ROUSH CLEANTECH

PROPANE AUTOGAS:

The Zero Compromise Alternative Fuel Solution

800.59.ROUSH

ROUSHcleantech.com

Agenda

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Today's Presenters:

- Tucker Perkins, Propane Education and Research Council
- Steve Whaley, Alliance AutoGas
- Todd Mouw, ROUSH CleanTech
- Robert Hann, GO Airport Express

Propane Autogas: Why it's the right fuel for your fleet.

Tucker Perkins
Chief Business Development Officer
September 6, 2012

PROPANE education & research COUNCIL

PROPANE EXCEPTIONAL ENERGY®

Propane Education & Research Council (PERC)

- *Authorized by the U.S. Congress October 11, 1996; governed by 21-member industry board of directors appointed by NPGA and GPA*
- *Funded by 4/10-cent per gallon ($39 million revenues projected for 2012)*
- *Functions:*
  - *Research & Development*
  - *Employee and Consumer Safety & Training*
  - *Public Education with restrictions*
- *Strategic Objective:*
  - *To promote the use of odorized propane through the development and commercialization of promising propane equipment, appliances and vehicles; and through training and safety support in traditional residential, commercial and agricultural markets.*

Propane autogas fuels
more than **17 million vehicles**
worldwide.

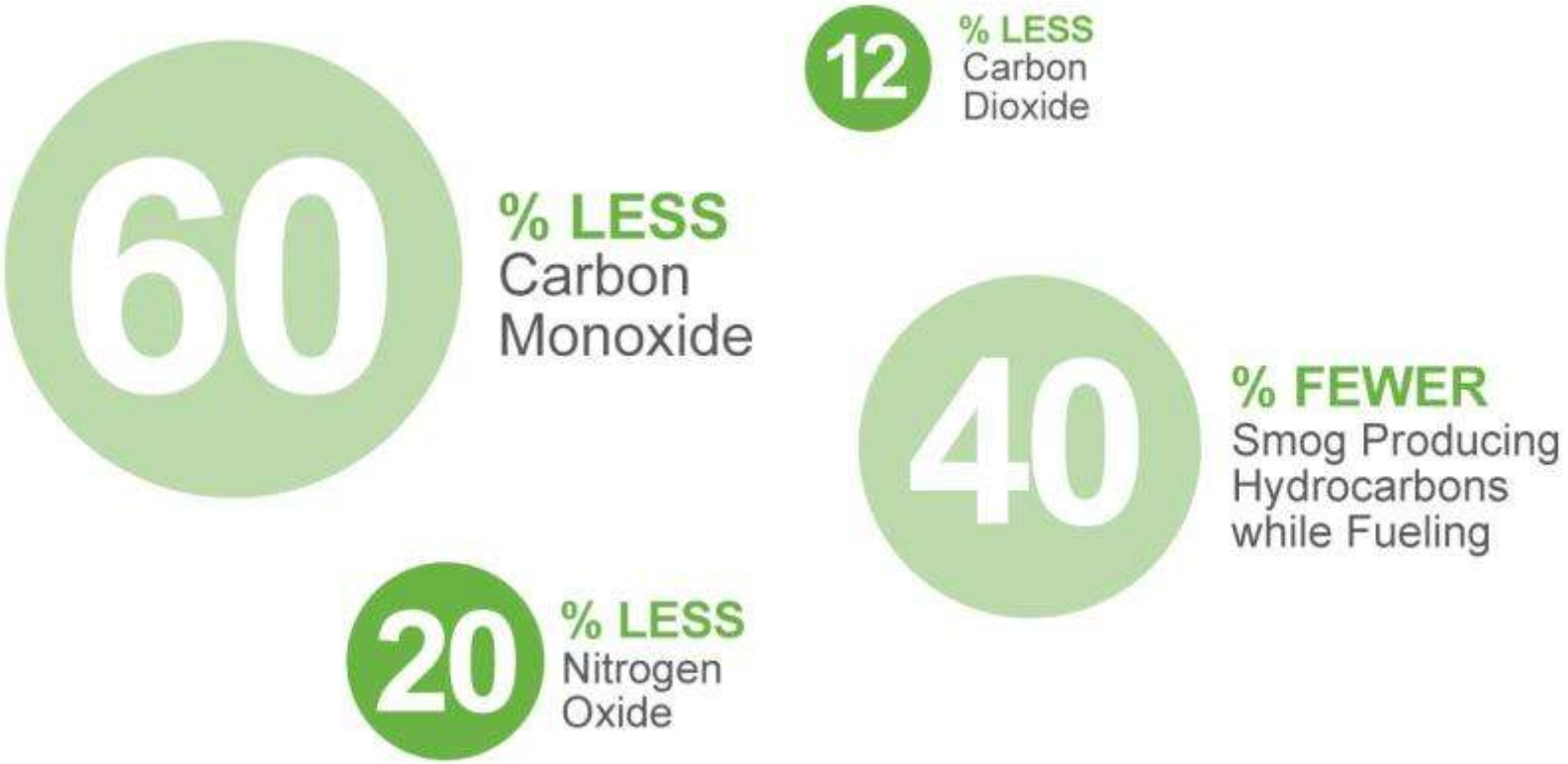

IN THE UNITED STATES,
PROPANE AUTOGAS
IS THE LEADING
ALTERNATIVE FUEL

Propane autogas is:

- **ABUNDANT**
  - The U.S. is now a net exporter of propane.
  - 70 percent of propane comes from natural gas.
- **SUSTAINABLE**
  - Propane is positioned at the intersection of environmentally friendliness and cost effectiveness.
- **CONVENIENT**
  - Propane autogas has the most developed refueling infrastructure of all alternative fuels in the United States.
- **DOMESTIC**
  - 97 percent of propane autogas consumed in the U.S. is produced in North America.

Propane Autogas:
Green Your Fleet.

Propane autogas is a Clean-burning fuel.



Propane Autogas:
Fuel Your Fleet.

Propane autogas

- Generally costs **30% less than gasoline** and **50% less than diesel.**
- Infrastructure is **affordable.**
  - **15 to 1**

The Bottom Line

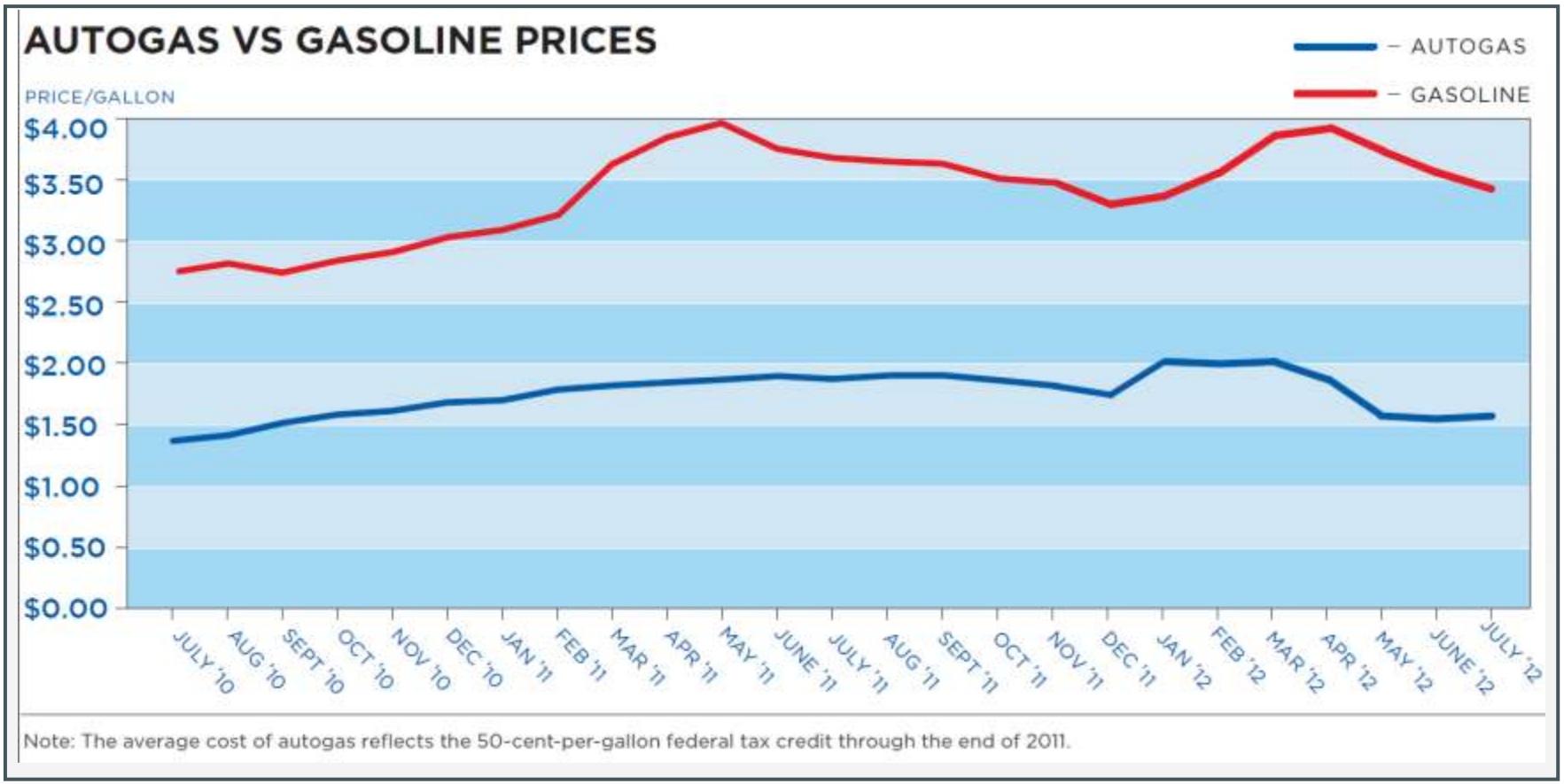
- Propane autogas has the lowest cost of entry of any alternative fuel.
  - Low Up Front Vehicle Cost.
  - Low On-Site Refueling Cost.
  - More Public Refueling Stations than any other alternative fuel.
  - Abundant Low Cost Fuel.
  - Domestically Produced Fuel.
  - Environmentally Friendly.


PROPANE
education & research
COUNCIL

Propane Autogas Fueling

Steve Whaley; Alliance AutoGas

COST SAVINGS



- **Fleets save more than $1.50/gallon versus gasoline on fuel costs**
- **Autogas fleets report reduced vehicle maintenance and extend engine life**

BUILDING AN AUTOGAS PROGRAM

The program has three core components:

- Consult- Help fleets identify the best propane autogas fueling solution
- Equip- Everything fleets need to make shifting to autogas easy & affordable
- Support- Ongoing training and technical support to ensure a fleet's autogas program is a success

ALLIANCE AUTOGAS FUELING

The Alliance AutoGas Fueling Solution Includes:

- Spill-free fueling station at fleet base
- No fueling equipment cost for fleets
- Guaranteed fuel supply
- Autogas data integration with fuel management systems
- Comprehensive autogas education includes extensive safety and operational training
- Ongoing support and training
- 24-hour safety support
- Green branding message support

A SCALABLE FUELING SOLUTION

A SCALABLE FUELING SOLUTION

A SCALABLE FUELING SOLUTION

A SCALABLE FUELING SOLUTION

A SCALABLE FUELING SOLUTION

A SCALABLE FUELING SOLUTION

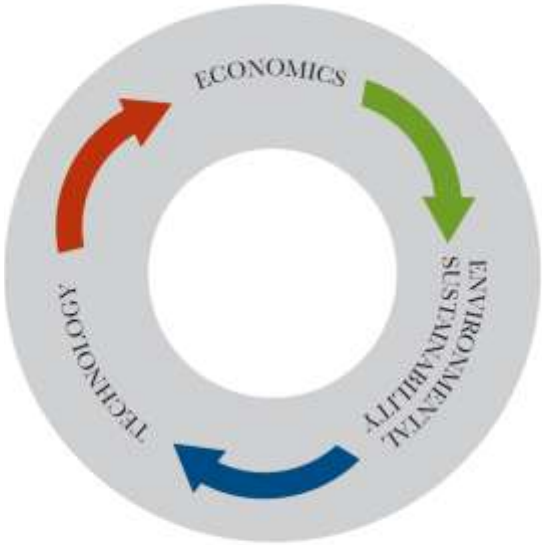
A SCALABLE FUELING SOLUTION

FUEL SUPPLY AND CUSTOMER TRAINING

MAJOR MARKETS WITH ALLIANCE PRESENCE

ALTERNATIVE FUEL COMPARISION

Sustainable transportation is based on a value equation that balances:



Autogas vehicle and infrastructure implementation is much less expensive than any other alternative fuel.

MOUNTAIN MOBILITY, NC

Making the switch to a propane autogas system was an easy decision for the Buncombe County Commissioners to make, after learning about the environmental benefits, fuel savings and lower-maintenance advantages of propane autogas.

Lori Hembree,
Director of Mountain Mobility

DENVER, CO

Denver Yellow Cab

Fleet Statistics

- 50 Ford Crown Victorias
- Anticipated annual gallon usage: More than 200,000
- Onsite fueling from Alliance AutoGas
- Time operating on autogas 4 years
- Estimated annual fuel cost savings:

  $300,000 for 50 vehicles

Fleet Sound Bite: Drivers happily report lower fuel cost and cite the fueling station at their fleet base as a convenient perk of running cabs on propane autogas.

IREDELL COUNTY, NC

Iredell County Sheriff's Department

Fleet Statistics:

- 26 Ford Crown Victorias
- Anticipated annual gallon usage: 52,000
- 2 fueling stations from Alliance AutoGas
- Time operating on autogas 9 months
- Estimated annual savings:

  Nearly $40,000 for 26 vehicles

Fleet Sound Bite: "We're saving 40 to 50 percent on fuel costs. We like the fact that the cars are clean burning and efficient, and we like that they're dual fuel" Captain Phillips

JACKSON COUNTY, GA

Sheriff Stan Evans
Jackson County, Georgia

Following the conversions of their first four autogas-powered cruisers, the department liked what they saw and began expanding their program. They are saving tax-payer dollars by **reducing fuel costs more than 30 percent**, and as their autogas fleet continues to grow, so do their fuel cost savings.

FLEET STATISTICS

FLEET TYPE:
Law Enforcement

PERCENT OF FLEET RUNNING ON AUTOGAS: 66%

AUTOGAS VEHICLES IN FLEET:
60 (58 Ford Crown Victorias; 2 pick-up trucks)

ADDITIONAL VEHICLES SLATED FOR AUTOGAS CONVERSION:
20

ANNUAL COST SAVINGS:
$110,000 - $145,000
With autogas use versus gasoline gallon equivalent

ANTICIPATED ANNUAL USAGE (gallons propane autogas):
120,000- 140,000

AUTOGAS FUELING:
Onsite autogas fueling infrastructure including 18,000-gallon autogas tank.

TIME OPERATING ON AUTOGAS:
3 years

RALEIGH

Raleigh Police Department

Fleet Statistics

- 10 Ford Crown Victorias
- Anticipated annual gallon usage: 39,600
- Onsite fueling from Alliance AutoGas
- Time operating on autogas 4 months
- Estimated annual fuel cost savings:

  $30,000 for ten vehicles

Fleet Sound Bite: RPD estimates they will reduce annual gasoline used by 30,000 to 36,000 gallons and save close to $30,000 in fuel costs. The department also expects reduced maintenance costs due to the high-octane rating of propane autogas.

RALEIGH

Chief Harry Dolan, City of Raleigh Chief of Police

AIRPORT SHUTTLE, NEW ORLEANS

The price differential makes autogas a very attractive alternative fuel. When we looked at how quickly we would reach a return on investment, it was a no-brainer. All our vehicles will eventually run on autogas.

Don Duverney, Airport Shuttle General Manager

MUSCOGEE COUNTY, GA

Alternative fuels are an undeniable part of the nation's future, and at Muscogee County we are excited to be a part of that evolution now.

Sheriff John Darr, Muscogee County

GREENVILLE COUNTY SHERIFF, SC

We're pleased to be converting 100 of our county's vehicles to propane autogas with the program, and we're also excited to be a certified conversion center and help deploy this project – and continue alternative fuel conversions for the county after the project concludes.

Alan Fairfield, County Fleet Director

Q&A

Website:

www.allianceautogas.com

Contact:

Steve Whaley, Alliance AutoGas

swhaley@allianceautogas.com

864.923.5000

ROUSH CLEANTECH

LIQUID PROPANE AUTOGAS:

Product Introduction & Overview

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ROUSH CLEANTECH

Company Background & History

Corporate Overview

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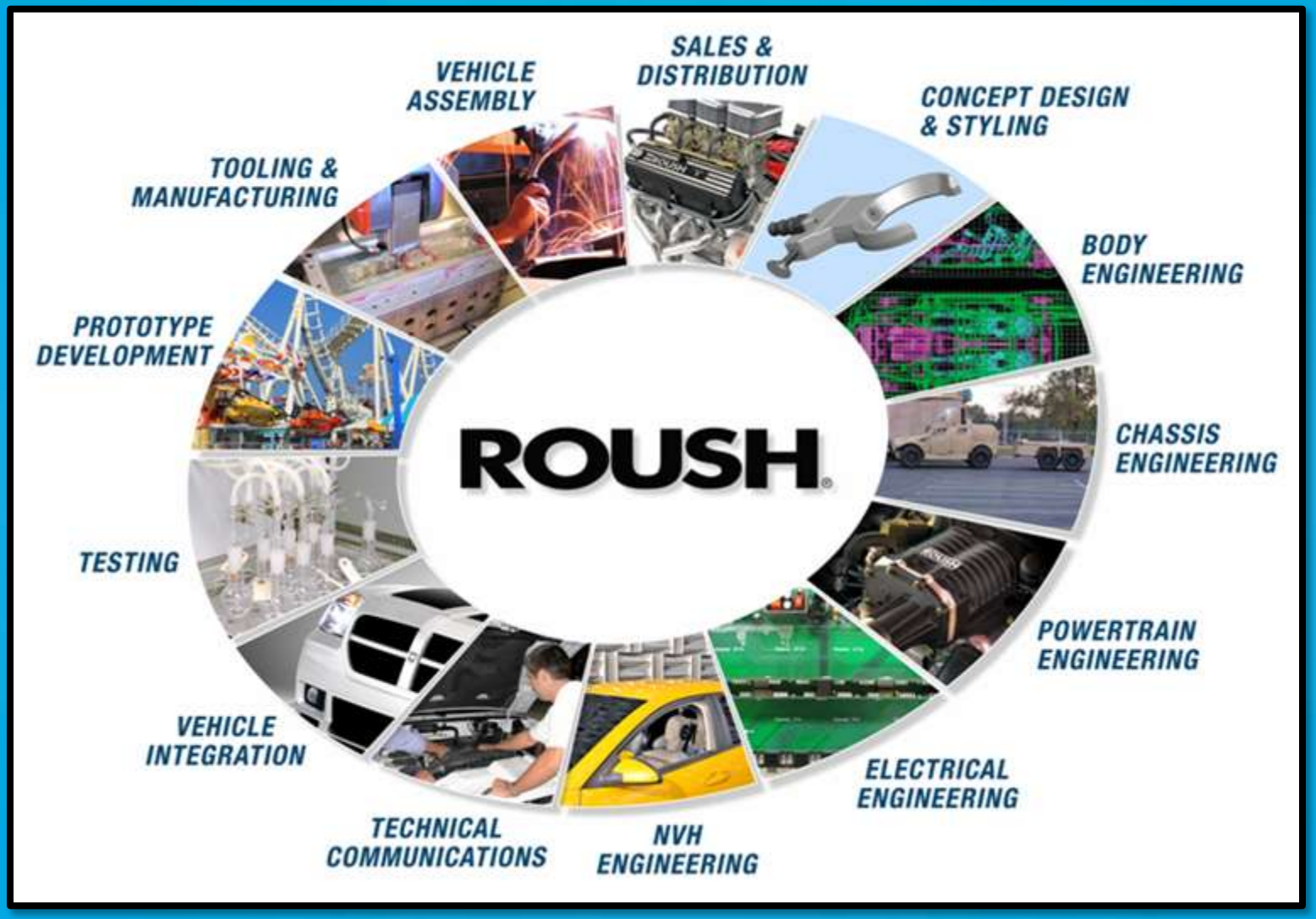


Corporate Wheel of Capability

Corporate Overview

ROUSH CLEANTECH

Transportation

- Ford
- Chrysler
- GM
- Toyota
- Honda
- Hyundai
- Isuzu
- Volkswagon
- EcoMotors
- VPG
- Navistar
- Bluebird

Defense

- Navistar Defense
- BAE Systems
- AM General
- General Dynamics
- SAIC
- Textron
- FAAC
- US Army/TARDEC
- Oskosh Defense
- Hardwire
- Astradyne

Entertainment

- Disney
- Universal Studios
- Disneyland Paris
- Universal Studios Orlando
- Hong Kong Disneyland
- Disney California Adventure
- Universal Studios Singapore
- The Henry Ford

Life Sciences

- GE Healthcare
- VWR
- UPG
- DeGroot
- Terumo
- Stryker
- Covidien
- Somanetics
- Genetix
- Merck
- Invacare

Motorsports

- Ford
- 3M
- Aflac
- Crown Royal
- UPS
- Scotts
- Kellogg
- Valvoline
- Coca-cola
- Fastenal

What are We Best Known For?

ROUSH CLEANTECH

Largest and most successful team in motorsports history

- Motorsports Management
- Licensing
- Retail Operations

ROUSH CLEANTECH

PRODUCT OVERVIEW:

Pickups | Vans & Wagons | Cutaway Vans

Chassis Cab | School Bus

ROUSH CleanTech Products

ROUSH CLEANTECH

Liquid Propane Autogas Vehicles

- Light & medium duty Ford trucks & vans, school bus.
- Factory Ford warranty maintained.
- No loss of HP / torque / towing capacity.
- Serviceable with existing diagnostic equipment.
- EPA & CARB Certified.

Ford E-150 / E-250 / E-350 | Ford E-350 SRW Cutaway | Ford E-450 DRW Cutaway | Ford F-450 / F-550 | Blue Bird Vision School Bus

Product Overview – Vans & Wagons

ROUSH CLEANTECH

Ford E-150 / E-250 / E-350

Model Years: 2009 – 2013

Engine Size: 5.4L V8 (2V)

Applications:
Extended or Regular
Cargo Van, Club Wagon, SRW Cutaway (S3H)
All rear-axle configurations
4-speed automatic transmission

Tank Sizes:
Mid-Ship: 25 usable gallons
In-Cab: 46 usable gallons

Technical Specs:
EPA and CARB approved
GVWR: < 10,000 lbs.
Requires “91G” gaseous fuels prep package.

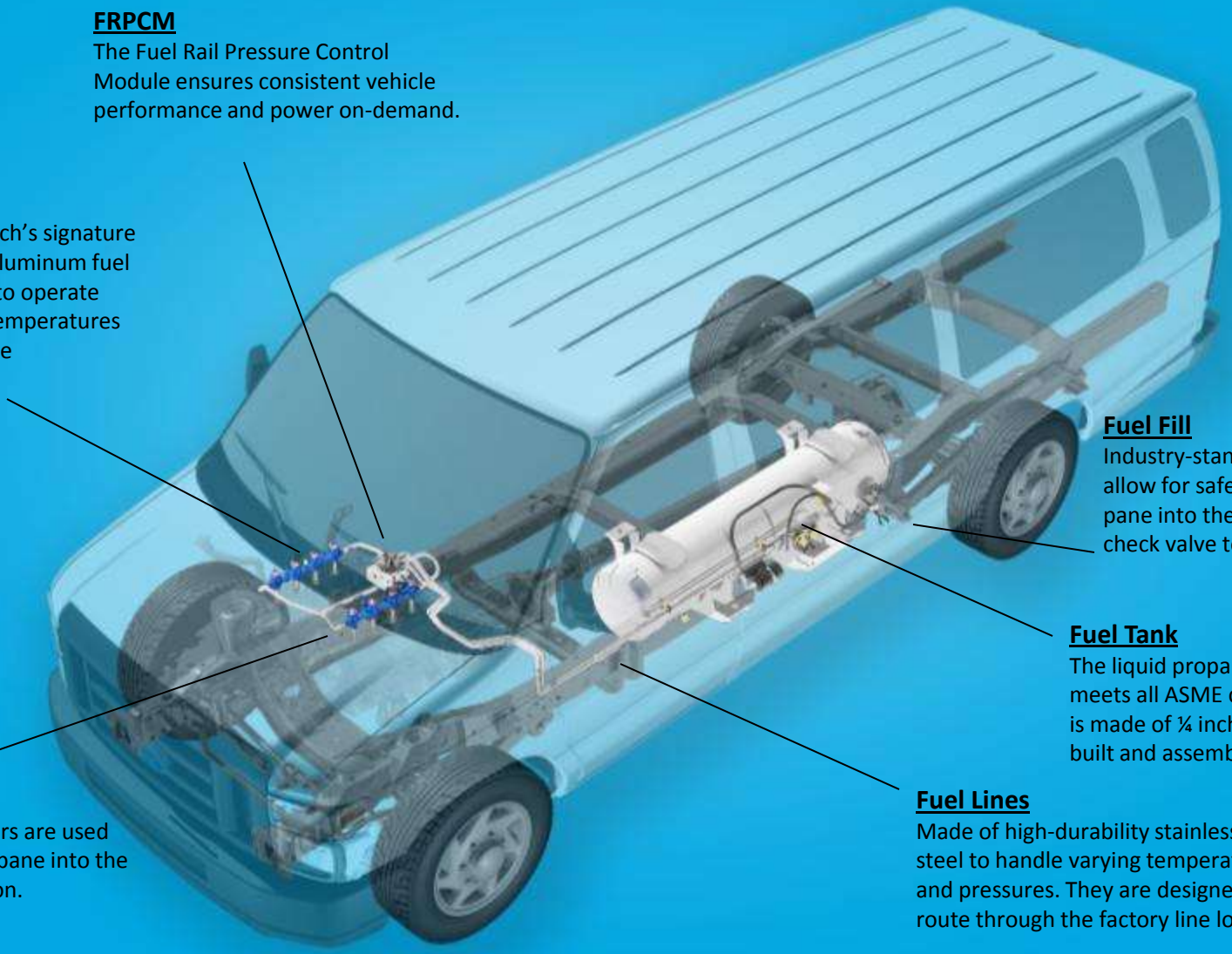
Order Availability:
Ford Ship Through
Conversion Kits

E-series Mid-Ship Fuel Tank

ROUSH CLEANTECH

FRPCM
The Fuel Rail Pressure Control Module ensures consistent vehicle performance and power on-demand.

Fuel Rail
ROUSH CleanTech's signature blue anodized aluminum fuel rail is designed to operate under varying temperatures of liquid propane



Fuel Fill
Industry-standard valve designed to allow for safe passage of liquid propane into the vehicle. Includes a check valve to prevent fuel leaks.

Fuel Tank
The liquid propane autogas fuel tank meets all ASME certification standards, is made of ¼ inch thick steel, and is built and assembled in the USA.

Fuel Injectors
Special fuel injectors are used to inject liquid propane into the cylinders for ignition.

Fuel Lines
Made of high-durability stainless steel to handle varying temperatures and pressures. They are designed to route through the factory line locations.

Product Overview – Vans & Wagons

ROUSH CLEANTECH

Ford E-450 DRW Cutaway

Model Years: 2009 – 2013

Engine Size: 6.8L V10 (2V)

Applications: 156” or 176” wheelbase
Stretched Chassis
5-speed auto transmission

ALTOONA TESTED

Tank Size: Aft-Axle: 41 usable gallons

Technical Specs: EPA and CARB approved
GVWR: < 14,500 lbs.
Requires “91G” gaseous fuels prep package.

Order Availability: Ford Ship Through
Conversion Kits

Product Overview - Pickups

ROUSH CLEANTECH

Ford F-250 / F-350

Model Years:	2012 - 2013
Engine Size:	6.2L V8 (3V)
Applications:	4x2 or 4x4 All bed configurations All body configurations All rear axle configurations (including chassis cab)
Tank Sizes:	Under-Bed: TBD In-Bed: 38 usable gallons
Technical Specs:	EPA and CARB approved GVWR: ≤ 13,300 lbs. Requires “98F” gaseous fuels prep package.
Order Availability:	Ford Ship Through Conversion Kits
Available	October, 2012

F-250 In-Bed Fuel Tank

ROUSH CLEANTECH

FRPCM
The Fuel Rail Pressure Control Module ensures consistent vehicle performance and power on-demand.

Fuel Rail
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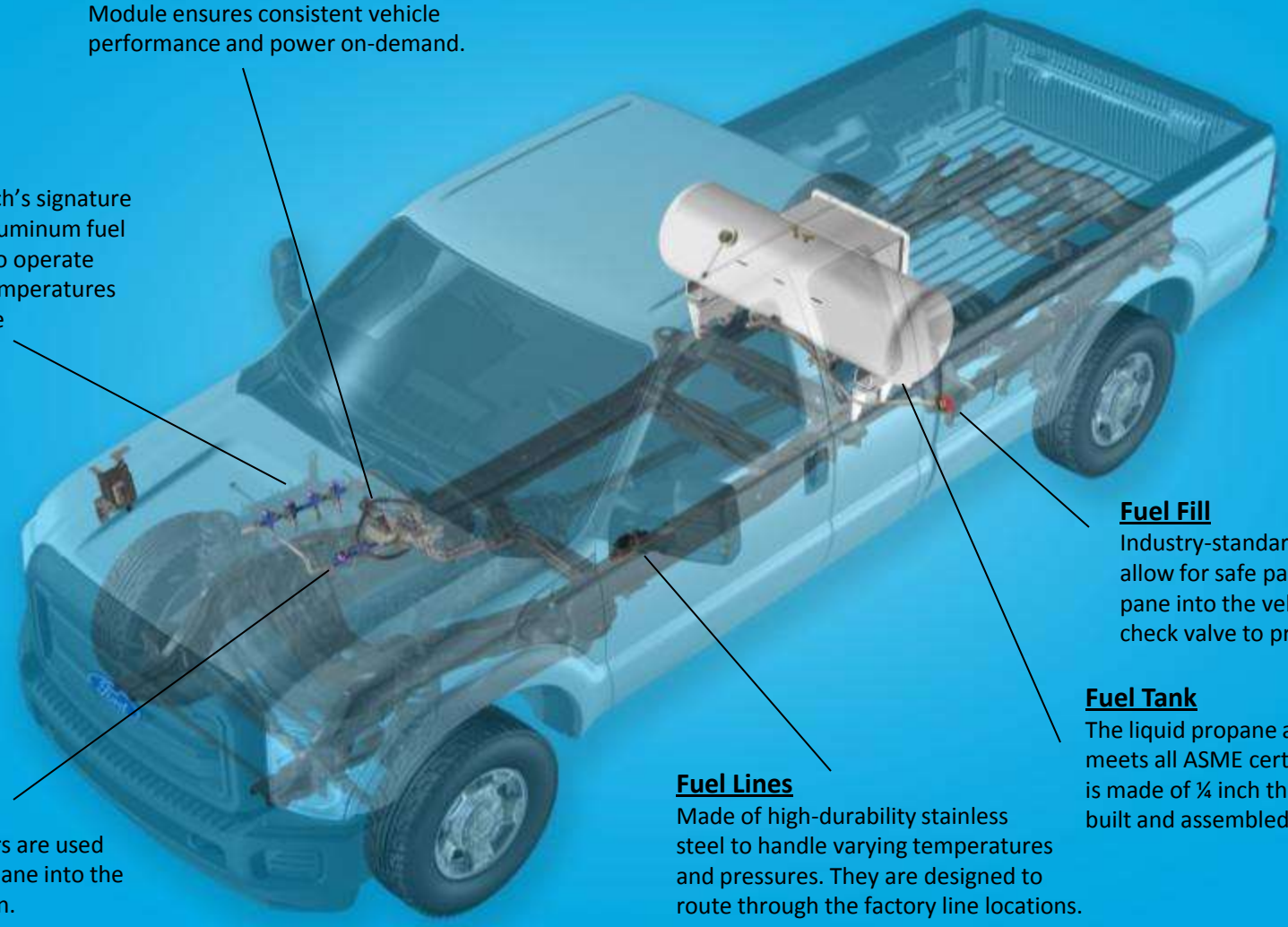

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Fuel Lines
Made of high-durability stainless steel to handle varying temperatures and pressures. They are designed to route through the factory line locations.

Fuel Injectors
Special fuel injectors are used to inject liquid propane into the cylinders for ignition.

Product Overview – School Bus

ROUSH CLEANTECH

Blue Bird Vision

BLUE BIRD

Model Years:	2012 - Newer
Engine Size:	6.8L V10 (3V)
Applications:	Blue Bird Vision Blue Bird MFSAB / Activity Bus
Tank Sizes:	67 usable gallons
Technical Specs:	EPA and CARB Approved Up to 77 Passengers GVWR: 33,000 lbs.
Order Availability:	Blue Bird Dealers

Product Overview – School Bus

Ford E-450 DRW Cutaway

Model Years:	2009 – 2012
Engine Size:	6.8L V10
Applications:	Dual rear wheel cutaway 5-speed auto transmission
Tank Sizes:	Aft-Axle: 41 usable gallons
Technical Specs:	EPA and CARB Approved Up to 30 Passengers GVWR: 14,500 lbs.
Order Availability:	Blue Bird Dealers

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RETURN ON INVESTMENT

A Positive Return, Even Without Government Incentives

Savings Calculator

ROUSH CLEANTECH

2012 Ford E-250 Cargo Van

	Gasoline (5.4L V8)	Propane (5.4L V8)	Savings or (Cost) to Convert
Capital Costs			
Base Ford Vehicle Purchase Price	$ 28,325.00	$ 28,325.00	
ROUSH Propane System Conversion Price		$ 11,300.00	
Total Capital Savings or Investment to Convert:	$28,325.00	$39,625.00	$ (11,300.00)
Operating Costs (fuel)			
Total Vehicle Life (miles)	200,000	200,000	
Average Miles per Gallon*	13.0	11.1	
Gallons of Fuel Used Over Life of Vehicle	15,385	18,100	
Fuel Price (per gallon)**	$ 4.01	$ 1.51	
Total Fuel Savings or Cost Over Life of Vehicle:	$ 61,692.31	$ 27,330.32	$ 34,361.99
Operating Costs (misc.)			
Maintenance Rate per mile (tune-ups, oil, engine life, etc.)***	$ 0.030	$ 0.015	
Maintenance Costs	$ 6,000.00	$ 3,000.00	
Fuel Loss from Pilferage & Theft ($100 per year)	$500.00	$0.00	
Total Misc. Savings or Costs Over Life of Vehicle:	$6,500.00	$3,000.00	$ 3,500.00

Gross Vehicle Lifetime Savings or Loss: $37,861.99

Net Vehicle Lifetime Savings or Loss: $26,561.99

Savings Calculator

ROUSH CLEANTECH

2012 Ford F-250 Pickup Truck

	Gasoline (6.2L V8)	Propane (6.2L V8)	Savings or (Cost) to Convert
Capital Costs			
Base Ford Vehicle Purchase Price	$ 35,765.00	$ 35,765.00	
ROUSH Propane System Conversion Price		$ 10,500.00	
Federal Alternative Motor Vehicle Tax Credit (propane only)			
Total Capital Savings or Investment to Convert:	$35,765.00	$46,265.00	$ (10,500.00)
Operating Costs (fuel)			
Total Vehicle Life (miles)	170,000	170,000	
Average Miles per Gallon*	12.0	10.2	
Gallons of Fuel Used Over Life of Vehicle	14,167	16,667	
Fuel Price (per gallon)**	$ 4.01	$ 1.51	
Total Fuel Savings or Cost Over Life of Vehicle:	$ 56,808.33	$ 25,166.67	$ 31,641.67
Operating Costs (misc.)			
Maintenance Rate per mile (tune-ups, oil, engine life, etc.)***	$ 0.030	$ 0.015	
Maintenance Costs	$ 5,100.00	$ 2,550.00	
Fuel Loss from Pilferage & Theft ($100 per year)	$500.00	$0.00	
Total Misc. Savings or Costs Over Life of Vehicle:	$5,600.00	$2,550.00	$ 3,050.00

Gross Vehicle Lifetime Savings or Loss:	$34,691.67
Net Vehicle Lifetime Savings or Loss:	$24,191.67

Demonstration Vehicles

ROUSH CLEANTECH

ROUSH CleanTech Demo Units

- Located around the U.S.
- Vehicles available:
  - E-series Cargo Vans
  - E-series Passenger Vans
  - E-series Cutaway Vans
  - F-series Pickup Trucks
- Contact us for details

Customer Adoption

ROUSH CLEANTECH

Success in the U.S. Because…

ROUSH CLEANTECH

Price of propane autogas

- 30-40% less expensive than gasoline.

Emissions reduction

- 24% reduction in Greenhouse Gas (GHG) emissions.
- 20% reduction in Nitrogen Oxide (NOx) emissions.
- 60% reduction in Carbon Monoxide (CO) emissions.

National security

- Decreases dependence on foreign oil.
- 97% of U.S. propane is from North America.

Supportive federal and state incentives

- Incentives and funding available in various states to cover the cost of conversion to propane autogas.

Sales Territories

ROUSH CLEANTECH

Sales Territories

Strategic Accounts

Territory Managers:

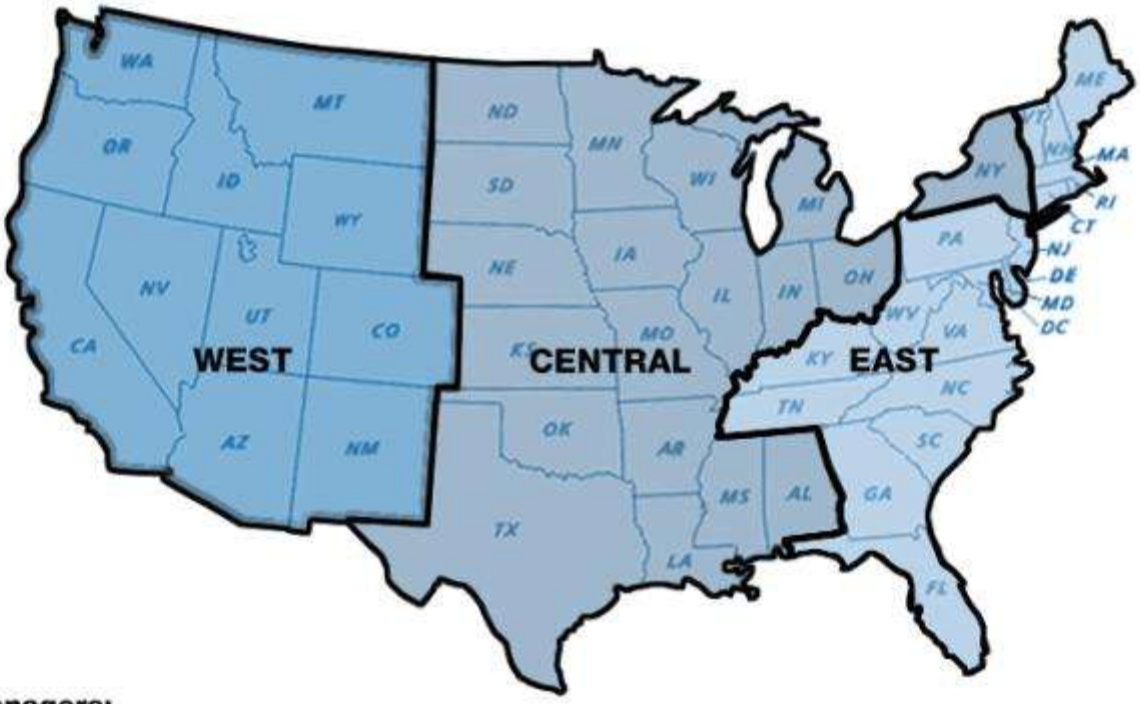
West:	Eric Bates	- 602.989.5086 - eric.bates@roush.com
East:	Peter King	- 313.529.8518 - peter.king@roush.com

Sales Territories

ROUSH CLEANTECH

Sales Territories

Government / School / Propane



Territory Managers:

West:	Brad Beauchamp	- 734.679.2756 - brad.beauchamp@roush.com
Central:	Robert Little	- 734.679.7526 - robert.little@roush.com
East:	Chelsea Jenkins	- 734.812.1965 - chelsea.jenkins@roush.com

10.28.2011

ROUSH CLEANTECH

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Vice President, Sales & Marketing

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Todd.Mouw@roush.com

Our Experience with Propane Autogas

GO Airport Express
THE ONLY WAY TO GO

Agenda

- Fleet vehicle composition.
- Decision process for propane autogas.
- Current propane autogas vehicles in fleet.
- How has your experience been with propane autogas?
- Return on investment.
- Future purchase plans around propane autogas.

GO Airport Express
THE ONLY WAY TO GO

Fleet Composition

- 64 E-350 Ford Vans – Airport Express
  - 30 Propane Autogas
  - 2 CNG
  - 32 gasoline
- 55 varied shuttle vans – Owner Operators
- 20 El Dorado Buses – Midway Parking Shuttle
  - Bio-Diesel
  - B-20 Blend

GO Airport Express
THE ONLY WAY TO GO

Decision Making Process

- High Gas Prices
- Saw presentations on CNG and Propane
- Clean Energy pushing CNG and decided to test CNG
- Met with Roush and decided to test Propane
- Met with other providers to learn of their experience with alternative fuels

GO Airport Express
THE ONLY WAY TO GO

Propane vs CNG

Compressed Natural Gas

- Price point for tanks and installs equivalent to Propane
- Government rebates equivalent with propane
- Fuel price
- Works well in winter
- 3 public stations in Chicago that are unreliable
- Costly to build our own station

Propane Autogas

- Better infrastructure for fueling
  - Able to build onsite
  - Great incentives from suppliers
  - Supplier will bring refueling trucks for emergencies
- Fuel Price
- Works well in winter

GO Airport Express
THE ONLY WAY TO GO

Current Propane Vehicles in Fleet

- 30 E-350 Ford Vans
- 46% of Airport Express fleet serving downtown Chicago

GO Airport Express
THE ONLY WAY TO GO

Experience

- Overall Good Experience
  - Roush is tremendous to work with.
  - Fuel costs much lower
  - Able to market a green fleet
  - Learning process for drivers and dispatchers due to lower gas mileage.

GO Airport Express
THE ONLY WAY TO GO

Future Purchase Plans

- Continue to purchase about 12 to 15 new shuttle vans each year equipped with propane autogas tanks.
- Have entire downtown fleet converted to alternative fuels in 2 to 3 years.

GO Airport Express
THE ONLY WAY TO GO

ROUSH CLEANTECH

QUESTIONS?

Thank you for joining us!