



Source: Public Works *John*

Agenda Item No: REP 105-12

To: City Council
From: City Manager and Staff *MM*

Council Meeting Date: Jul 2, 2012

Re: Compress Natural Gas Vehicles and Roll Carts (CM 3642)

EXECUTIVE SUMMARY:

Staff has prepared for Council consideration a report concerning the relationship between natural gas, trash trucks and bins.

DISCUSSION:

At the June 4, 2012 Council meeting, Council asked for clarification regarding the relationship between natural gas, trash trucks and bins, as all three had been proposed as part of one project. Council also requested staff report on the cost savings involved with just purchasing natural gas trucks to pick up trash as the City currently collects trash, and the cost of purchasing the trucks so the City could utilize bins.

During initial discussions, the purchase of Compressed Natural Gas (CNG) trucks would coincide with the conversion to roll carts. That is no longer the case as CNG is moving forward with, or without, the changes proposed with roll carts, and CNG automated collection vehicles.

Fiscal year 2011 costs to collect trash only from the curb line was \$9.18 per house per month. It is estimated that conversion from manual bags to automated bin collection would cost \$8.30 per house per month. This is based on 33,000 houses; no apartments, as CNG was not part of that calculation.

On average, a manual residential trash collection uses 6,000 gallons of diesel per year. CNG equivalent savings is projected to be \$1.40/gallon. There are currently eight residential routes and it is proposed to keep the same number of CNG routes. CNG would replace 48,000 gallons of diesel per year, with a projected annual saving of \$67,200.

It cost approximately \$40,000 more per truck to equip it for CNG. Our cost for 10 trucks (including 2 spares) would be \$400,000. With an annual saving of \$67,200, payback would be realized in 5.95 years. This excludes any changes to fleet operation or parking spaces to accommodate CNG vehicles. Other vehicles will follow the conversion to CNG once the station is built, increasing the savings per gallon and reducing the payback period.

FISCAL IMPACT:

It is estimated to cost approximately \$5,860,000 for collection vehicles, (\$300,000 per new truck, plus \$40,000 per truck to equip it for CNG), and roll carts.

VISION IMPACT:

<http://www.gocolumbiamo.com/Council/Meetings/visionimpact.php>

None

SUGGESTED COUNCIL ACTIONS:

For information only.

FISCAL and VISION NOTES:					
City Fiscal Impact Enter all that apply		Program Impact		Mandates	
City's current net FY cost	\$0.00	New Program/ Agency?	No	Federal or State mandated?	No
Amount of funds already appropriated	\$0.00	Duplicates/Expands an existing program?	Yes	Vision Implementation impact	
Amount of budget amendment needed	\$5,860,000.00	Fiscal Impact on any local political subdivision?	Yes	Enter all that apply: Refer to Web site	
Estimated 2 year net costs:		Resources Required		Vision Impact?	No
One Time	\$0.00	Requires add'l FTE Personnel?	No	Primary Vision, Strategy and/or Goal Item #	
Operating/ Ongoing	\$0.00	Requires add'l facilities?	Yes	Secondary Vision, Strategy and/or Goal Item #	
		Requires add'l capital equipment?	Yes	Fiscal year implementation Task #	