Pilot Study: Estimating Rural and Urban Minnesota’s Interdependencies

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Thanks!

* U.S.D.A Rural Development
* Blandin Foundation
* University of Minnesota
  * Humphrey School
  * Applied Economics
  * Community Economics
* DEED
Motivating Force

How are rural and urban Minnesota interdependent?

What types of market relationships tie them together?

….I think if we added it up, it would be extraordinary and would show the true interdependence of our state quite clearly.

- Jane Leonard, Instigator, Rural Urban Connections Project & MRP Board Member
Approach

- What’s rural? What’s urban?
- Regional clusters
- Input Output analysis
- Implications
Urban & Rural Minnesota
Industry Clusters

Counties with High Employment Concentration in Computer and Electronic Product Mfg.
Innovations in American Regions Project

- Initially focused on Rural Clusters and Economic Development
- Purdue & Indiana University
- Obtained data on 17 traded Industry clusters (establishments, wages and employees) by County

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Diagram 1

Cluster Labels indicate:
Cluster name (total number of Minnesota jobs in the cluster)
Percent of cluster jobs located in rural Minnesota

For instance, the first cluster label should be read "Education and Knowledge Creation Cluster was responsible for 232,958 jobs in Minnesota in 2008. Of those jobs, 54% were located in rural Minnesota."
IO Analysis & IMPLAN

* Rural Urban Baseline
* Billion Dollar Stone - “Direct Effect”
* Rural Urban Ripple Effects

* Manufacturing & Agribusiness

<table>
<thead>
<tr>
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<tr>
<td>* Output</td>
<td>* Output</td>
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<tr>
<td>* Jobs</td>
<td>* Jobs</td>
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Findings - Baseline

Diagram 3: 2008 IMPLAN Baseline
Comparing Agribusiness and Manufacturing Output

- Agribusiness
  - Urban: 15% ($5,983,548,179)
  - Rural: 85% ($34,485,781,939)
  - Total: $40,469,330,118

- Manufacturing
  - Urban: 53% ($16,544,672,769)
  - Rural: 47% ($14,954,583,208)
  - Total: $31,499,255,977

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# Ripple Effects

## Manufacturing

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<tr>
<th>Category</th>
<th>Revenue</th>
<th>Jobs</th>
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<tr>
<td>$538 M</td>
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### B2B

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### B2C

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### Urban

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<td>44% $M</td>
<td>32%</td>
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<table>
<thead>
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<tbody>
<tr>
<td>30% $M</td>
<td>24%</td>
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Ripple Effects

Agribusiness

$603 Million 3,646 new jobs

B2B

$458 M 2,383 jobs

B2C

$145 M 1,263 jobs

Urban

22% $M 19% jobs

Urban

28% $M 22% jobs

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Implications

- The reverse is also true! A $1 B decrease in manufacturing output in rural Minnesota results in 1,043 jobs lost and a loss of $208 M revenue among Twin Cities area businesses.

- Economic dependence of Urban MN on Rural MN is real, measurable and significant.

- Wealth Creation takes place through trading networks that span urban and rural markets.

- Coordinate policy and investments in an approach that fully values the ways in which a healthy city depends on robust rural areas.