

# Supporting the Tech Industry and Young Professionals in Chittenden County

**CCRPC PAC Meeting—May 11, 2016**



# Presentation Overview

1. Why STEM and young professionals?
2. The current state of STEM and young professionals
3. Building Blocks of the STEM economy
4. What can CCRPC do?

Science  
Technology  
Engineering  
Mathematics  
=  
STEM fields

Sectors that  
use STEM, such  
as medicine  
=  
STEM-related  
fields

# Why STEM and Young Professionals?

STEM jobs are an important part of economic development for the region.

The Chittenden County and Vermont CEDS identify STEM sectors as some of the target sectors for economic development.

- *Highly paid positions*
- *A growing concentration and number of companies*

The region needs young professionals to fill those jobs.

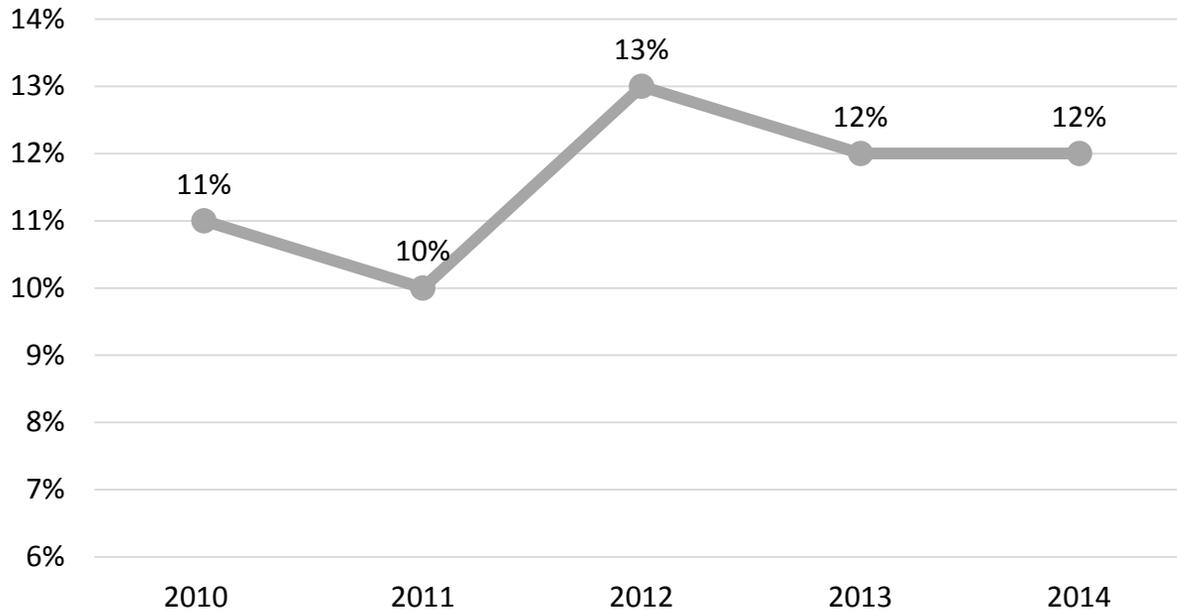
- *The workforce is aging*
- *Attracting and retaining young professionals is key*

# Current Conditions

**What are the current conditions of the STEM economy and young professionals?**

# A High Concentration of STEM Jobs

Proportion of Total Jobs in STEM Fields,  
Chittenden County



US Census 1-year American Community Survey and Bureau of Labor Statistics

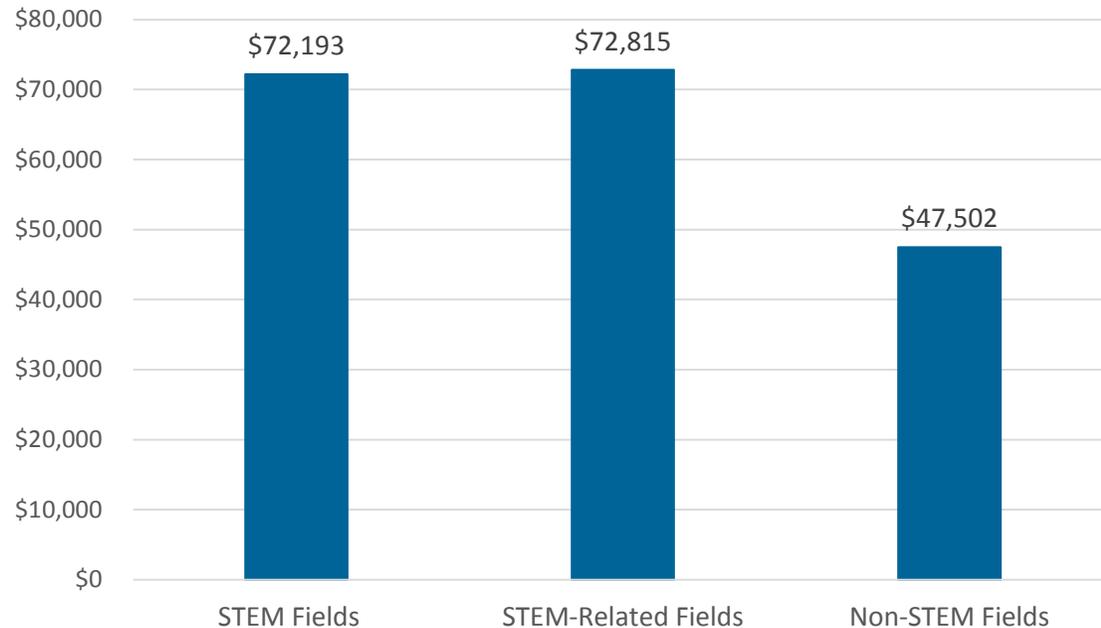
Sector	Location Quotient
Computer and electronic product manufacturing	4.12
Food manufacturing	1.64
Ambulatory health care services	1.53
Electrical equipment and appliance manufacturing	1.32
Machinery manufacturing	1.15
Fabricated metal product manufacturing	1.07

*Bureau of Labor Statistics*

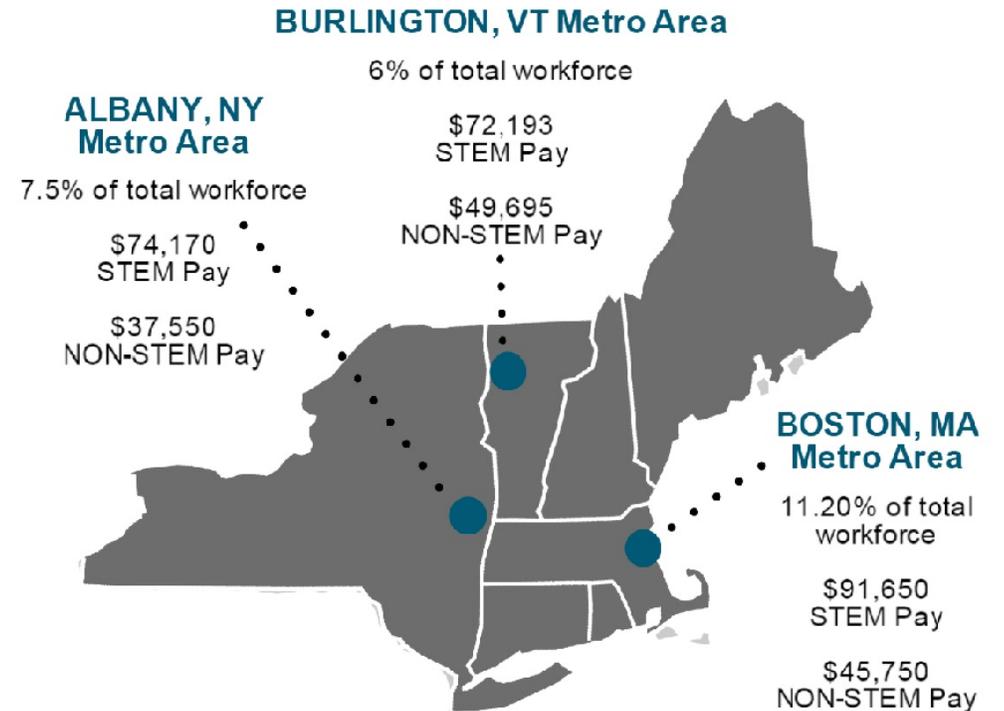
The region ranks **#2 in the USA**  
in patents per capita

# STEM Jobs Pay Well

Annual Average Earnings by Field of Employment



Source: US Census 1-year American Community Survey and Bureau of Labor Statistics



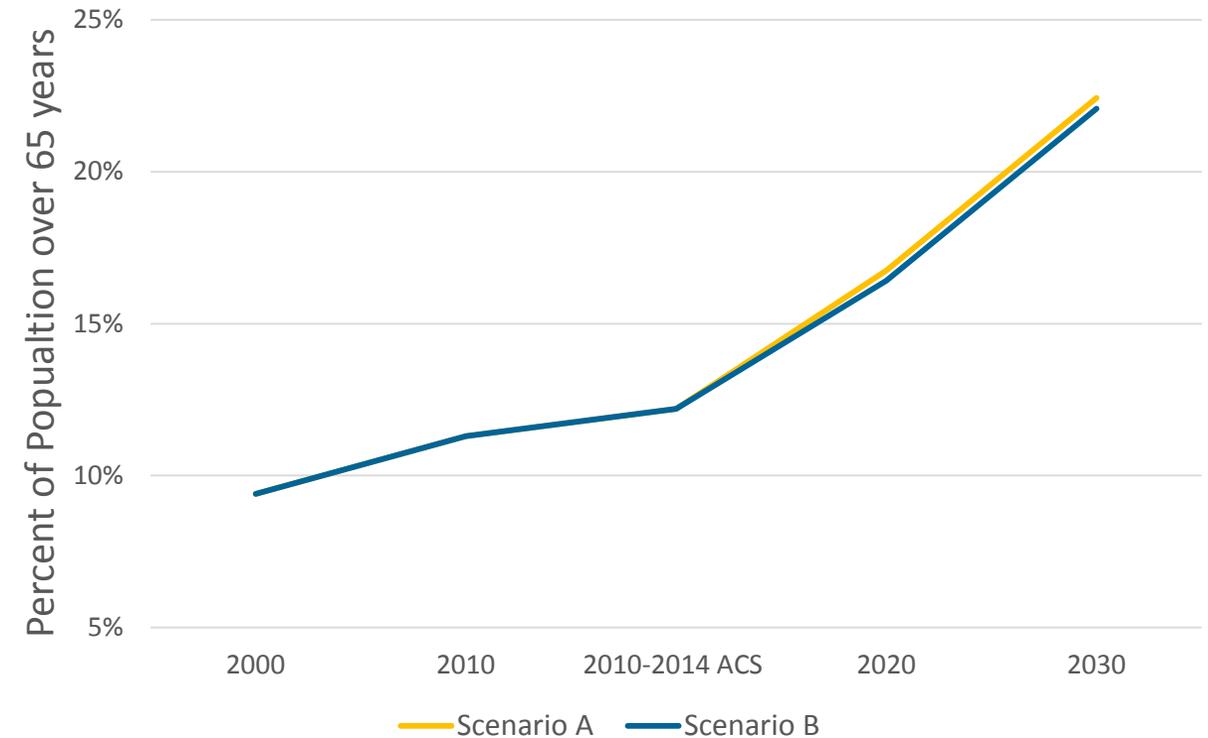
# Low Unemployment

Unemployment is very low:  
3.6% in 2015.

But...

- *The labor force participation rate is low*
- *Underemployment is high*

## Projected Population Over 65 Years



Source: ACCD

# Job Concentration vs. Employee Concentration

## Employers express concern about finding skilled employees

- *46% of employers surveyed by Davis and Hodgdon Associates*
- *62% of employers surveyed by the Vermont Business Roundtable and Economic Policy Resources*

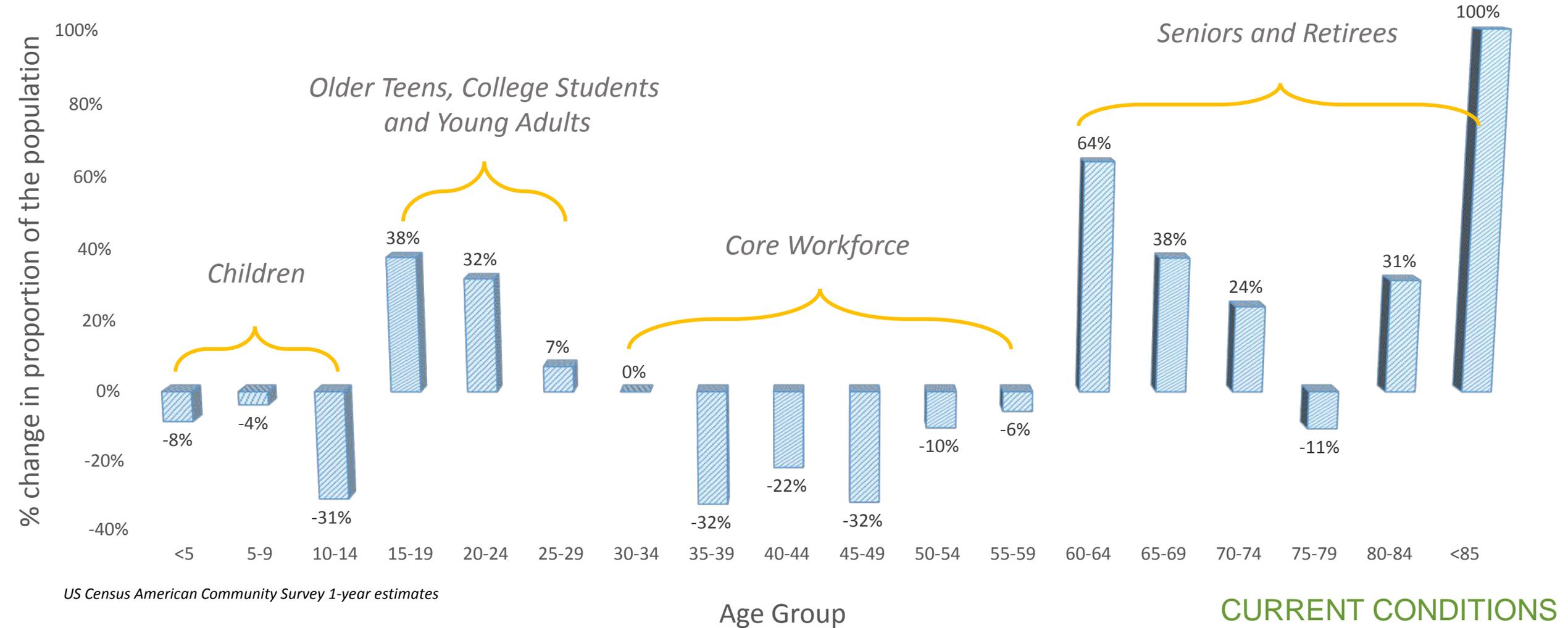


## Employees express concern about finding the right job

- *Not enough STEM companies for job mobility*
- *Not enough job opportunities for partners of employees*

# An Aging Population

## CHANGE IN AGE COHORTS, 2005-2014



# Building Blocks for a STEM Economy

**How can the region create and maintain an environment where a strong STEM economy can thrive, and make sure there are enough people to work in it?**

# A STEM Economy Needs:

- Well-educated workers at all levels
- Initiatives and programs to support innovation
- Adequate infrastructure
- **Affordable Housing**



CHITTENDEN COUNTY RPC  
*Communities Planning Together*

BUILDING BLOCKS

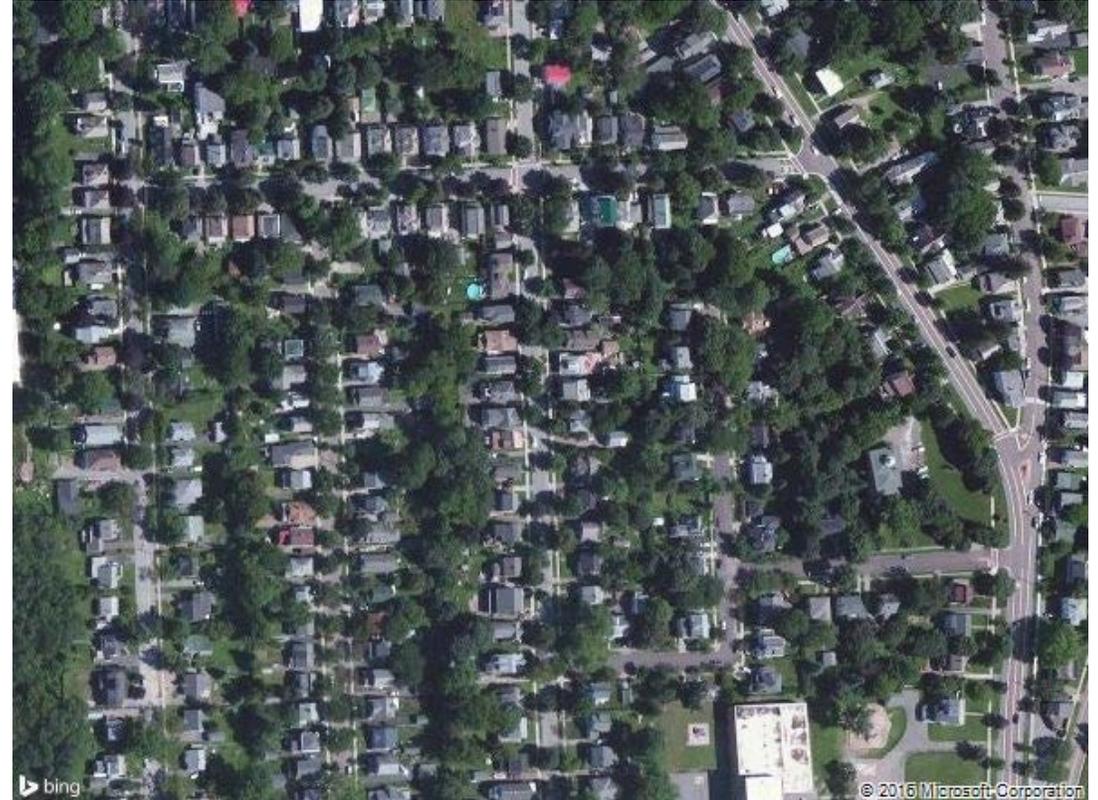
# Housing and Cost

Cost is high.

Demand is shifting.

- *Both young adults and retirees in Vermont express preferences for living in denser neighborhoods and in smaller homes*
- *Household size is shrinking*

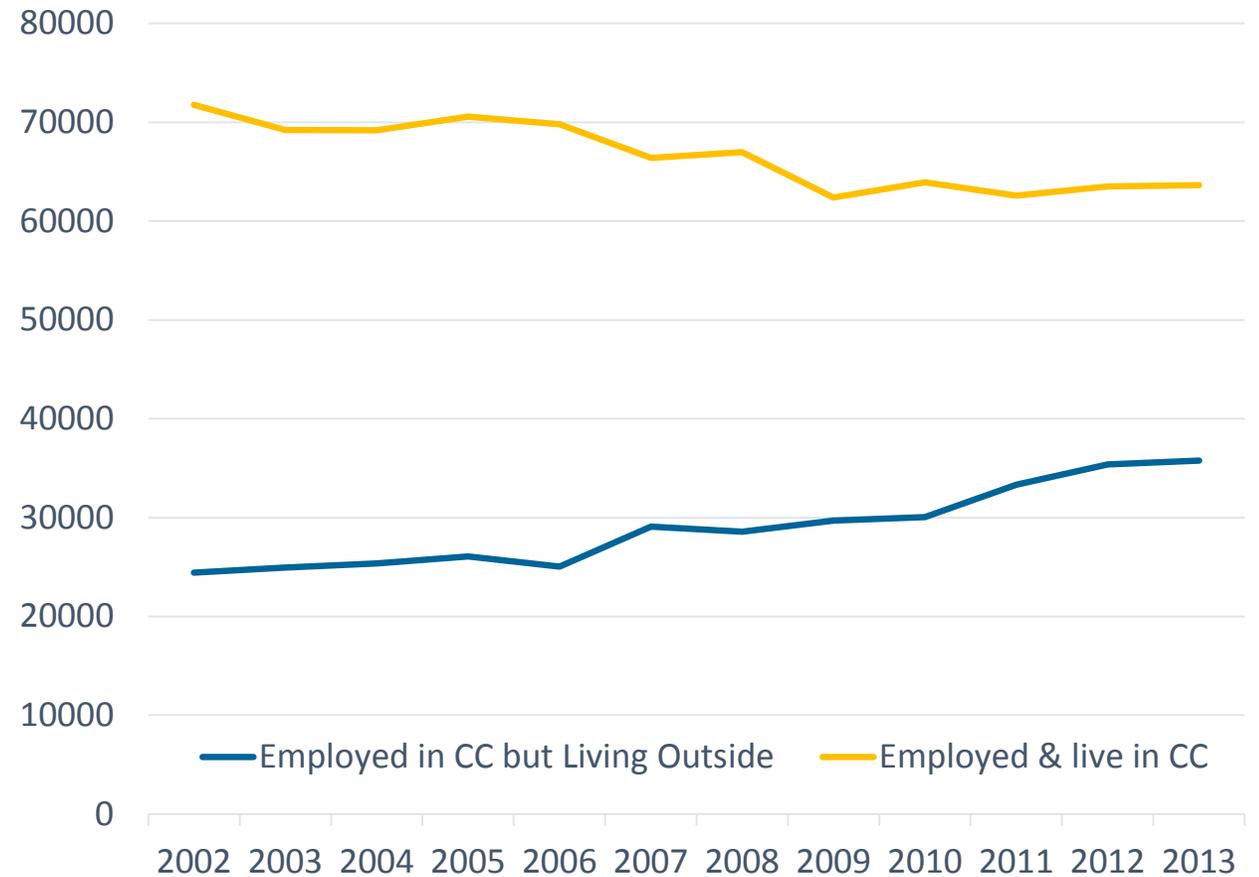
Young professionals are seeking different housing options.



# Housing and Cost

Every day, **32,960** people who live outside of Chittenden County commute to jobs here.

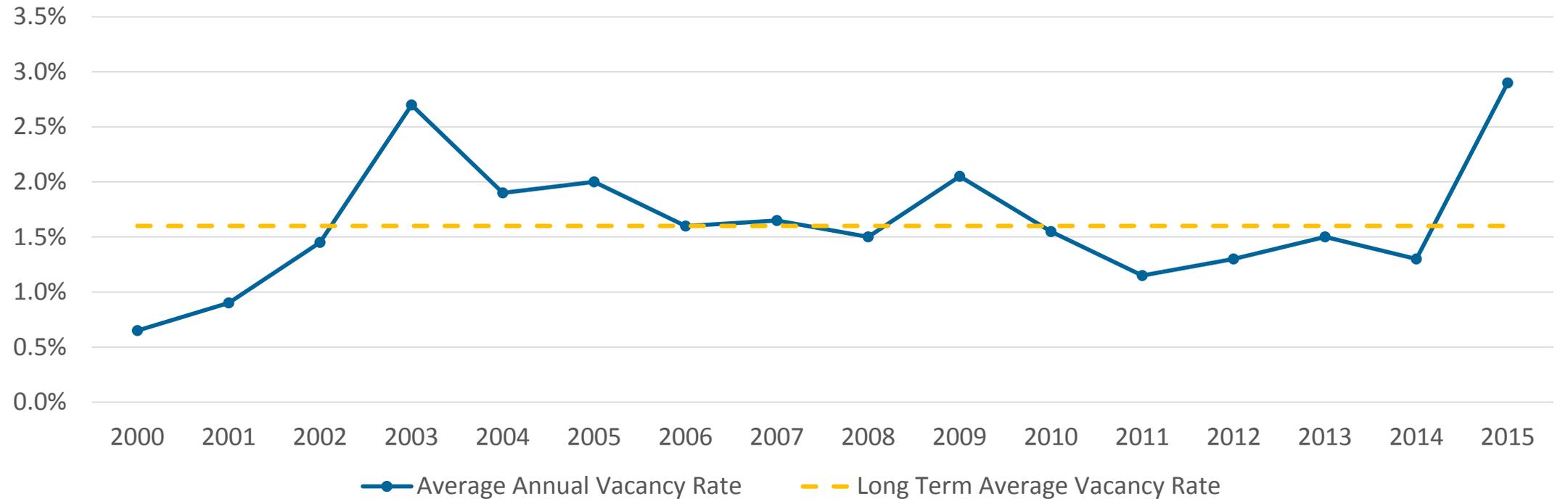
### Where do Chittenden County Employees Live?



Source: U.S. Census Bureau Longitudinal Employer-Household Dynamics

# Housing and Cost

## Rental Vacancy Rates



# Conclusions

What's next?

# Conclusions

To grow the STEM economy, Chittenden County must:

- 1. Educate, attract and retain STEM professionals, especially young professionals*
- 2. Make housing available for all incomes, ages and household types*
- 3. Provide and maintain appropriate infrastructure*
- 4. Continue to provide opportunities and incentives for businesses to begin and grow*

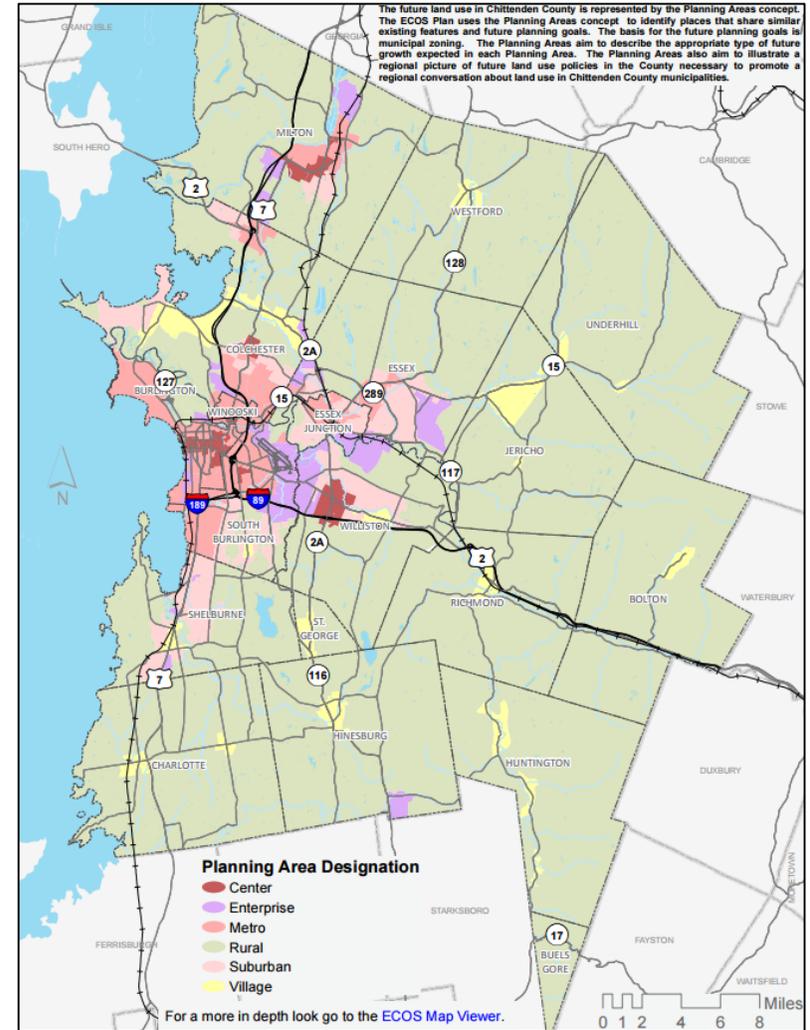
# CCRPC's Role

1. Promote investment in all modes of transportation, especially between areas with high planned housing density and employment centers, and prioritize those investments in order to best grow the economy;
2. Collaborate with partners like the Chamber of Commerce to enhance the Vermont brand and promote Chittenden County as a burgeoning tech center;



# CCRPC's Role

3. Collaborate with GBIC to promote the development of industrial space that achieves a higher level of density and greater compatibility within traditional development patterns, uses less land and provides for all modes of transportation (per ECOS Strategy 1, Action 2);



# CCRPC's Role

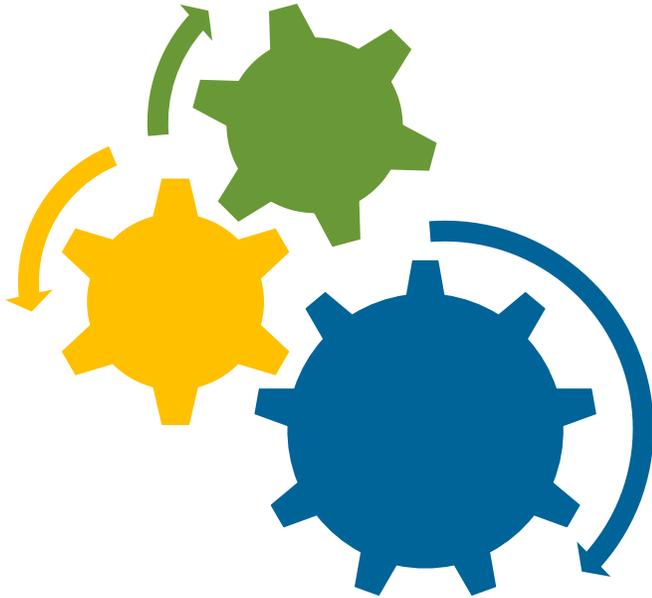
4. Assist towns in meeting the challenges of the Lake Champlain Total Maximum Daily Load and associated regulations;
5. Promote housing development for all income levels in areas planned for growth by providing assistance to municipalities; and



**CHITTENDEN COUNTY RPC**  
*Communities Planning Together*

# CCRPC's Role

## 6. Lead a regional housing conversation



CCRPC will work in collaboration with regional partners to identify the number of units needed for residents in all stages of life and to identify how that increased housing can be built.