ACEDC/ACRPC REDS Metrics & Dahboard

Final presentation of REDS Committee

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Addison County needs more migrants: especially younger migrants in arts, entertainment, recreation and STEM

- **Economic production output is not keeping up with Vermont or the USA**
  - Business growth is reasonable but new startups are rare
  - Medium term business growth interrupted by 2015-16 decline

- **Population index declining due to decreasing migration and aging population**
  - Losing cultural/creatives: arts, entertainment & recreation
  - Losing manufacturing & trade
  - Bright spot – attracting professionals/STEM

- **Solid human impact growth driven by improvements in disengaged youth & poverty**
  - Education index increasing due to improving 11th grade test scored & more college grads
  - Employment has also improved - however gains are not reflected in incomes: would be explained by non-working households/members = aging population
  - Burdened households (>30% of income to housing) have not decreased appreciably
  - Inequality remains relatively unmoved
Components of economic development

- Production output
- Business activity
- Human impact

Drivers of economic development

- Physical assets
- Land
- Entrepreneurship
- Access to capital
- Broadband
- Human capital
- Population
- Education

Weighting factors

Goal
ADDISON COUNTY ECONOMIC DEVELOPMENT DASHBOARD: MOST RECENT STANDING

Addison County Economic Development index
Year: 2015

Production output: 2015
Business activity: 2016
Human impact: 2016
Physical Assets: 2017
Business environment: 2016
Human capital: 2017
EADISON COUNTY ECONOMIC DEVELOPMENT DASHBOARD: MOST RECENT STANDING

**Economic development results**

- Economic development 2015: 60.0
- Production output 2015: 55.6
- Business activity 2017: 73.3
- Human impact 2016: 57.3

**Economic development drivers**

- Business environment* 2016: 52.7
- Human capital 2017: 55.7
- Physical Asset 2017: 70.1
MAJOR INDICES TIME SERIES & GROWTH RATES

**Economic development results**

![Graph showing economic development results]

**Economic development drivers**

![Graph showing economic development drivers]
Components of economic development

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ADDISON COUNTY ECONOMIC DEVELOPMENT DASHBOARD: PRODUCTION OUTPUT RAW DATA

**Total economic production output, USD**

- Addison (100,000)
- Vermont (million)
- USA (billions)

**Economic production output per capita, USD**

- Addison
- Vermont
- USA
• Economic production output is not keeping up with Vermont or the USA – especially vs. Vermont per capita
Components of economic development

- Production output
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Weighting factors

Economic development

Drivers of economic development

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Weights

Goal
ADDISON COUNTY ECONOMIC DEVELOPMENT DASHBOARD: BUSINESS ACTIVITY RAW DATA

**Agriculture (NAICS 11)**

- Emp/1000 pop AC
- Emp/1000 pop VT
- Emp/1000 pop US
- Payroll/100 pop AC
- Payroll/100 pop VT
- Payroll/100 pop US

**Education (NAICS 61)**

- Emp/1000 pop AC
- Emp/1000 pop VT
- Emp/1000 pop US
- Payroll/100 pop AC
- Payroll/100 pop VT
- Payroll/100 pop US
ADDISON COUNTY ECONOMIC DEVELOPMENT DASHBOARD: BUSINESS ACTIVITY RAW DATA

**Construction (NAICS 23)**

- AP AC '000
- AP USA 10m
- AP VT 10K
- Emp AC hundreds
- Emp USA mm
- Emp VT '000

**Health care (NAICS 62)**

- AP AC '000
- AP USA 10m
- AP VT 10K
- Emp AC hundreds
- Emp USA mm
- Emp VT '000
ADDISON COUNTY ECONOMIC DEVELOPMENT DASHBOARD: BUSINESS ACTIVITY INDEX

AC Business activity index by sector

Growth rates

- Medium term growth interrupted by 2015-16 decline
- Losing cultural/creatives – arts, entertainment
- Losing manufacturing & trade
- Bright spot – attracting professionals/STEM
Components of economic development

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ADDISON COUNTY ECONOMIC DEVELOPMENT DASHBOARD: HUMAN IMPACT
RAW DATA

Civilian labor force

Civilian employed pop. 16+

AC '000  VT 10K  USA 10 mm

AC '000  VT 10K  USA 10 mm
ADDISON COUNTY ECONOMIC DEVELOPMENT DASHBOARD: HUMAN IMPACT

RAW DATA

Unemployment rate (%)

Median household income (10K)
• Solid medium-term growth increasing in 2015-16
• Driven by improvements in disengaged youth & poverty
• Employment has also improved
• **However gains are not reflected in incomes**
• Burdened households (>30% of income to housing) have not decreased appreciably
• Inequality remains relatively unmoved
Housing index components

- Housing index is declining driven by reduced affordability even while stock and commuting improve.
ADDISON COUNTY ECONOMIC DEVELOPMENT DASHBOARD: LAND

LAND USE RAW DATA

<table>
<thead>
<tr>
<th>Land Use</th>
<th>2012</th>
<th>2017</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Harvested Cropland/100 Residents AC</td>
<td>5,660</td>
<td>4599</td>
</tr>
<tr>
<td>Total Harvested Cropland/100 Residents VT</td>
<td>19,993</td>
<td>19,110</td>
</tr>
<tr>
<td>Total Woodland/100 Residents AC</td>
<td>106</td>
<td>96</td>
</tr>
<tr>
<td>Total Woodland/100 Residents VT</td>
<td>655</td>
<td>594</td>
</tr>
</tbody>
</table>
• Cropland & woodland values only available for 2012 and 2017
• Largest drop seen in harvested cropland
• Based on EEGL and Parcel Count there isn’t much land development
Components of economic development

- Production output
- Business activity
- Human impact

Drivers of economic development

- Physical assets
- Business environment
- Human capital

Weighing factors

- Housing
- Land
- Entrepreneurship
- Access to capital
- Broadband
- Population
- Education
We need to aim for higher startup rates.

Growth rates (new businesses with more than 5 people) have remained strong.

How can we encourage more startups and help businesses survive?
Components of economic development

Goal

Drivers of economic development

Weighting factors

Production output

Business activity

Human impact

Economic development

Physical assets

Housing

Land

Entrepreneurship

Weights

Access to capital

Business environment

Weights

Broadband

Human capital

Weights

Population

Education
Population index declining due to decreasing migration and aging population

Education index increasing due to improving 11th grade test scored & more college grads
METHODOLOGY
Components of economic development

- Production output
- Business activity
- Human impact

Drivers of economic development

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Weights
PRODUCTION OUTPUT CALCULATIONS

**GDP**
- AC vs VT GCP
  - AC population count
  - AC GDP
  - VT population count
  - VT GDP

- AC vs US GCP
  - AC population count
  - AC net migration
  - VT population count
  - VT GDP

**GDP per capita**
- AC vs VT GCP per capita
  - AC population count
  - AC GDP per capita
  - VT population count
  - VT GDP per capita

- AC vs US GCP per capita
  - AC population count
  - AC GCP per capita
  - US population count
  - US GDP per capita

Sources: BEA
Components of economic development

- Production output
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Goal

Weighting factors

Economic development

Weights
BUSINESS ACTIVITY CALCULATIONS

Index

- Accommod. & food
- Agriculture
- Arts, ent, recreation
- Construction
- Education
- Health care
- Manufacturing
- Prof, sci, tech
- Trade
- Transport

Weighting factors

Sub-Index

- AC employees/population
- VT employees/population
- USA employees/population
- AC annual payroll/population
- VT annual payroll/population
- USA annual payroll/population

Raw Data

Sources
- Agriculture (AC/VT) – USDA Ag. Census
- Education (AC/VT) – Census/VT Dept. of Labor
- Health (AC/VT) – VT of Labor
- All else: County Business Patterns
Components of economic development

Production output

Business activity

Human impact

Drivers of economic development

Physical assets

Land

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Population
HUMAN IMPACT CALCULATIONS

Relative metrics
- AC relative poverty
- AC rel. unemployment
- AC rel. med. HH income

AC-only metrics
- AC poverty rate vs VT & USA
- AC unemp. rate vs VT & USA
- AC employed% vs VT & USA
- AC med HH inc vs VT & USA

Weighting factors
- AC poverty rate
- VT poverty rate
- USA poverty rate

Adjustment factors
- AC unemp. rate
- VT unemp. rate
- USA unemp. rate
- AC employed/labor force
- VT employed/labor force
- USA employed/labor force
- AC med HH income
- VT med HH income
- USA med HH income

Source:
- Equality/Disengaged youth – FRED St. Louis
- Burdened HH – housingdata.org
- All else: Census

AC disengaged youth
- <25 yo unemployed & not in school

AC burdened households
- HH with >30% of income spent on rent

Human impact
### HOUSING CALCULATIONS

**Physical assets**

- Land

**Housing**

- Housing Stock index
- Affordability index
- Commute index

**Adjustment factors**

- AC housing units /1000 pop
- VT housing units /1000 pop
- USA housing units /1000 pop
- AC med HH inc / med home price
- VT med HH inc / med home price
- USA med HH inc / med home price

**Weighting factors**

- AC units /1000 vs VT & USA
- VT units /1000 vs VT & USA
- USA units /1000 vs VT & USA
- AC inc / hm price vs VT & USA
- VT inc / hm price vs VT & USA
- USA inc / hm price vs VT & USA

**<20 min comm. % of pop**

Source: Census
HOUSING CALCULATIONS

Source: VT Dept. of Labor and USDA Ag. Census
Components of economic development

Production output

Business activity

Human impact

Drivers of economic development

Physical assets

Land

Entrepreneurship

Access to capital

Broadband

Population

Education

Business environment

Human capital

Goal

Weights

Weights

Weights
BUSINESS ENVIRONMENT CALCULATIONS

Source: County Business Patterns

Weighting factors:
- Entrepreneurship
- Access to capital
- Broadband

Adjustment factors:
- Startup index
- Growth index
- Financial pros
- Financial payroll
- High speed
- Under-served
- New biz <5 ppl/1,000 pop
- New biz 5+ ppl/1,000 pop
- AC percentile Fin pros/pop
- AC percentile Fin payroll/pop
- AC 100/100 pop %
- AC <4/1 pop %

Adjustment factors:
- AC biz <5ppl
- AC population
- AC biz 5+ ppl
- AC population
- AC financial pros
- All counties financial pros
- AC population
- All counties population
- AC financial payroll
- All counties financial payrolls
- AC population
- All counties population

NOTE: Broadband not included in current index as data only available from 2016 onwards

Source: County Business Patterns
Drivers of economic development

Components of economic development

- Production output
- Business activity
- Human impact

Weighting factors

Economic development

Goal

Drivers of economic development

- Physical assets
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Weights

Human capital
HUMAN CAPITAL CALCULATIONS

Index

Weighting factors

Human capital

Sub-Index

Population

Education

Adjustment factors

Raw Data

AC rel headcount
- VT population count
- USA population count

AC median age

AC migration/1,000 pop
- AC population count
- AC net migration

AC births/1,000 pop
- AC population count
- AC total births

11th grade test scores
- English proficiency %
- Math proficiency %

High school graduation
- Graduation rate

Higher education
- Higher ed enrolment
- Assoc deg % of pop
- BA/BS % of pop
- Grad/prof deg % of pop

Adjustment factors

Sources:
- All data from Census except "11th grade test scores" and "HS grad. rate" which come from Dept. of Ed.