

## Propane

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- **National Program**
  - AFDC Station Locator enhancements
  - Price Report enhancements
  
- **Coalitions**
  - In Kansas City and California Renzenberger uses propane for shuttle van applications
  - Delivery applications operating in many locations – Schwan's, Alpha Baking,
  - School Bus projects in Florida, Virginia
  - National Parks projects – Mammoth, Blue Ridge Pkwy, National Mall

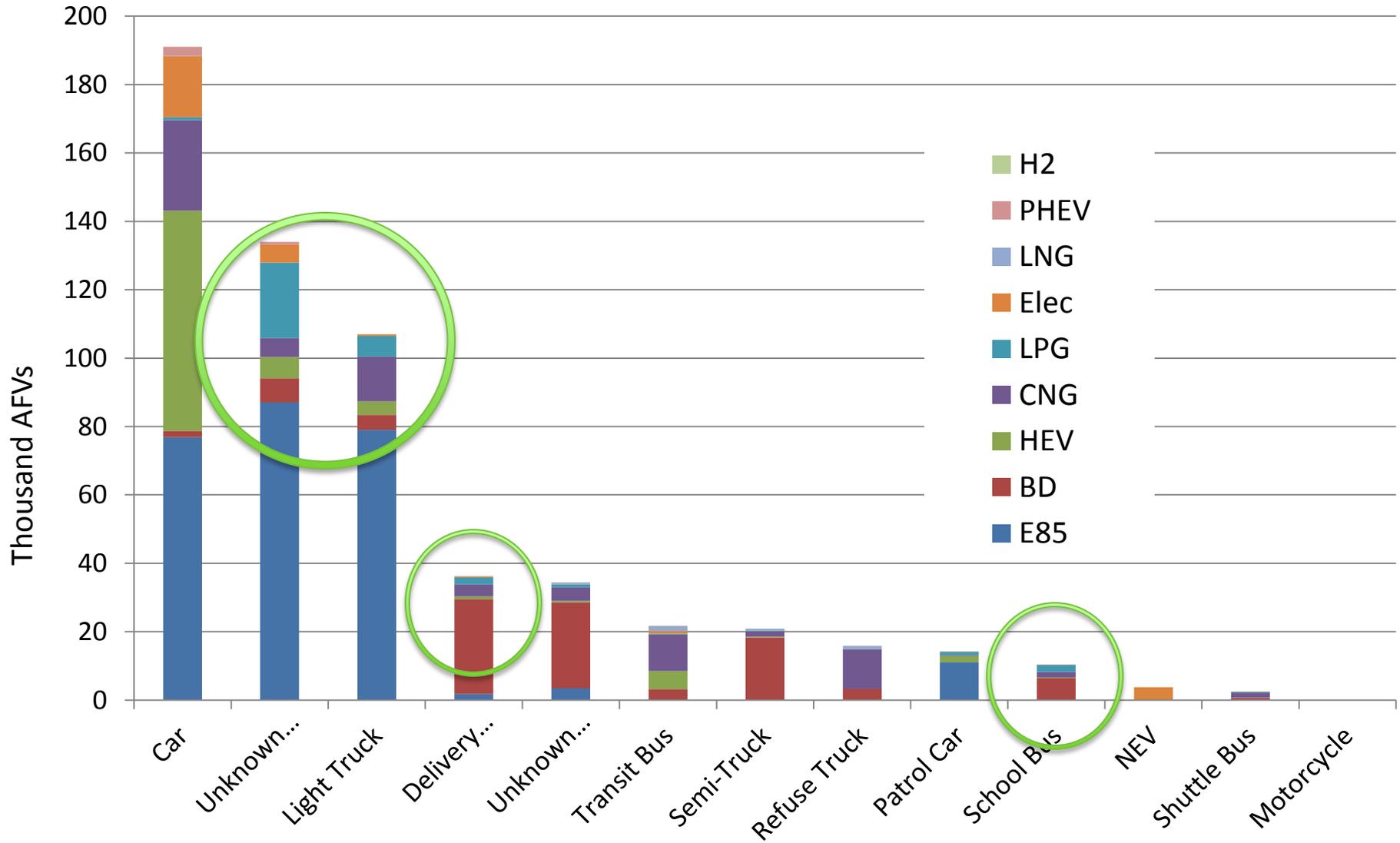
- **Vehicles:** 140,000
  - Predominantly light and medium duty
  - Dispersed across the US – concentrations in Texas, California, and the southeast (Georgia, Florida, North Carolina)
  - Industry expects vehicles to grow to 220,000 by 2020
- **Stations:** Nearly 3,000
  - 50% of these are considered classified as “primary for autogas”
  - Significant growth and standardization of infrastructure would be needed to accommodate the growing vehicle pool
- **Niches Today:**
  - School Buses and Delivery

# Overview of Niche Market Findings



Niche Market	Technologies/Potential Vehicles	Petroleum Saving Potential (10 <sup>6</sup> GGE/y)
School Buses	MD/HD - 675,000 buses	1B gallons diesel
Para-Transit	MD – 65,000	123M gallons gasoline 62M gallons diesel
Government Fleets	LD, MD, HD, lawn care	
Delivery	MD	

# AF Use by Vehicle Type



## Niche Stats

- 675,000 school buses nationwide
- 1B gallons of conventional fuel used each year



## Opportunities

- Great success and partnerships developed
- Propane buses easy to start in cold weather
- Only 2% of school bus fleets are currently using propane

## Niche Stats

- 65,000 Para-Transit vehicle nationwide
- 175M gallons of conventional fuel used each year

## Opportunities

- Wide variety of products available to satisfy this size/class
- These vehicles qualify for FTA funding incentives for AFV
- Less than 2% of para-transit fleets are currently using AF



## Niche Stats

- Large numbers of fleets and vehicles on the road
- Box trucks and step vans have wide application



## Opportunities

- Builds on recent successes
- Builds on long-standing successes
- Significant market potential for expansion – including to other niches where step van/box truck is used

## Niche Stats

- 2.4M on road and 3M total government vehicles nationwide
- These vehicles span LD, MD, HD, off-road

## Opportunities

- Many of these fleets have AF policies or mandates
- Fleets can utilize lawn maintenance equipment to expand their use of infrastructure

- National Clean Cities Program
  - Training designed for fleet operators
    - Conversions, fuel supply contracts, dispensing technologies
  - Host Technical Workshops on engine technology
  - Update business case tools to include propane
- Key Partnerships
  - Niche market engagement (para-transit)
  - Partnering with PERC
  - Station owners and propane suppliers
- Local Coalitions
  - Coordinating with state propane organizations

- Good potential for propane in vehicles exists because of robust supply, engine/vehicle performance and portfolio of applications
- Propane industry is well engaged in their key markets
- Industry engagement/coordination needed
  - Station “standardization”, payment, user experience
  - New dispenser nozzle



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