



## PROPANE AUTOGAS

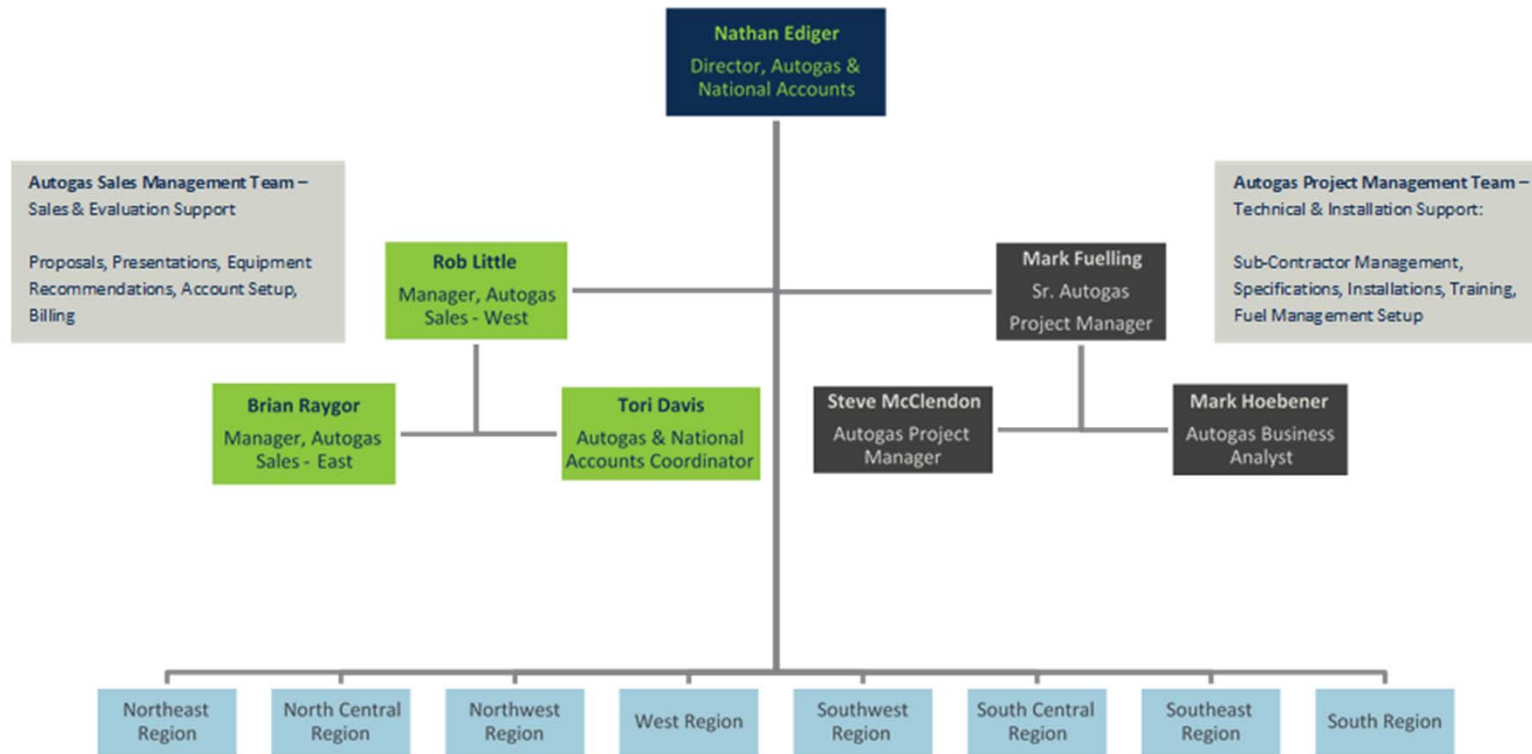
*Clean. Domesetic. Abundant. Safe. Inexpensive*

# FERRELLGAS OVERVIEW

- ✓ ~30% Employee Owned
- ✓ Started in 1939 by A.C. Ferrell
- ✓ More than 4,000 employees in the US
- ✓ Nearly 875 retail outlets
- ✓ 185,000,000 Gallons of Storage Across the USA
- ✓ Fleet of more than 4,000 vehicles
- ✓ Serving nearly 1 million Customers
- ✓ Delivering nearly 1,000,000,000 (1 Billion) gallons per year



# STRUCTURED FOR INDUSTRY LEADING SUPPORT



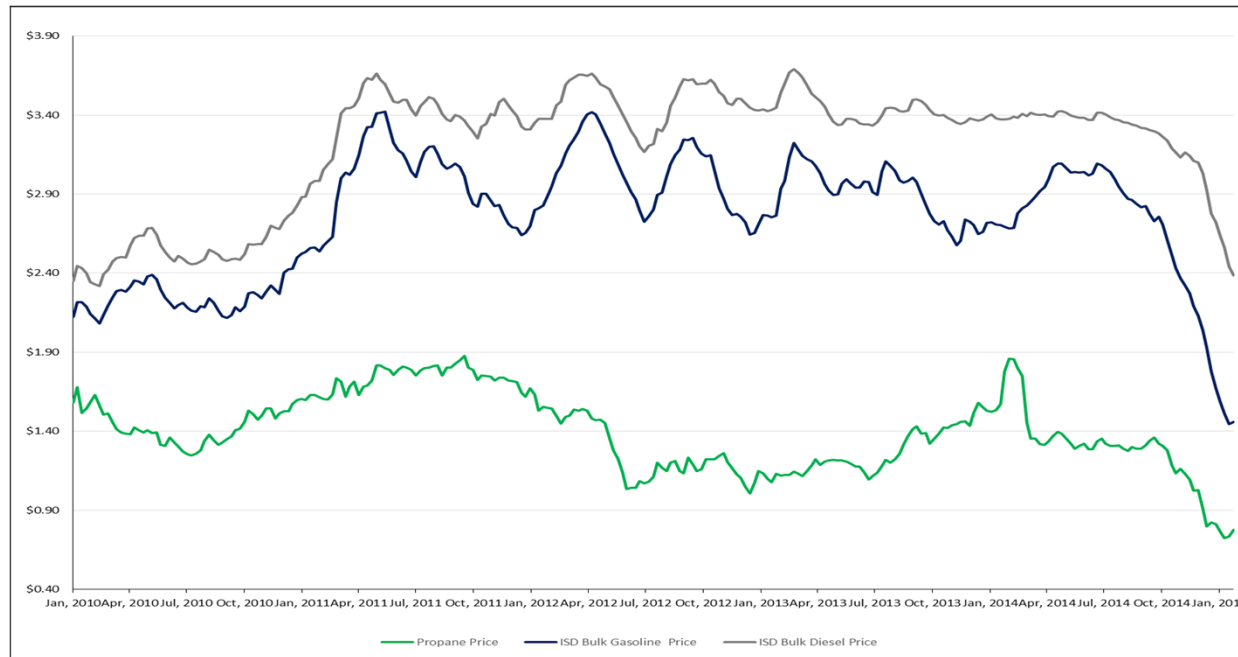
**Eight (8) Regions with Local 24/7 Contacts:**

Over 860 Retail Locations, more than 60 strategically located Account Managers for Site Visits, Operational Execution, Permitting, Routing, Fuel Level Monitoring



# HISTORICALLY INEXPENSIVE

- Average 60 Month Savings vs. Gasoline: 49% less expensive
- Average 60 Month Savings vs. Diesel: 56% less expensive



# DELIVERY PROCESS

Customer projected to use 100,000 gallons per year

- ✓ Designated Fixed Route Autogas Customer by our Logistics Manager
- ✓ Alongside our daily deliveries, to safeguard acceptable fuel levels, [we'll install a remote tank monitor](#):

1. Tank Monitor will Send Multiple Daily Automatic Fuel Level Reports via Email

2. Alert Sent via Email & Delivery Dispatched at 30-35% Capacity

- a. Approximately 550gals remaining in storage at time of dispatch

3. Dispatched Bobtail Truck Completes Delivery and Visually Inspects Fueling Site

- a. Estimated time on property = ~30mins

Ferrellgas Primary Service Center: 8088 Miramar Rd. San Diego, CA 92616

- a. Delivery approx. 1x – 2x per week (80 deliveries annually)
- b. Bobtail Delivery Truck on Route within 5 miles of Delivery Point Multiple Times Each Day
- c. More than 13 Full Time Drivers & Trucks Operating in San Diego Market
- d. Over 250,000 Gallons of Ferrellgas Owned Storage in San Diego Market



## SAMPLE FUELING PACKAGE

- ✓ One (1) Autogas Dispenser with Hose Retractor
- ✓ One(1) Fuel Management (FMS) Tower
- ✓ One (1) 2,000 Gallon Storage Tank
- ✓ One (1) Autogas Hi-Diff Pump/Motor
- ✓ Electrical Control Panel with E-Stop
- ✓ Remote Tank Monitoring
- ✓ One (1) Blue Moon Fuel Filter
- ✓ Tank Stands & all required piping/fittings/valves
- ✓ Ongoing Safety Training
- ✓ Emergency Service & Contingency Planning

\*EQUIPMENT SUBJECT TO SITE SURVEY & LOCAL CODE\*



Autogas Dispenser, 1000gal Tank & FMS Tower



One 2,000wGal Tank

# FUELING STATION FOOTPRINT

## SITE PREP:

### Fleet Responsibility

- Concrete Pad
- Electrical: 3 Phase or 1 Phase
- Low Voltage
- Data Line
- Crash Bollards

### Supplier Responsibility

- Permitting
- Maximize Space
- Optimal Tank Sizing
- Delivery Schedule

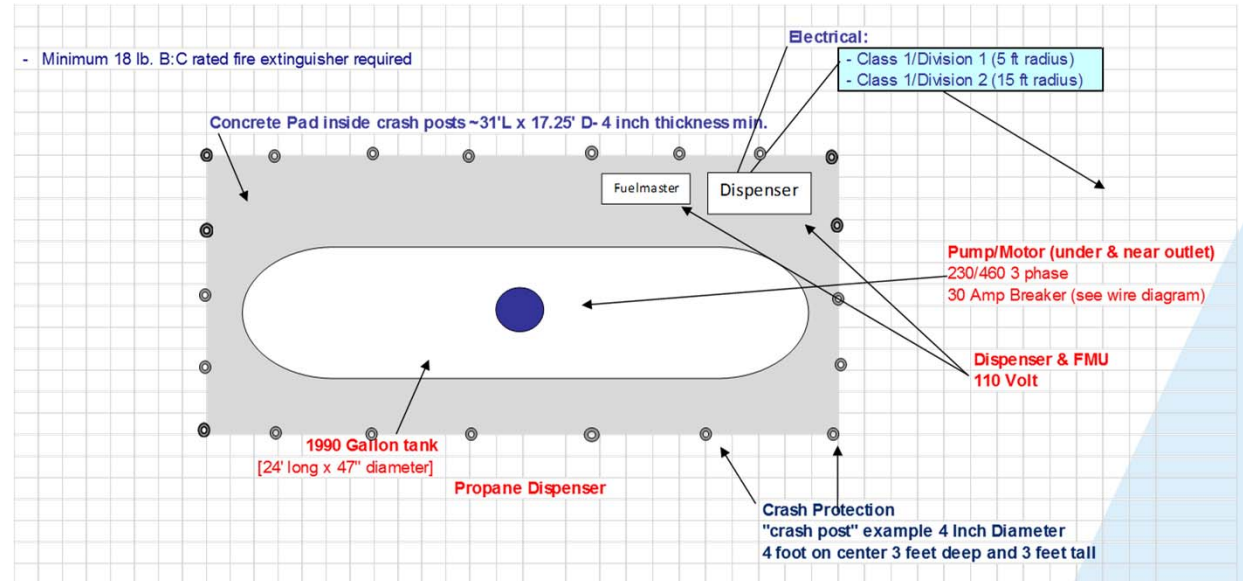
2k Fueling Site:

~31'L x 13' W

Average Type C Bus:

~40'7" L x 8'6" W

Average Type A / Para Transit Bus: ~23'L x 8'W



# SETBACK CONSIDERATIONS

Container Size	Distance Requirement
501-2,000 gallons	At least 25 feet from Important Buildings, or property lines that can be built upon.
More than 2,000 gallons	At least 50 feet from important buildings, or property lines that can be built upon.
Condition	Action to Take
Combustible Materials (ex: woodpiles, dry grass / tall weeds, brush or chaparral)	Maintain at least 10' clearance around container
Exterior Sources of Ignition (ex: opening into direct vent appliances, mechanical ventilation air intakes, etc)	Maintain at least 10' clearance around container
Overhead electric Lines more than 600 volts -typical electric wires from poles to buildings are 230 volts	Maintain 6' Horizontal clearance from container. (imagine dropping a plumb bob straight down to the ground, now measure 6' away from this point. The container must be at least this far back. )

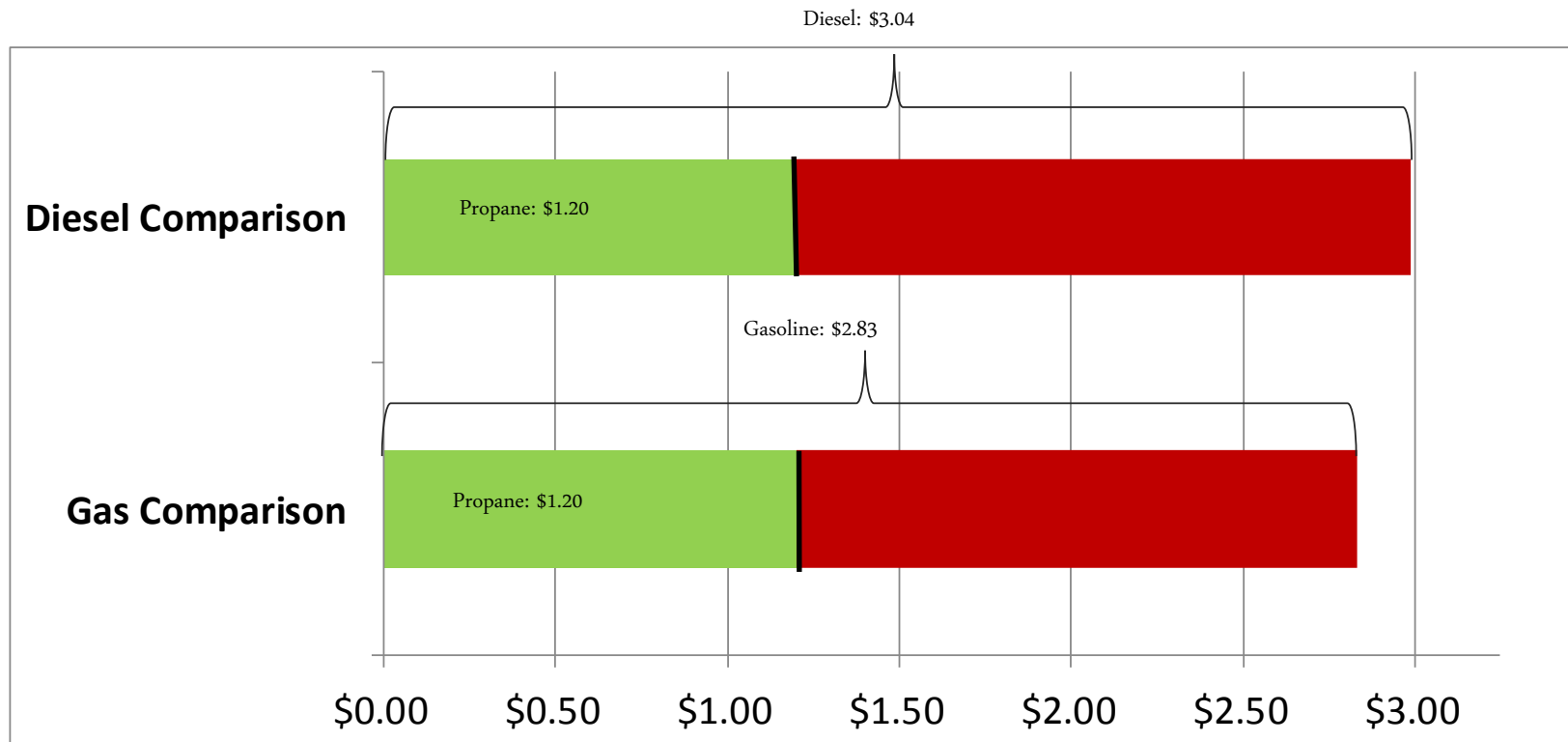


# SAMPLE INSTALLATION MATRIX

Task	Responsibility	Estimated Timeframe
Select Tank & Dispenser Location	FGP & Customer	1 Day
Finalize Supply & Equipment Agreement	FGP & Customer	1 Week for Review
Order Dispensing Equipment & Tanks	FGP	~4 Week lead Time
Submit Requirements & Obtain Site Permits	FGP & Customer	4 - 12 Weeks
Obtain Electric Permits (if necessary)	Electric subcontractor	2 – 4 Weeks
Install / Run Conduit for Electric	Electric Subcontractor	1 - 2 Weeks
Install Pad(s) & Install Bollards	Concrete Subcontractor	1 - 2 Weeks
Install Autogas Dispenser & Tank	FGP	1 - 2 Weeks
Complete electric hookups	Electric subcontractor	1 Week
Train on safety and system operations.	FGP	1 - 2 Days
<b>Total Estimated Timing</b>		<b>12– 24 Weeks</b>



## STAY IN THE GREEN



The **Red** represents the unnecessary fuel expense from operating gas or diesel assets.

These are funds that can be reinvested in business, staff, education, supplies, etc.

# UNPRECEDENTED SAVINGS

## Savings vs. Diesel

\$37,000+ per Bus



	Diesel	Propane Autogas
<b>Fuel Consumption</b>		
Annual Miles	12,000.00	12,000.00
Years in Service	12	12
Total Miles over Service Life	144,000.00	144,000.00
Average MPG	5.70	4.00
Gallons Consumed Annually	2,105.26	3,000.00
Gallons Consumed Total	25,263.16	36,000.00
Diesel Price Per Gallon	\$3.04	
Propane Price per Gallon		\$1.20
<b>Maintenance Comparison</b>		
Oil Interval	3,500.00	6,000.00
Oil Capacity	13.00	7.00
Oil Filter Cost	\$28.00	\$5.00
Oil Cost per Quart	\$1.50	\$1.50
DEF Gallons (2%)	505.26	0.00
DEF Cost per Gallon	\$2.50	\$0.00
PM's Over Life	41	24
Labor Hours per PM	1	1
Hourly Labor Cost	\$30.00	\$30.00
Fuel Filter Change Interval	12,000	50,000
Fuel Filter Cost	\$20.00	\$100.00
Total Filter Changes	12	3
<b>Operating Costs</b>		
<b>TOTAL Cost to Operate</b>	<b>\$81,491.73</b>	<b>\$44,580.00</b>
<b>Absolute Savings</b>		
Annual Cost to Operate	\$6,790.98	\$3,715.00
Annual Savings vs. Diesel	\$0.00	\$3,075.98
Estimated Operating Cost Per Mile	\$0.45	\$0.25
<b>Minimum Operational Savings</b>		<b>\$36,911.73</b>

## SCALABLE AND FLEXIBLE



One (1) 1,000 Gal Tank



One (1) 2,000 Gal Tank



One (1) 2,800 Gal Tank

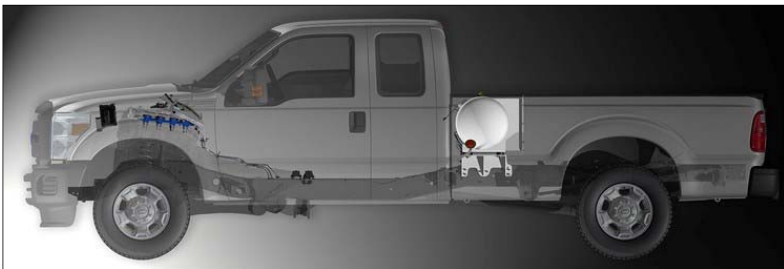


One (1) 18,000 Gal Tank

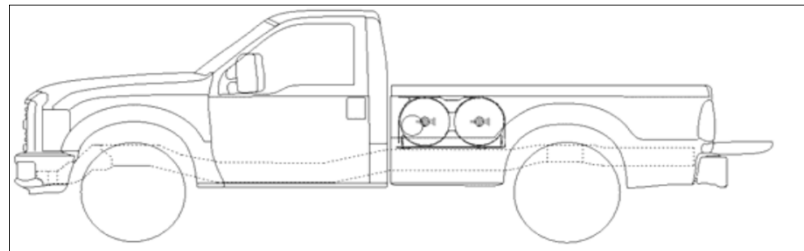
# COMPARING TO CNG

- ✓ Serviceability: Shop Enhancements / Certification required for CNG
- ✓ Added Weight: CNG storage adds an average 300-900lbs to vehicle
- ✓ Track Record: 11.2M Worldwide / 112k in US (less CNG vehicles worldwide)
- ✓ Cost of Conversion: 1.5x More (avg CNG vehicle conversion is 1.5x more than LPG system)
- ✓ Operating Pressure: 3,600 psi (high operating pressure and specialized service)
- ✓ Station Downtime: Contingency Plan / Availability (no backup plan with CNG)
- ✓ Fueling Station Cost: \$500k - \$1.5M+ (10-20x more expensive for CNG station)

LPG: 46 Usable Gallons



CNG: 20 GGE



## DECISIVE VALUE IN PROPANE AUTOGAS



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