

New Hampshire's Climate Action Plan

***An Opportunity to Leverage Social,
Economic and Ecological Benefits
through Coordinated Planning***

**2010 NNECAPA Annual Conference
October 7, 2010**

Thomas S. Burack, Commissioner

Thomas.Burack@des.nh.gov

603-271-2958



Overview

- New Hampshire's Changing Landscape
- New Hampshire's Energy Dependence
- New Hampshire's Changing Climate
- Opportunities to Address All Three



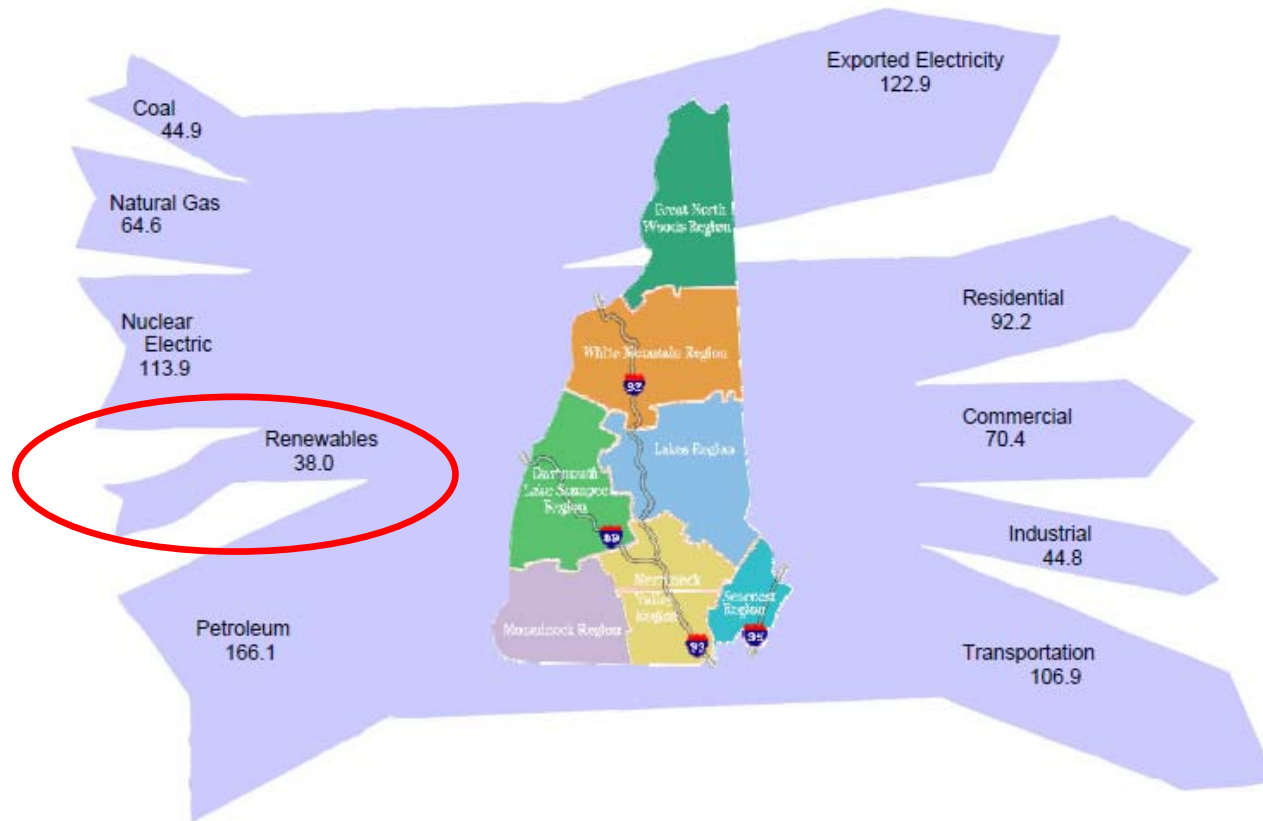
Current New Hampshire Land Use Patterns

- Rapidly growing small towns
- Scattered development
- Dispersing population
- Increasing rate of land consumption
- Segregated land uses
- Lack of activity centers
- Poor accessibility



NH Energy Inputs & Consumption

NH Energy Sources and Uses - 2007
All Units in Trillions of British Thermal Units (TBtu)



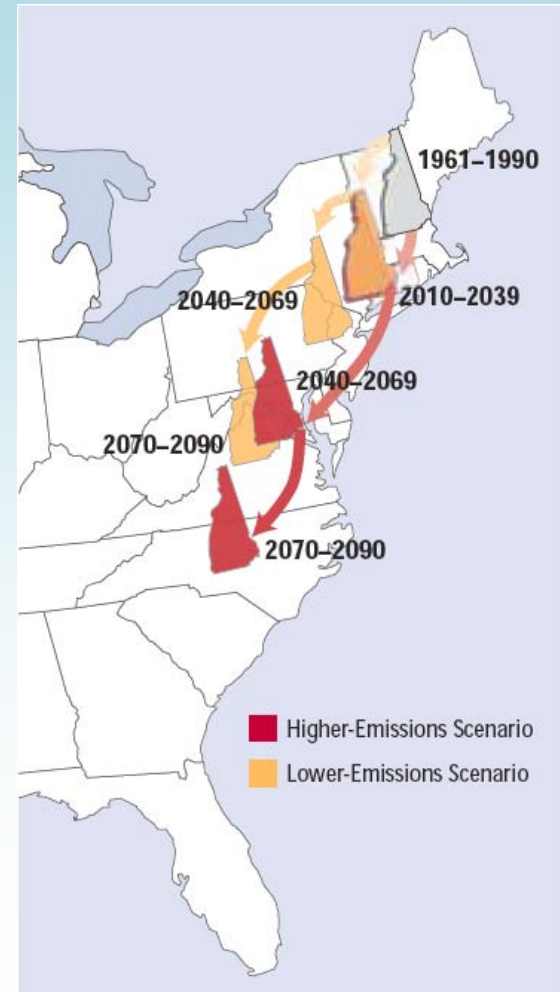
Environmental Impacts of Energy Consumption

- Impacts of electricity generation from fossil fuel use still exist, including, but not limited to:
 - Mercury
 - Acid deposition (e.g., NO_x, SO_x)
- Practically all energy sources have potential environmental impacts, either direct or indirect
- Climate change is a new and serious threat

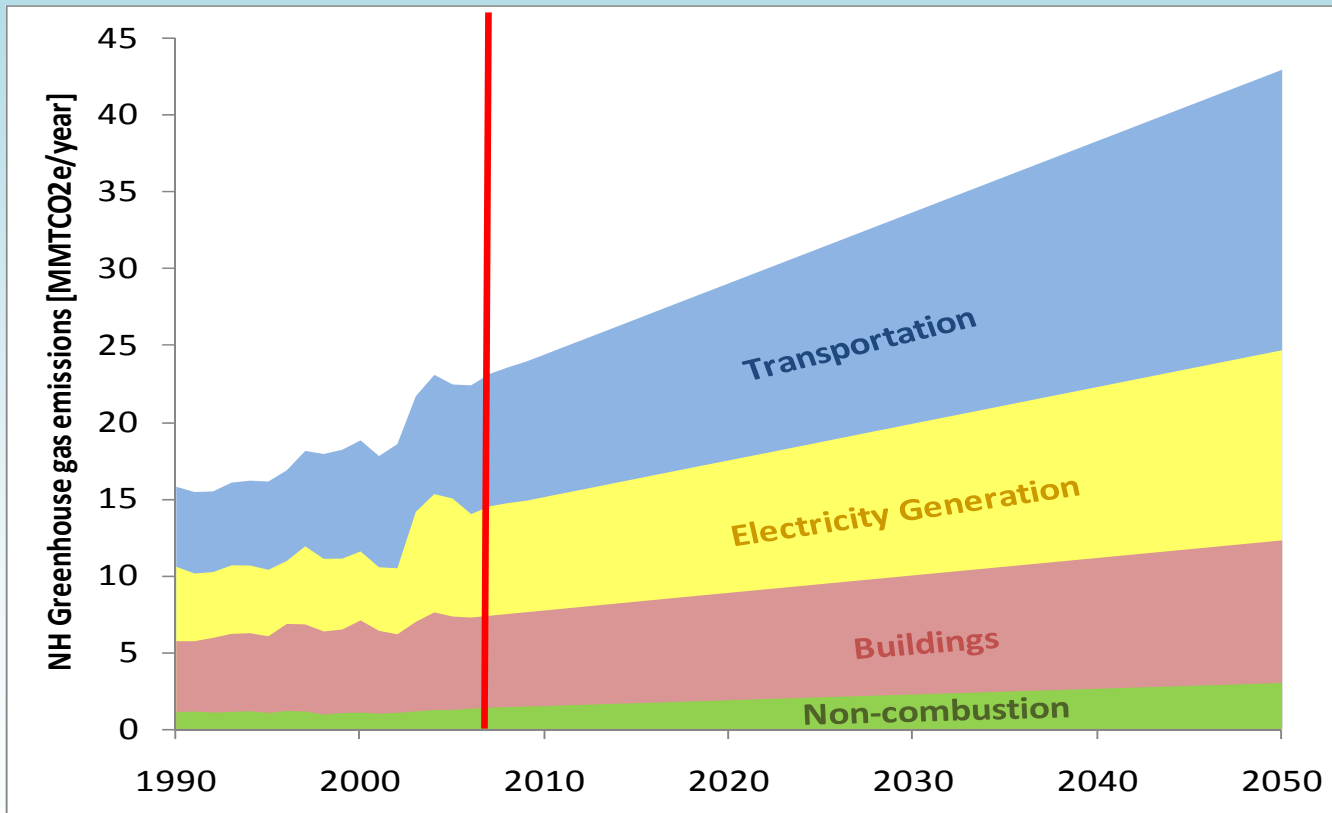
Climate Change Impacts in the Northeast

- More precipitation
- More frequent extreme precipitation
- Winter warming
- Decreased snowfall
- Fewer days with snow on ground
- Lake ice out dates earlier
- Earlier spring runoff
- Extended growing season
- Sea-level rise

Hodgkins et al., 2002; 2003; Wolfe et al., 2005;
Wake and Markham, 2005; Wake et al., 2006



Greenhouse Gas Emissions Projections



Historical data from EPA

Business as Usual (BAU) estimates from CSNE



NH Climate Action Plan

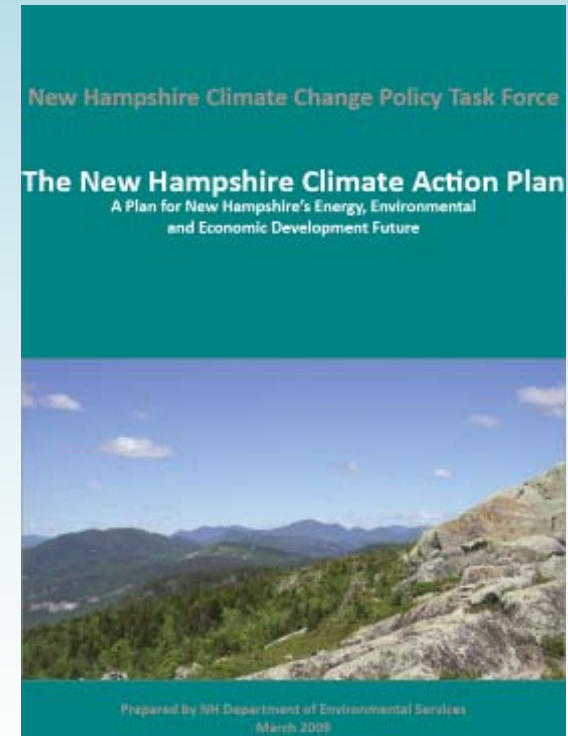
The Plan

- Plan completed in March 2009

The Goals

Reduce greenhouse gas emissions:

- 20% below 1990 levels by 2025
[44% below 2005 levels by 2025]
- 80% below 1990 levels by 2050



NH Climate Action Plan

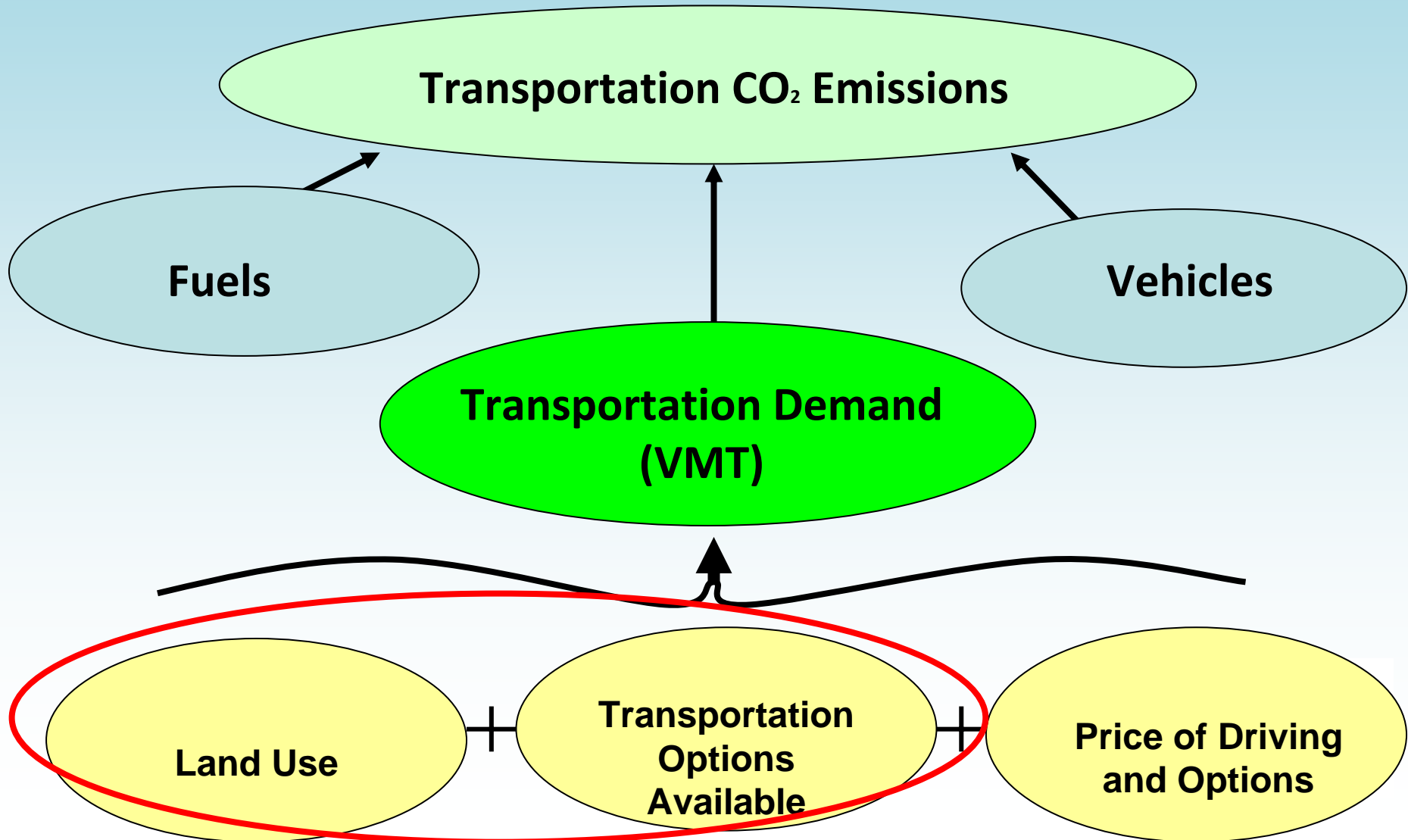
Overarching Strategies

1. Maximize energy efficiency in buildings and transportation;
2. Increase renewable and low-emitting heat and electric power sources;
3. Protect our natural resources to maintain the amount of carbon sequestered;
4. Develop an integrated education, outreach and workforce training program; and
5. Adapt to existing and potential climate change impacts.



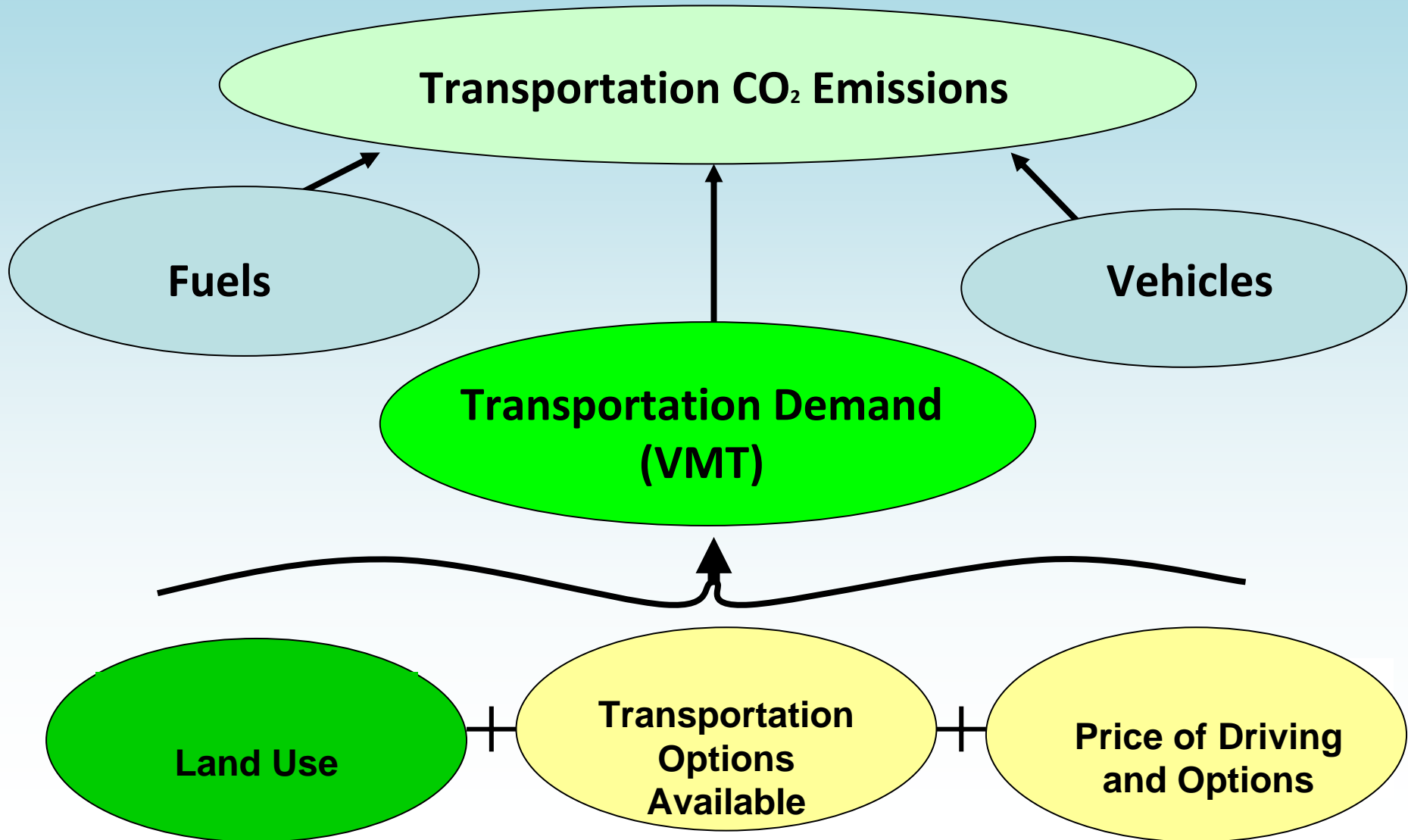
Greenhouse Gas Emission REDUCTIONS

Transportation Sector



Greenhouse Gas Emission REDUCTIONS

Transportation Sector



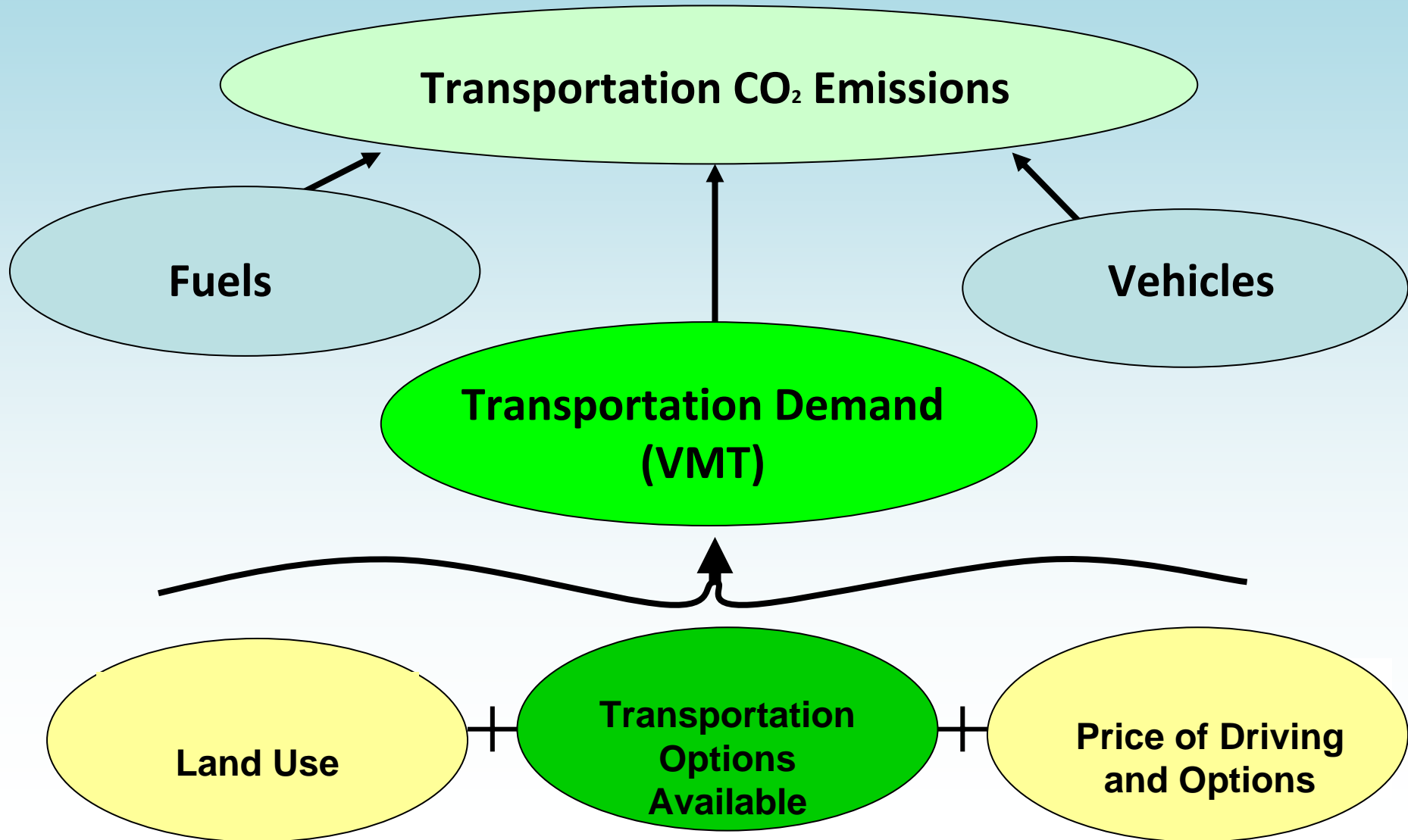
Desired Land Use Conditions

- Open space preservation
- Higher density development
- Concentrated activity centers
- Mixed use development
- Pedestrian oriented design
- Increased density near transit



Greenhouse Gas Emission REDUCTIONS

Transportation Sector



Desired Transit Outcomes

- Expand existing transit availability
- Increase transit options
- Increase connectivity and accessibility of transportation system



Addressing Climate Change Impacts

Newmarket, NH
May 2006



Fosters Daily Democrat photos



Desired Adaptation Outcomes

- Facilitate early responses/avoided impacts
- Enhance communities' resistance to change
- Promote resilient communities



Potential Planning Community Role

- Technical Assistance
 - Master Plan Energy Chapter Development
 - Land Use and Energy Policy Audits
- Network Development
 - Engage diverse partners
 - Outreach & Education

