

ROUSH

Fleet Outlook in the New World

Roush at a Glance

Michigan based

Privately held

Founded in 1976

More than 4,000 employees

Over 3 million sq. ft. office / development space

Primary activities:

- Engineering
- Testing
- Prototype development
- Manufacturing
- Motorsports management

Enterprise Brand Portfolio



ROUSH

ROUSH Industries

OEM manufacturing, engineering, prototyping and design



Roush Fenway Racing

Dominant NASCAR Sprint Cup racing team



ROUSH Performance

Industry-leading high performance vehicles



ROUSH
CLEANTECH

ROUSH CleanTech

Alternatively fueled commercial vehicles and school buses



- Roush office in San Luis Obispo
- Partnered with Canoo for beta vehicle production to help them accomplish in a third of the time
- Canoo & Roush bridged the gap between the fast-paced tech industry and the traditional automotive industry
- Provided advanced solutions for complex, low-volume production and state-of-the-art machinery for durability testing and key-cycle management



- Autonomous vegetable weeder to replace herbicides and save the grower on labor
- Built a dozen prototypes in 2019
- Hoping to apply automotive techniques to this autonomous weeder



Flexible Assembly Sample Portfolio

- Google Self-Driving Vehicle
 - Assembled 50 vehicles at a rate of one vehicle per day
 - Vertically integrated composite body panels, aluminum space frame and suspension, and wire harnesses
- Polaris DAGOR Vehicle
 - 400 produced to date at a rate of five per week
 - Manufactured chassis; modified Ford powertrain
- Domino's DXP Delivery Vehicle
 - Vehicle up fit and modification from base Chevrolet Spark
 - Majority of components vertically integrated including injection molding, vacuum forming, wiring harnesses, metal fabrication, graphics, paint and upholstery
 - 156 vehicles completed at a rate of five per day



ROUSH CleanTech

- Dedicated to developing quality alternative fuel solutions
- EPA and CARB certified
- Reduces operating costs, carbon footprint
- Using American fuel and American technology
- Launched Gen 5 technology on new Ford 7.3L engine

OVER
37,000
VEHICLES ON THE
ROAD



OVER
**ONE
MILLION**
STUDENTS
TRANSPORTED DAILY
ON A PROPANE BUS



OVER
**ONE
BILLION**
MILES
ACCUMULATED



OVER
1,200
SCHOOL DISTRICTS



Key Market Adoption



Food & Bev



Para-transit



Schools



Energy



Airport

Ford F-450 / F-550
7.3L V8



Ford F-650 / F-750
7.3L V8



Ford E-450
7.3L V8



Ford F-53 / F-59
7.3L V8



Blue Bird Vision
6.8L V10



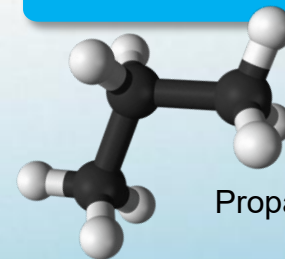
What's Ahead

30 billion
gallons of
Propane
Produced in
the U.S.

Renewable
Propane
Source

Propane &
DME
Blend

Technology
Advancements



Propane Molecule
(C₃H₈)



THANK YOU

Todd Mouw
President
ROUSH CleanTech

todd.mouw@roush.com

734-466-6522