ...

Increased Challenges Impact Tool Suppliers

- Product and tool complexity
- Shorter lead times with less complete data
- GD&T much tighter
- Jobs on hold
- Lack of skilled labor
- Capital equipment needs
- Ever increasing software needs
- Cash flow management

Jeoff to put in a comment

- ▶ As tooling demand grows
 - ▶ Relationship power will move from the buyer to the seller
 - ▶ Some tool shops will overcommit and under deliver





Purchasing Implications

OE's

More product
Faster refreshes
More technology
None of which they can afford



Tool Shops

Gaining Power
Overpromising
Firing Customers
Increased operation

Buyer Strategies

- Manage tool shop relationships collaboratively
- Know your tool shops
 - Capacity
 - Demand
 - Plans
 - Management
- Know how well your suppliers manage their tool shops
- Understand your planned purchases
 - Be proactive understanding and responding to your company's sales and refresh pipeline
 - Status/condition of current tools
- Manage launches