



Ethanol Production Facility in Rural Illinois: An economic impact analysis

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Purpose of Presentation

Describe the basics of economic impact modeling and its application in the analysis of ethanol production facility.



Presentation Outline

- Overview of IIRA-RETAC
- Basics of economic impact modeling
- Description of ethanol production facility
 - Location, inputs, revenues
- Economic impacts associated with facility
- Considerations, Concerns, and Opportunities
- Conclusion



Illinois Institute for Rural Affairs

www.IIRA.org

Strategic Planning and Community Assessment

1. MAPPING the Future of Your Community
2. Health Resources Management / Health MAPPING
3. Value Added Rural Development Center (IVARDC)
4. Renewable Energy—Ethanol & Illinois Wind Energy
5. Rural Transit Assistance (RTAC)
6. IL Center for Rural Education Studies / School MAPPING
7. Info Tech Planning Project (IT)
8. Rural Housing Program

Technical Assistance

9. Business & Geographic Information Services (BGIS)
10. Data analysis and survey center
11. Rural Economic Technical Assistance Center (RETAC)

Implementation

12. Peace Corps Fellows (PCFs)
13. USDA—Rural Community Development Initiative (RCDI)
14. Volunteer Training Support System (VOLTS)
15. Midwest Community Development Institute (Midwest CDI)
16. USAID Project in Chiapas, Mexico



Rural Economic Technical Assistance Center (RETAC)

- Economic and fiscal impact analyses
- Business feasibility studies and market analyses
- Business information broker
- Community-oriented programming (i.e., Business Retention and Expansion)



Basics of Economic Impact Modeling

- IMPLAN Input-output modeling software
- Basis of Analysis
- Modifications
- Levels of impact
 - Direct
 - Indirect
 - Induced
- Assumptions

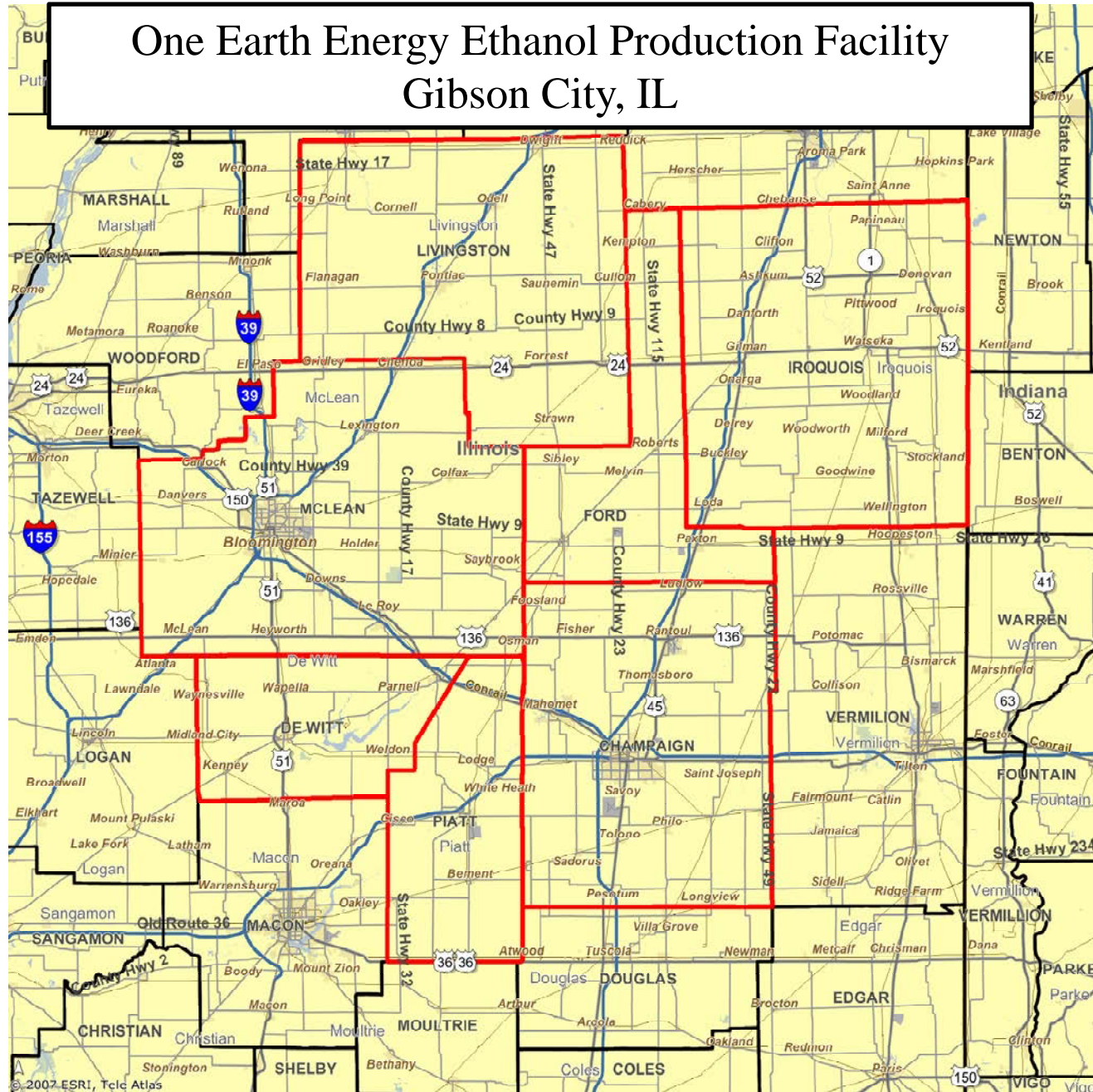


Economic Impact Analysis

- Minimum Inputs
 - Annual Employment Compensation
 - Employment
 - Annual expenditures (total and within study area)
- Reported Outputs (Annualized)
 - Economic Output
 - Employment
 - Employment Compensation
 - Public revenues



One Earth Energy Ethanol Production Facility Gibson City, IL





Ethanol Production Facility

- Inputs
 - Corn
 - Water
 - Organic & inorganic chemicals
 - Transportation



Ethanol Production Facility

- Gross revenues: \$217.6 million
 - De-natured ethanol (110 mm gallons)
 - DDGS (320,000 tons)



Ethanol Production Facility Economic Impacts

- Direct
 - \$217.6 million in economic activity
 - 48 positions
 - \$3.1 million in Employment Compensation



Ethanol Production Facility Economic Impacts

- Indirect and Induced
 - \$8.3 million in economic activity
 - 48 positions
 - \$1.3 million in Employment Compensation



Ethanol Production Facility Economic Impacts

- Total
 - \$225.9 million in economic activity
 - 96 positions
 - \$4.32 million in Employment Compensation
 - \$1.44 mm Federal Revenues
 - \$933K State/Local



Ethanol Production Facility Economic Impacts

- Multipliers
 - Economic activity: 1.04
 - Employment: 2.0
 - Employment Compensation: 1.39



Ethanol Production Facility Economic Impacts

- Additional impacts associated with premium for corn delivered to plant (\$.03/bu = \$1.2 million)
 - Economic activity: \$386k - \$579K
 - Employment: 3.6 – 5.4 positions
 - Compensation: \$101K-\$152K
 - Public revenues: \$56K - \$85K



Considerations

- Concern
 - Reality in model construction
 - Labor availability
- Opportunities
 - Employment retention
 - Gap/import substitution



Conclusion

- Suggestions for improving analysis
 - Holistic approach
 - Incorporate aspects of fiscal impact
 - Incorporate impacts on community infrastructure
 - Incorporate comparative analysis of alternate application of existing resources



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