

MAKING LOW COST ALTERNATIVE FUELS AVAILABLE TO OREGON

Alternative Fuels Available Now

1) Cost Savings of Alternative Fuels

Fuel Burned in Oregon Annually:

Total Gallons of Gasoline and Diesel Burned in Oregon (2009):
Approximately **2 billion gallons**ⁱ

Annual Cost of Gasoline and Diesel in Oregon (at \$4.00 per gallon):
8 billion dollars

Savings Realized by Switching to Alternative Fuels:

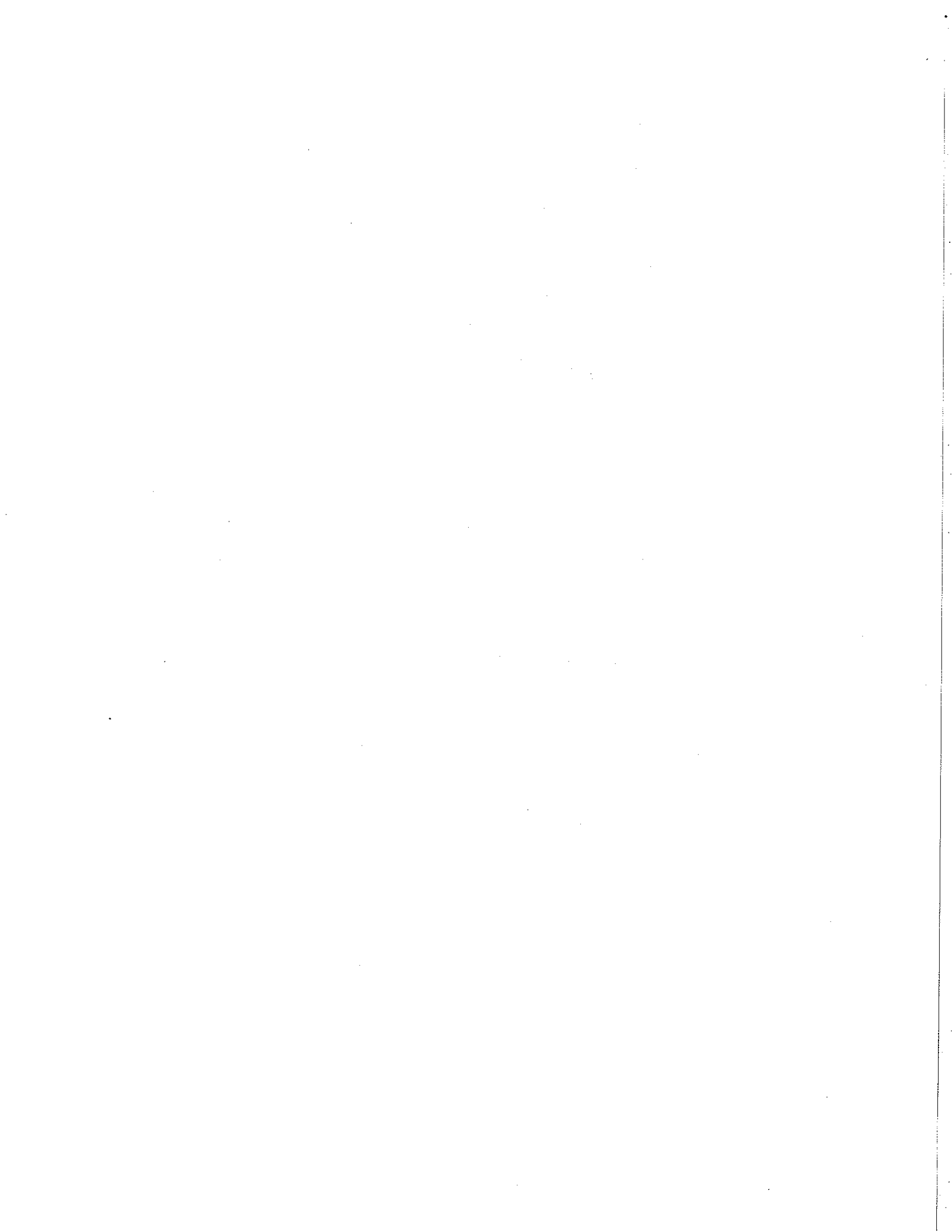
If every vehicle operated on compressed natural gas (CNG), the savings realized would be enormous.

At approximately \$2.00 per gallon in savingsⁱⁱ, Oregonians would have an **additional 4 billion dollars** every year to spend in Oregon's economy.

2) Public Bodies and Private Companies that Already Operate Natural Gas Vehicle Fleets

| | |
|--|-----------------------------------|
| AT&T | Pierce Transit |
| Budget Rent-a-Car | Republic Services |
| Central Jersey Waste | Royal Disposal and Recycle |
| City Cab | Sacramento Rapid Transit District |
| Hertz Rent-a-Car | Santa Monica Big Blue Bus |
| Los Angeles County Metropolitan Transit Authority | The Parking Spot |
| Los Angeles Unified School District | TTSI |
| New York State Department of Transportation | United Parcel Service |
| Oklahoma State University Community Transit | Verizon |
| Orange County Transit Authority | Washington Metro |
| | Waste Management |
| | Yellow Cab |

MEASURE: HB 3632
EXHIBIT: A
HOUSE REVENUE COMMITTEE
DATE: 7/25/2011 PAGES: 5
SUBMITTED BY: REP. CLIFF BENTZ



Why should the Oregon legislature get involved to provide Oregonians with fuel alternatives?

1) Economic reasons

The cost savings provided by alternative fuels would free up billions of dollars annually to be spent in Oregon's economy (see above)

2) Environmental reasons

Natural gas vehicles emit far fewer pollutants than gasoline powered vehicles:ⁱⁱⁱ

Reduces **carbon monoxide** emissions 90% - 97%

Reduces **carbon dioxide** emissions 25%

Reduces **nitrogen oxide** emissions 35% - 60%

Potentially reduces non-methane hydrocarbon emissions 50%-75%

Emits little or no **particulate matter**

Eliminates evaporative emissions

Propane is a much cleaner fuel than gasoline and diesel. Compared to gasoline:^{iv}

Potentially lower toxic, carbon dioxide (CO₂), carbon monoxide (CO), and nonmethane hydrocarbon (NMHC) emissions

Rich calibration shows high NMHC and CO emissions, but lower nitrogen oxide (NO_x) emissions

Lean calibration shows slightly higher NO_x emissions, but lower CO and NMHC emissions

3) Reduce dependency on foreign oil

The United States imported over 4 billion barrels of oil in 2010 (168 billion gallons of oil)

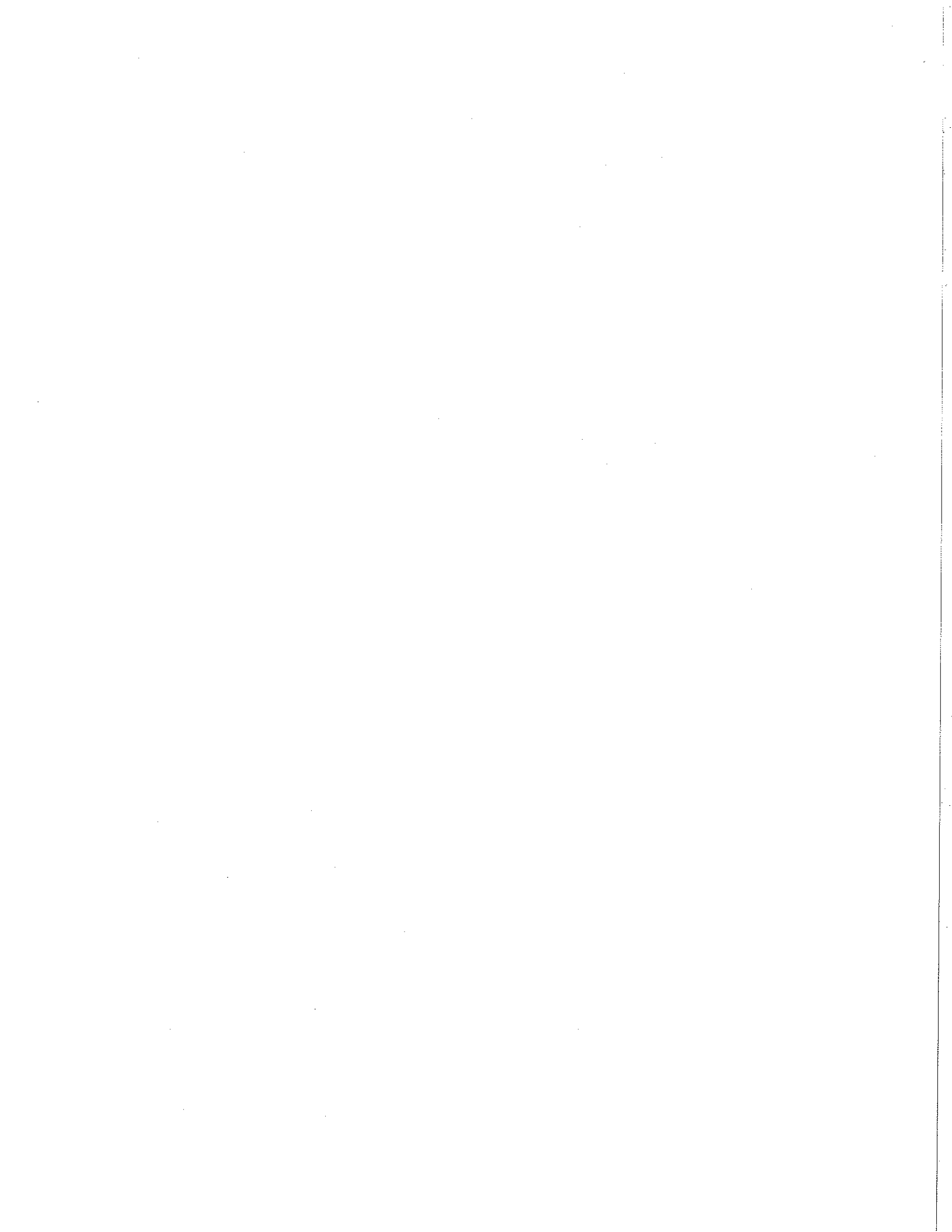
Since the federal tax incentives were introduced in 2006, natural gas use in vehicles increased 25%, which displaced 320 million gallons of gasoline.

4) Reduce use of ethanol as fuel – help world food supply

The federal ethanol mandates (“renewable fuel standard”) have been a major factor in the skyrocketing prices of food.

Global food prices have risen for eight consecutive months^v

Reducing the use of ethanol as fuel will help to steady global food prices



What can the legislature do to make alternative fuels available to Oregonians throughout the state?

Policies that reduce the incremental costs of high volume fleet vehicles would create a sustainable network of fueling stations. The network of fueling stations, while constructed to support fleets, would be made open to the public, thereby making it practical for Oregonians to purchase CNG vehicles or convert their vehicles to run on CNG. As the number of private CNG vehicles on the road increases, so would the number of operable CNG fueling stations across the state. Oregon would truly have a fuel alternative.

Typically, **300,000 gallons of fuel sold per year** will support a CNG fueling station^{vi}
The types of fleets listed below, on average, consume:

- One **long haul truck** consumes **20,000 gallons** per year
- One **transit bus** consumes **15,000 gallons** per year
- One **refuse truck** consumes **10,000 gallons** per year
- One **airport shuttle bus** consumes **8,500 gallons** per year
- One **taxi** consumes **6,000 gallons** per year
- One **private vehicle** consumes **600 gallons** per year

Applying the above averages, the number of fleet vehicles necessary to support a fueling station varies by type of vehicle:

- 15 long haul trucks** would support a station
- 20 transit buses** would support a station
- 30 refuse trucks** would support a station
- 36 airport shuttle buses** would support a station
- 50 taxi cabs** would support a station
- 500 consumer vehicles** would support a station

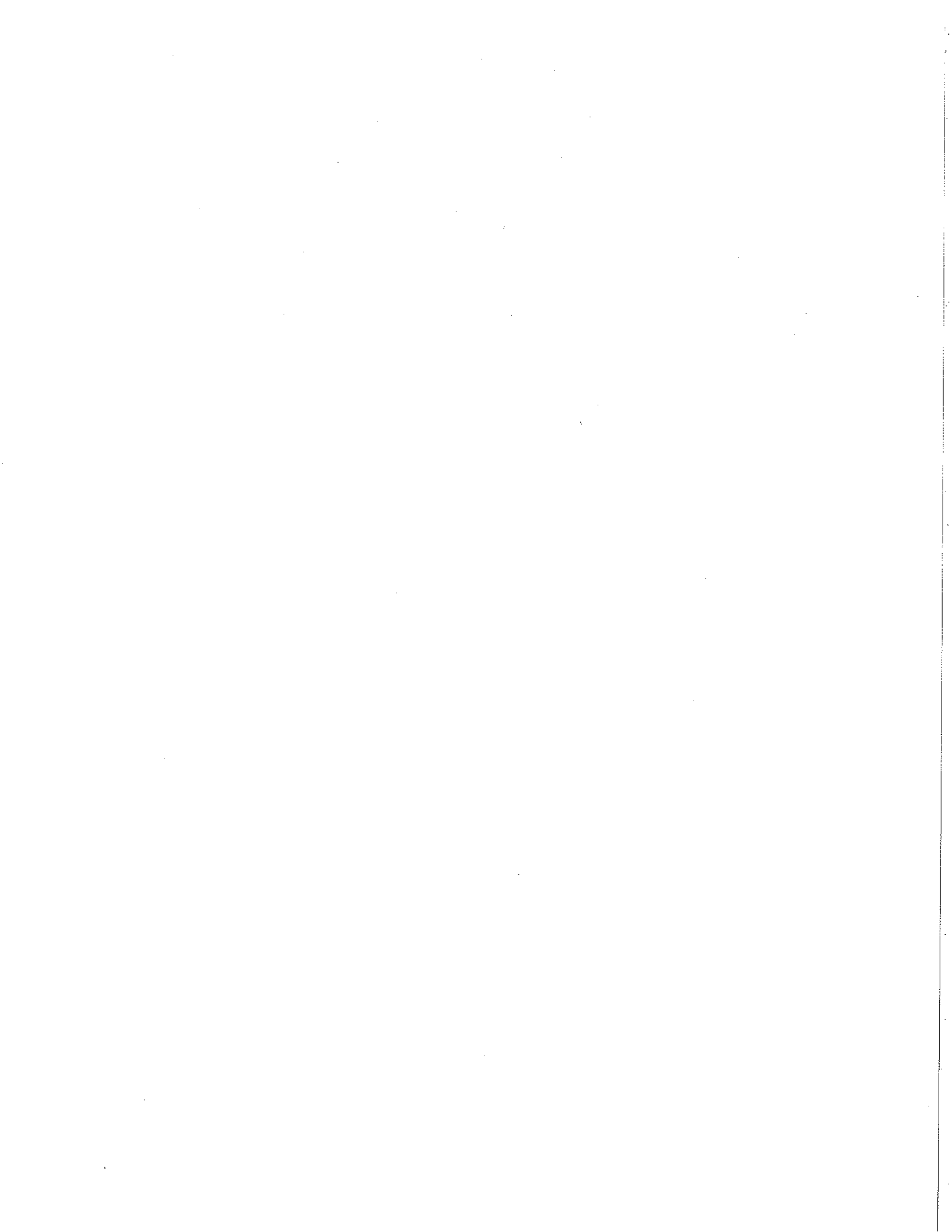
Options Available to the Legislature Right Now

1) Facilitate school bus conversion to alternative fuels

- HB 2960:** Cool Schools Bill (Encourages use of fuel grant for conversion)
- HB 3622:** Transportation Grant Bill (Source of funds for conversion)
- HB 3632:** Directs the Department of Energy to develop a plan to facilitate the conversion of school bus fleets to the use of vehicles that run on CNG

2) Encourage fleet conversions

- HB 3632:** Directs the Department of Energy to develop a plan to facilitate the conversion of fleets to the use of vehicles that run on CNG



- 3) **Direct Public Utilities Commission** to modify its tariffs to allow long term contracts of natural gas

HB 3632 could be amended to add a provision modifying the PUC tariffs

4) **Tax credits**

Give tax credits for the cost of constructing alternative fuel distribution facilities and for the incremental cost of purchasing alternative fuel vehicles

Current Tax Credit Opportunities:

Federal Tax Credits

Income Tax Credits for Alternative Fuel Infrastructure

Tax credit of 30% (up to \$30,000) of the cost of natural gas fueling equipment (filling station)

This tax credit can be passed from the contractor to the school district

Expires December 31, 2011

Excise Tax Credit for CNG Sold as Motor Fuel

Tax credit of \$0.50 per gallon equivalent of compressed natural gas that is sold as fuel in a motor vehicle.

Available to sellers of CNG as a motor fuel, but public bodies that self-fuel can claim and keep this credit.

Expires December 31, 2011

Oregon's Current Tax Credits

BETC tax credit

35% of the cost of natural gas fueling infrastructure

School Districts and other public bodies can take advantage of this credit through ODOE's "pass through" program.

BETC tax credit

35% of the incremental cost of purchasing a CNG vehicle

School Districts and other public bodies can take advantage of this credit through ODOE's "pass through" program.

BETC tax credit

25% (up to \$750) of the cost of installing a CNG fueling station in a dwelling

Tax Credit Bills:

HB 3632: Gives highest priority to distribution facilities of CNG

HB 2208-1: Tax credits for alternative fuel vehicles and fueling stations necessary to operate alternative fuel vehicles

HB 2524: Extends the BETC tax credits for alternative fuel vehicles and construction of alternative fueling stations

