



Smart Commute: Creating Mobility Options in NH and VT

Aaron Brown, Upper Valley TMA

www.stagecoach-rides.org

Presentation to Transportation Research Board
19th National Rural Public and Bus Transportation Conference
October 26, 2010
Burlington, VT

VERMONT
ELR 816

Contents

- Program Overview
- Challenges and Opportunities in the Upper Valley
- Developing Workplace Programs that Address the End-User

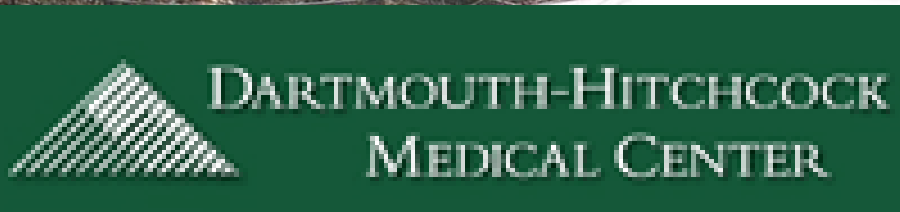


Program Overview

- Employer-Based TDM Program
- Annual commuter behavior and attitudes survey → sustainable commuting plans and marketing campaign
- Focuses on fostering sustainable behavior and improving mobility access, not providing information alone



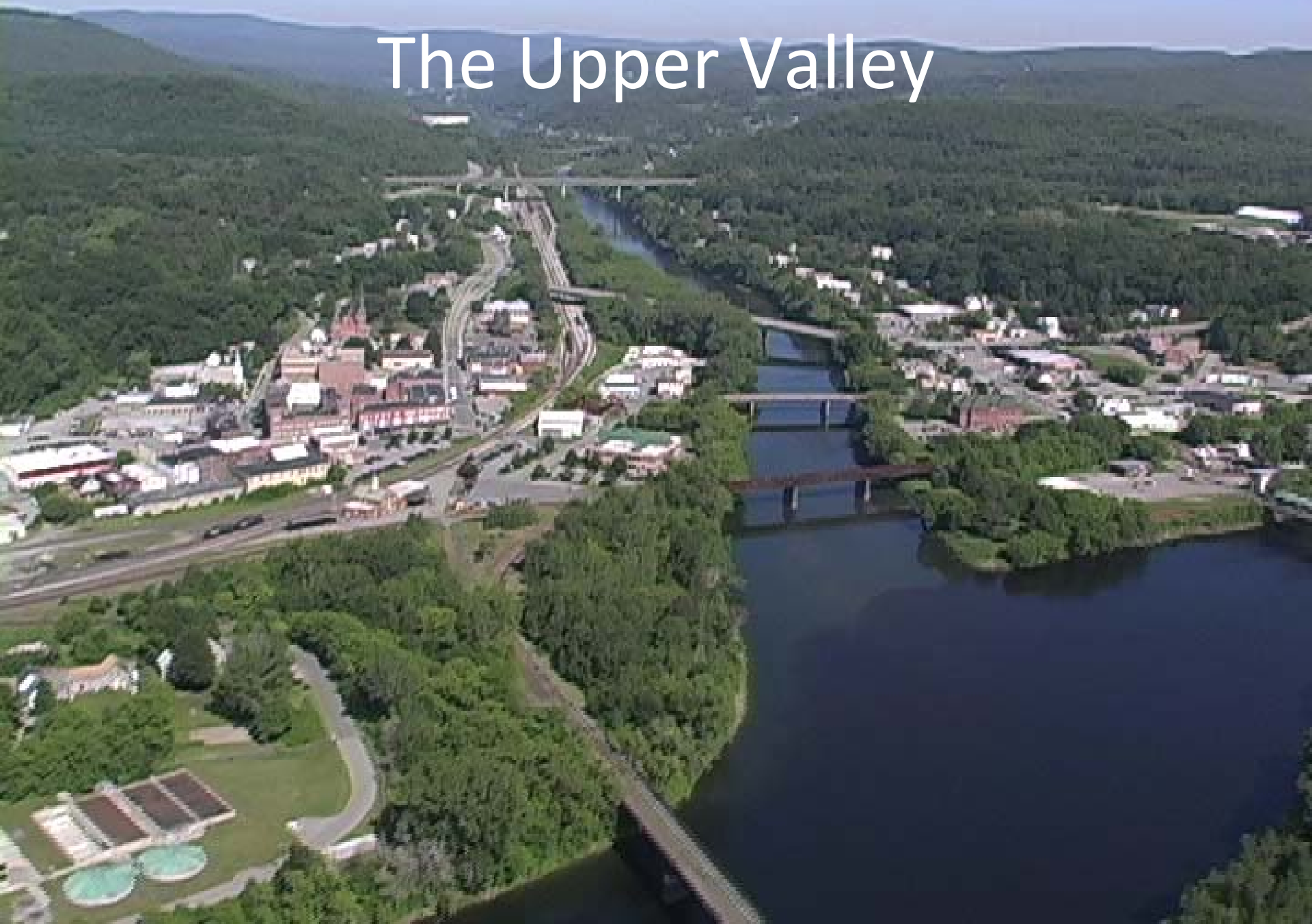
Some Participants



www.stadecoach-rides.org

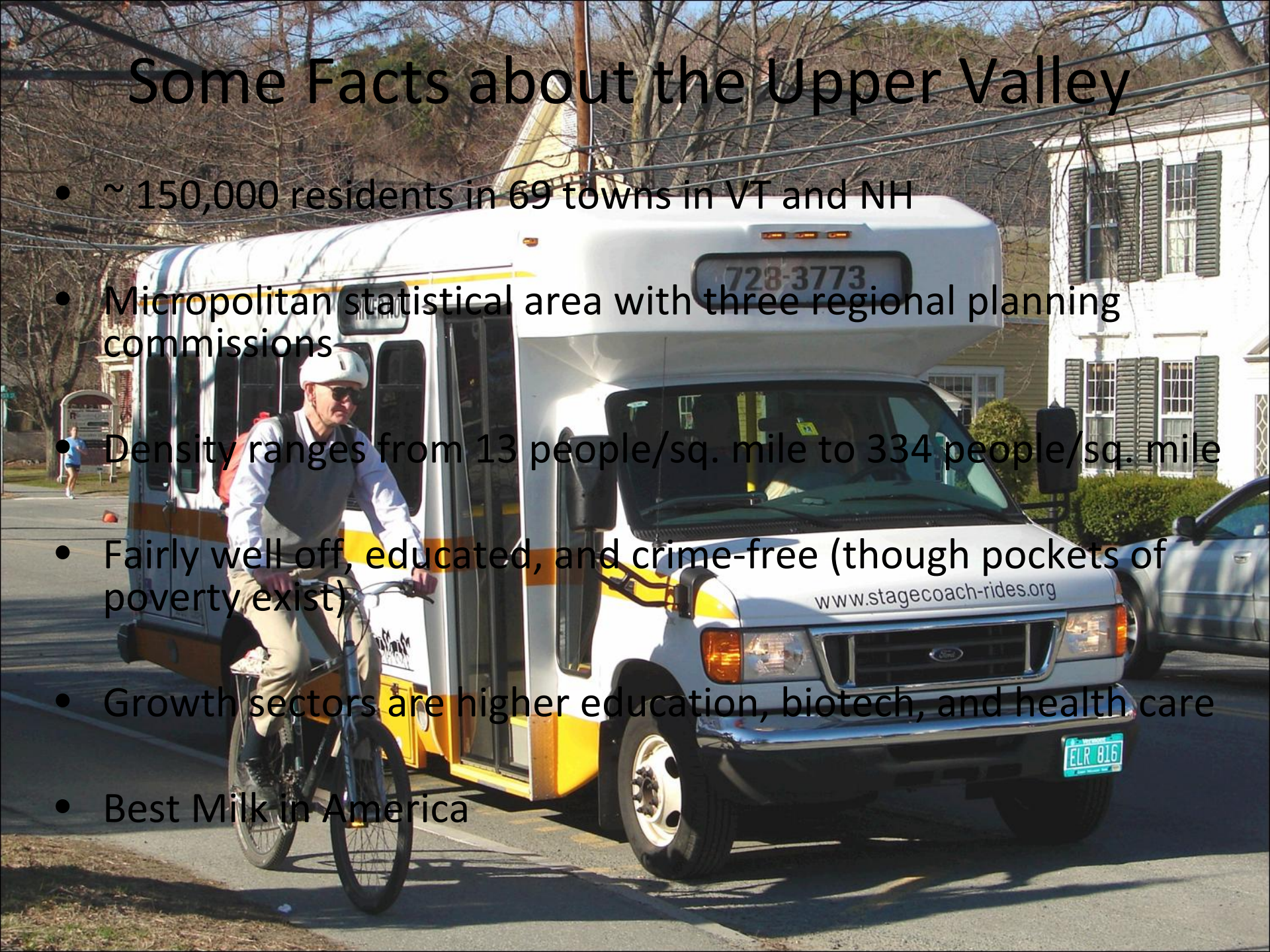


The Upper Valley

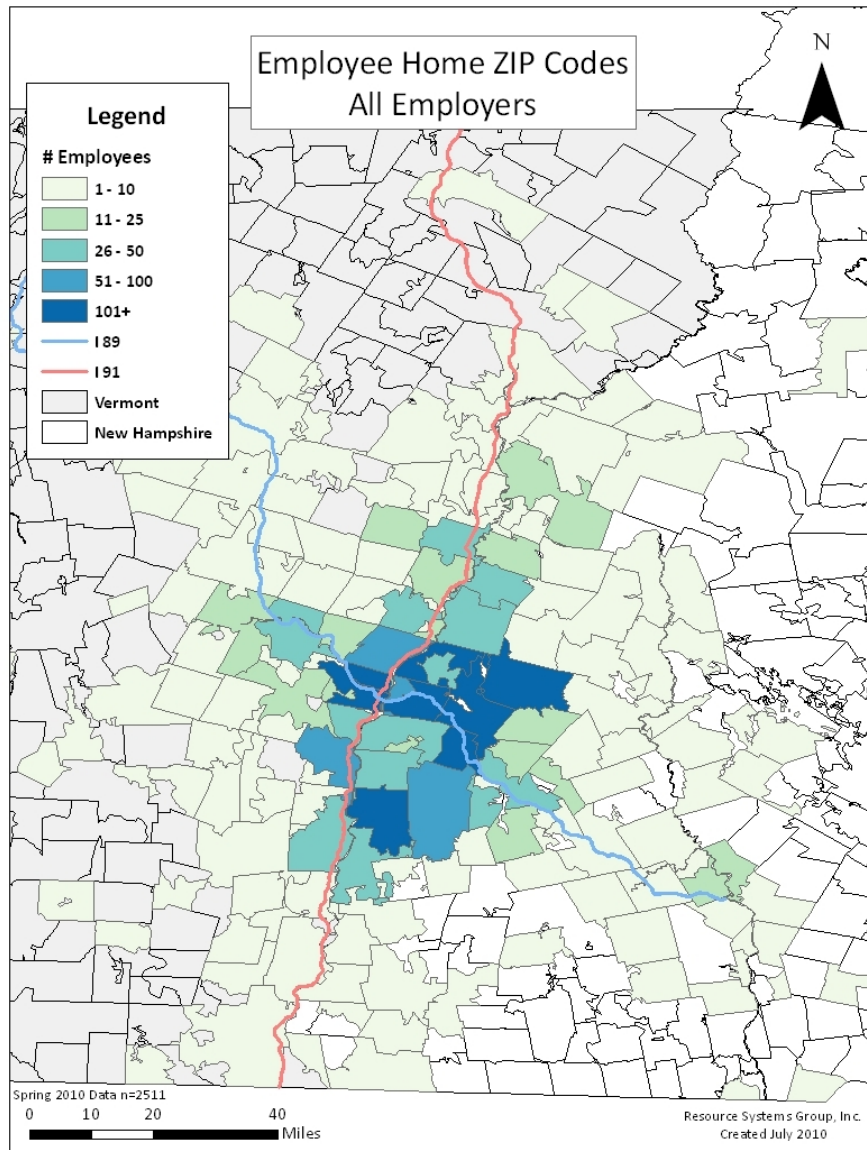


Some Facts about the Upper Valley

- ~ 150,000 residents in 69 towns in VT and NH
- Micropolitan statistical area with three regional planning commissions
- Density ranges from 13 people/sq. mile to 334 people/sq. mile
- Fairly well off, educated, and crime-free (though pockets of poverty exist)
- Growth sectors are higher education, biotech, and health care
- Best Milk in America



Challenge #1: Land Use Patterns



- Residential patterns widely disbursed – average commuting distance 35 miles RT
- Sprawl threatens traditional ways of life and ability to attract new talent to area
- Employment Centered in Four Core Towns
 - Norwich and Hartford, VT
 - Lebanon and Hanover, NH
- Areas of Employment Lack Housing
 - 12:1 Jobs-Housing Ratio in Major Employment Corridor

#2: Mixed Transit Access



#3: Energy and Transportation

- Transportation is the Greatest Single Source of GHGs
- ~ 90% of Work Trips Involve Driving Alone
- Vermonters Spend \$1 Billion/Year on Personal Driving



Yet...Opportunities Abound



Four Transit Providers Including Fare-Free Advance Transit



Traditional Walkable Towns



Growing bike network



Increasing Number of Park and Rides



Addressing Behavioral Change through the Workplace

- Sustainable Commuting Plan – short- and long-term workplace initiatives
- Direct Employee Engagement
 - Focus Studies
 - In-House Promotions
 - Incentives
- Social Marketing Campaign and Commuter Challenges
- Improved Access to Mobility Options



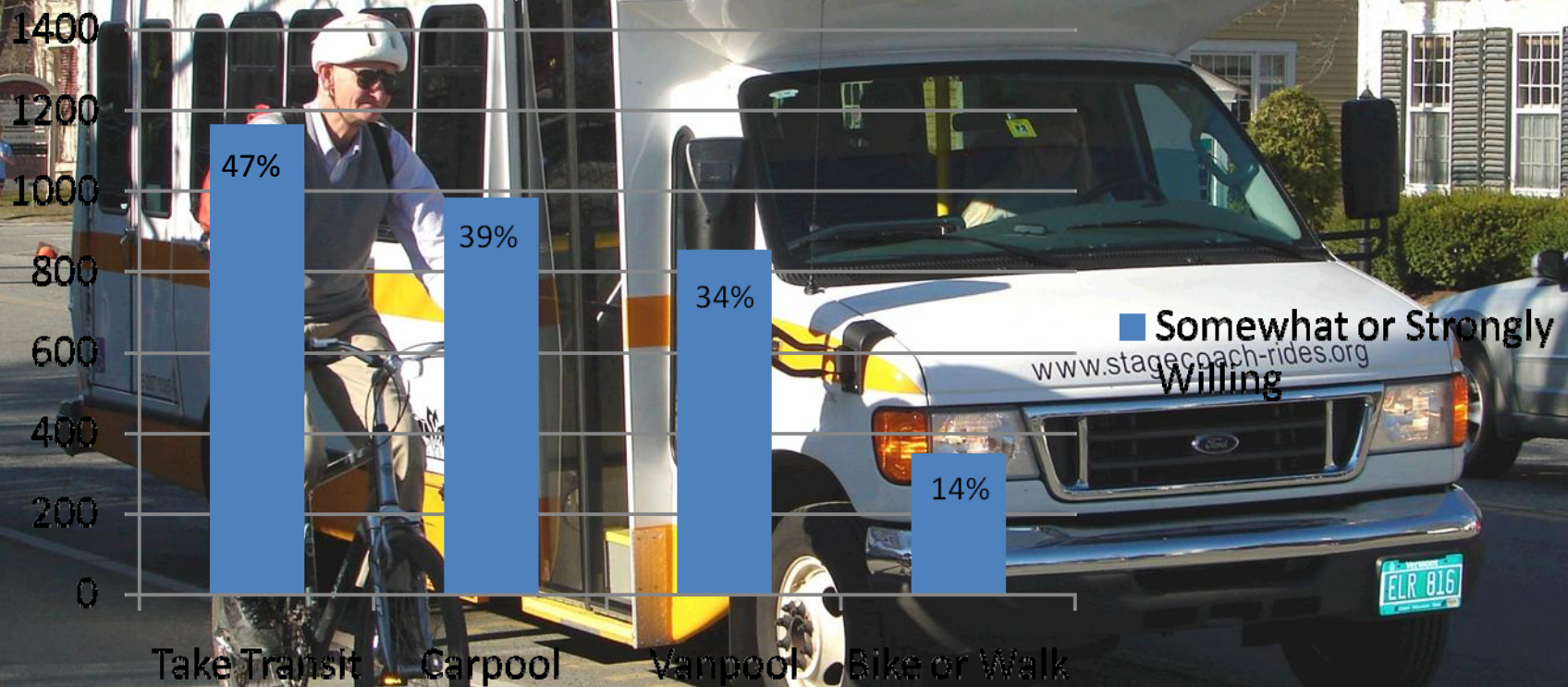
2010 Survey Results: Mode Choice



NB: Aggregate results from 2,500 respondents at eight workplaces

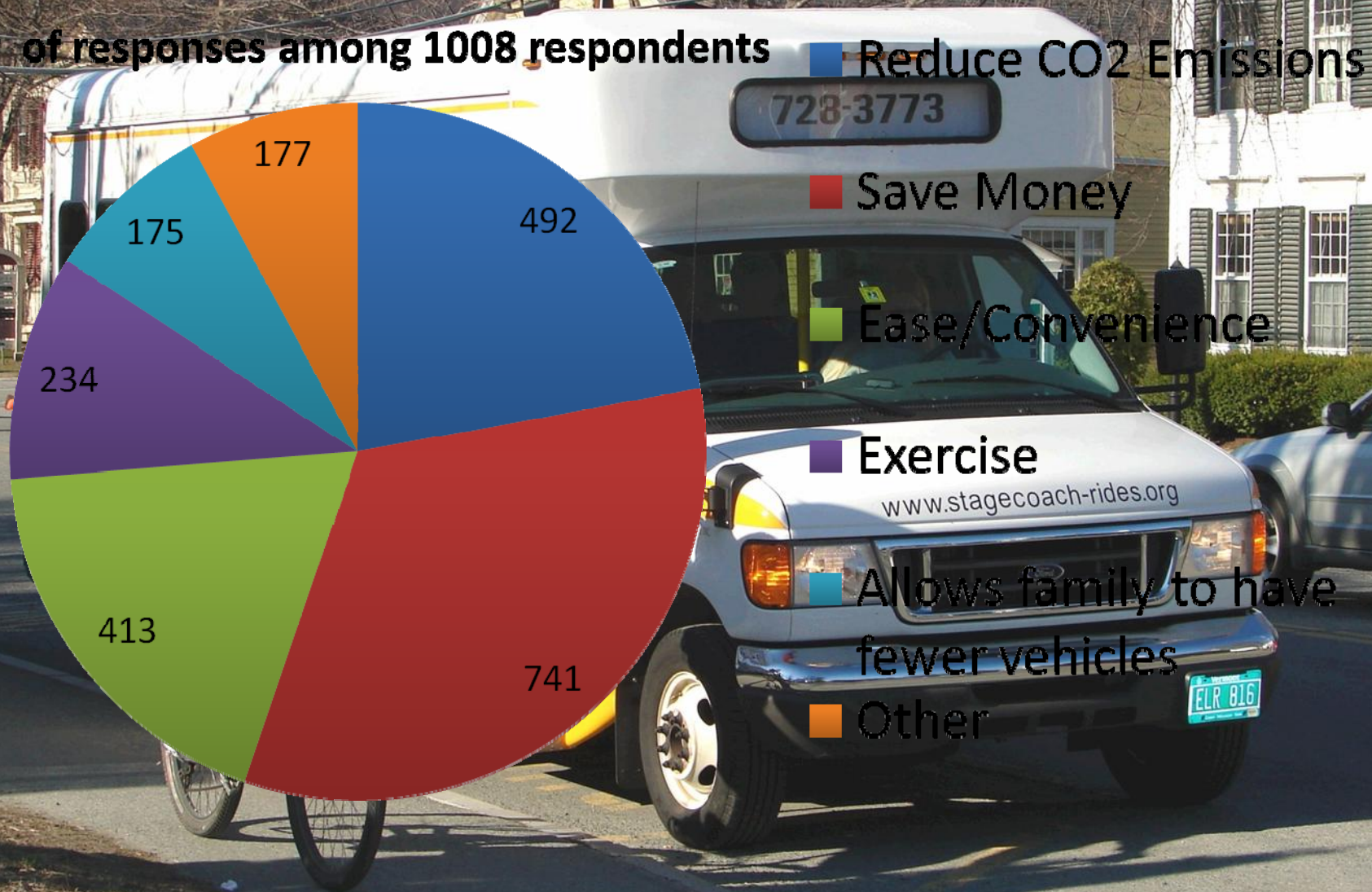
Willingness to Try Options

Somewhat or Strongly Willing - # Among 2500 Respondents



Results: Motivations for Choosing non-SOV Mode

of responses among 1008 respondents



Motivation Variation:

Different Workplaces Have Different Cultures and Needs

- 100% of Vital Communities' employees cite reduced emissions as a motivating factor for non-SOV commute
- 78% of Resource Systems Group employees cite exercise – strong biking and walking culture
- 50%+ respondents at all locations like to save money on their commutes

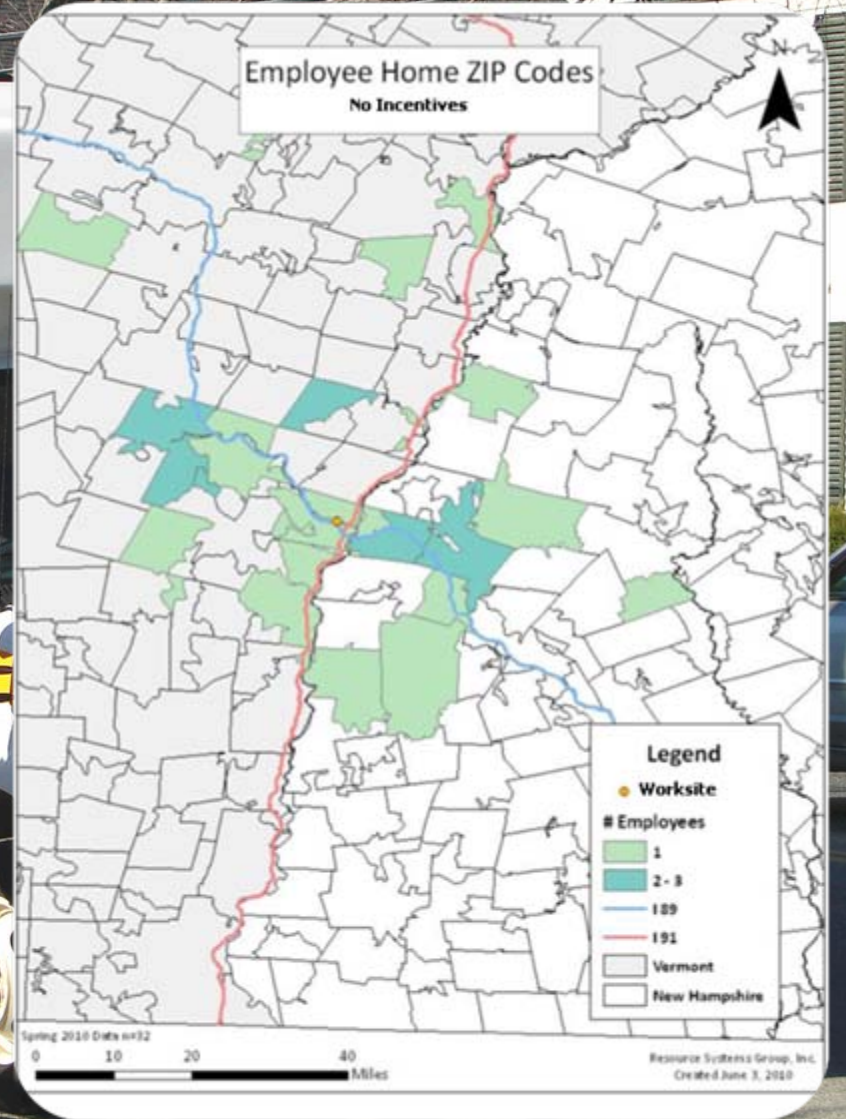
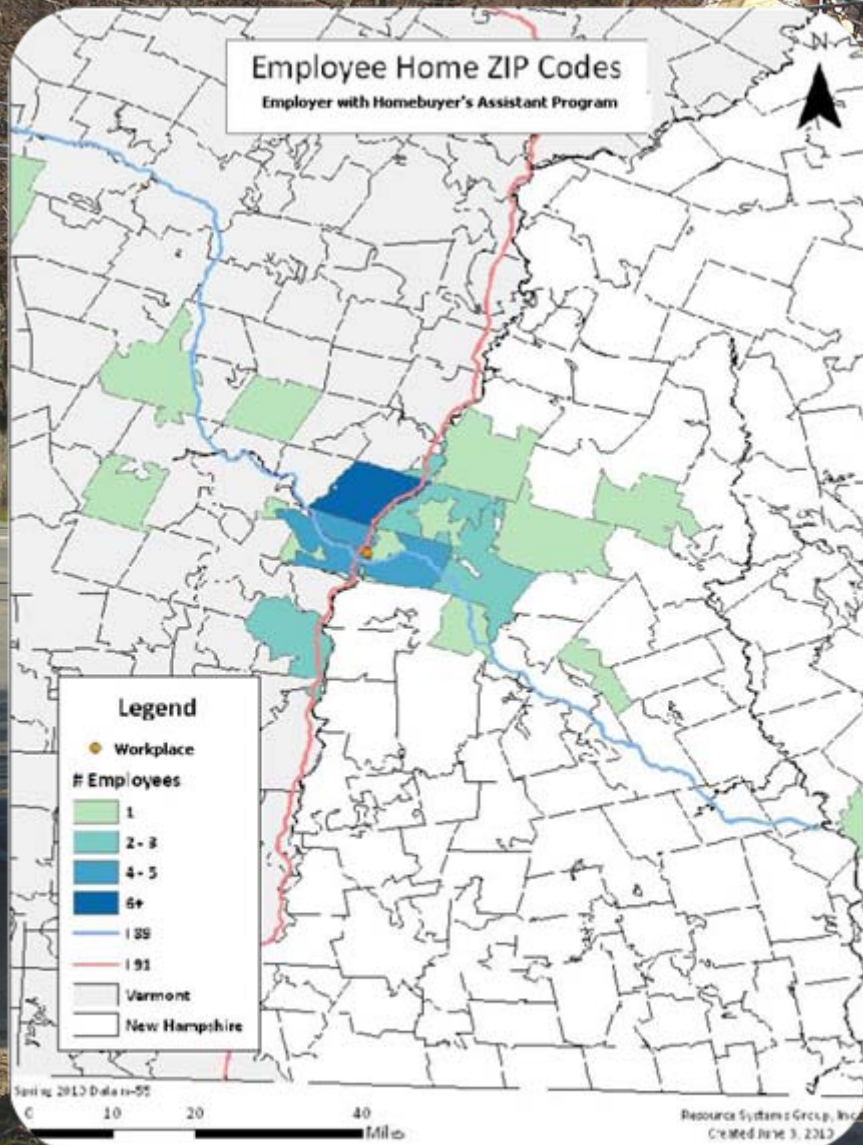


Community-Based Social Marketing

- Address motivations and barriers of the “end user,” not VMT reductions of interest to transportation wonks
- 85% of employees cite financial savings as motivator? Don't run an environmental campaign
- Commitment → prompts → normalization of behavior
- Work with employers to incentivize sustained behavior



The Power of Incentives

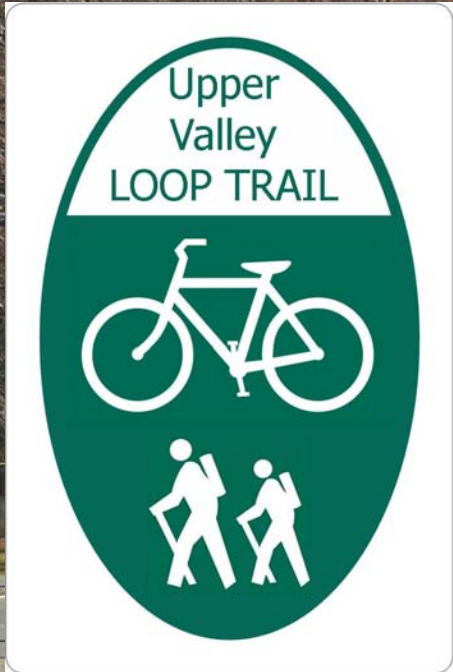


Improved Options

Bike-ped travelways

Access Points and Amenities

Parking Management



Potential Savings: Carpool Scenario

- If drive alone rate fell from 84% to 80% (~300 more people carpooling to 8 participating workplaces)

- CO₂ savings of 4.7 tons/day
- 527 gallons of gasoline/day
- \$1,422 gasoline cost savings/day

Annually...

- 1222 tons of CO₂
- 115,940 gallons of gasoline
- \$312,840 saved in fuel costs
- Savings on avoided parking?

Avg. carpool occupancy = 2.15 persons
Assumes avg. round-trip of 30 miles
220 work days
Gas at \$2.70/gallon
Source: EPA COMMUTER Model v. 2.0

And the results?

- Administering second survey in Spring
- Will evaluate program and change as needed
- Predictions?
 - Slightly lower drive-alone rate because of gas prices
 - Greatest mode shift – drive-alone to carpooling



Questions? Comments?

Thanks!

Aaron Brown

Upper Valley TMA

aaron@vitalcommunities.org

