

Forest context



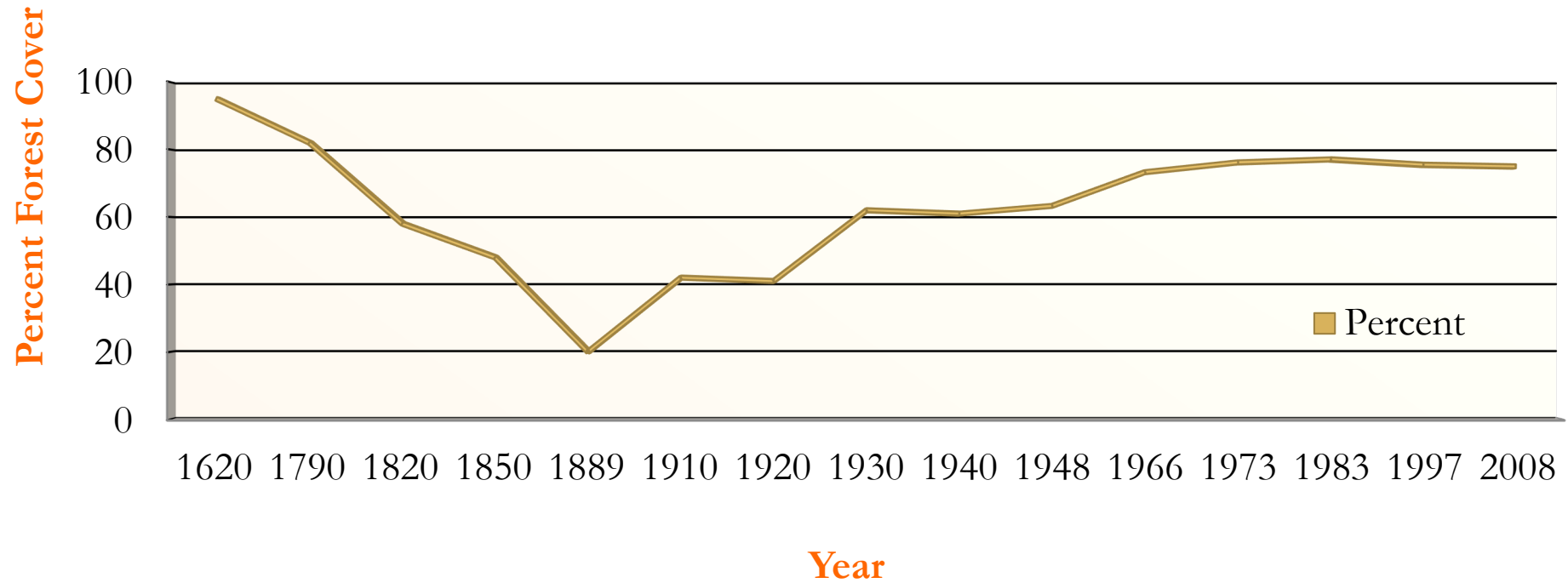
Photo. J. N. Blanchard. Montp.

VT
Landscape
Change
Program
Plainfield
1895



Changes in forest cover

Percent Forest Cover by Year



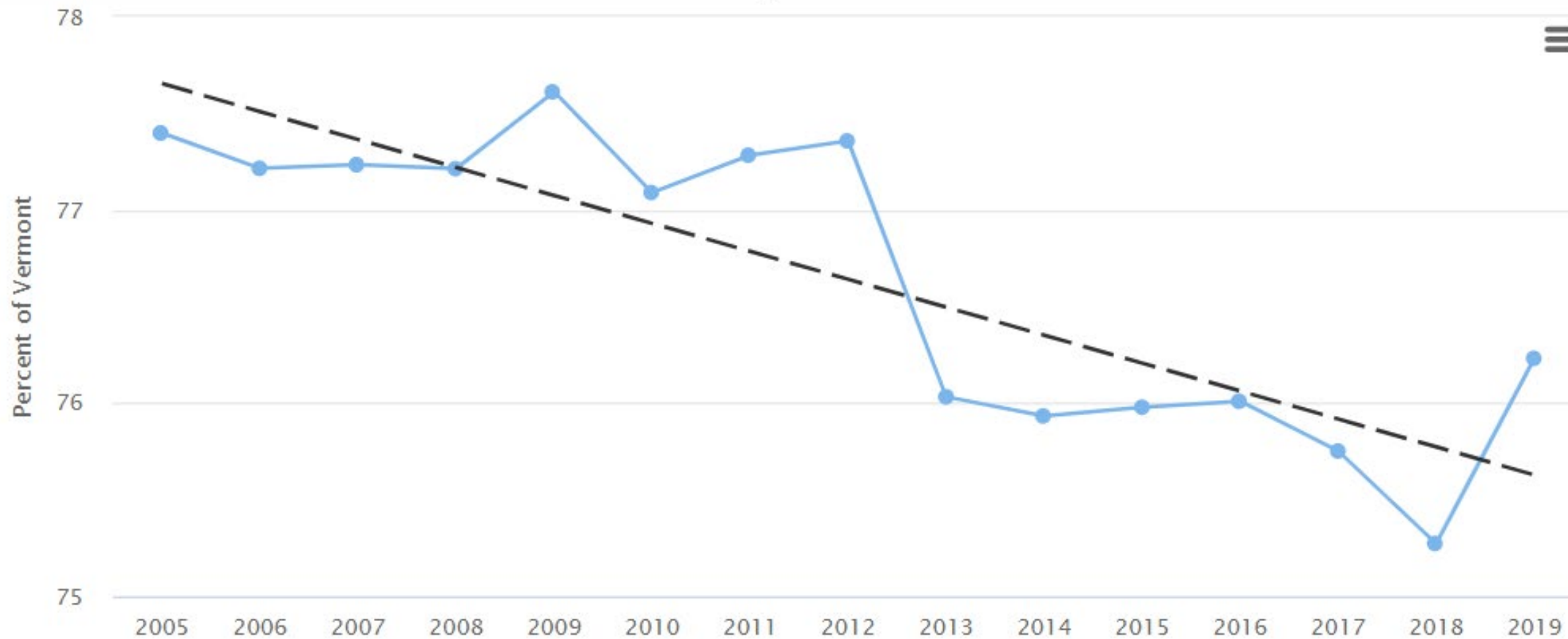
LANDSCAPE HISTORY



Pre-settlement forest –
ca. 1700



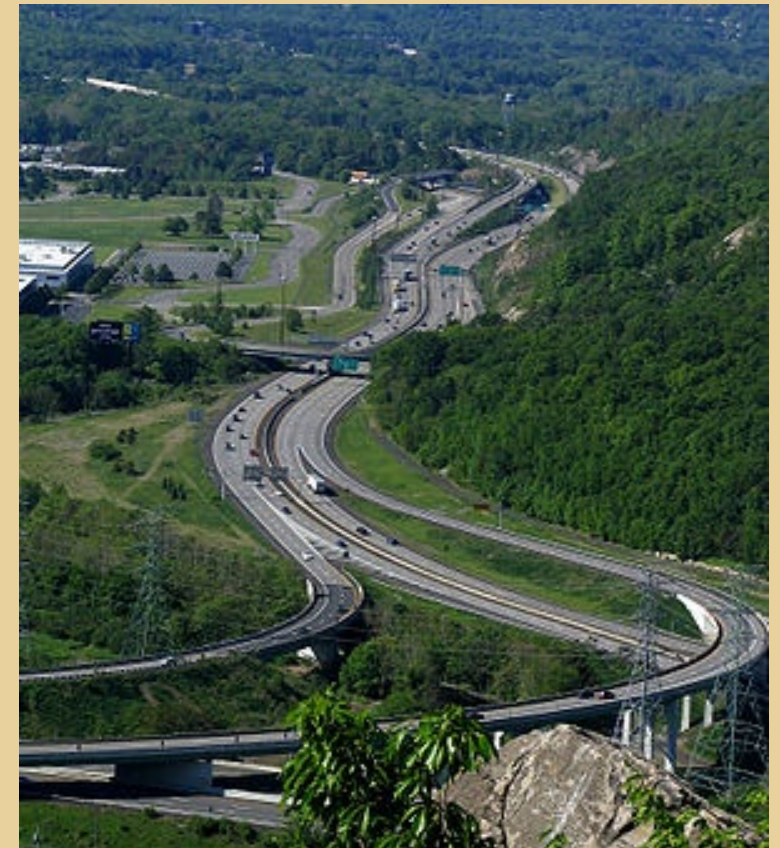
Changes in forest cover



LANDSCAPE HISTORY



2023



Sprawl

Dispersed,
auto-dependent
development outside
of compact urban
and village centers,
along highways, and
in rural countryside.

(SmartGrowth Vermont)





Economic benefits of
recreation and
tourism \$\$\$

Prevent erosion and
reduce flooding
\$\$\$

Provide land for
hunting, fishing,
wildlife viewing
\$\$\$

Provide working lands
and jobs for forest
products industry
\$\$\$

Benefits of Large Forests

Clean air &
water

Transmit fewer tick-
borne illnesses

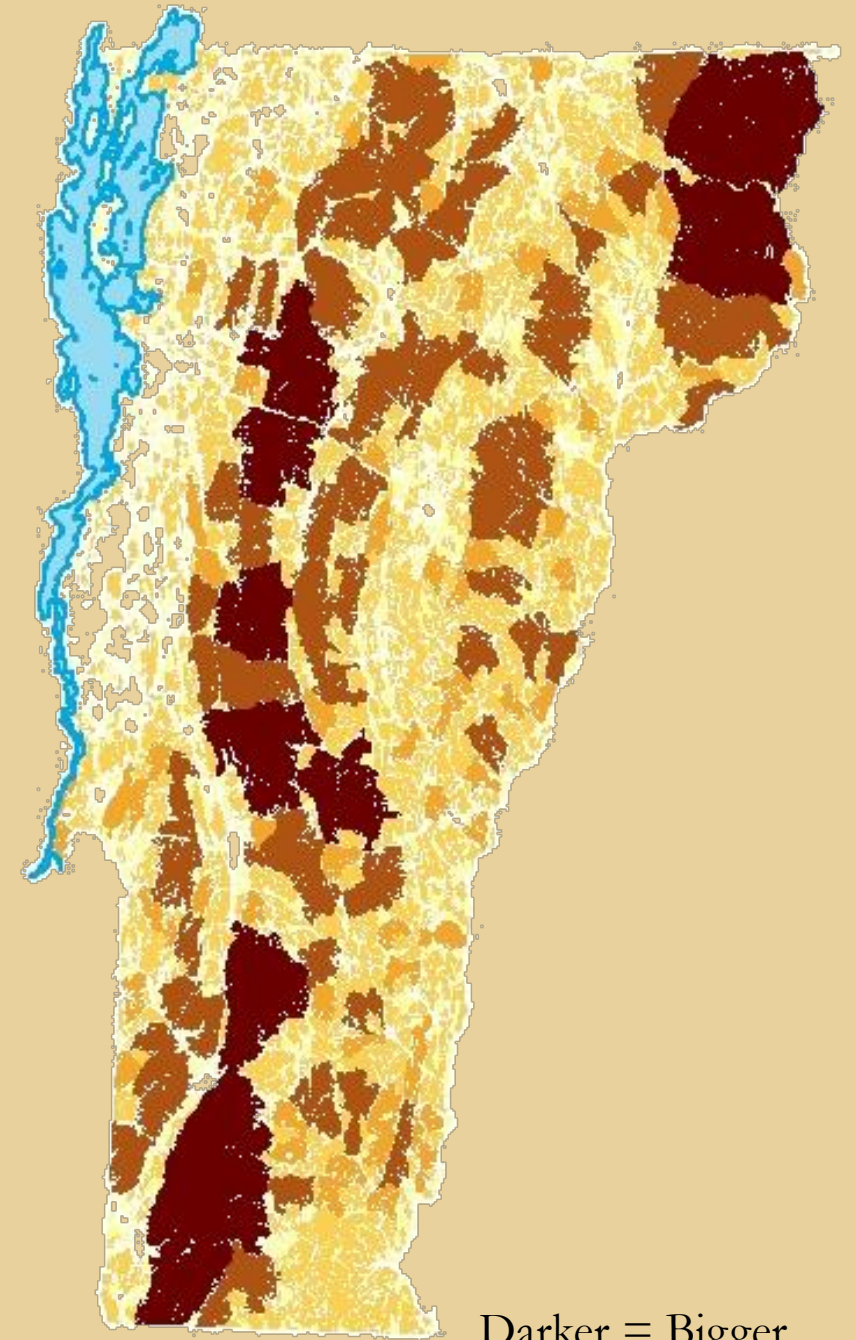
Scenery

Biological
diversity

Mitigate climate
change

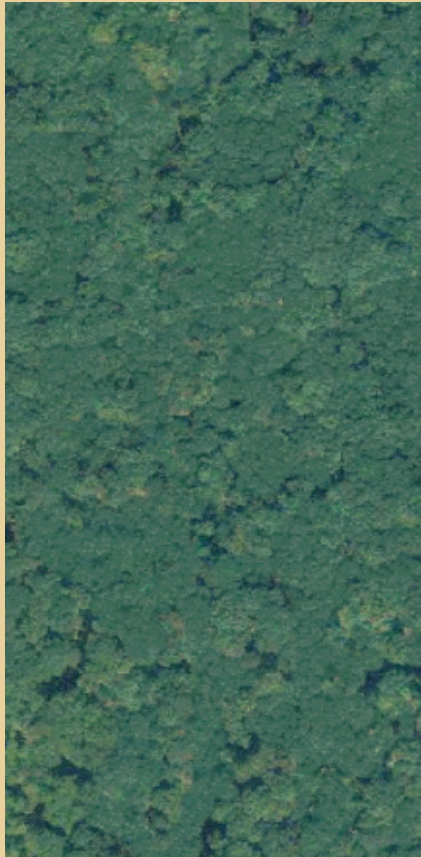
Habitat Blocks

- *Areas of natural cover*
- Surrounded by roads, development & agriculture
 - Largest: 153,000ac
 - Average: 1,000ac



Darker = Bigger

Forest Development Patterns



Intact



Fragmented



Parcelized



Parcelized and
Fragmented

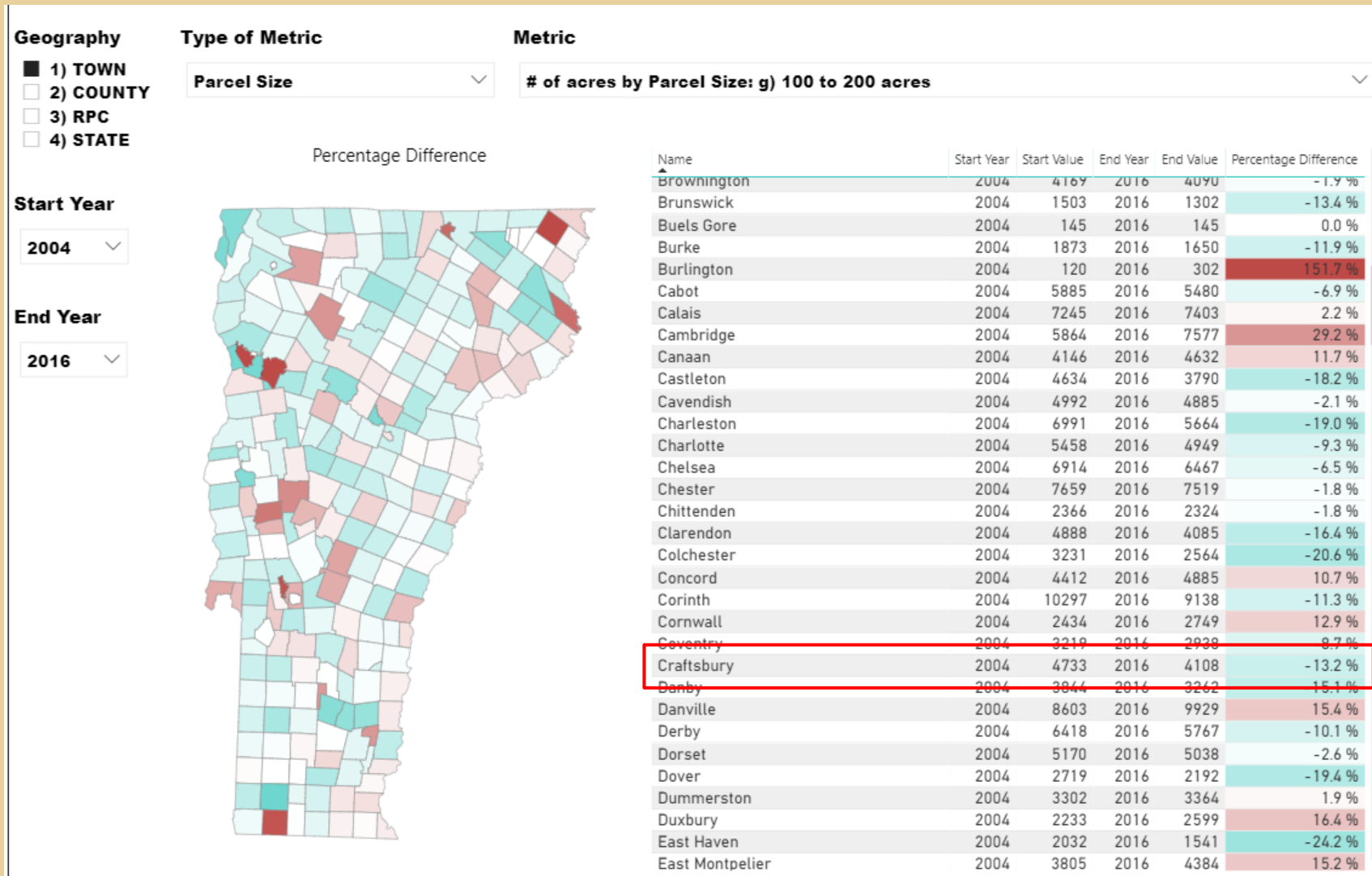
Parcelization

<https://vtforesttrends.vnrc.org/home>

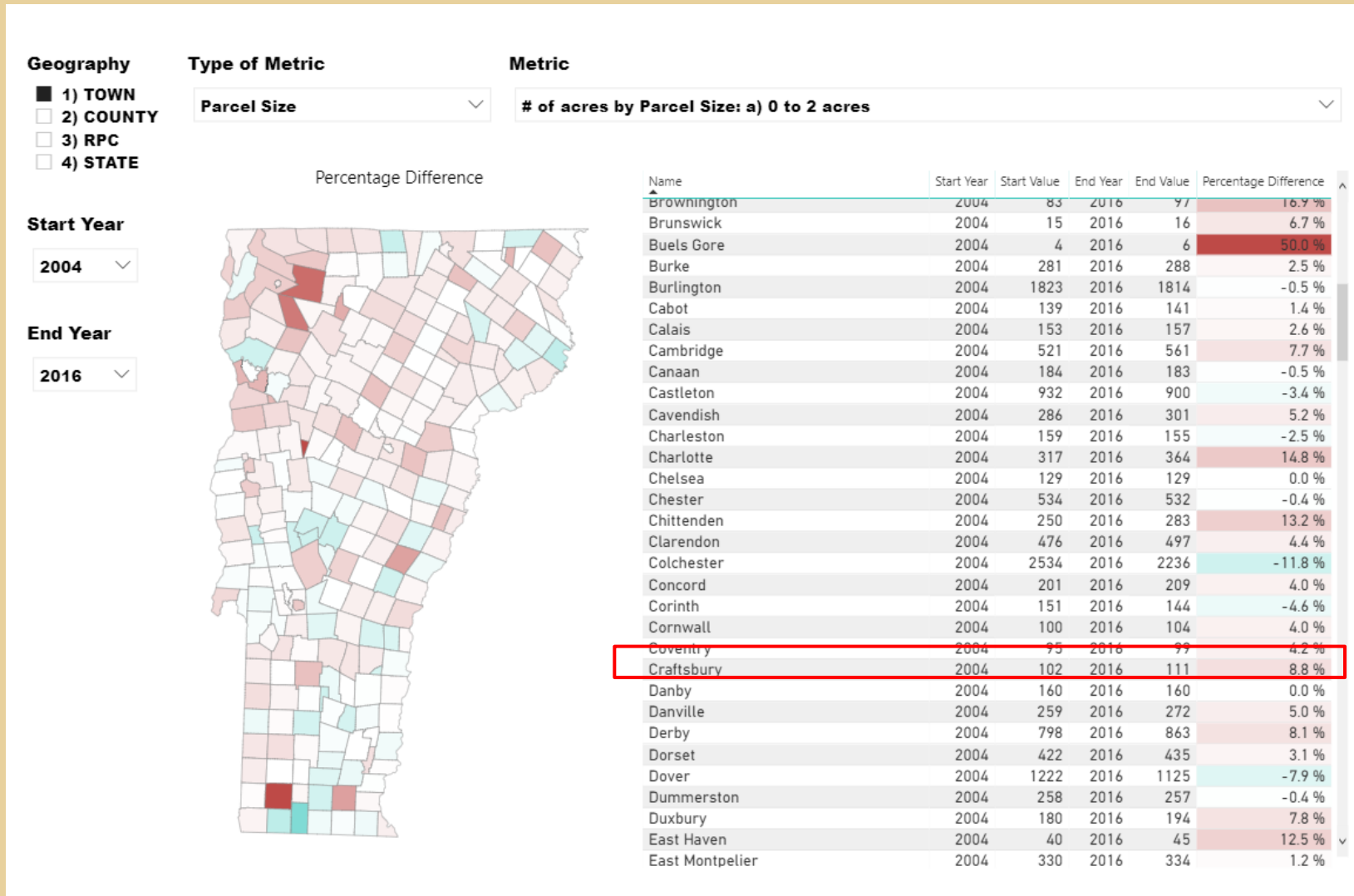
- Residential development is occurring at low densities in rural areas
- Not in compact existing centers or planned growth centers
- 7 out of 555 (1%) subdivisions trigger Act 250 (VNRC, 2014 review of 14 towns)



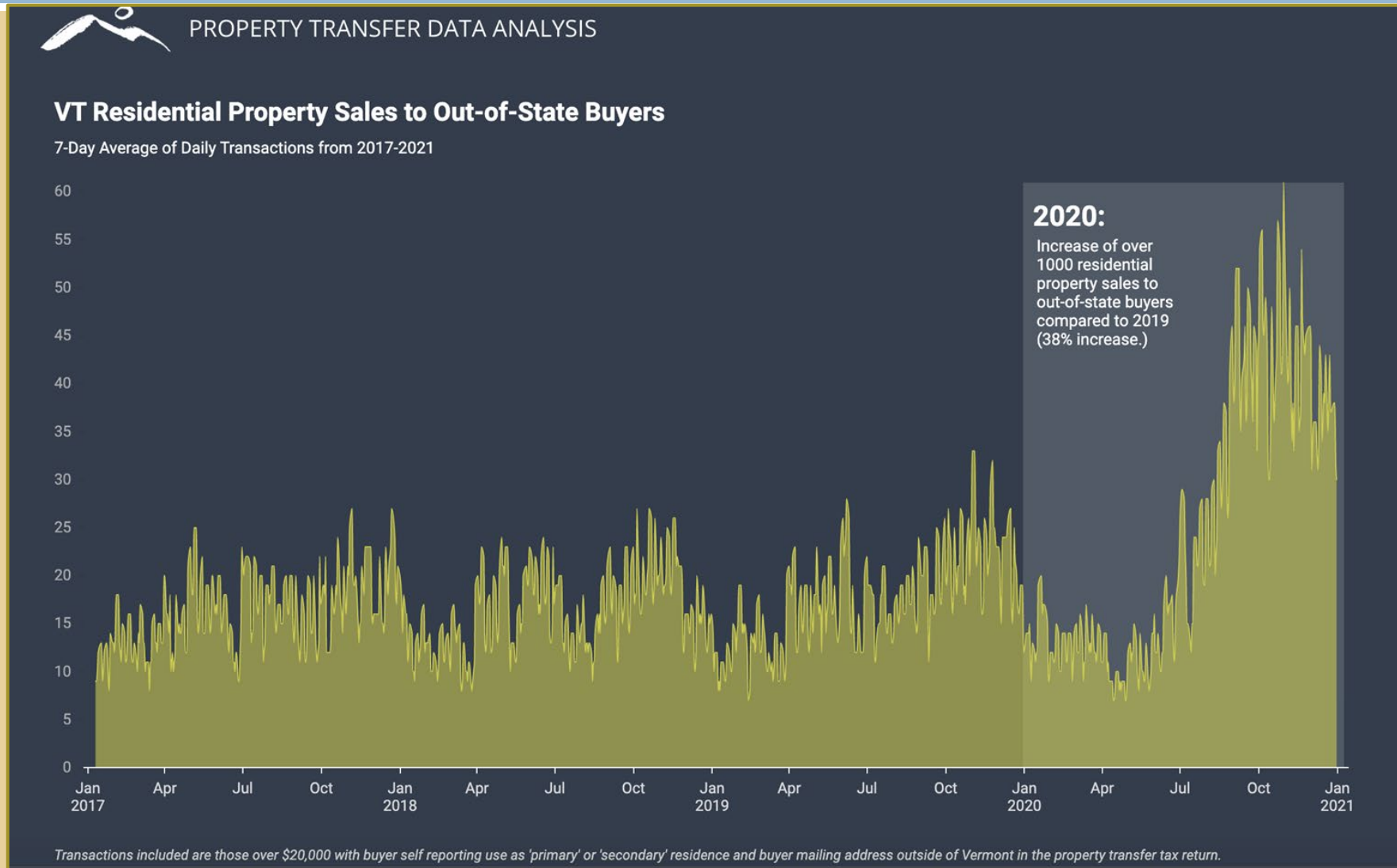
Loosing Parcels 100- 200



Gaining Parcels 0 to 2 ac

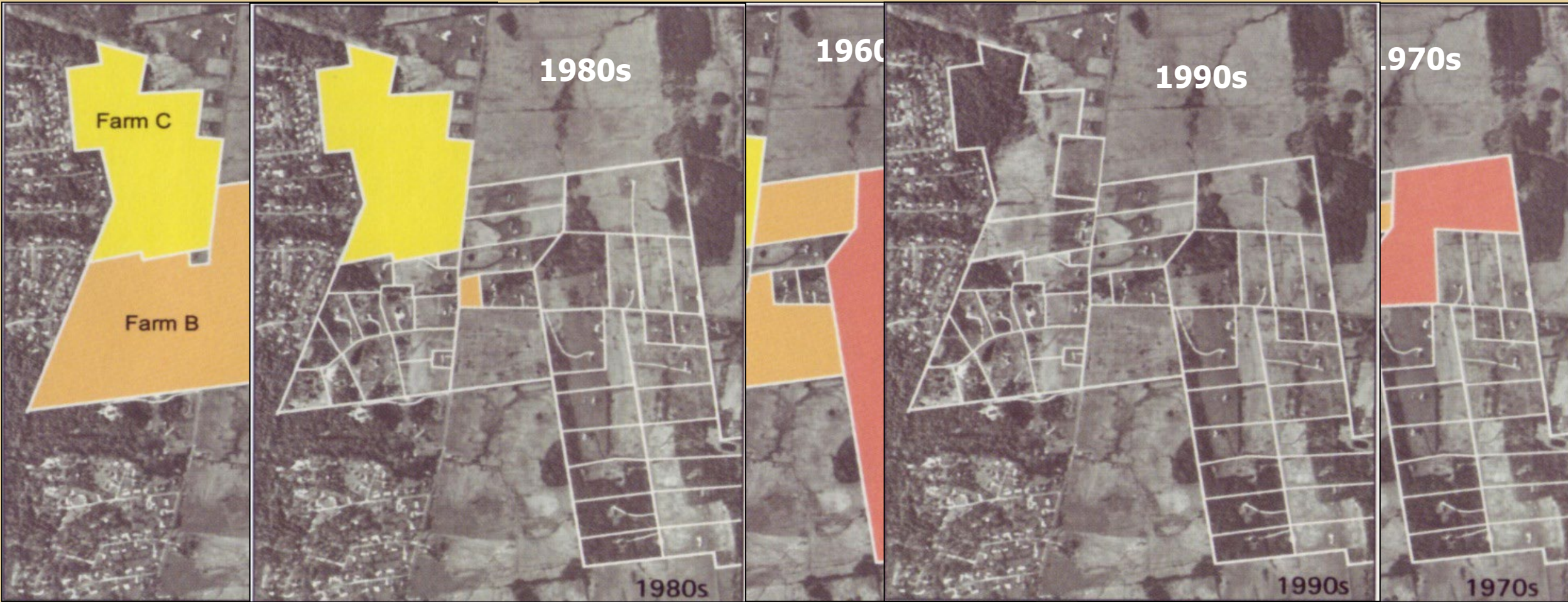


Property Sales & Covid/Climate Migration





Parcelization





2000



County Rd, Stratton, Vt.,



2003

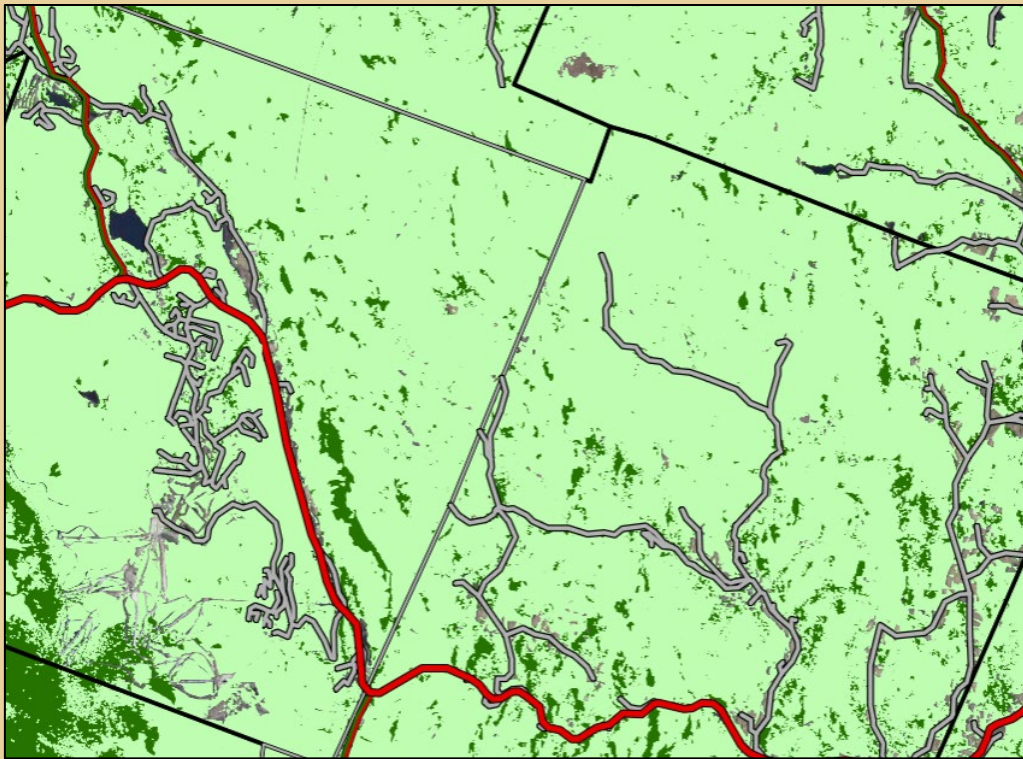


County Rd, Stratton, Vt.,

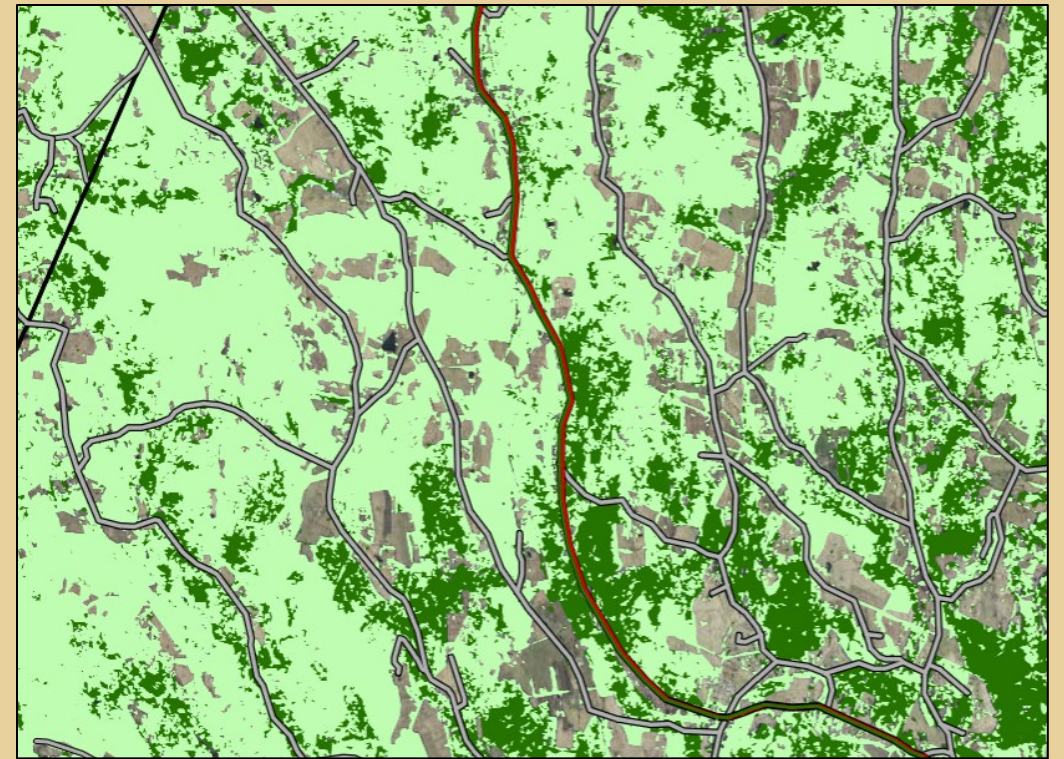


Mountain Rd, Stratton, VT

Pattern Matters

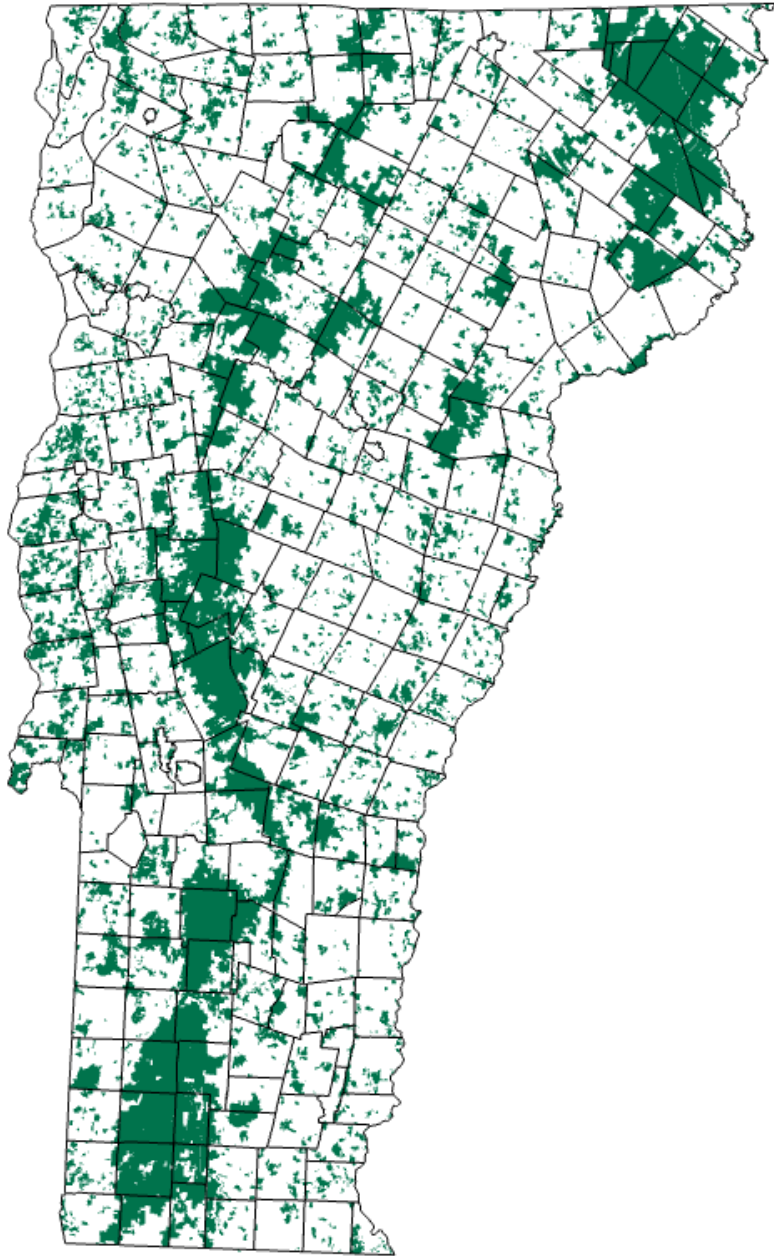


Less fragmented forest
in a rural community



More fragmented forest
in a rural community

Conserved Lands in VT



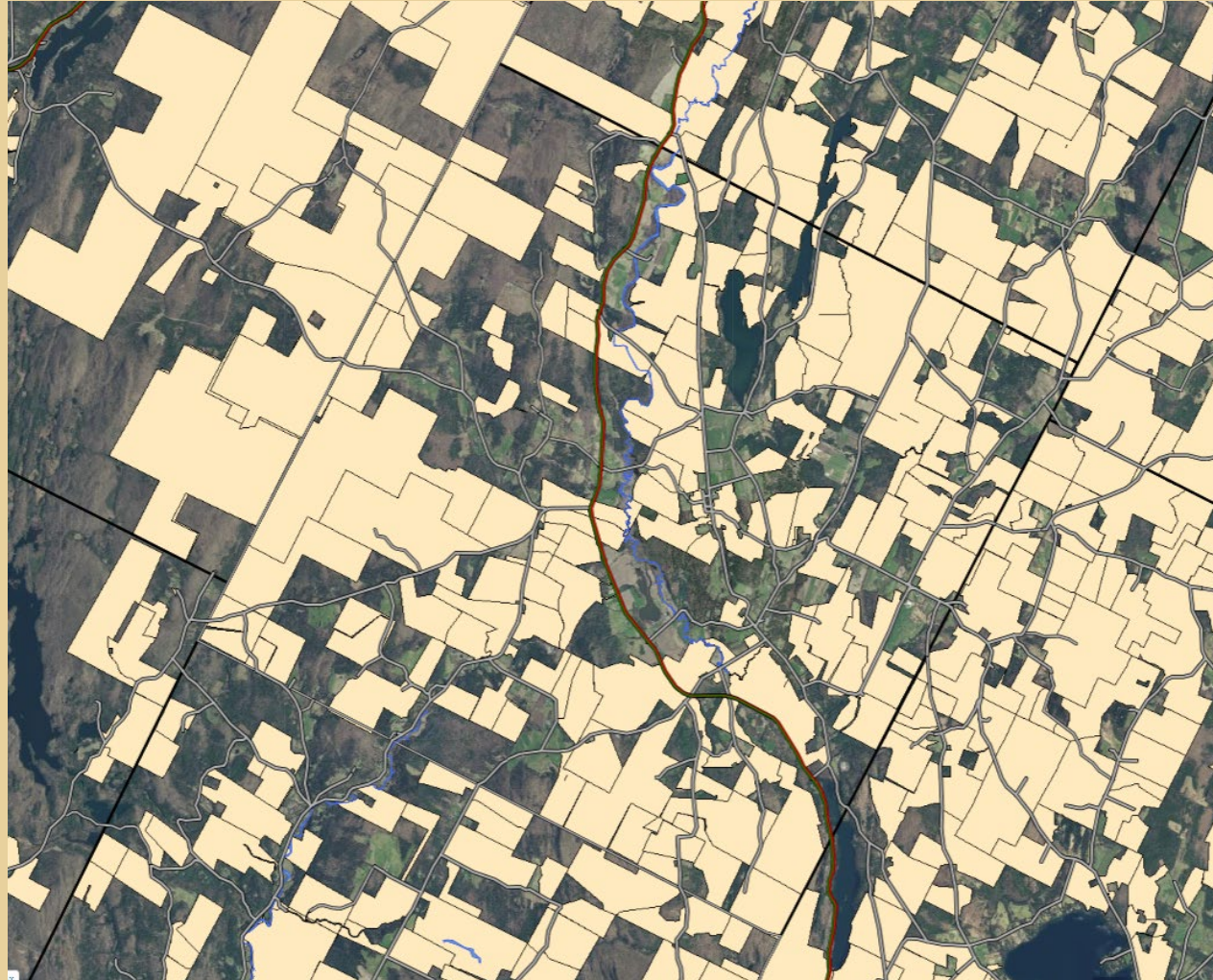
Craftsbury 2022

Intact Lands are Valuable

- Forest-based recreation & tourism = \$1.9B annually in VT
- Recreation economy = 37,000 jobs
- Wildlife economy = \$712M of spending in VT (2011)



Use Value Appraisal Program



Craftsbury 2022

Recreation: Opportunity & Challenge

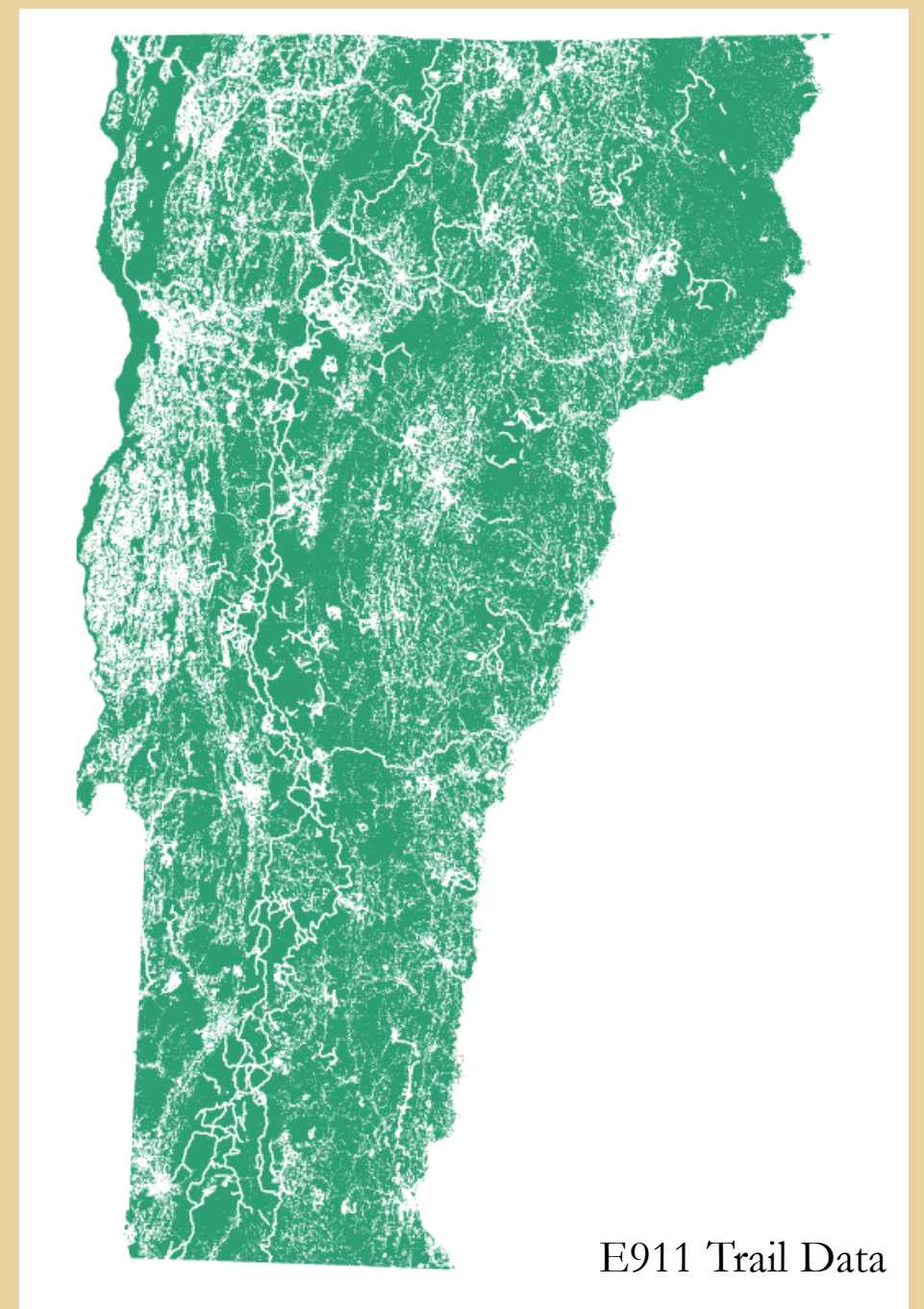
- Trail-based recreation on the rise
- Sales of hunting and fishing licenses declining nationally
- Increased demand for recreation access





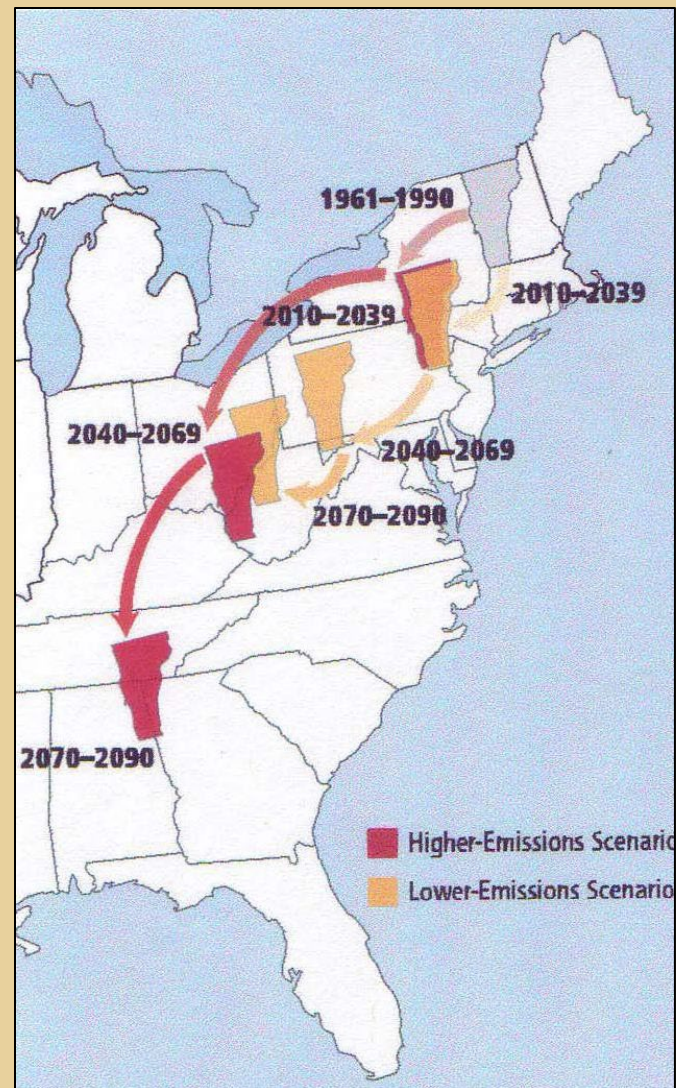
Recreation and Wildlife

Trail-less areas are a Finite Resource



E911 Trail Data

Climate Change



- Temperatures have increased 1.8°F since 1970.
- **Projected:** 9-13°F of additional rise by late-century.
- Precipitation has increased 15-20% over the past 50 years with 67% of this falling in heavy precipitation events.
- **Projected:** Winter precipitation will increase 20-30% with less snow & more rain.
- **Projected:** Short-term summer droughts will occur 2x as often.

Changes in Precipitation

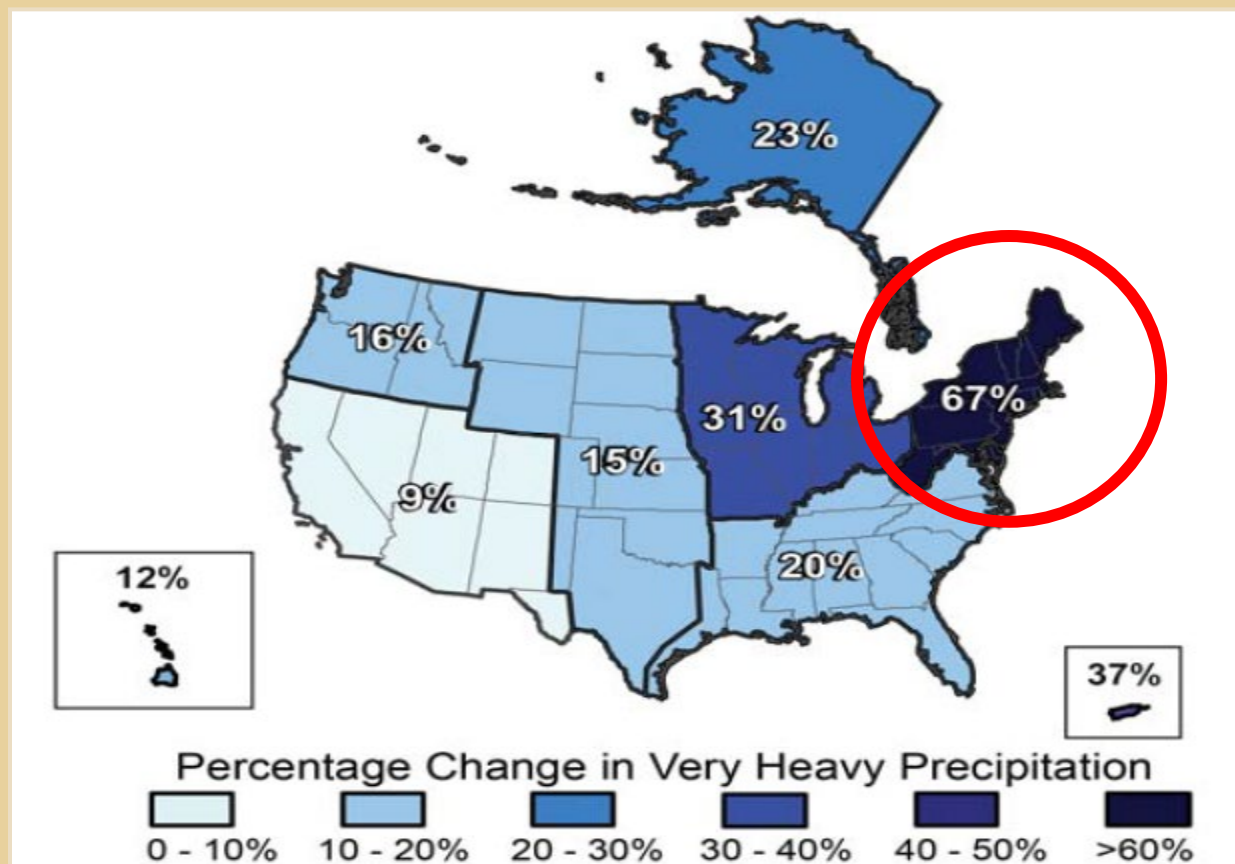
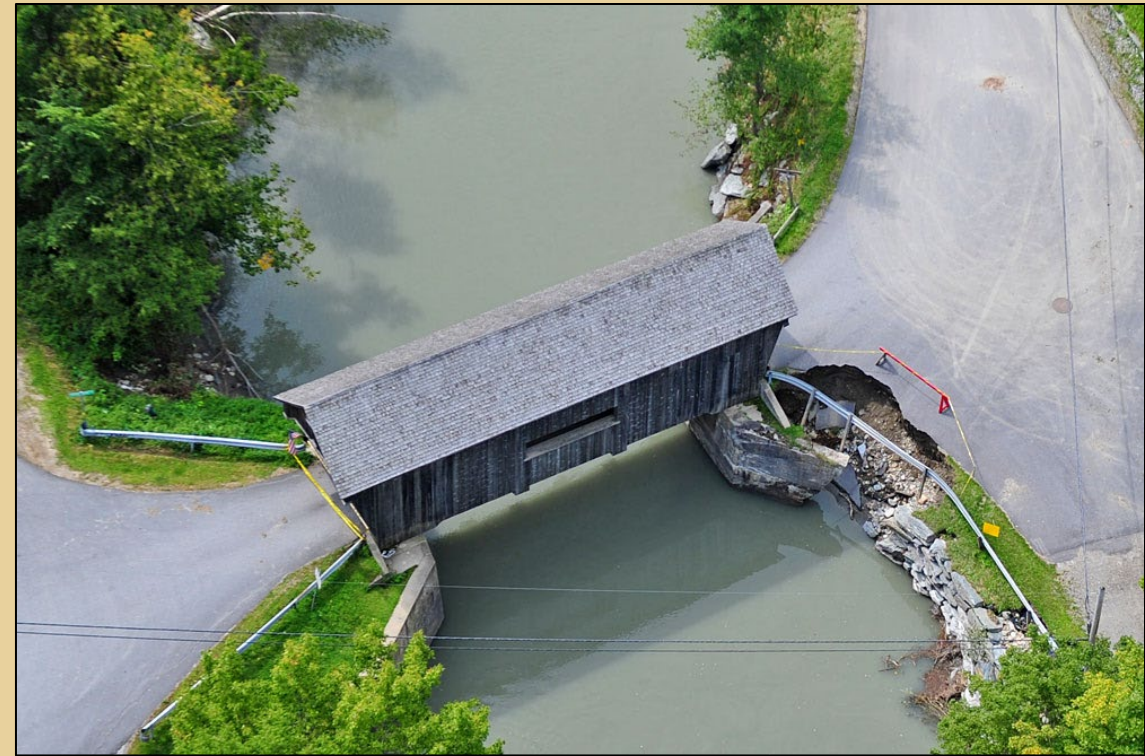


Figure 3. Percent increases in the amount falling in very heavy precipitation events (defined as the heaviest 1% of all daily events) from 1958 to 2007 for each region.¹

Resilience

A Resilient Landscape has space for dynamic natural processes



A Resilient Community can learn from mistakes and adapt

Questions?

