DENSO

DENSO & Project Lead the Way

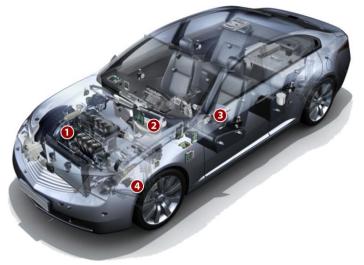
Doug Patton

Executive Vice President, Engineering DENSO International America, Inc.

President, DENSO North America Foundation

Who is DENSO?

Global Supplier of Advanced Automotive Technology, Systems and Components with \$39.8 Billion in Sales (As of March 31, 2014)



Systems Provider

- Powertrain Control System Engine management system, Gasoline direct injection, Hybrid components, Starter, Alternator, etc.
- Thermal Systems
 Heating Ventilation Air Conditioning (HVAC), Compressor, Heat exchangers, Battery thermal management, etc.
- Information & Communications Systems
 Instrument cluster, Head-up display, Human machine interface technologies, Horn, Keyless entry, Wireless phone charger, etc.
- Passive safety technologies, Airbag sensing system, Active safety technologies, Traction control system, Antilock braking system, etc.

DENSO Operations in North America



The DENSO Challenge

FINDING

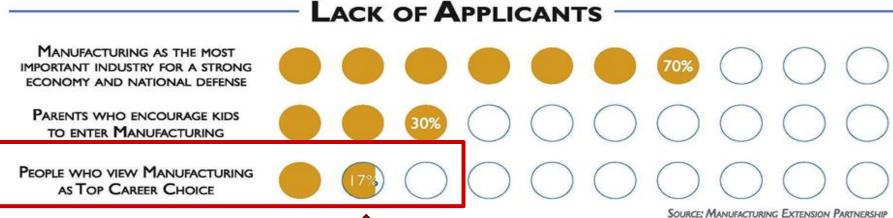
Software Engineers • Electrical Engineers • Mechanical Engineers

TAEST

RETAINING



The Manufacturing Challenge



How do we improve?



Our CSR Mission

Promote activities aimed at building a better future for the communities in which we
work and live, both independently and in partnership with community organizations.

What We're Up Against

Negative reputation of being a



Negative reputation of dirty jobs |





What We're Up Against

PERCEPTION

How do we change perception?

SKILLS

How do we engage and prepare students to meet the needs of the industry?

ATTRACT

How do we attract students to work in automotive?



What We Need To Do

Training and feeder programs

Create a community where people want to work

Influence curriculum to meet industry needs

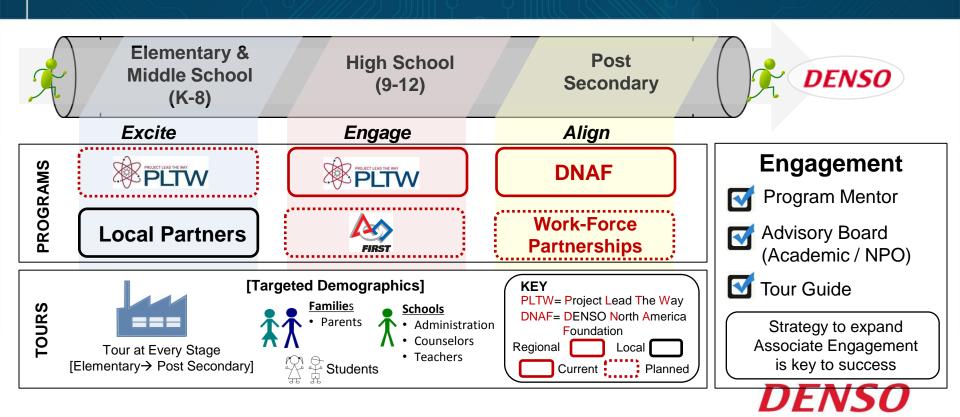
Increase diversity

Co-ops and internship opportunities

Create a work environment that fosters innovation and creativity



What We Are Doing



How we pick partners

- National with regional potential
- Embedded into school
- Curriculum based
- Hands on
- Multi-age
- Turn-key
- Partnership between industry & education
- Suitable for engineering and skilled need



DENSO Manufacturing PLTW Example

- Production location of automotive air conditioning and engine cooling components and systems
- Partner with Kalamazoo Regional Educational System
- <u>20 DMMI volunteer</u> associates go into classroom to support lessons
- Students, teachers & administrators tour facility





Conclusion

How can we change perception?

We need to tackle the

STEM CHALLENGE

differently.

