

One of the best kept secrets in alternative  
fuels is right here in our own backyard

# Why is propane essential for Williamson County?

- Reduced emissions – near non-attainment
  - Clean Air Act
- Saves taxpayer dollars:
  - Reduced fleet fuel cost
  - State and federal funds to reduce vehicle acquisition costs
  - Reduced vehicle maintenance costs

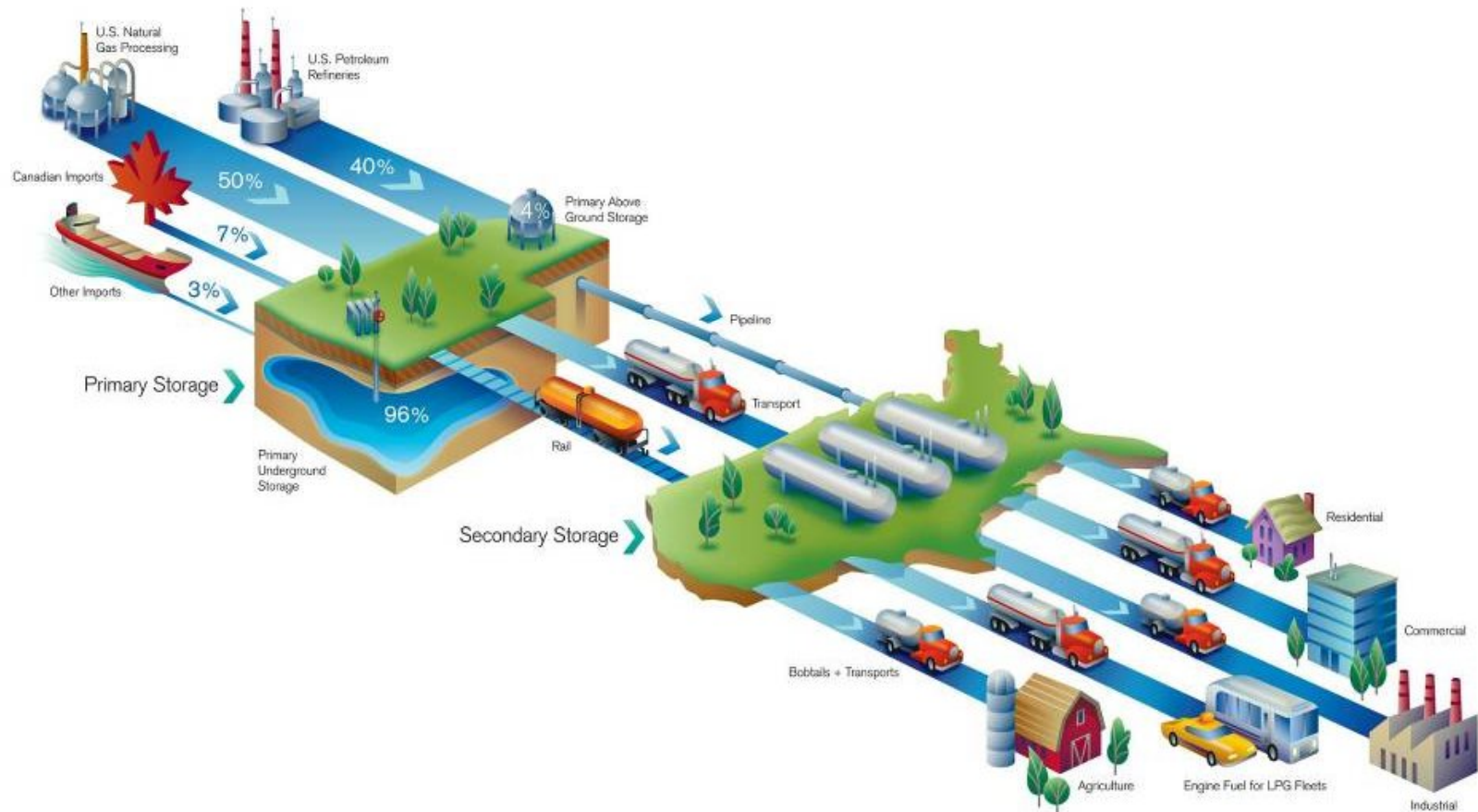
# What is Propane?

- Propane is a hydrocarbon ( $C_3H_8$ ) and is sometimes referred to as liquefied petroleum gas, LP-gas or LPG.
- Propane is non-toxic and does not contaminate ground water or soil.

# Why Propane? Because...

- It's domestically produced
- It's environmentally-friendly
- It's readily available
- Now more than ever there are more vehicle and mower choices
- It's easy on a county's pocket book

# 90 % Produced in US



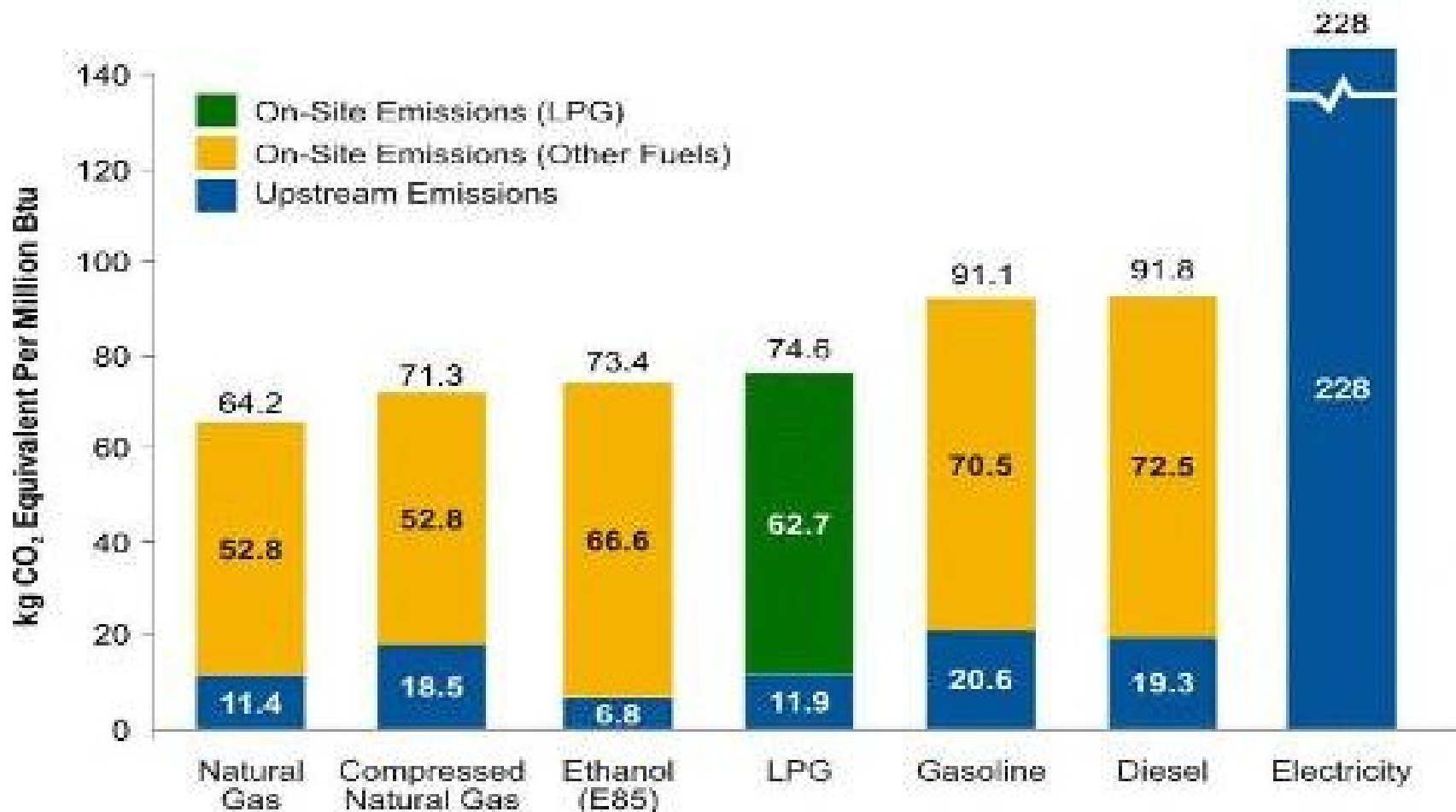


# Do You Know What The Principal Green House Gases (EPA) Are?

They are:

- Carbon Dioxide CO<sub>2</sub>
- Methane (*principal component of natural gas*)
- Nitrogen Oxide (NOx)

- Cleaner than gasoline/diesel as approved by the Clean Air Act of 1990 and National Policy Act of 1992 and 2005

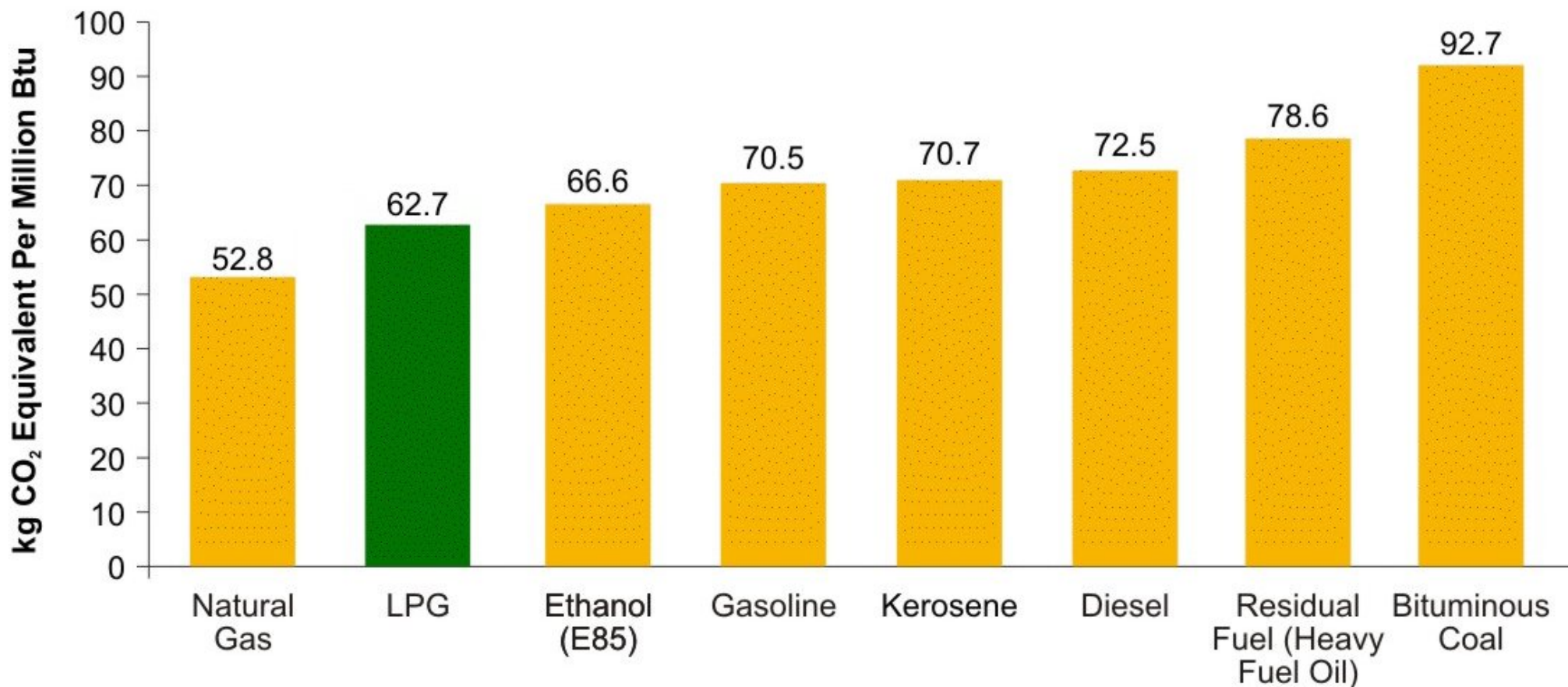


Sources: DOE 1994, EPA 2007, GREET 2007

On-site emissions estimates based on chemical composition of the fuel with 99 percent combustion.

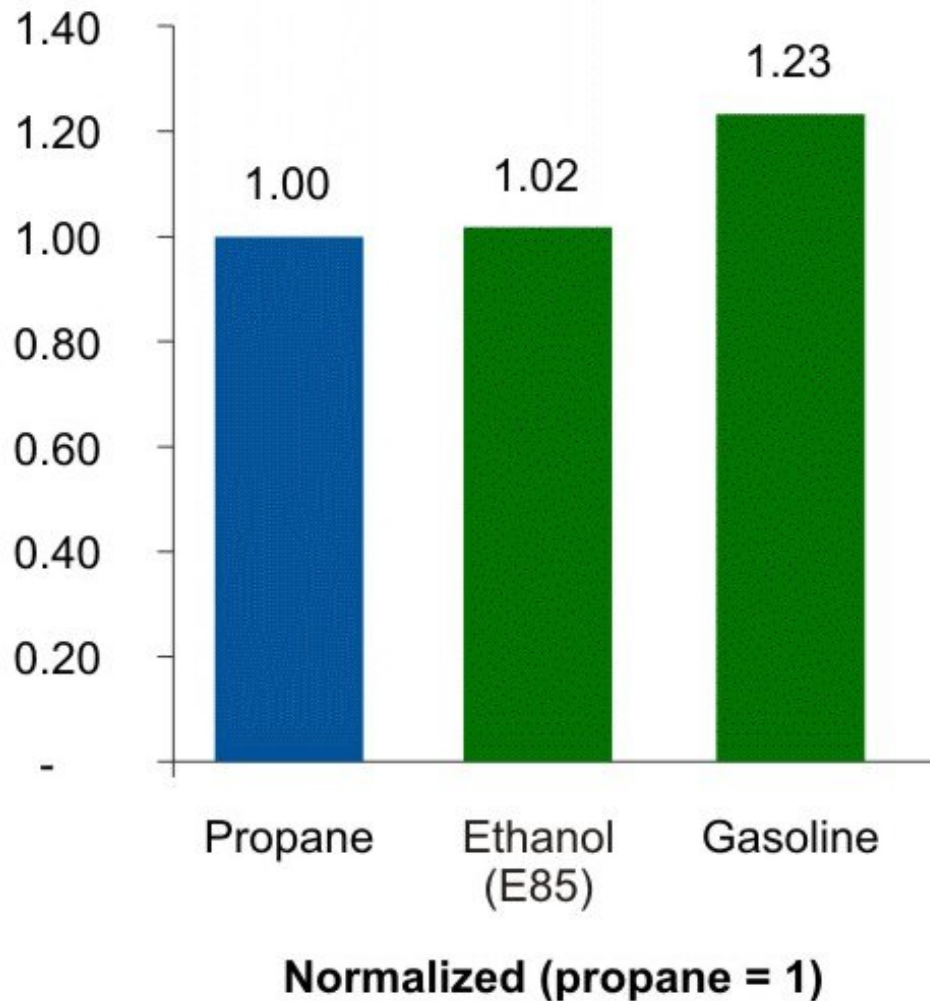
Actual life-cycle emissions vary by application.

## On Site Carbon Emissions





## Light-duty trucks emissions



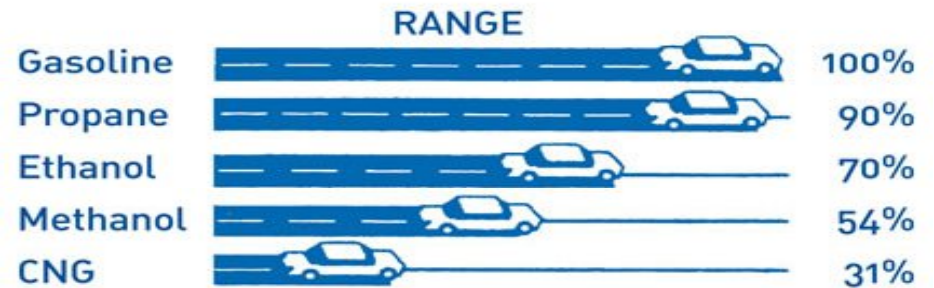
# Propane: It's CLEAN-BURNING

- Propane vehicles are EPA certified and produce significantly **LESS** CO<sub>2</sub>, NO<sub>x</sub>, hydrocarbons and GHG emissions than gasoline or diesel engines. Additionally, propane vehicles produce **LESS** CO<sub>2</sub> than fuel oil and ethanol.

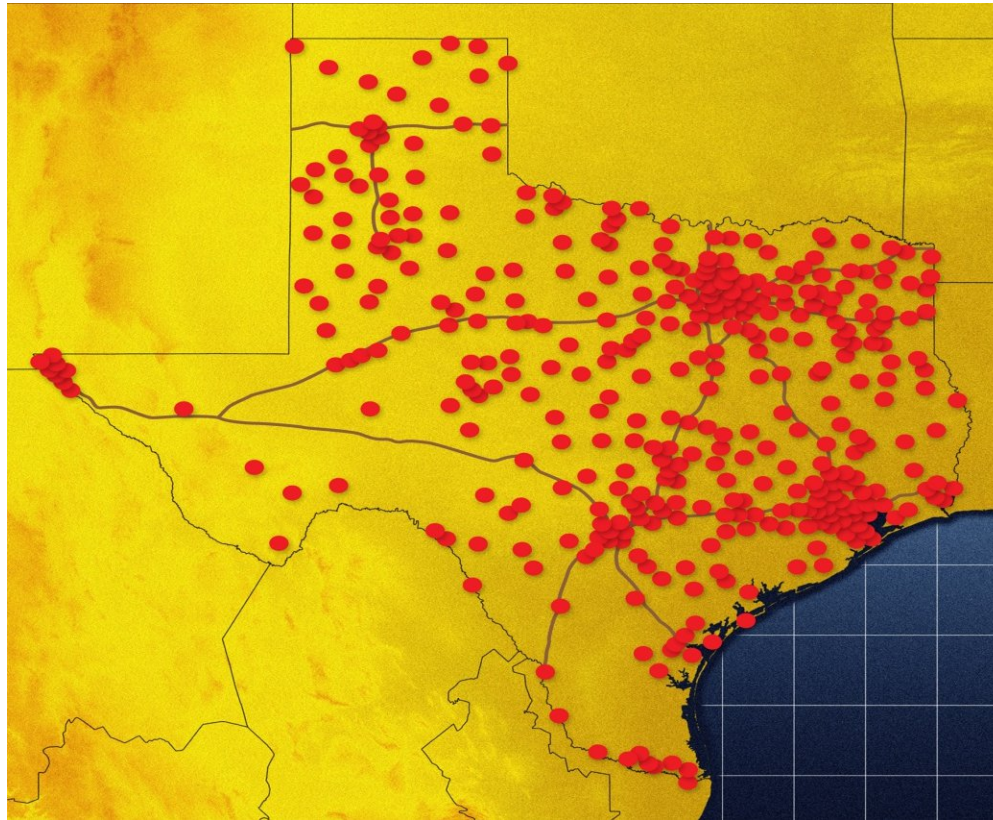


# Going the Distance

- Propane gives you the **highest volumetric efficiency** of all alternative fuels. That means a vehicle range comparable to gasoline and better than any of the other alternatives.
- Propane fueled vehicles compare favorably with their gasoline counterparts on power, acceleration, and cruising speeds.



# Propane: It's Readily Available Over 850 stations statewide

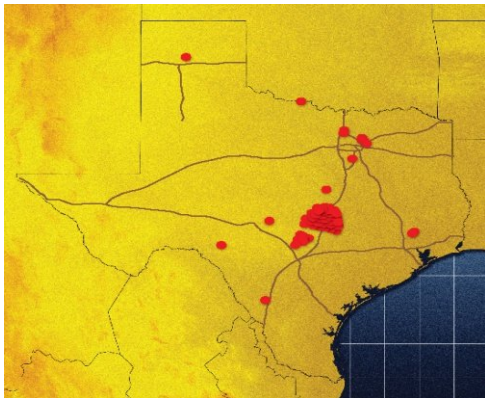




## Propane



## CNG/LNG



## Bio-Diesel



## Ethanol



# Multiple platforms available for county vehicles



Chevy Impala



Chevy Silverado

# GMC Topkick Series

- GMC Topkick Series 4500-8500 with liquid propane injection (LPI) system designed by CleanFuel USA. Retrofit with any body.

System can be put on any 8.1 L My 2005-2009.





# Roush Performance

## *Liquid Propane Injection*



F-250 & F-350



E-150, E-250 & E-350

# Propane: It's Economical

- Propane can save you **30-50%** over diesel or gasoline.
- And if you are a registered alternative fueler, you could qualify for a **\$.50/gallon tax credit** from the Federal government even if you are **TAX EXEMPT.**



# County Savings Case Study

- CARTS is the second-largest rural transit fleet in State of Texas.
- Service area size: 7,500 sq. mi
- Transports 350,000 passengers annually
- Annual transit bus mileage—1.6 million miles
- Annual usage of propane – about 150,000 gallons
- 33 propane transit buses
- **Annual savings: \$150,000**





## Denton ISD

### 77 school buses

#### – Propane Tax Credit Program 2006-2009

- DISD qualifies for a 50¢ per gallon tax credit for each gallon of propane purchased from October 1, 2006 to September 30, 2009.
- DISD usage of LPG/Propane per year = 298,844 gallons
- 298,844 gal. x 50¢ per gal. = \$149,422.00 per yr.
- Estimated Propane Credit Total - \$600,000.00+ (2006-09)
- RCC anticipates the program may carry over to 2012-13
- Total estimated return to DISD = \$1,200,000+

# Dallas ISD and Northside ISD

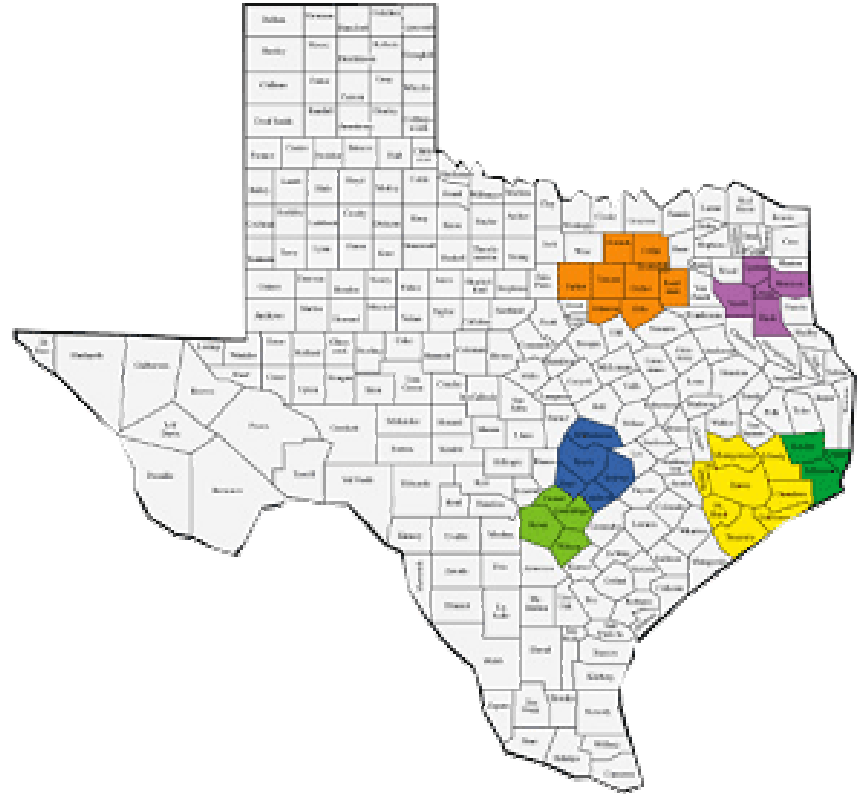
- Dallas ISD – 545 Propane Buses
  - \$400,000 per year rebated from IRS on the .50 cpg fuel credit
- Northside ISD – 351 Propane Buses
  - \$226,079 rebated from IRS for fuel in 2007

# Grants available to replace medium duty trucks

- For dedicated (mono-fuel) medium duty vehicles and school buses through the Alternative Fuels Research & Education Division (AFRED) of the Railroad Commission of Texas (RRC).
- Average grant is between \$23K to \$25K

# RRC Grants: Eligible Counties

Bastrop • Bexar • Brazoria •  
Caldwell • Chambers • Collin •  
Comal • Dallas • Denton • Ellis •  
Ft. Bend • Galveston • Gregg •  
Guadalupe • Harris • Hardin •  
Harrison • Hays • Jefferson •  
Johnson • Kaufman • Liberty •  
Montgomery • Orange • Parker •  
Rockwall • Rusk • Smith •  
Tarrant • Travis • Upshur • Waller  
• **Williamson** • Wilson



# Propane Lawn Mowers

- Propane Lawn Mowers are environmental-friendly alternative to gasoline and diesel mowers.
- Many of the Propane Lawn Mower models today meet the proposed 2012 EPA air standards. Emitting almost significantly fewer hydrocarbons.
- Reduced opportunity for fuel theft.
- This allows counties to mow on OZONE ACTION DAYS.





# Propane Lawn Mowers



- You are just not just saving fuel, your saving money from those lost gallons and typically for fleet lawn mower customers, propane may be 30-50 % less than gasoline and diesel through propane fuel contracts.*

# Mower Grants Available through Clean Cities



- *Propane Lawn Mower Grants are available up to \$2,500 in non-attainment and near non-attainment areas through a state agency's local Clean Cities Coalition with funding from the Propane Education & Research Council (PERC).*

# Examples of local fleets using propane.

- CARTS
- TxDot
- Travis County
- City of Austin
- Railroad Commission of Texas

## Contact

Tony Dale  
Chairman

Texas Propane Educational  
and Marketing Foundation

Cedar Park, TX  
512-260-7482