

**Case Study:**  
**HART Drives Emissions Down While  
Saving on Annual Fuel Costs**



**Compressed Natural Gas fueling  
for the transit buses helped.**



**OVERVIEW:**

Hillsborough Area Regional Transit (HART) serves Florida's Hillsborough County with public transportation services. Covering more than 1,000 square miles, HART's fleet includes 200 transit buses. As part of its alternative fuels strategy, the agency is transitioning its buses from diesel to compressed natural gas (CNG).

**ENVIRONMENTAL IMPACT**

Since 2015, HART's use of CNG has helped improve the region's air quality. Compared to diesel, CNG emits virtually no particulate matter or soot, and less greenhouse gases. Smog forming NOx emissions are now reduced by more than 90%. In addition to the improved air quality, CNG buses are quieter and have helped HART reduce noise pollution throughout the community.

**"During Hurricane Irma, we were tasked with evacuating Hillsborough County. With the reliable natural gas pipeline, we never missed a beat."**

— Dale Smith  
HART Manager of  
Facilities Maintenance

**"The low cost, better environmental benefits, and utmost reliability make CNG a no brainer."**

— Timothy O'Connor  
Peoples Gas Vice President  
of Sustainability

**ECONOMIC BENEFIT**

Natural gas costs less than diesel. Even with the upfront investment needed to purchase new buses and fueling equipment, HART earned a payback on its first buses by the second year. Add to that the annual IRS tax credit for alternative fuel, and the economic benefits are significant.

**RELIABILITY AND RESILIENCY**

Domestically produced and delivered by underground pipeline, the reliability of natural gas has helped HART reduce unplanned maintenance allowing for more on-time routes and predictable operations. And, as a critical transportation provider during emergencies like storm evacuations, CNG supports HART's resiliency plans.

**APPROACH**

HART began working with Peoples Gas in 2015 to evaluate fuel requirements for its bus fleet. Considering its options, HART developed a business plan for a phased transition of its transit buses to CNG with the conversion of 22 buses in the first phase. By the end of 2020, HART's fleet included 69 buses running on CNG.

**• Fueling Operations Review**

HART needed fast-fueling to keep buses fueled and ready for route schedules.

**• Fueling Station Design Considerations**

HART planned to operate and maintain a private fueling station on property that would be dedicated to its fleet.

**• Capital Investment Structure**

Without significant capital constraints, HART could own a dedicated station.

**• Natural Gas Infrastructure Upgrades**

With considerable natural gas needed to serve the station and number of buses, Peoples Gas upgraded the pipeline for increased capacity.



**“When I drive around and see a CNG vehicle ... I feel very grateful that I’ve been part of the team that’s brought the technology to Hillsborough County.”**

– Lynda Crescentini  
 HART Director of Enterprise  
 Project Development

 <p>Lower emissions, reduced noise and exhaust</p>	 <p>\$1.8 million in annual fuel cost savings</p>	 <p>Reduced unscheduled maintenance for more on-time routes</p>	 <p>Emission reductions equal to taking 3,000 vehicles off the road</p>
---	--	---	--

**EMISSIONS REDUCTIONS**

Nitrogen Oxide	↓	93%
Sulfur Oxide	↓	54%
Greenhouse Gases	↓	25%

**CONCLUSION**

Since the transition to CNG, HART has reduced fleet emissions significantly. The greenhouse gas emission reductions from 2015 through 2020 were equivalent to removing 3,000 passenger vehicles from roads for a year.

While reducing emissions, HART has also been a steward of its community-funded budget by reducing its fuel costs by \$1.8 million in 2020 alone.

To learn more, visit [PeoplesGas.com/altfuel](https://PeoplesGas.com/altfuel)

