

Transportation Solutions that Drive Down Greenhouse Gas Emissions

Moderator: Sarah Simonds, High Meadows Fund

Ross MacDonald

GoVermont Program Manager at VTrans

Richard Ritter

Vermont Green Driving School

Tom McGrath

UVM's Transportation Research Center and the Vermont Clean Cities Coalition

What Is Our Long-Range Goal?

90% renewable energy by 2050

By mid-century, Vermont can be nearly free of fossil fuel usage, in all energy sectors

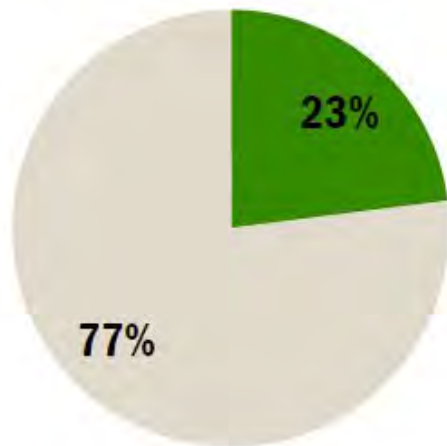
2011: ~23% renewable  **2050: 90% renewable**



What Is Our Long-Range Goal?

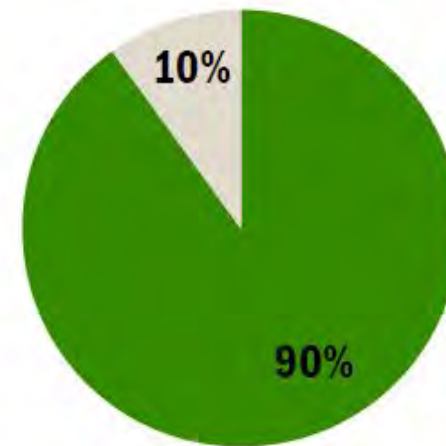
2011

■ Renewable ■ Other



2050

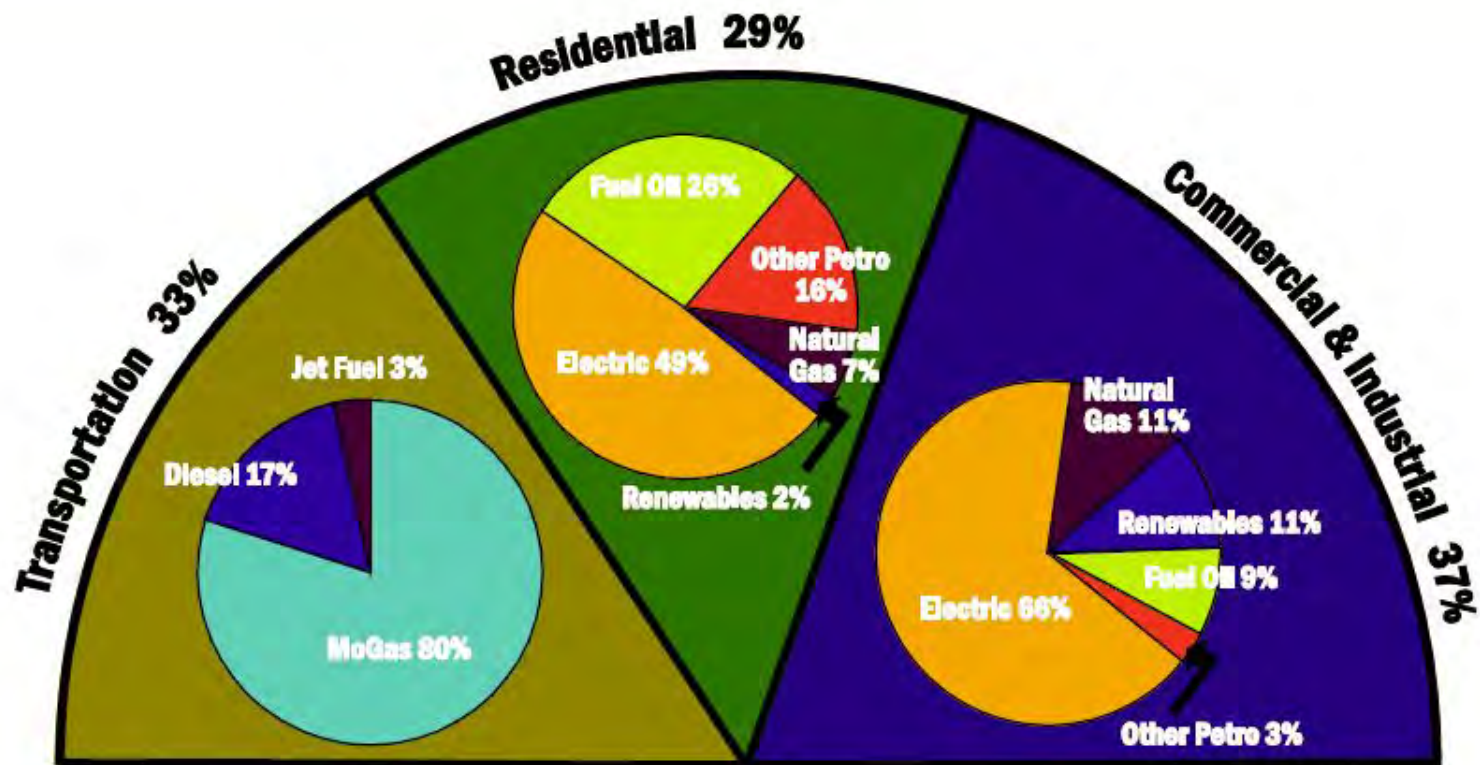
■ Renewable ■ Other





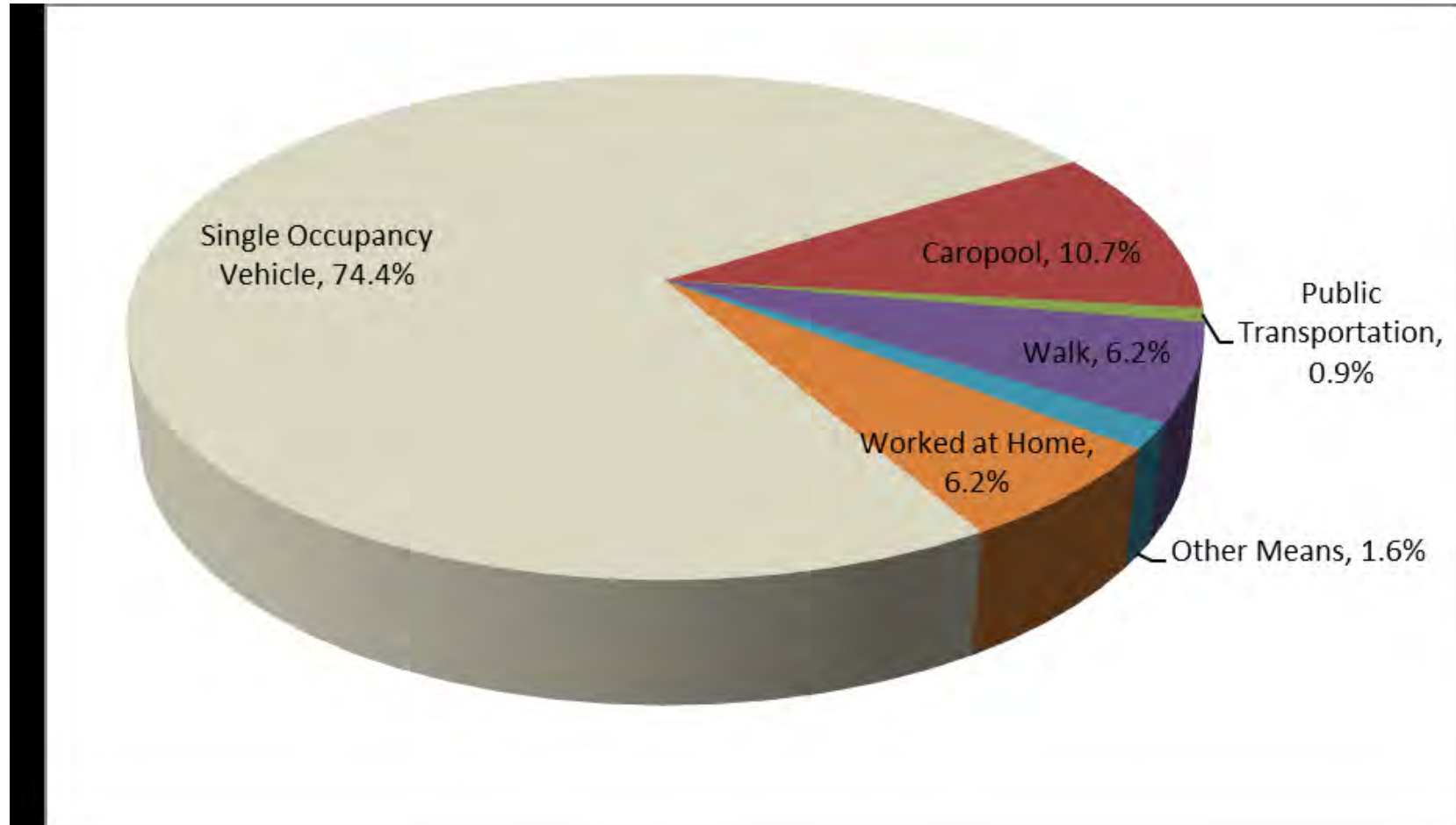
Vermont Total Energy Use by Sector

(percent of total BTUs consumed, 2008)

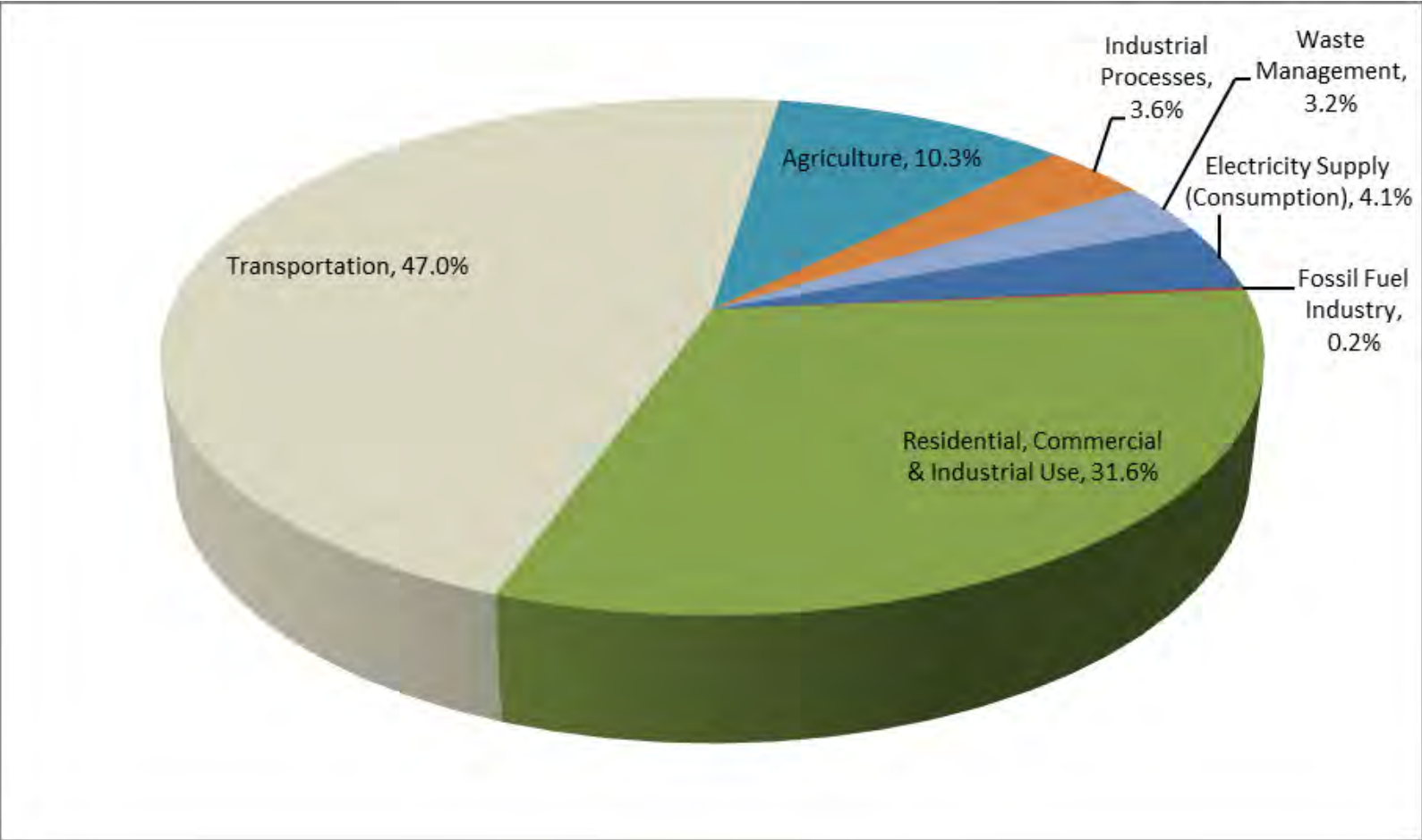


VT Commute Trips to Work

(American Community Survey, Vermont Profile 2005-2009)



VT Greenhouse Gas Emissions by Source (VT Agency of Natural Resources)



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VERMONT

CONNECTINGCOMMUTERS.ORG



Our Goal

To reduce the cost and environmental impacts of transportation by providing information and services that promote efficient transportation options.

Objectives



To Improve and Encourage: Access to Services

- New ride matching system and Call center, improved vanpool program.

Market Presence

- New website, branding and marketing campaign.

Build Capacity

- Insure transparency and scalability of regional programs and services (Go Chittenden County, Go Addison County, Brattleboro).

Provide Support for Advocacy

- Direct to Business program, Way to Go! Program support, Local Community Assistance program.



- Employers
- Commute Calculator
- Newsletter
- Sponsors and Partners



Go Vermont is a resource for travelers who want to reduce the cost and environmental impact of driving. Throughout this site you will find information about the different ways you can get around the state, and how these modes can save you money.

In addition to information on [bus routes](#), [biking](#) or [walking](#), and other modes, Go Vermont features a [free carpool/vanpool matching service](#), [ridesharing tips](#), and other practical information on getting around.

800-685-RIDE (7433)

We have answers! Call our Q&A Hotline

Carpool/Vanpool 101: Cut gas costs by 50%!

Register and become part of the Go Vermont database—it's full of Vermonters looking to share a ride. As a regular commuter, you can cut your cost of commuting by 10% if you share just one ride per week with one other person!

- How it Works
- Find Local Commuters
- Join a Car or Vanpool



VIDEO

Take a ride with some of our commuters

Ride along with three Go Vermont carpoolers and learn the benefits of sharing a ride.



CARPOOL MATCHING



Get Started!



Video: How to use our ride matching system

PARK AND RIDE



Find park and ride lots that work for you



Get the latest Vermont travel information, including road conditions, restrictions, delays and closures.

CONNECTING COMMUTERS



Carpool or Vanpool



Walk or Bike



Bus

1. Where To?

2. What Time?

3. What Else?

I Am



willing to drive



passenger only

Starting From

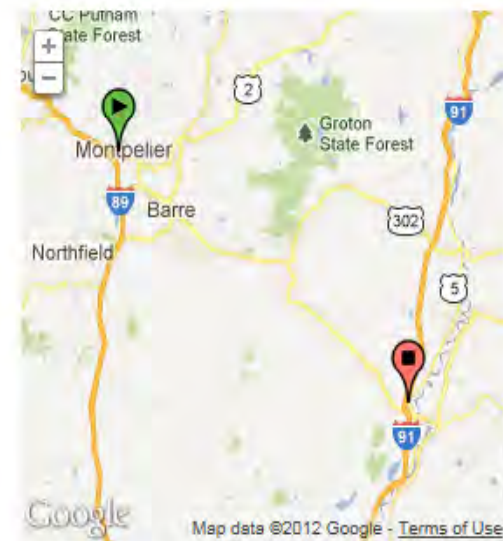
1 National Life Dr, Montpelier, VT 05602, USA

Going To

Bradford, VT, USA

Only the closest crossstreets are shown in your listing (e.g. 1st & Main)

Next Step ▶




1. Where To?


2. What Time?

3. What Else?

Are you taking a regular commute or a single trip?

Commute 

Single Trip 

Depart 11/05/2012  8:00am ▾

Return 11/05/2012  11:00am ▾

+ Add more dates

◀ back

Next Step ▶



1. Where To?

2. What Time?

3. What Else?

How much do you want each passenger to contribute?

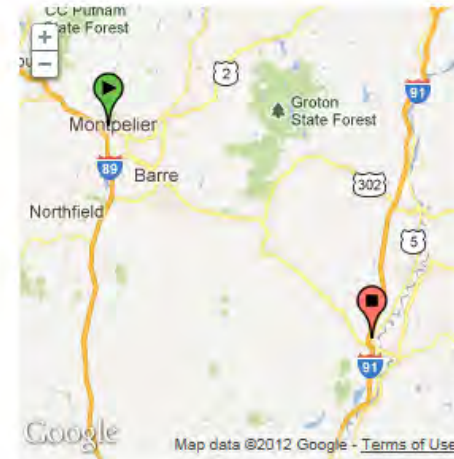
\$ each way

suggested price of \$5.00 based on the Zimride average for this trip

Number of available seats

Notes

Two hour commute



Visibility

- Make this ride visible to all Zimride communities
- Make this ride visible only on Go Vermont
 - Include Go Vermont's Trusted Partners [\[show\]](#)

◀ back

Post Ride



Hi, Ross!

[My Profile](#)
[Commute Calendar](#)

Did you know?

The average person spends \$8,000/year on their car. By sharing your ride you can split the cost and save enough to buy either: 416 burritos, 25 small goats, or a 7 day Hawaii vacation for 2.

Add Ride

[next »](#)

My Inbox



CONVERSATION WITH ZIMRIDE

January 26th, 2012

Zimride "While you were home enjoying the holidays"

[View all messages...](#)

My Rides



Ross M - Commute (driver/passenger)

\$0 /day

From: Great Rd & Field Rd, Peacham, VT

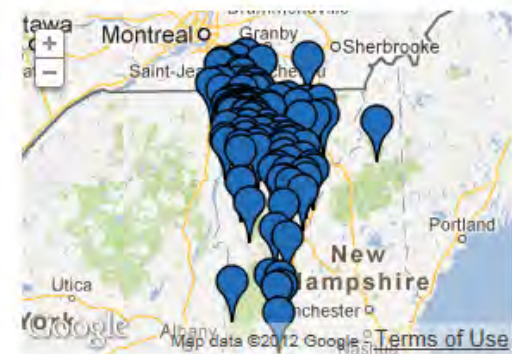
To: National Life Dr & Mountainview St, Montpelier, VT

More Info

Depart 6:30am ±15m Return 4:00pm ±15m Every Mon, Tue, Wed, Thu, Fri

[Match List](#)
[Edit Ride](#)
[Deactivate](#)

Go Vermont Community



Commutes »

Travel »

Burlington (9)

Fairlee (10)

Montpelier (9)

Concord (2)

Essex Junction (6)

Mechanicsburg (1)

Save Money



Owning a car costs roughly \$8,000 per year. Share a ride with others in Vermont and save.

Additional Resources

[Go Vermont Homepage](#)

[Guaranteed Ride Home form](#)

What is a vanpool?

A vanpool is a better way to travel to and from work.

A vanpool is a group of 5 to 15 people who commute together on a regular basis in a roomy, comfortable van. One person volunteers to be the driver/ coordinator of the vanpool and often rides free. The riders share the cost of operating the vanpool. The group determines their daily schedule and route including one or more designated pick-up locations, such as Park and Ride lots or shopping centers. Ask your employer if they offer a qualified transportation or vanpool benefit.



JOIN US IN TAKING 1 MILLION CARS OFF THE ROAD.

The national "Don't be an S.O.V." campaign is calling on commuters to take a ride in the HOV lane. We promise you will reduce road rage nation wide and will save money, time and the planet.

Visit dontbeansov.com

vRide®

1-800-VAN-RIDE

vRide.com



Printed on recycled paper.

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Everything you need to know about a vanpool



VPSI is now:

vRide®



Opportunities for Local Action

Local Committee Assistance Grant

- 6 month program, \$500 grant award
- Outreach activities decided by community
- Develop awareness and identify needs in your town/region.

**Support for additional local activities
and outreach.**

**Use Go Vermont information and services –
Provide feedback for program development.**

Thank You!

Ross.MacDonald@state.vt.us

www.ConnectingCommuters.org

Welcome to the Road!

...Now let's learn how to drive
efficiently.

ECO-DRIVING For the
Vermont Community Energy and
Climate Action Conference
By Vermont Green Driving School
Updated by Richard Ritter
December 1, 2012

Developed by Community Climate Action, Debra Sachs, GRP and Dana Rubin

Resources: Community Climate Action

...Now let's learn how
to drive efficiently.

The perfect time to introduce Eco-Driving to new Teen Drivers is during Driver Education!

Teens learn and practice these habits early so they will become automatic and integrated into their daily driving behaviors.

Male drivers spends an average of 81 minutes a day driving, that's 29,565 hours

What is Eco-Driving?

Driving that...

- Is more environmentally friendly
- Is more economical (better bang for your buck/saving money by purchasing less fuel)
- Uses Less Fuel = Fewer Emissions.
- Slows down Climate Change !



Become Knowledgeable



Fuel Efficiency: Best/Worst Vehicles



Getting to Know the Prius



The Facts: Vermont Trends & Climate Change







CHANGE! Lifestyle Changes & Driving Tips



Fuel Efficiency: Best/Worst Vehicles



Consider the vehicle you will be driving

Average Yearly Mileage 15,000 miles	MPG	Fuel Cost/ gal.	Annual Fuel Cost
Chevrolet Suburban 	13	3.75	\$4,327
Subaru Outback 	22	3.75	\$2,557
Honda Civic 	29	3.75	\$1,940
Toyota Prius 	50	3.75	\$1,125



Resource:

<http://www.fueleconomy.gov/feg/findacar.htm> ** Numbers based on 15,000 mi/year

Prius



\$1,125 of fuel/ year

size of tank =
(11.6 gallon tank)



One Tank = 536 miles
(Vermont to Washington, D.C.)

Cost of 3,000 mile Cross Country Road Trip
\$225.00



Resource:

<http://www.fueleconomy.gov/>

SUV



\$2,557 of fuel/ year

size of tank =

(18.5 gallon tank)



One Tank = 366 miles

(Vermont to Philadelphia)

Cost of Cross Country Road Trip

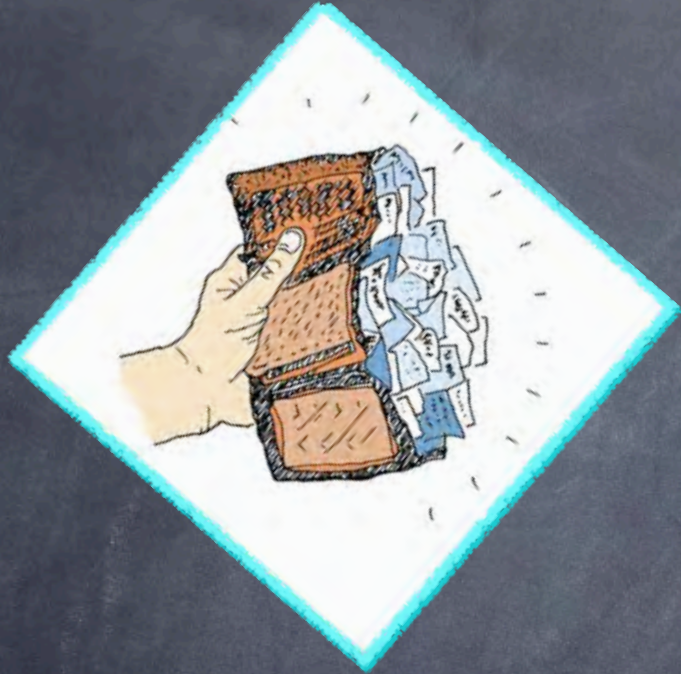
\$511.00



Resource:

<http://www.fueleconomy.gov/>

What would you do with more money in your pocket?



- Purchase textbooks?
- Donate to charity?
- Buy a smart phone?
- Buy a new tablet computer?
- Go to an MLB game?
- Invest?



Getting to Know the Prius

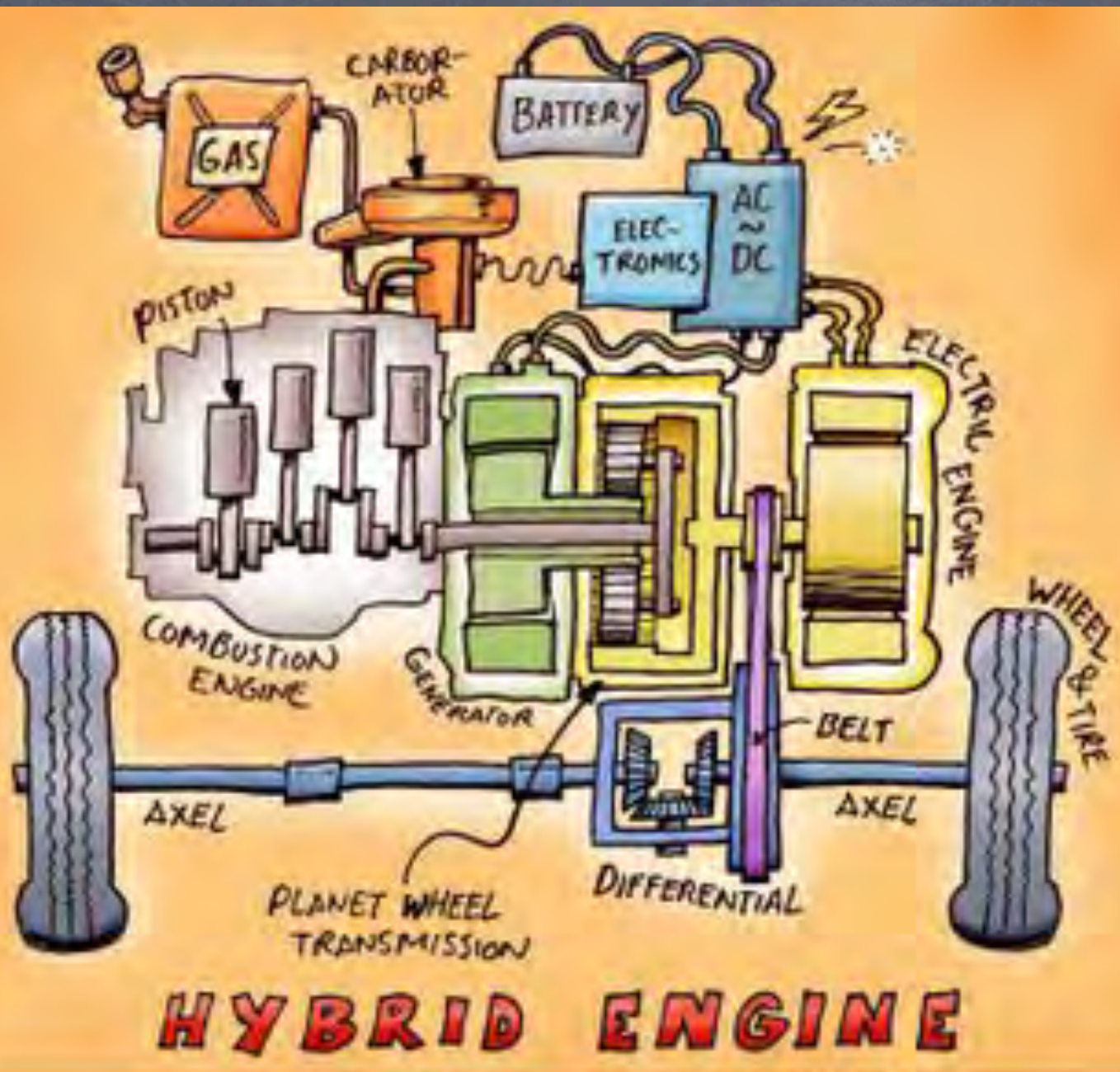


Resource:

Richard Ritter, VGDS Driver Ed Teacher

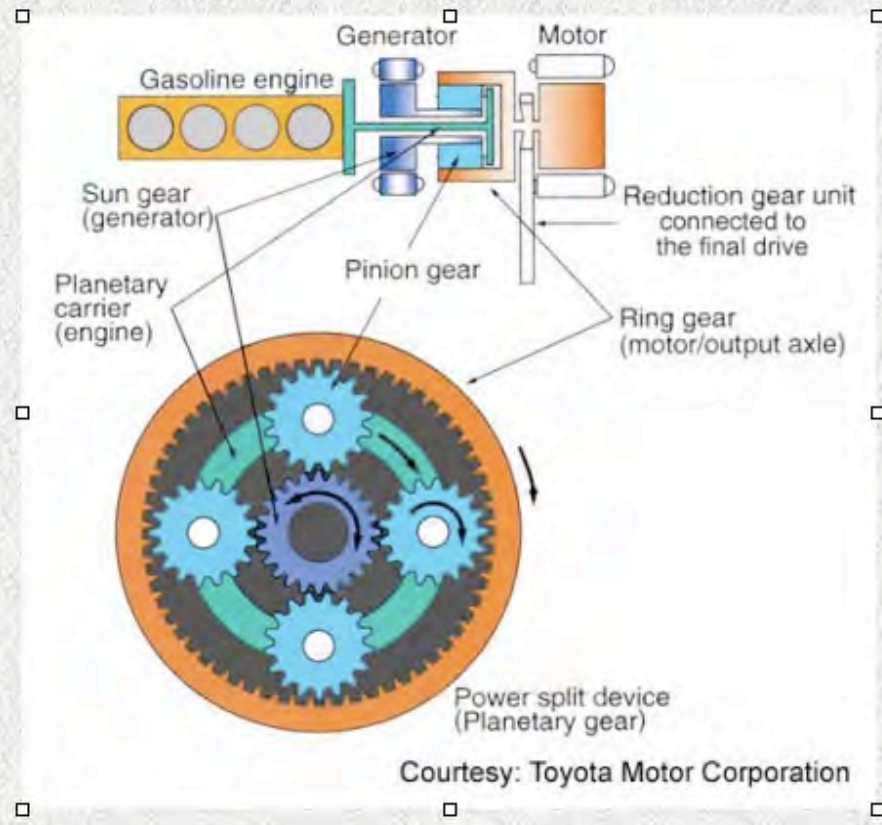


Resource: Richard Ritter, VGDS Driver Ed Teacher



What is a Hybrid?

Has both a Gasoline and Electric motor to power the car!

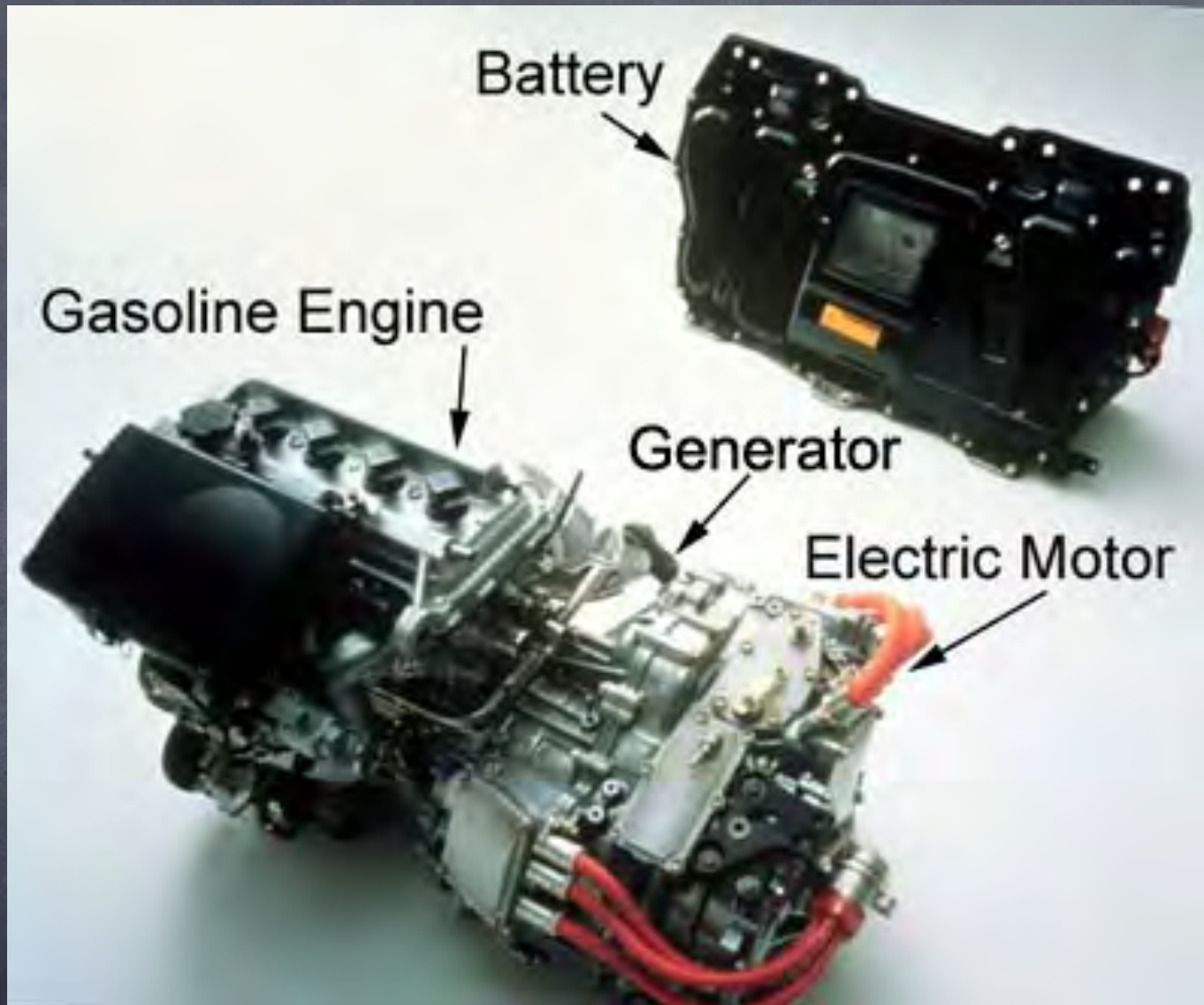


Courtesy: Toyota Motor Corporation



Resource:

Richard Ritter, VGDS Driver Ed Teacher



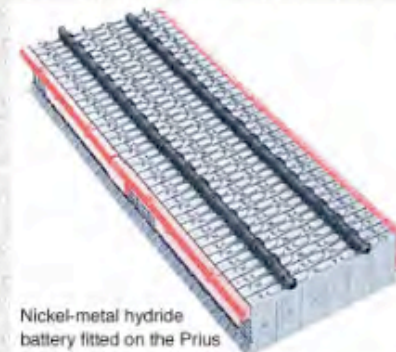
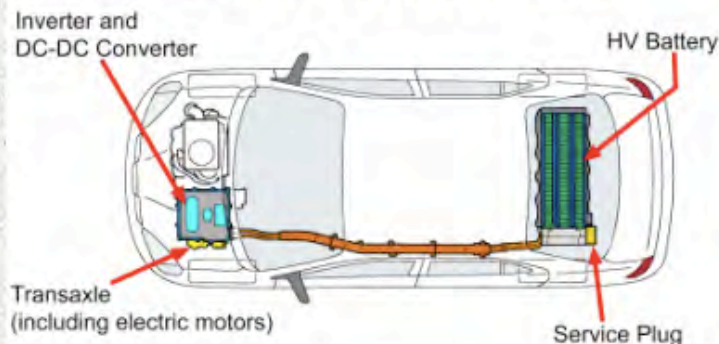


Resource:

Richard Ritter, VGDS Driver Ed Teacher

HV Battery

The HV battery pack used in the Prius is comprised of 38 modules, each module consisting of six 1.2-volt cells for a total voltage of 273.6 volts. The battery pack is contained within a carbon composite case, isolated from the passenger compartment. It is positioned behind the rear seat, protected by the unibody structure of the vehicle.





The battery pack of the second generation Toyota Prius consists of 28 Panasonic prismatic nickel metal hydride modules—each containing six 1.2 volt cells—connected in series to produce a nominal voltage of 201.6 volts. The total number of cells is 168, compared with 228 cells packaged in 38 modules in the first generation Prius. The pack is positioned behind the back seat.



Resource: Richard Ritter, VGDS Driver Ed Teacher

How it works

- The Car is comprised of 2 engines; a 1.5 Liter gas engine and an electric motor
- The electric motor is able to run the car up to 25 mph. (Newer models of the Prius will have be capable of up to 40 mph)
- Fuel is saved when the gas engine is turned off during times of idling.
- The electric motor recharges the battery through the braking system and the gas engine





Reference Chapter 6: Performing Basic Skill Maneuvers. Become comfortable with steering.



Resource:

Richard Ritter, VGDS Driver Ed Teacher
Drive Right

Consumption

OUTSIDE TEMP 34 °F

 =50Wh Regenerated



Average

Energy

49.6 MPG

194 miles

Reset

Energy Monitor

OUTSIDE
TEMP

61



Consumption

Current 0.0 MPG

Consumption

OUTSIDE TEMP 75 F

+50Wh Regenerated



Energy

Average

51.8 MPG

388 miles

Reset

Energy Monitor

OUTSIDE TEMP 23 °F



Consumption

Current 99.9 MPG



Energy Monitor

OUTSIDE TEMP 46 F



Consumption

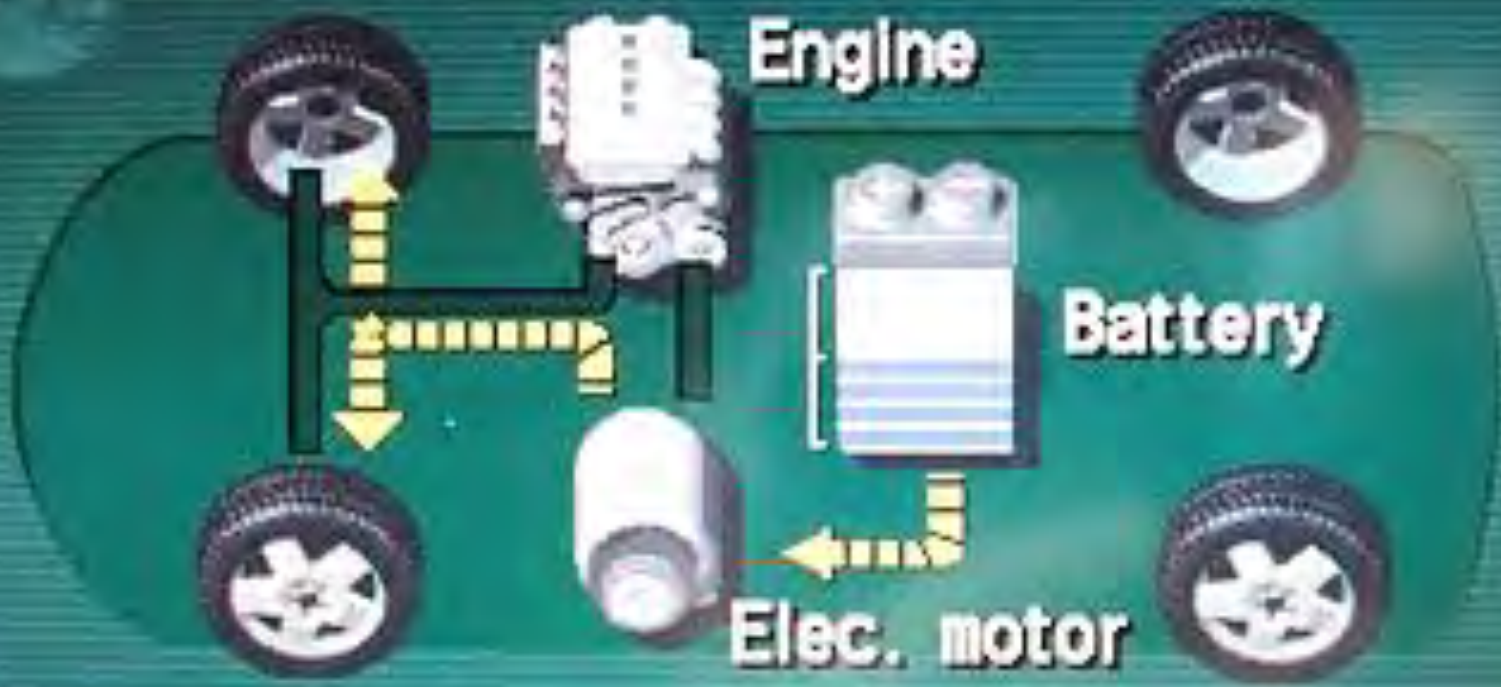
Current 21.9 MPG



Energy monitor

Outside temp.

32 °C

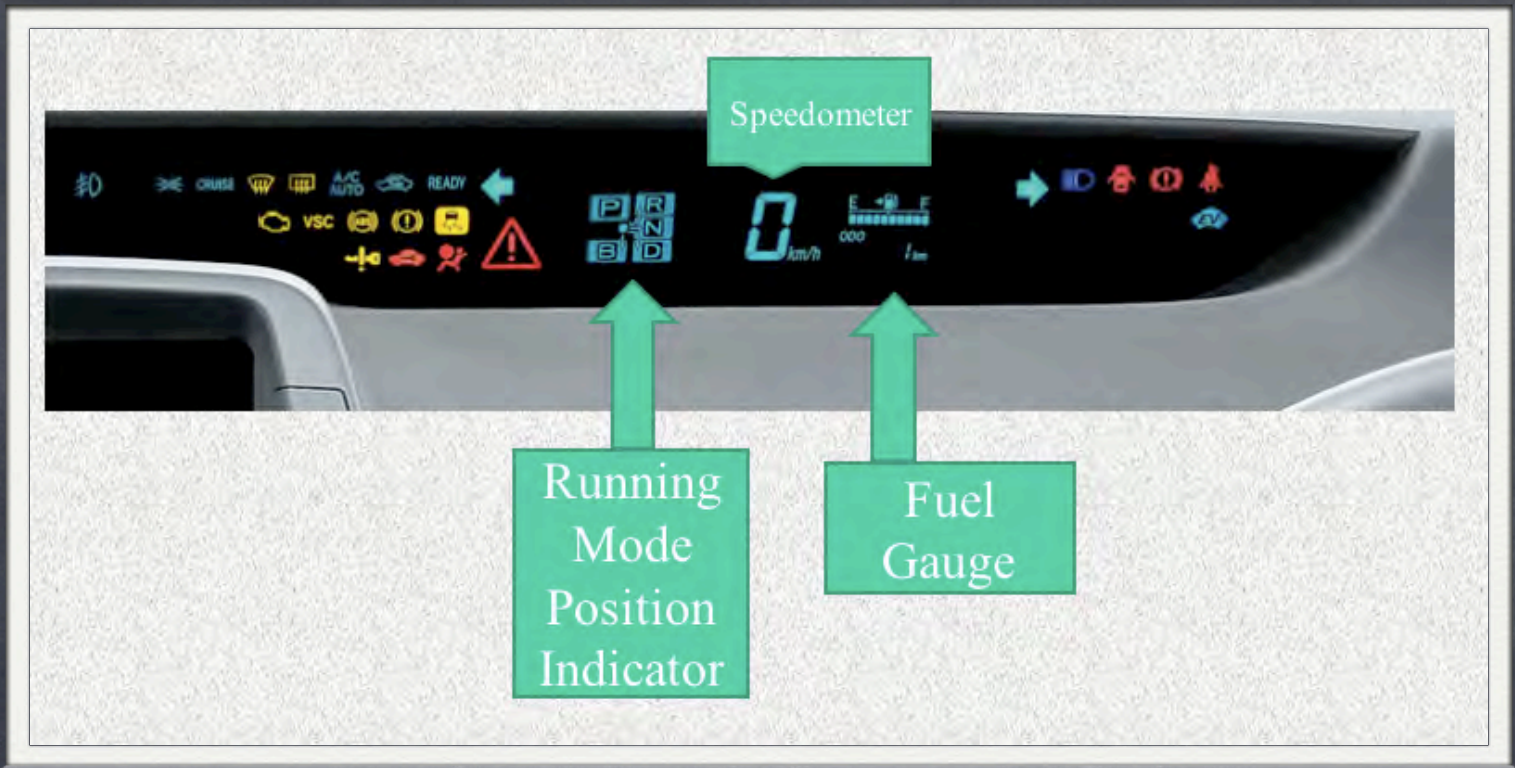


Consumption

Current

0.0

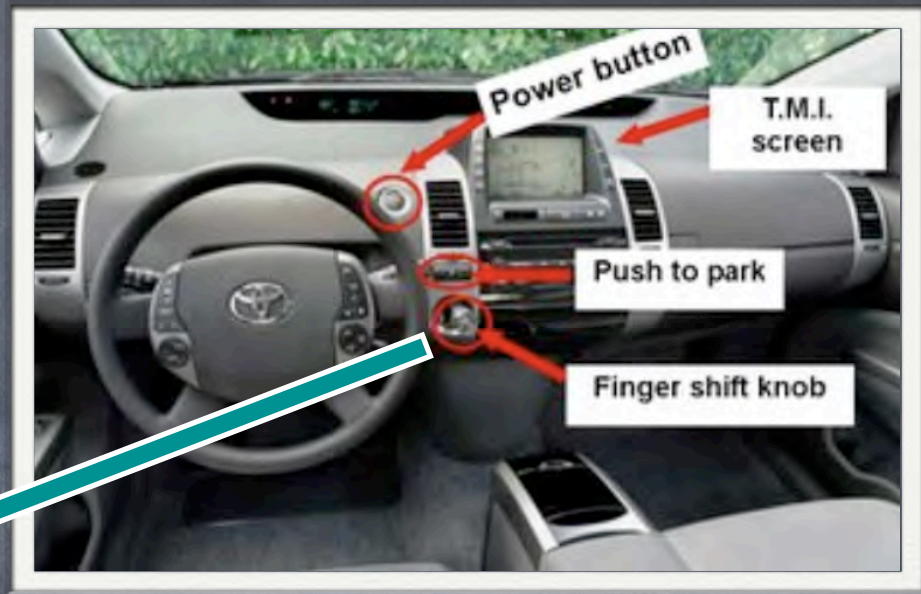
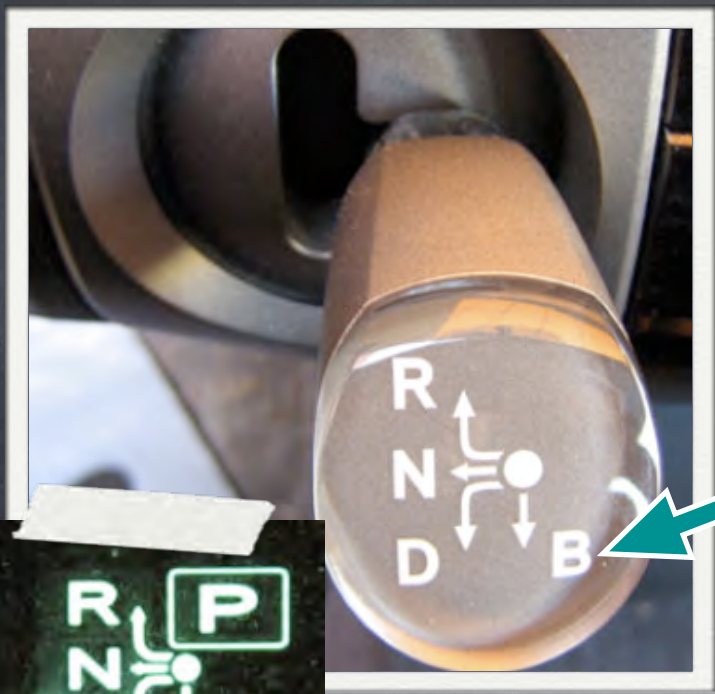
L/100km



Resource:

Richard Ritter, VGDS Driver Ed Teacher

Familiarize yourself



Resource:

Richard Ritter, VGDS Driver Ed Teacher

How to Drive the Prius

1. Place foot firmly on the brake;
2. Press the ON button;
3. Use the electronic shifter to place the vehicle into DRIVE or REVERSE;
4. Slowly release the brake; and
5. Drive the car like any other vehicle; note that all hybrid functions are controlled by the car's computer system



Safety Features

Star Safety System™ - In Vehicle Stability Control (VSC) [18] + Traction Control (TRAC), Anti-lock Brake System (ABS) with Electronic Brake-force Distribution (EBD) and Brake Assist [19]	S
Safety Connect™ [20]	P
Pre-Collision System (PCS) [21]	P
Lane Keep Assist (LKA) [14]	P
★ Driver and front passenger Advanced Airbag System [22]	S
★ Driver and front passenger front seat-mounted side airbags and front and rear side curtain airbags [22]	S
Driver's knee airbag [22]	S
Driver and front passenger active headrests [23]	S
Direct Tire Pressure Monitor System (TPMS) [24]	S
Front and rear energy-absorbing crumple zones	S
★ Side-impact door beams	S
Driver and front passenger seatbelt warning sensor	S
3-point seatbelts in all seating positions	S
Adjustable seatbelt anchors for front seating positions	S
Emergency Locking Retractor (ELR) on driver's belt, Automatic/Emergency Locking Retractor (ALR/ELR) on all passenger belts	S
Front seatbelt: pretensioners with force limiters	S
LATCH (Lower Anchors and Tethers for Children) for outboard rear seating positions only	S
Child-protector rear door locks	S

2010 Toyota Prius received Top Safety Rating, issued by the IIHS



Reference Chapter 5 Natural
Laws and Car Control:
Learn about the importance of
airbags and other protection
devices.



Resource:

<http://www.toyota.com/prius-hybrid/features.html>

Vermont Trends and the Facts about Climate Change



Crunch the Numbers

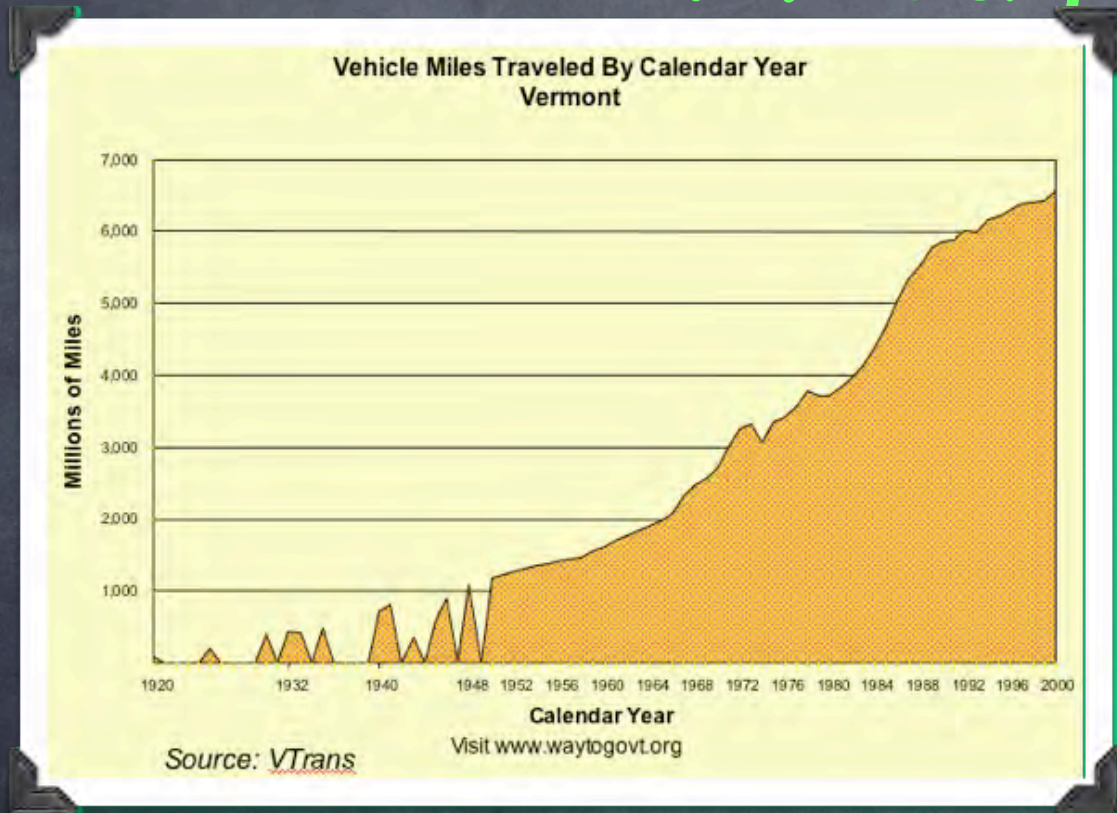
- # Vehicles per VT household =
1.75
- # Single Occupant Vehicles
driving to work:
234,388
- # Miles driven in VT per year =
15,147 miles/year
- # Miles driven in USA per year
= **7,176,200,000**



Resources:

<http://www.vcwww.gi.org>, numbers based on 2000 data
© Google Earth

Vermont Stats: Average Mileage



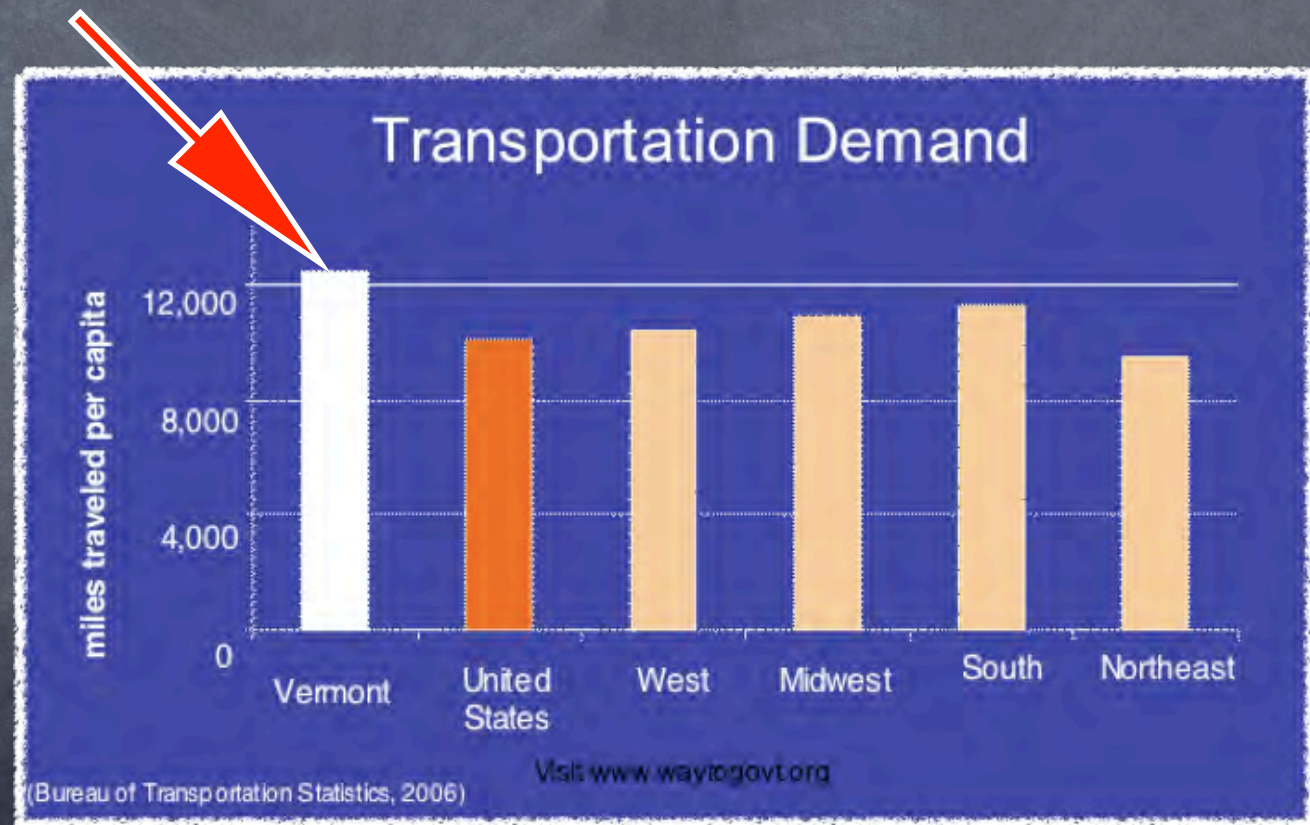
- On Average, 16-19 year olds drive ~ **7,600 miles/year**. (U.S. Dept. of Trans.)
- In 2005, Vermonters drove on average, **34+ miles/day**
- The average number of trips out of each driveway = **7 per day**



Resources:

<http://www.waytogovt.org>
Vermont Agency of Transportation

Vermonters drive more miles & consume more energy than the average American in any other region

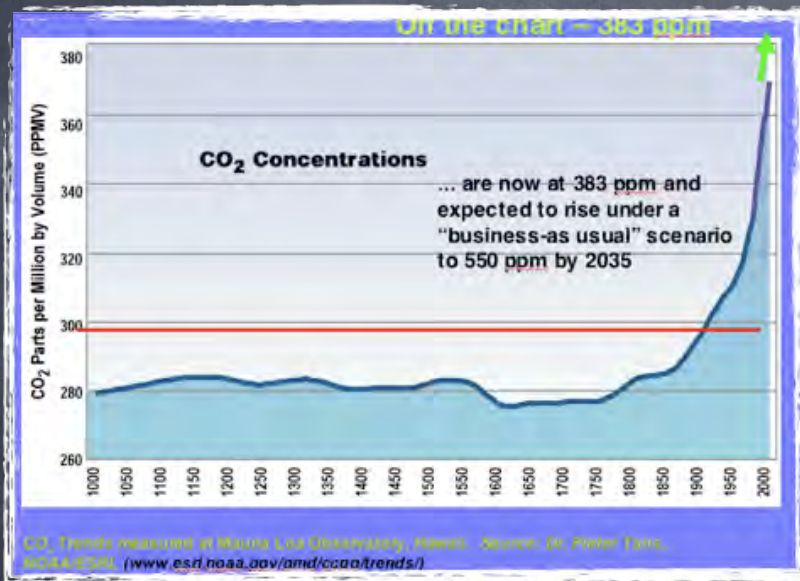


Resource:

<http://www.waytogo.org>

Climate Change is Happening

- This decade was declared the warmest (ever?)



- *Increasing temperatures decrease water supplies and increase famines.*
- 40% of the phytoplankton population has been eradicated since 1950, reports Canadian researchers
- *Phytoplankton forms the base of the marine food chain.*
- CO₂ levels are higher than measured in the past 650,000 years
- *Climate Change threatens way of life not only for us, but for all other species*

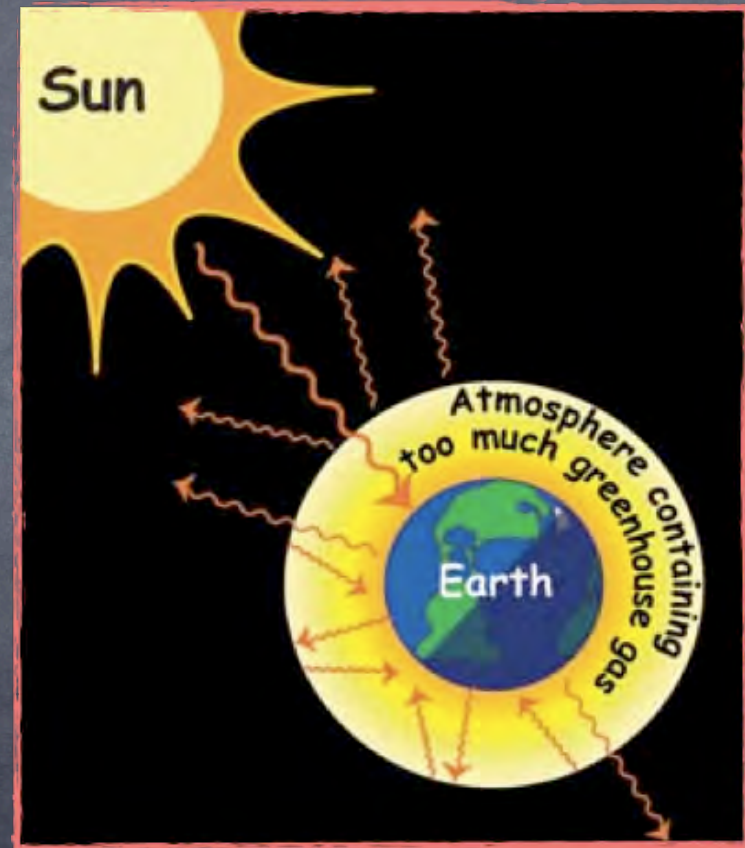


Resources:

Bill McKibben, <http://www.350.org>
Community Climate Action

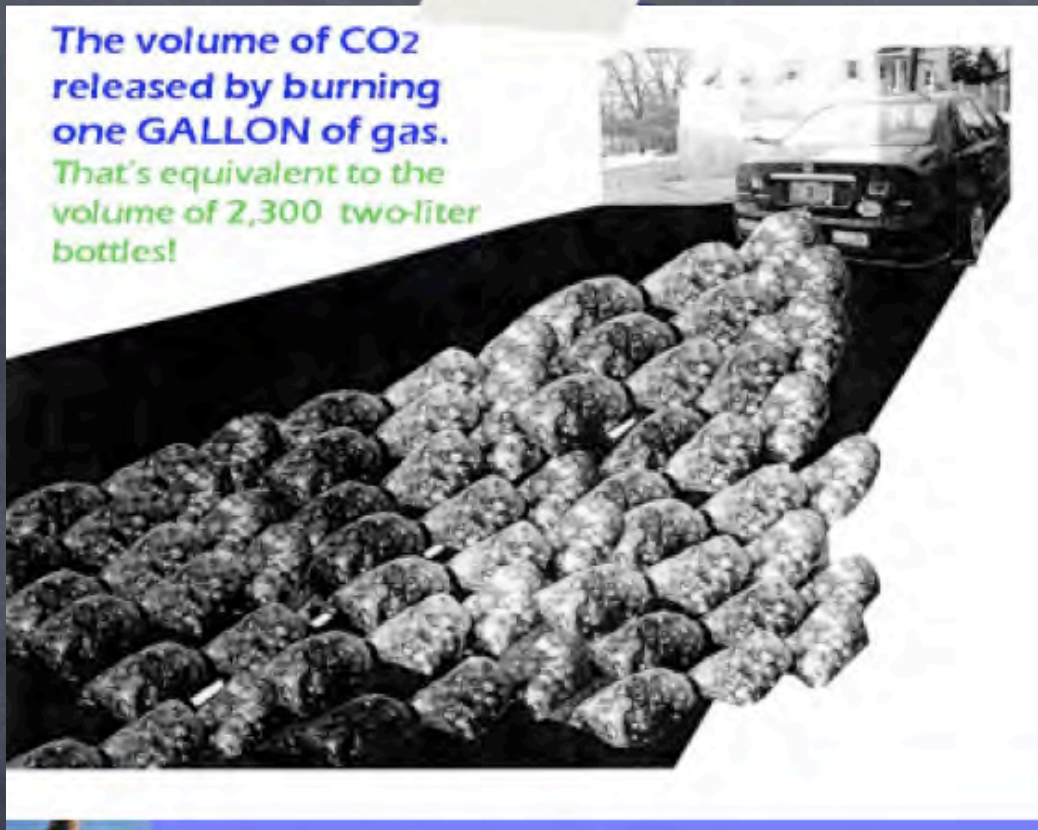
Why we don't like so much carbon in the Atmosphere

- An increased level of carbon dioxide is throwing off the planet's naturally balanced cycles--
 - -- altering the Earth's greenhouse effect;
 - -- reflecting lots of energy back to the Earth's surface;
 - -- causing the Earth to warm; and global climate change.



Resource:

<http://www.climate.nasa.gov>
Vermont Agency of Transportation



- How can 6.3 pounds of gasoline (one gallon) produce 20 pounds of CO₂ when burned?
- Did you know? CO₂ stays in the atmosphere about 200 years.

HOW MUCH CARBON ARE YOU ADDING TO THE ATMOSPHERE?



Resources:

<http://www.epa.gov/oms/climate/420f05001.htm>
Community Climate Action, VBC

CO₂ In VERMONT

- According to the UVM Transportation Research Center
- --**Transportation** is accountable for **44%** of greenhouse gases in Vermont.



Resources:

<http://forcechange.com/tag/global-warming/page/2>
UVM Transportation Research Center

Vermont Consumption



- On average, a Vermonter consumes about 650 gallons of fuel/year.
 - That's over \$2,400 / year in fuel costs!



Resource:

UVM Transportation Research Center

Reliance on Oil

- Over 50% of our Oil is imported to the U.S.
- The U.S., on average consumes 20 Million Barrels every day
- Two-thirds is for Transportation



Resources:

<http://www.grist.org>
UVM Transportation Research Center



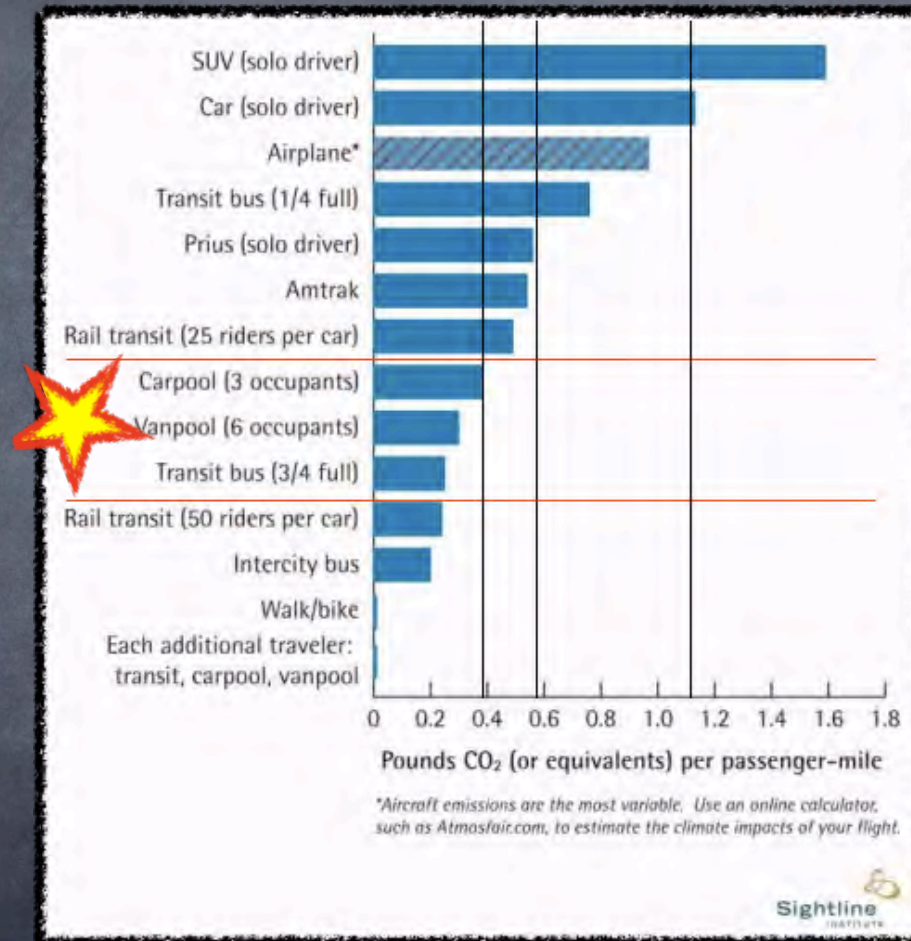
CHANGE: Be the
Change you want to see



Resource:

<http://www.thegreenstarterkit.com>

Make a Change!



Resource:

Community Climate Action

Lifestyle

MEDIUM & LOW LEVEL CHANGES

That will significantly reduce your carbon footprint

Combine Trips



Take Public Transportation



Drive a Hybrid Vehicle



Resources:

<http://www.toyota.com>

UVM Transportation Research Center

Lifestyle

HIGH LEVEL CHANGES

That will significantly reduce your carbon footprint

Drive Less



Carpool/Vanpool



Walk or Bike



Resources:

UVM Transportation Research Center
Community Climate Action

Behind the Wheel Tips!

Save Money and reduce your carbon footprint

Reference
Chapter 9:
Driving in
Heavy Traffic

- Avoid Jack-Rabbit starts and stops.
- Watch your speed; set for ideal traffic conditions
- Use Air Conditioning at speeds over 40 mph;
- AC can use up to 7% of your fuel.
- **Avoid Idling!!**



Resources:

Drive Right
UVM Transportation Research Center
<http://idlefreevt.org>

IDLE-FREE VT^{INC.}



What you can do as a driver?

- o Warm-up your car only 30 sec. prior to departure
- o Park. Avoid Drive -throughs
- o Right Turn on Red ! Avoid sitting in traffic.





Avoid Idling

Top 8 Reasons to Turn the Key:

1. Idling = Gets Zero mpg. You're throwing \$\$\$ away?
2. Idling emissions impact our air and respiratory health
3. Emissions are transportation pollutants, mostly CO_2 warming gases
4. Vermont's location makes CO_2 output nearly double the national average
5. Idling, is wasteful of finite fossil fuels
6. Idling wears down your engine and costs more to maintain
7. Drains our economy - Our \$\$ leave the U.S.
8. It's the LAW! Many communities in VT ban idling on school property



Resource:

<http://www.idlefreevt.org>

Car Up-Keep Tips

- Remove Excessive weight from vehicle
- Keep Tires inflated; For highest efficiency and safety
- Change oil when recommended
- Watch for your check-engine light
- Replace air filters; dirty Air filters can reduce fuel efficiency by 10 percent



16



17



18



19



Reference your textbook for further information:

Reference Chapter 5:

Natural Laws and Car Control:

Learn about the importance of airbags and other protection devices.

Reference Chapter 6:

Performing basic Skill Maneuvers. Become

comfortable with steering.

Environmental Responsibility:
Unit 1: The Driving Task

Reference Chapter 16:
16.3 : Environmental Concerns

Reference Chapter 9:
Driving in Urban Traffic



Resource:

Drive Right

Reference your 2010 Textbook for further information:

Reference Chapter 9: Natural
Laws and Car Control:
Learn about the importance of
airbags and other
protection devices.

Reference Chapter 4:
Performing Basic Skill
Maneuvers
Become comfortable with
steering.

Environmental Responsibility:
Unit 1: The Driving Task

Reference Chapter 18: 18.1:
Environmental Concerns

Reference Chapter 14:
Driving in City Traffic



Resource:

Reference these Sections for
Drive Right 2010 version

Project Exercise

- Choose the Car and do your research!
 - Annual Cost for Fuel?
 - Insurance?
 - 10-year projection on fuel costs alone?

Resources!

American Lung Association www.lungne.org

Bill McKibben: www.350.org

Community Climate Action, www.10percentchallenge.org

Drive Right, Prentice Hall Bridge

Driver's Education presentation on Prius hybrid, Resource: Richard Ritter, Vermont Green Driving School LLC , Driver Ed Teacher

Idle Free Vermont INC. Idle-freevt.Org

Vermont Agency of Transportation, www.aot.state.vt.us

Vermont's center for Geographic Information, www.VCGI.org

Vermont Energy Investment Corp. www.VEIC.org

Special Thanks

Colchester School District—And the Project Coordinating Committee:

Driver Educators, Ken Perrotte, Corky Van Kleech, Richard Ritter (VGDS) and Colchester Business Manager, George Trieb; and Evan Stewart, Colchester Energy Task Force

Tom McGrath, UVM Transportation Research Center: For initial research work on Eco-Driving; www.uvm.edu/~transctr

U.S. Department of Energy, 2009 Energy Efficiency and Conservation Block Grant, EE0001750

Developed by Community Climate Action, Debra Sachs, GRP and Dana Rubin

Vermont Clean Cities Coalition

Vermont Community Energy and
Climate Action Conference
December 1, 2012
Lake Morey Resort

Tom McGrath
Coordinator, VT Clean Cities Coalition
UVM Transportation Research Center
tmcgrath@uvm.edu



RESEARCH
EDUCATION
OUTREACH

UNIVERSITY OF VERMONT
TRANSPORTATION RESEARCH CENTER

71

VT Clean Cities Coalition



- **Funded by US Dept of Energy**
- **87 coalitions in 45 states**
- **Mission - To reduce petroleum consumption in the transportation sector**
 - **Reduce**
 - **Replace**
 - **Eliminate**



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TRANSPORTATION RESEARCH CENTER

Transportation in VT

- **Transportation sector - Largest energy user in VT**
- **Key role in reducing state's energy and fossil fuel use**
- **Possible solutions?**

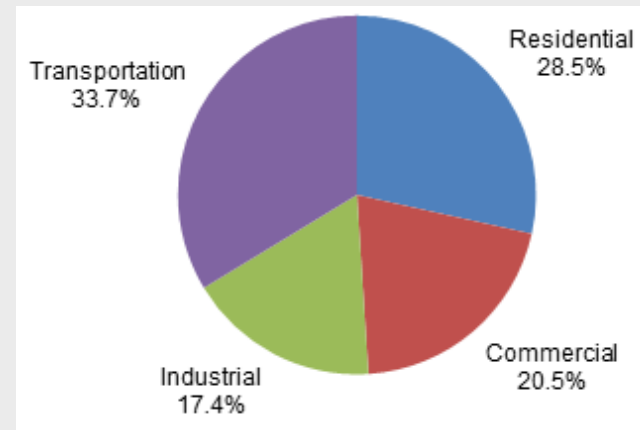


Figure 1-1 Energy Use by Sector in Vermont



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TRANSPORTATION RESEARCH CENTER

Current Projects and Activities Biodiesel

- **Biodiesel use limited**
 - Price, cold weather
- **Availability limited**
- **New blending facility**
- **Hope to expand use in 2013**



RESEARCH
EDUCATION
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Current Projects and Activities Biodiesel



- **On-farm production**
- **Grow oilseeds, press seeds, convert to biodiesel**
- **Small scale**



Current Projects and Activities

CNG



- **3 fueling stations**
 - 1 quasi-public
- **Limited availability of natural gas**
- **30+ CNG vehicles in VT**



Current Projects and Activities

CNG



- **Infrastructure**
- **Pipeline expanding**
- **Current search for public station**
- **NG Advantage to distribute CNG**



Current Projects and Activities

Propane

- **More widely-used in the past**
- **Schwan's is sole propane fleet**
- **Widely available**
- **Buses?**



Current Projects and Activities

PEVs

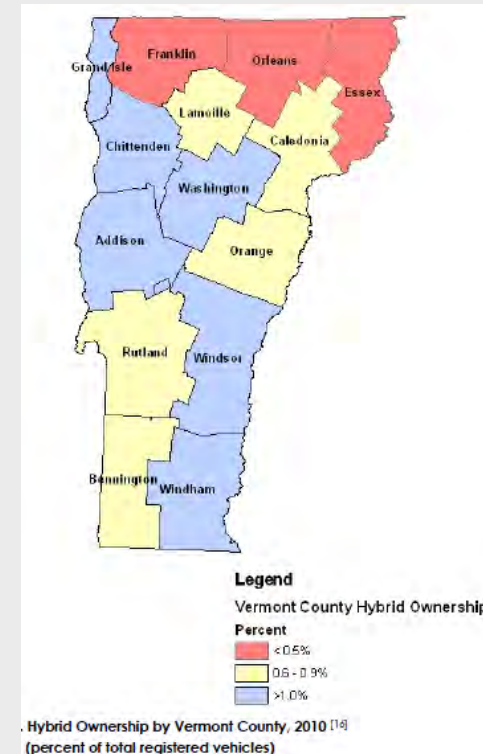
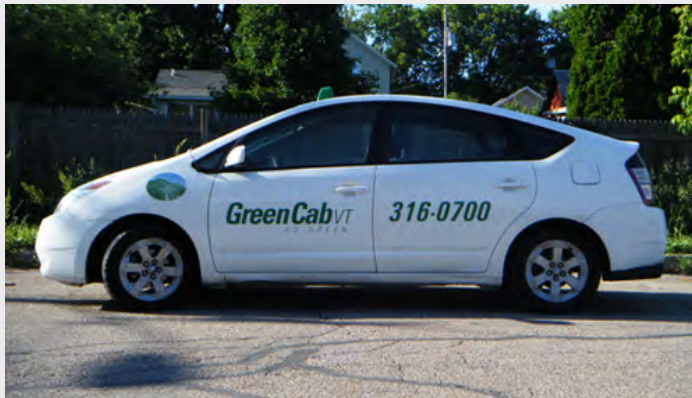
- **Northeast Electric Vehicle Network**
 - TCI/NYSERDA
 - Northeast Electric Vehicle Network
 - Siting and Design Guidelines
 - Permitting, Building Codes
 - Outreach Activities
- **Dealership outreach**
- **Availability of PEVs increasing**
- **EVSE installation**



Current Projects and Activities

Hybrids

- **Better mpg, fewer emissions**
- **No additional infrastructure**
- **'Transition' vehicle to PEV**



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Current Projects and Activities

Eco Driving Workshops



- **Increase Fuel Efficiency**
 - 5-20%
- **Reduce Emissions**
- **Save Money**
- **Easy to Implement**



Current Projects and Activities

College/University Outreach

- **CCUWDP intern Allie Evarts**
- **Summer 2012 survey to all colleges/universities in VT**
- **Report on best practices and recommendations**



Outreach and Education

Monthly newsletter

Vermont Clean Cities Newsletter
October 2012



WELCOME TO THE VTCCC NEWSLETTER:
Your clearing house for news, programs, and funding information related to reducing the consumption of petroleum for transportation in Vermont.

UPCOMING EVENTS

Bourne's Energy Biodiesel Blending Plant Opening
Oct. 24, 2012, 11:00am-2:00pm
1475 LaPorte Road, Morrisville

Vermont Transportation Board Fall 2012 Public Hearings
Purpose of the hearings is for public to comment on a variety of transportation-related topics.
Oct. 24: Brattleboro
Oct. 25: Rutland
Oct. 30: White River Junction
Nov. 8: St. Johnsbury
Nov. 13: Winooski
Nov. 14: Montpelier

Safe Routes to School National Course
Oct. 30, 2012, 10:00am-3:30pm
Rand Memorial Library
Troy, VT

CCRPC Conference
Nov. 1 and 2, 2012
Double Tree Hotel, South Burlington

Climate Action Seminar: Responding to the New Normal
Fall 2012 Seminar Series
Sponsored by the UVM Clean Energy Fund and the UVM Environmental Program
A weekly seminar featuring guest speakers
Mondays 11:00-12:00 pm in Lafayette 207, UVM
[Click here for more info.](#)

Follow the VTCCC on Facebook

Check out our website!

Learn more about Clean Cities

Follow the VTCCC on Twitter

Facebook

DOE News

Energy Department Announces \$1 Million to Evaluate Technology Pathways for Cost-Competitive Hydrogen Fuel
Funding will evaluate the most promising technology paths toward achieving \$2 to \$4 per gallon gasoline equivalent (GGE) of hydrogen fuel or less by 2020.

DOE wants your feedback on ways to make electric vehicles more affordable to own - part of EV Everywhere Challenge.
This exciting initiative focuses on enabling U.S. companies to be the first in the world to produce electric vehicles (EVs) that are as affordable and convenient for the average American family as today's gasoline-powered vehicles by the year 2022.

Vermont News

VTCCC Celebrates National Alternative Fuel Vehicle Day Odyssey on the Church Street Marketplace
VTCCC coordinator Tom McGrath addressed the crowd and spoke about the Clean Cities mission. Special guest Vermont State Representative Freda Sam and Burlington Mayor Miro Weinberger also delivered remarks in support of alternative fuel vehicles.

VTCCC Releases Plug-in Electric Vehicle Readiness Findings Report
The overall purpose and goals of this project were to disseminate information, create dialogue, and build capacity among targeted groups of stakeholders who are vital for the mass deployment of plug-in electric vehicles (PEVs) in Vermont.

State, Federal Officials Celebrate Rail Line Improvements
U.S. Secretary of Transportation Ray LaHood and Vermont officials took a train trip from White River Junction to Brattleboro on Friday to mark the completion of track repairs.

CATMA Announces Its Transition to a Traditional TMA
CATMA also announced the appointment of Sandy Thibault as Executive Director, effective October 29, 2012.

National News

Researchers Pursuing Home-Based NGV Refueling Technology
In concert with Argonne National Laboratory, GTI and the university researchers will work toward

achieving an aggressive DOE goal: reducing the cost of home refueling systems from today's \$4,000 to less than \$2,000.

GE, Pease Solutions Launch CNG In-A-Box
CNG-in-a-box is a fully-integrated fueling supply system that enables gas retailers to add low-cost compressed natural gas pumps at their current locations.

UPS to Add 40 Hydraulic Hybrid Vehicles to Its Fleet
The package can also achieve up to 25 percent improved fuel economy, and up to 30 percent CO2 emissions reduction over traditional diesel-powered vehicles that use automatic transmissions in stop-and-go applications.

ECOality Surpasses 1 Million Charge Events for EV Project
The Blink Chargers also achieved another key milestone - 40 million miles of driver data recorded, and over 1.70 million gallons of gas saved.

Ryder Publishes 2012 Corporate Sustainability Report
The 2012 report outlines Ryder's sustainability strategy, which focuses on providing transportation and logistic solutions to companies of all sizes that ease complexity, increase efficiency, and keep goods and materials flowing so that the economy can grow and thrive.

International News

Electric Car Chargers Hoped to Fuel Tourism in Ontario
The installation of four electric vehicle chargers at locations between Sudbury and Toronto means drivers can now make the journey on nothing but battery power - and hopefully give a boost to tourism.

Almost 25 Million Propane Autopark Vehicles Will be Operating on Snaps Worldwide by 2020: Fuels and More Research
Internal combustion engines, both diesel and gasoline, can be readily adapted to use LPG as a dual fuel; converting a gasoline engine to run entirely on LPG is straightforward and not particularly costly.

German Government May Subsidize Electric Cars
The German government has pledged 1 billion euros (\$1.3 billion) of federal research spending on electric cars and battery technology and is planning other steps such as granting 10 years exemption from vehicle tax.

FUNDING OPPORTUNITIES

Safe Route to School Infrastructure Program
We are pleased to announce that VTTRANS is now accepting applications for the 2012 VT Safe Routes to School Infrastructure program. The goal of the program is to remove barriers that deter

students from walking and bicycling to school in Vermont through the planning, design and construction of infrastructure projects.

Eligible projects must be located within approximately 2 miles of a school that includes at least one grade in the range K-8. The school must be signed up as a Partner of the VT Safe Routes to School Resource Center and must have a School Travel Plan that has been updated within the last 3 years. Applications are due 10/26/12. For more info contact [Pam Coburn](#) or [click here](#).

Environmental Education Regional Grants
Under this solicitation EPA is seeking grant proposals from eligible applicants to support environmental education projects that promote environmental stewardship and help develop knowledgeable and responsible students, teachers, and citizens. This grant program provides financial support for projects that design, demonstrate, and/or disseminate environmental education practices, methods, or techniques, as described in this notice, and that will serve as models that can be replicated in a variety of settings. Under this solicitation EPA expects to award environmental education grants from the 10 EPA Regional offices.

Grantees that receive awards under this solicitation must establish methods to document and report measurable results from grant projects. To ensure that grant proposals are competitive, applicants should carefully read Sections IV and V regarding how to structure a proposal and what criteria will be used to evaluate proposals. EPA receives a large number of grant applications under this program and can fund just a small percentage of those applications received. Applications are due 11/21/12. For more info contact [Krisen Conroy](#) or [click here](#).

Go Vermont Grassroots Grants For Energy Committees
The Vermont Agency of Transportation (VTTRANS) Public Transit Section is offering grants to municipalities to assist in building a statewide outreach and advocacy network for the Go Vermont Program ([www.connectingcommuters.org](#)). VTTRANS will provide a \$500 grant to participating municipal energy committees. Go Vermont is a web-based clearinghouse for all transportation modes in Vermont, featuring an automated carpool, vanpool and public transit matching service, a vanpool program, information for State Park and Ride locations, and a link to "511" traffic conditions. The project objectives are as follows:

- Broaden Go Vermont outreach efforts
- Build relationships with local committees and advocates
- Identify local and regional transportation priorities and activities
- Increase traffic to the Go Vermont website and tools ([www.connectingcommuters.org](#))
- Focus regional and local initiatives and advocacy efforts.
- The ultimate goal of this program is to increase program awareness, carpool registrations, numbers of van-pools and general activity on the Go Vermont website.

For more information contact [Ross MacDonald](#) or [click here](#).

	Gas at the Pump, VT	Crude Oil Futures
Weekly Petro-Stats		
Current	\$ 3.84/gallon	\$ 86.68/barrel
One Month Ago	\$ 3.94/gallon	\$ 91.32/barrel
One Year Ago	\$ 3.56/gallon	\$ 91.32/barrel



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Outreach and Education

- **New England Clean Fleet Certification**
- **Biodiesel regional workgroup**
- **CNG, propane, biodiesel workshops**
- **Work with MPOs**



Contact information

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Questions?

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UVM's Transportation Research Center and the Vermont Clean Cities Coalition

Sarah Simonds – ssimonds@vermontcf.org

High Meadows Fund

THANK YOU!