City of Raleigh
Solid Waste Services
CNG Experience

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Raleigh





Raleigh at a Glance

128,000 +
Customers Served

121
Refuse Trucks

Raleigh

FY26 Collections

Garbage
95,549 tons

Recycling
23,540 tons

Yard Waste
16,560 tons



FY26 Collections

Special Collections

Central Business District

Special Events

Multifamily

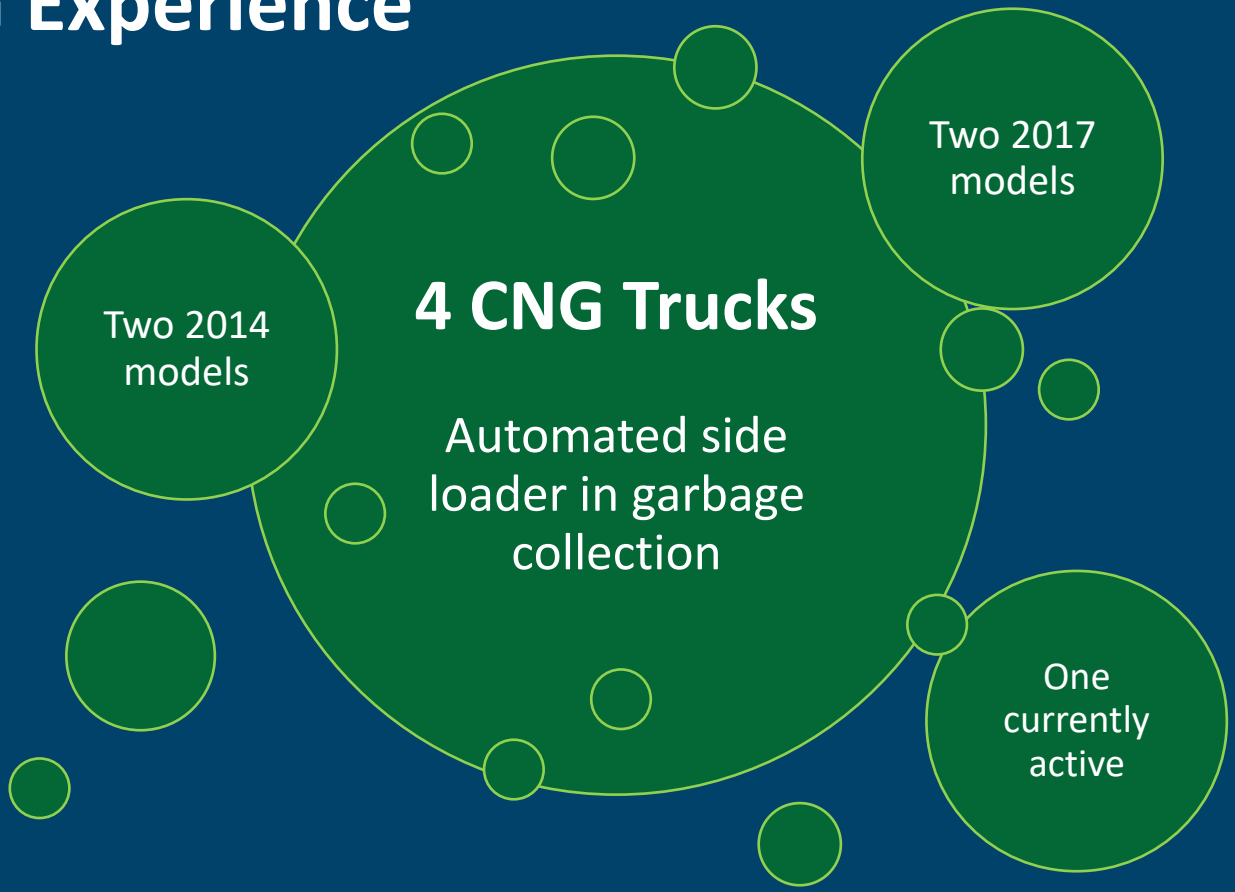
Bulky Load

Dead Animals

Bus Stops



Our CNG Experience



Cost and Fueling

$1.20 - $1.50

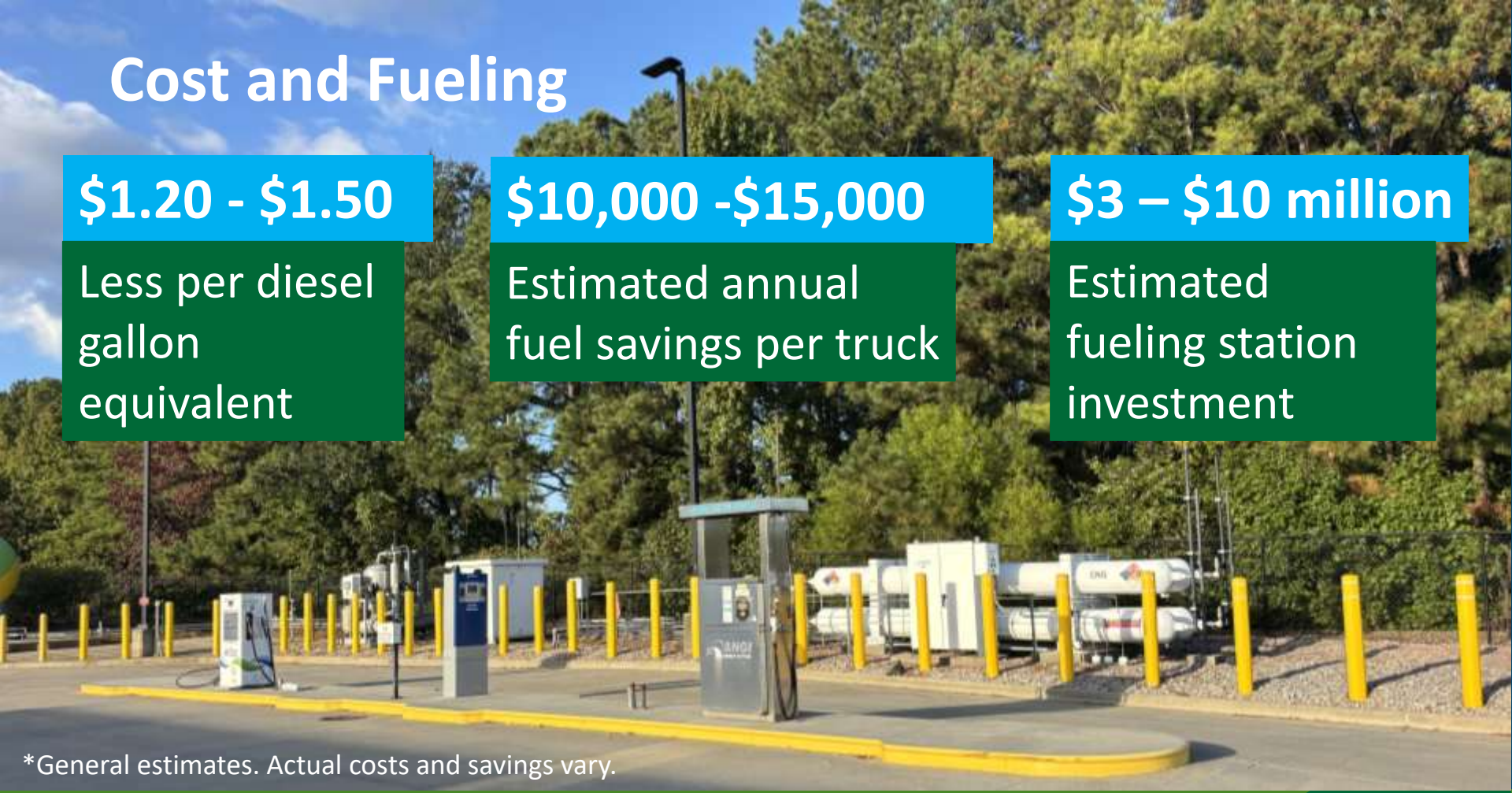
Less per diesel gallon equivalent

$10,000 -$15,000

Estimated annual fuel savings per truck

$3 – $10 million

Estimated fueling station investment



*General estimates. Actual costs and savings vary.

Challenges and Lessons Learned

Fueling access and range

Travel time to the fueling station and time needed to fill a truck

Truck maneuverability

Longer trucks in tight streets and cul-de-sacs

Driver confidence and safety concerns

Unfamiliar popping sounds caused hesitation about operating the trucks

Maintenance support

Local parts, service, and tank inspection capability

CITY OF CHARLOTTE

Solid Waste Services CNG Program

ELLEN PRICE

The Numbers



233K
curbside
units served



161K
multi-family
units served



313K
tons refuse
collected & disposed



41K
tons yard waste
collected &
composted



43K
tons collected
& recycled



$96.7M
operating
budget



327 positions



210 refuse collection
trucks



67
light-duty
vehicles



483K
refuse &
recycling carts

Residential Services



Curbside Garbage Collections Weekly



Curbside Yard Waste Collections Weekly



Curbside Recycling Collections Bi-weekly (contracted)



Curbside Bulky Collections By appointment



Multi-family Solid Waste Collections Weekly (contracted)

Other Services: Litter pickup (right-of-way cleaning), street sweeping, central business district maintenance, public receptacles, dead animal and business garbage collections, special events support and CATS transit lines maintenance

History of Charlotte CNG Trucks

- 2005 – 2 Automated Side Loaders
- 2026 – 33 Automated Side Loaders; 1 Rear Loader
- Goal – 50% composition for ASL fleet



What Has Changed

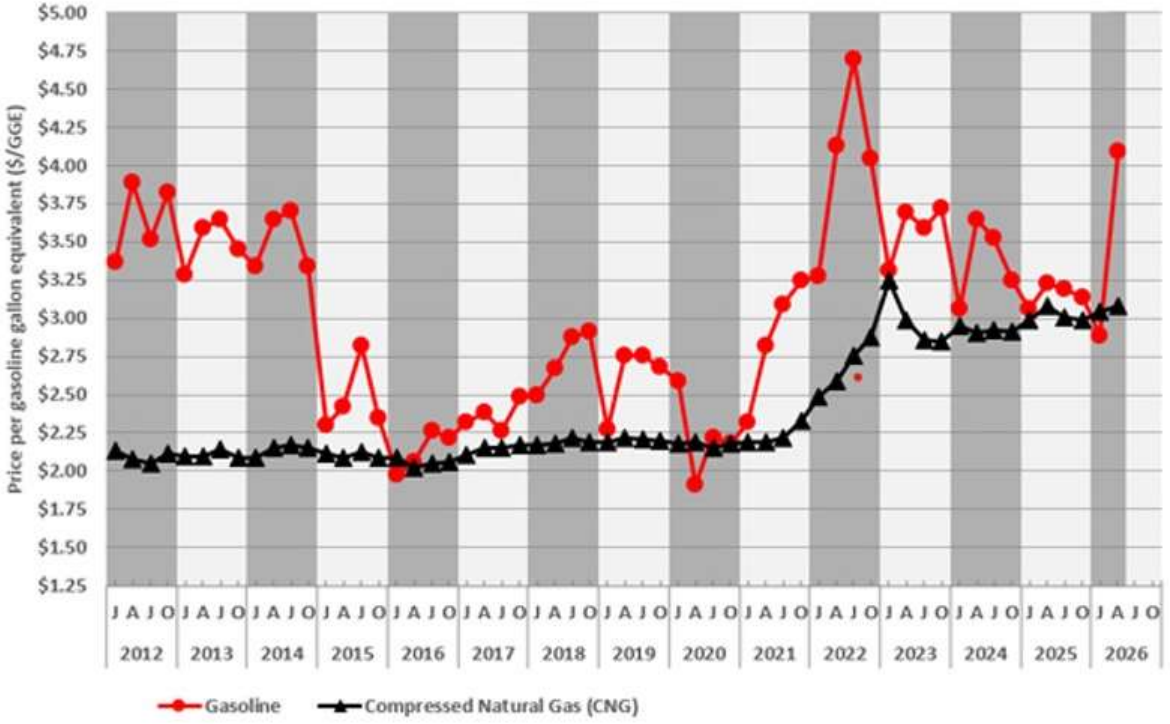
- Tank size
- Fueling option
- Fleet maintenance



What Remains the Same

- **Cab/chassis cost differential**
  - ≈ $30-$40K
- **Grant opportunities for truck replacements**
  - EPA
    - *Clean Heavy-Duty Vehicles (CHDV) Grant Program*
    - *Diesel Emissions Reduction Act (DERA)*
  - NC Technology Center
    - *Clean Fuel Advanced Technology (CFAT)*
  - Funding contributions vary by program

CNG & Diesel Price Comparison



https://afdc.energy.gov/fuels/prices

Benefits for Municipal Refuse Fleets

- Fuel price stability
- Lower M&R costs
- Reduces local air pollutants versus diesel
- Quieter operation in residential areas
- Proven technology for heavy-duty trucks
- Monetary incentives


Questions?