

## TRANSPORTATION AND ENERGY

April 7, 2011



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Deputy Secretary, Vermont Agency of Transportation

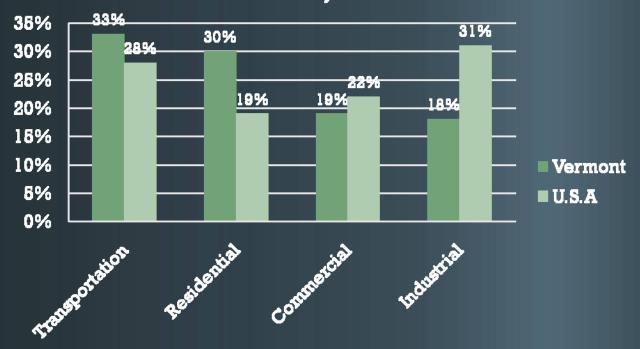


Trends in Transportation Energy-Use





### Vermont and National Energy Use by Sector, 2008

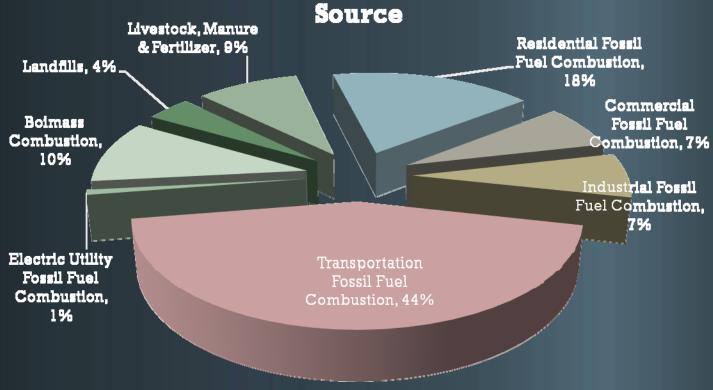


Source: The Vermont Transportation Energy Report: Vermont Clean Cities Coalition (August 2010)

■ The transportation sector is the largest user of energy in Vermont, accounting for approximately one-third of all energy use.



# Vermont Greenhouse Gas Emissions by



Source: Vermont Agency of Natural Resources, 2007

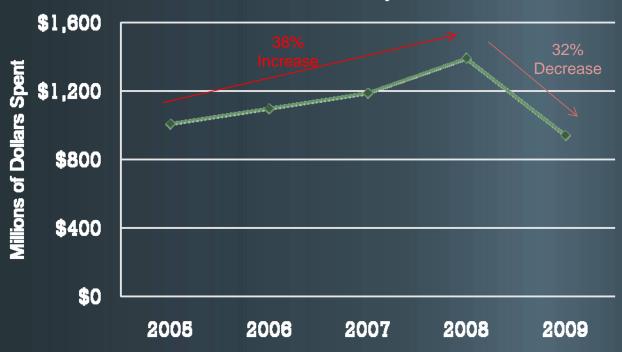


### The Transportation GHG Emissions Challenge





# Total Annual Spending on Gasoline and Diesel in Vermont, 2005-2009

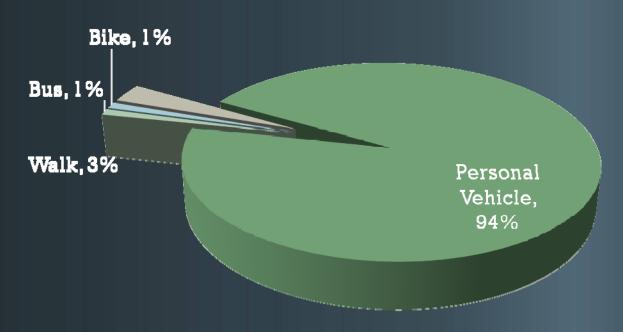


Source: The Vermont Transportation Energy Report: Vermont Clean Cities Coalition (August 2010)

- Annual spending on gasoline and diesel declined from \$1.3 billion in 2008 to \$941 million in 2009.
- Spending on transportation is the 2<sup>nd</sup> highest category of household expenditures in Vermont, behind housing costs.



### Journey-to-Work Travel Mode



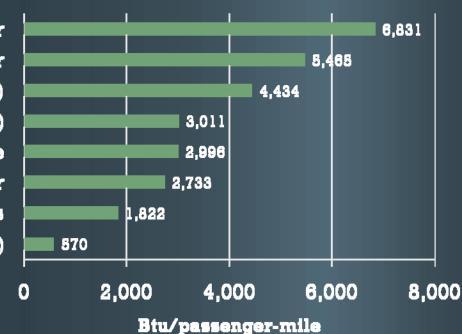
Source: The Vermont Transportation Energy Report: Vermont Clean Cities Coalition (August 2010)

■ Over 94% of all work trips are made with personal vehicles.



# Energy Use per Passenger-Mile by Transport Mode and Occupancy

SUV - solo driver
Car - solo driver
Transit bus (av. Occupancy)
Rail (Amtrak)
Airplane
Car - 1 passenger
Car - 2 passengers
Transit bus (at capacity)



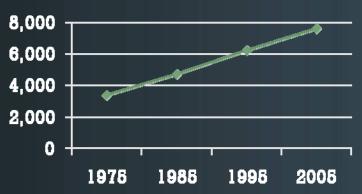


Source: The Vermont Transportation Energy Report: Vermont Clean Cities Coalition (August 2010)

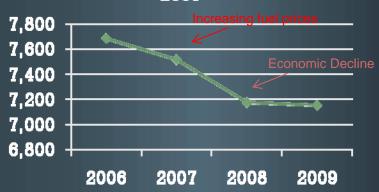
Single-occupancy vehicles account for the vast majority of transportation energy use.



#### Vermont Annual Vehicle Miles Traveled (in millions), 1975-2005



#### Vermont Annual Vehicle Miles Traveled (in millions), 2006-2009



Source: Vermont Agency of Transportation Highway Research VMT Report

■ VMT in Vermont increased three-fold from 1975-2005, followed by a gradual decline. Between 2006 and 2009, Vermont's VMT dropped 7.7%







All Vehicles Registered in Vermont by Fuel Type						
Fuel	2006	2007	2008	2009	% change 2005- 2009	
Hybrids	2,358	3,651	4,565	5,473	132%	
Electric	110	106	101	94	-14%	
Propane	110	93	75	69	-37%	
Diesel	29,161	31,648	32,140	30,724	5%	
Gasoline	542,126	583,568	578,881	528,930	-2%	
Source: The Vermont Transportation Energy Report: Vermont Clean Cities Coalition (August 2010)						

Source: The Vermont Transportation Energy Report: Vermont Clean Cities Coalition (August 2010

- Vehicle purchase trends in Vermont reflect growth in energy-efficient power-trains.
- Electric Vehicles Policy Question Very low sales to date. Do we wait until there is demand to develop infrastructure or develop infrastructure to spur demand?



Vehicle Class of New Vehicle Purchased in Vermont, 2009					
Vehicle Class	% of New Vehicle Purchases in 2009				
Economy (i.e. Honda Civic, VW Rabbit)	35%				
Midsize & Large Sedan (i.e. Toyota Camry, Ford Fusion)	24%				
S.U.V., Pick-up Trucks, Minivan & Van	40%				
Other	1%				
Source: The Vermont Transportation Energy Report: Vermont Clean Cities Coalition (August 2010)					

Source: The Vermont Transportation Energy Report: Vermont Clean Cities Coalition (August 2010)

■ While economy-class vehicle sales remain strong, less energy-efficient S.U.V., pick -up trucks, minivan and van sales account for the majority of vehicles sold in Vermont.



# How VTrans Supports Energy-Efficient Transportation







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#### Commuting & Ridesharing Resources for Vermonters



#### A Carpool Story

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

Go Vermont is a free resource that provides transportation options for people who want to reduce the cost and environmental impact of driving. The program features a free carpool/vanpool matching service, event and single trip ride matching, ridesharing tips, and other practical information on getting around by biking, walking, bus, train and ferry.



#### Get started

Click here to connect with commuters looking for carpool and vanpool opportunities, whether it be for a work commute or for a meeting or conference. Answer a few simple questions about your commute, schedule, and ideal carpool or vanpool partners, and we'll match you to ridesharing candidates.

#### Guaranteed Ride Home

Registered Go Vermonters who share a ride two or more days per week are eligible for the Guaranteed Ride Home benefit, which reimburses up to \$70 towards getting you home in case of an unexpected change

#### Calculate Your Commute

Find out what your commute is costing you and measure the environmental impacts, as well as estimate what you could save by





Before you register, you can see who wants to share a ride near you, and the carpools/vanpools and rideshare routes in your immediate area.

Carpool Finder

Vanpool Finder

Event/Single Trip <u>Finder</u>



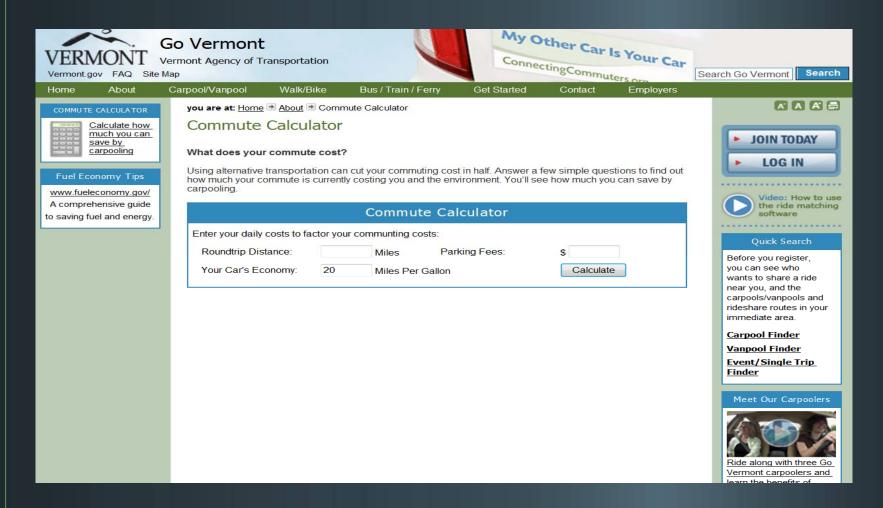
Carpool or Vanpool Walk or



Bike

www.connectingcommuters.org/

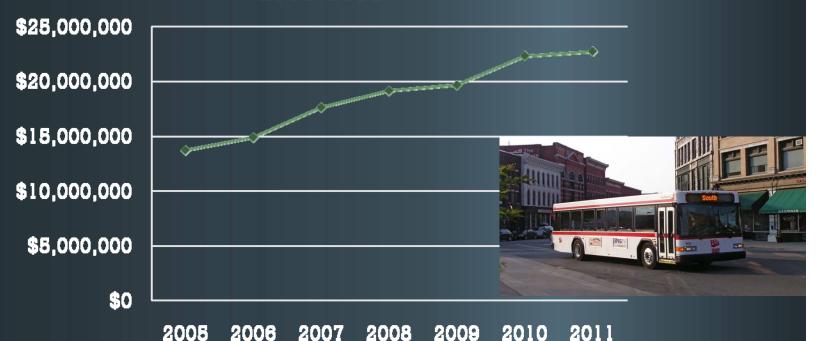




www.connectingcommuters.org/about/commute-calculator



# Public Transit Appropriations, SFY 2005-2011

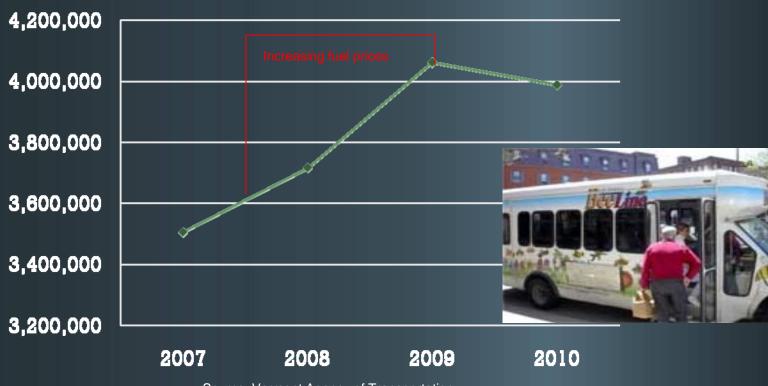


Source: Vermont Agency of Transportation

- VTrans' Public Transit funding has increased by 106% from FY2002-FY2012 (7.8% annual average), more than double the 48% growth in the overall transportation budget.
- ARRA and discretionary funding in the past two years has resulted in 140 news transit vehicles, replacing close to a quarter of the state's transit fleets.



### Public Transit Ridership in Vermont



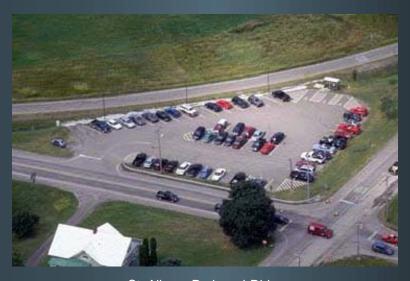
Source: Vermont Agency of Transportation

■ Public Transit ridership has increased by 482,640 trips, or 13.8% since 2007.





Richmond Park-and-Ride



St. Albans Park-and-Ride

- There are 27 State Park-and-Ride lots in Vermont, encompassing 1,142 spaces.
- Average utilization rates for all State Park-and-Ride lots has increased from 60% to 70% since 2007.
- ■Utilization rates at 1/4 of State Park-and-Ride lots exceed capacity.



### Vermont Amtrak Ridership



- Intercity passenger rail trips in Vermont has increased by 60% to over 97,000 since 2006.
- ■ARRA funding for intercity passenger rail \$75 million (FRA and Railroad) to improve track speeds to 59-79MPH along the Vermonter Route.



# Policy Challenge



Source: Wall Street Journal

State policies that enhance energy-efficient transportation reduce the transportation revenue base.



### The fork in the road





### **Questions or Comments?**