

# Minnesota Energy Study



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# Economy

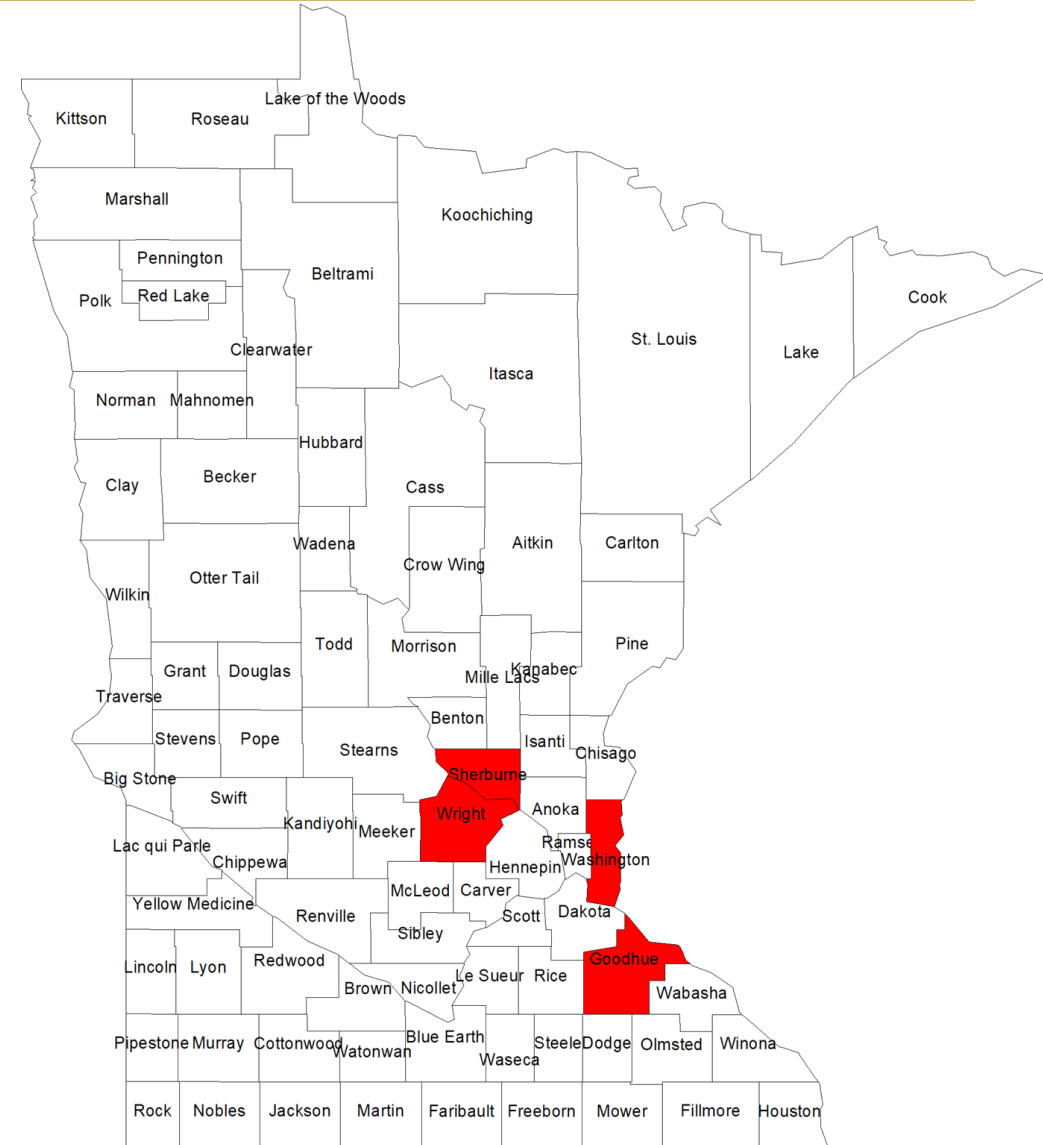
## Minnesota:

- Nominal GDP: \$384B, 17<sup>th</sup> (2019)
- Nonfarm Employment: 2.9M, 18<sup>th</sup> (2019)
- Personal Income: \$337B, 17<sup>th</sup> (2019)

County	Employment	Share
Goodhue	21,652	0.7%
Washington	88,430	3.0%
Wright	45,005	1.6%
Sherburne	26,357	0.9%

County	GDP (\$B)	Share
Goodhue	3.0	0.8%
Washington	10.8	2.9%
Wright	4.6	1.2%
Sherburne	3.6	1.0%

County	Population	Share
Goodhue	46,449.0	0.8%
Washington	262,748.0	4.6%
Wright	138,531.0	2.4%
Sherburne	97,520.0	1.7%

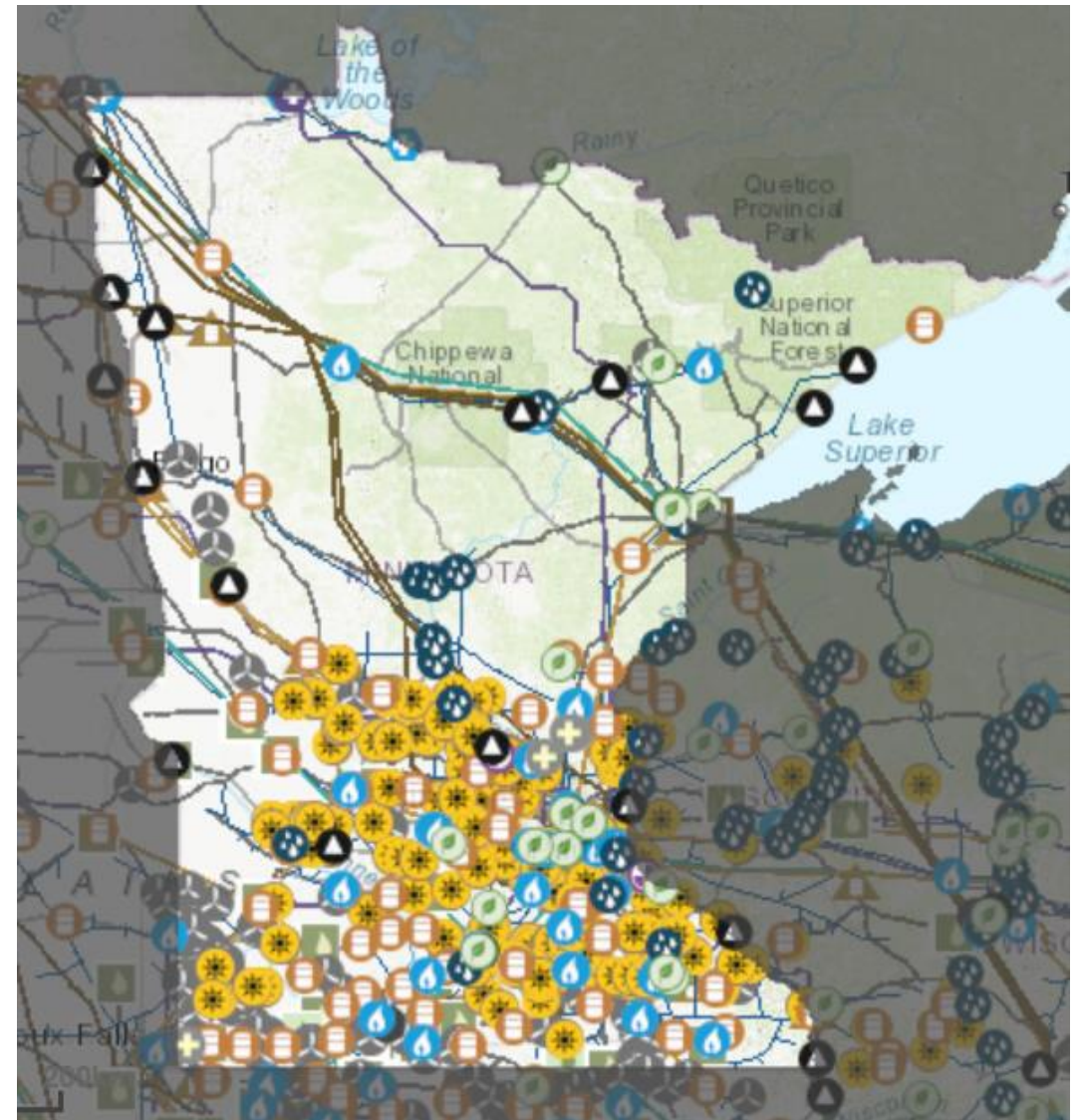


# Energy State

## Ranking

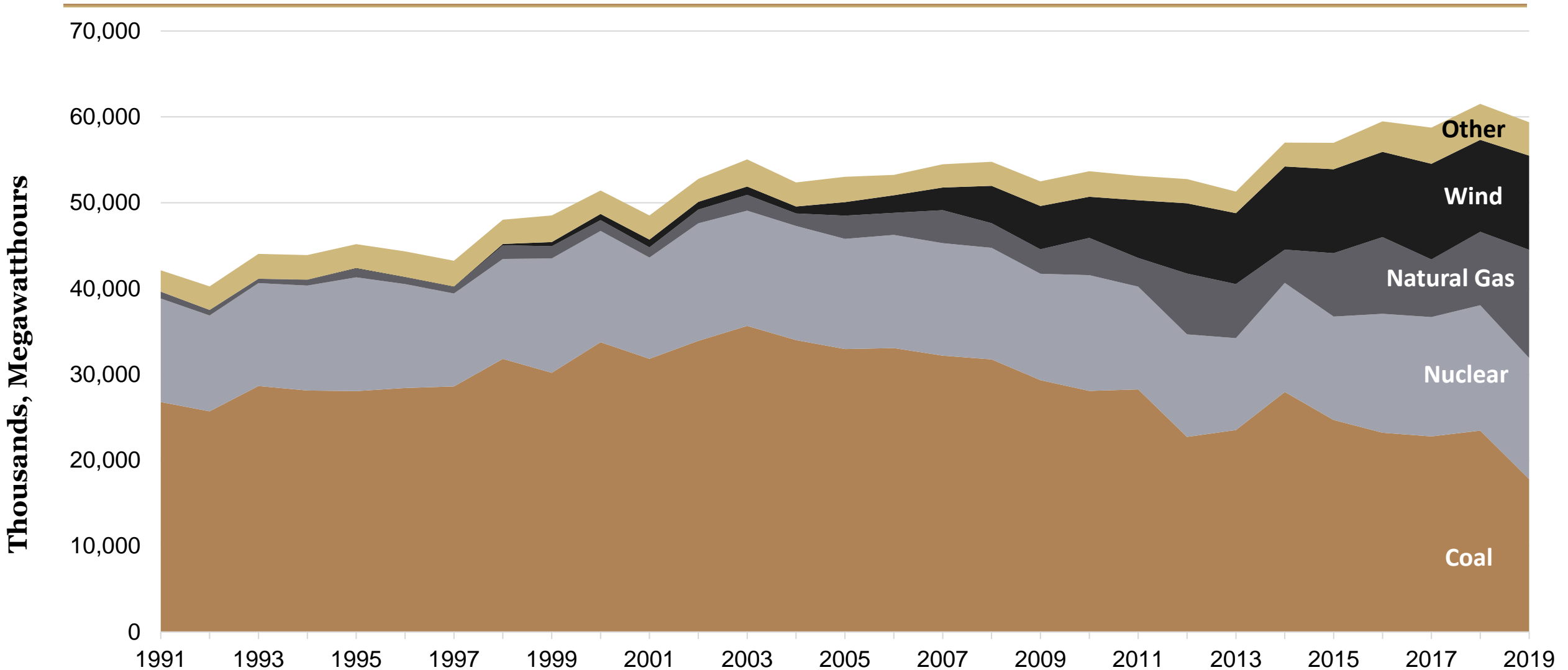
- Crude Oil Production: --
- Natural Gas Production: --
- Coal Production: --
- Electricity: 28<sup>th</sup>
- Total Energy: 32<sup>nd</sup>
- Natural Gas Prices: 44<sup>th</sup>
- Electricity Prices: 16<sup>th</sup>
- Solar Thermal and Photovoltaic: 13<sup>th</sup>
- Wind: 8<sup>th</sup>

County	Utility Share of GDP
Goodhue	23.2%
Sherburne*	24.6%
Washington	2.1%
Wright	10.4%
Minnesota	1.4%

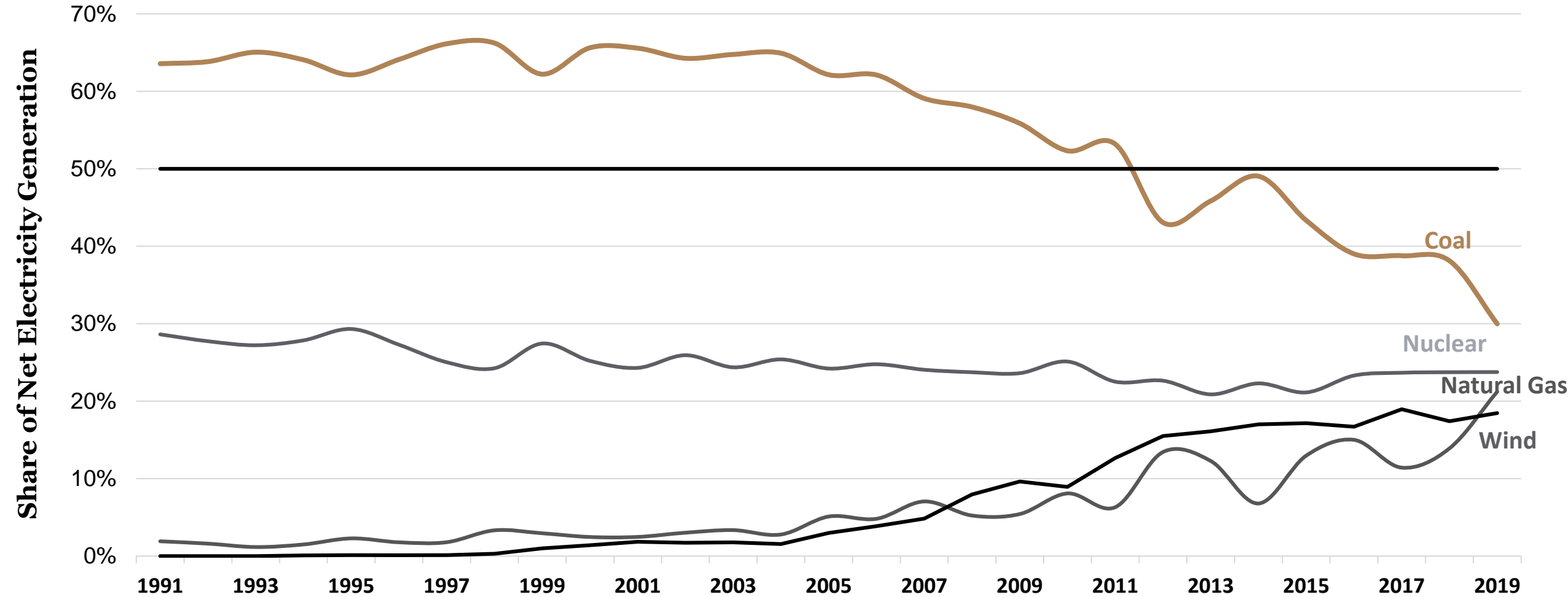


Source: Energy Information Administration. GDP data 2018, except in Sherburne County (2013).

# Minnesota Net Electricity Generation



# Minnesota Net Electricity Generation



# Minnesota Utility Economic Impact Study

## Economic Impact of Utility Scenarios on Host Communities

- Proposed alternative resource plan scenarios
- Electricity from cleaner sources
- Impact on generating communities and the state
- Retirement of coal-fired generating facilities
- Replacement energy sources
- Gross v. net impact
- REMI E3+ model

### Community Impacts

Goodhue County (Prairie Island Plant)

Sherburne County (Sherco 3 Plant)

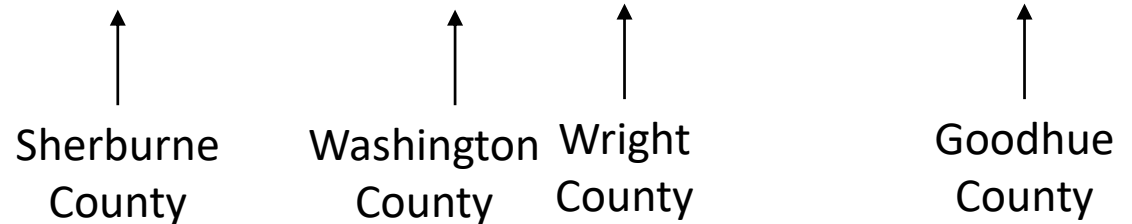
Washington County (King Plant)

Wright County (Monticello Plant)

State of Minnesota

# Scenarios

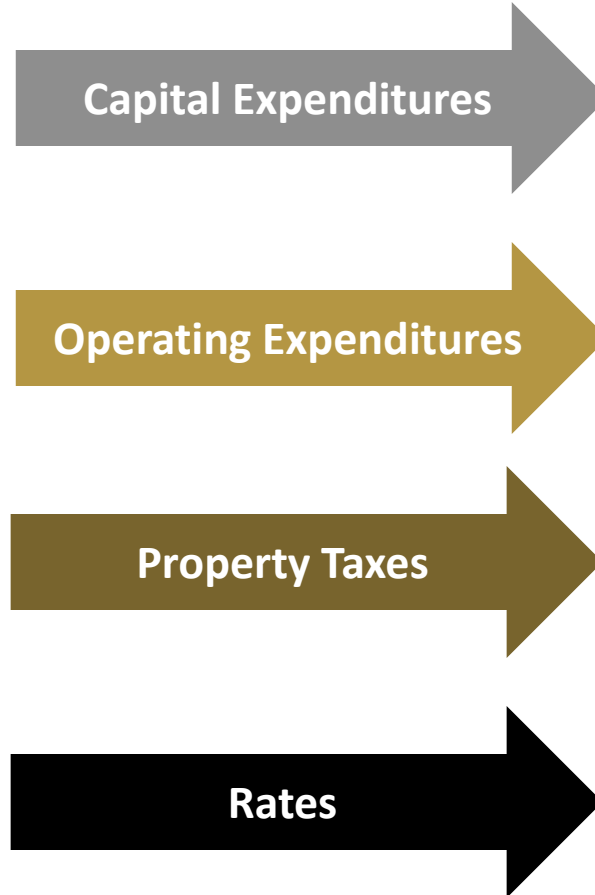
Scenarios Analyzed in the Host Community Impact Study								
Scenario	Description	Coal				Nuclear		
		Sherco 1	Sherco 2	Sherco 3	King	Monticello	Prairie Island 1	Prairie Island 2
1	Reference	2026	2023	2040	2037	2030	2033	2034
2	Early King	2026	2023	2040	2028	2030	2033	2034
4	Early Coal	2026	2023	2030	2028	2030	2033	2034
9	Early Coal; Extend Monticello	2026	2023	2030	2028	2040	2033	2034
10	Early King; Extend Monticello	2026	2023	2040	2028	2040	2033	2034
12	Early Coal; Extend All Nuclear	2026	2023	2030	2028	2040	2043	2044



# Data

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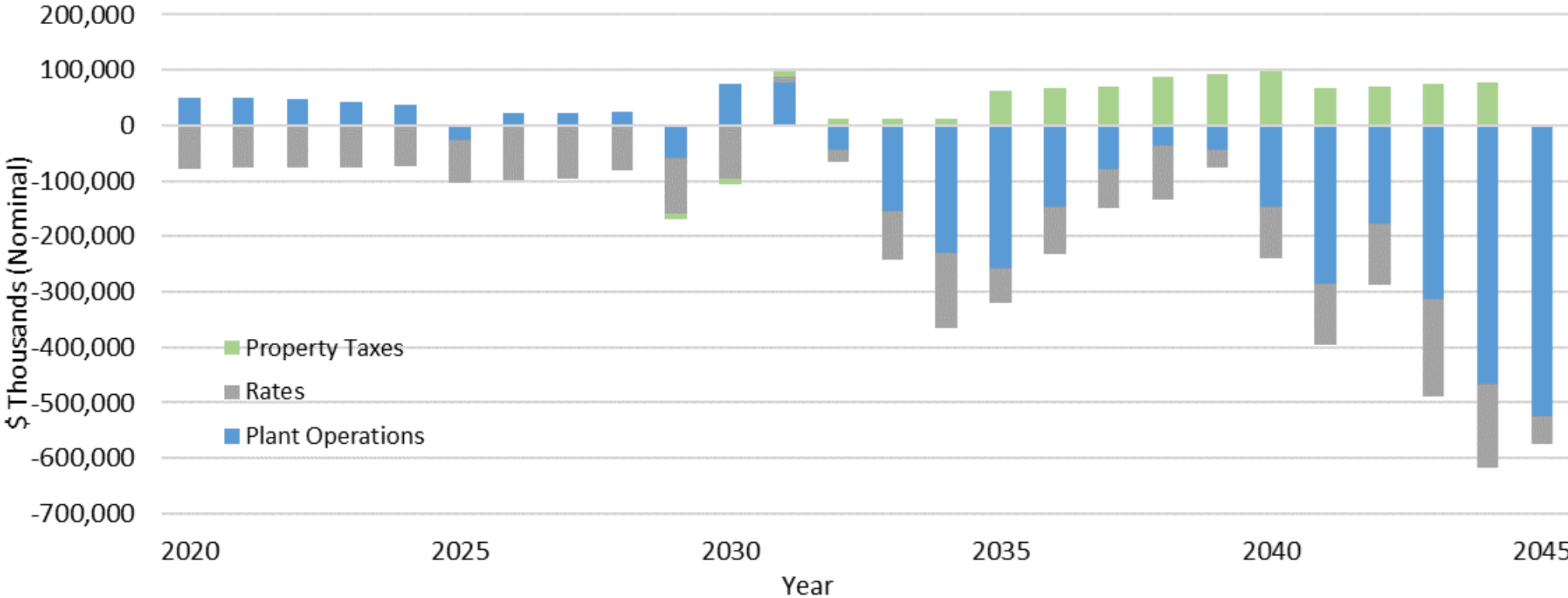
Utilities



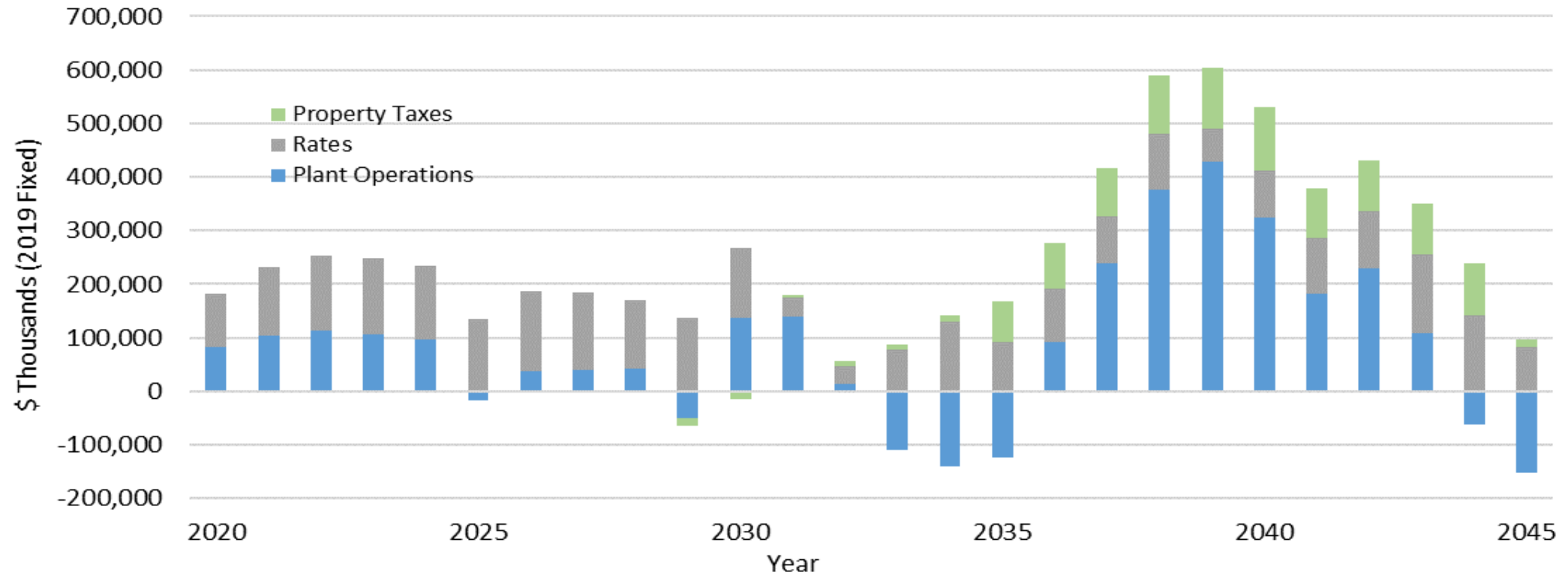
Economic  
Impact



# Minnesota Net Expenditures and Rates by Year

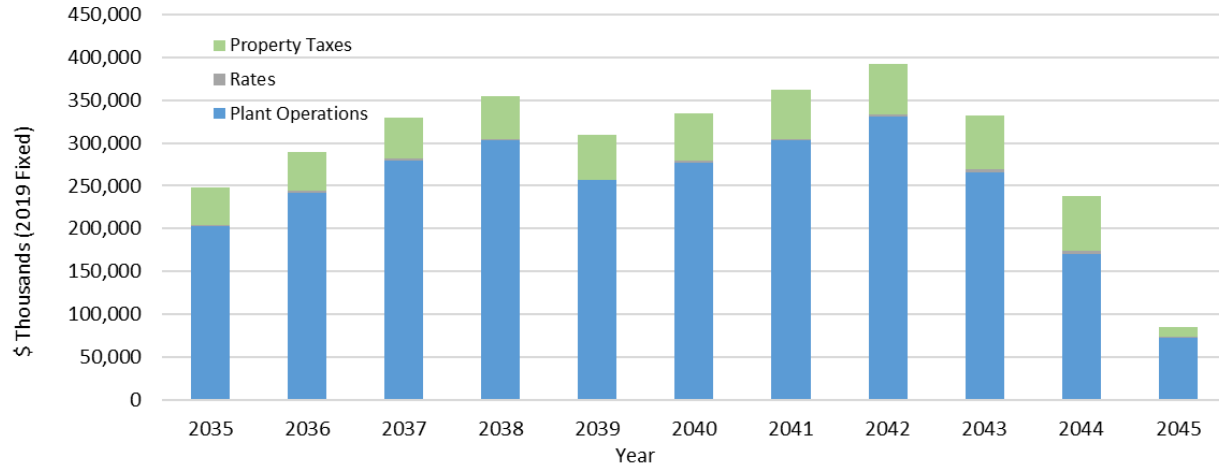


# Impact on Minnesota

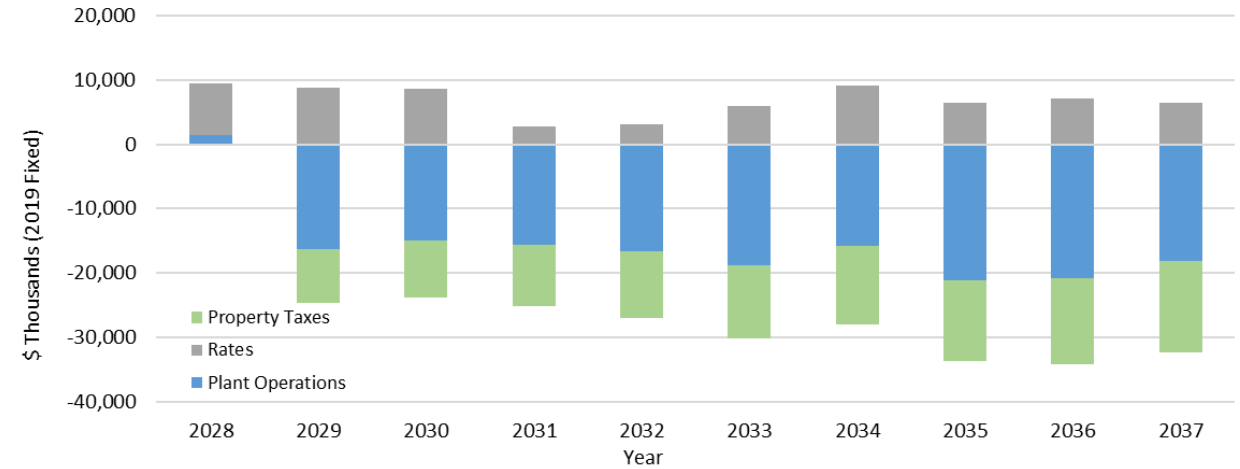


# Impact on Communities

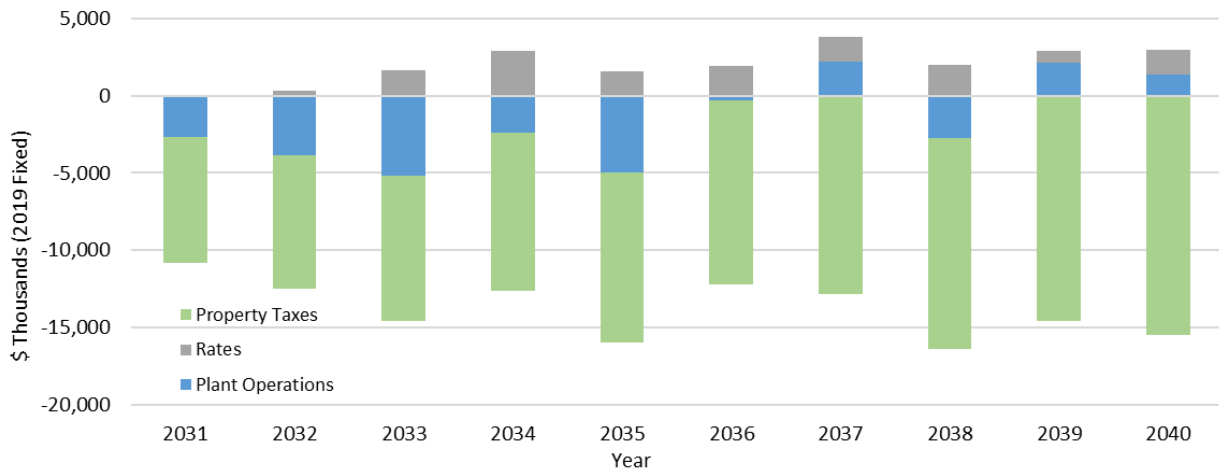
## Goodhue County



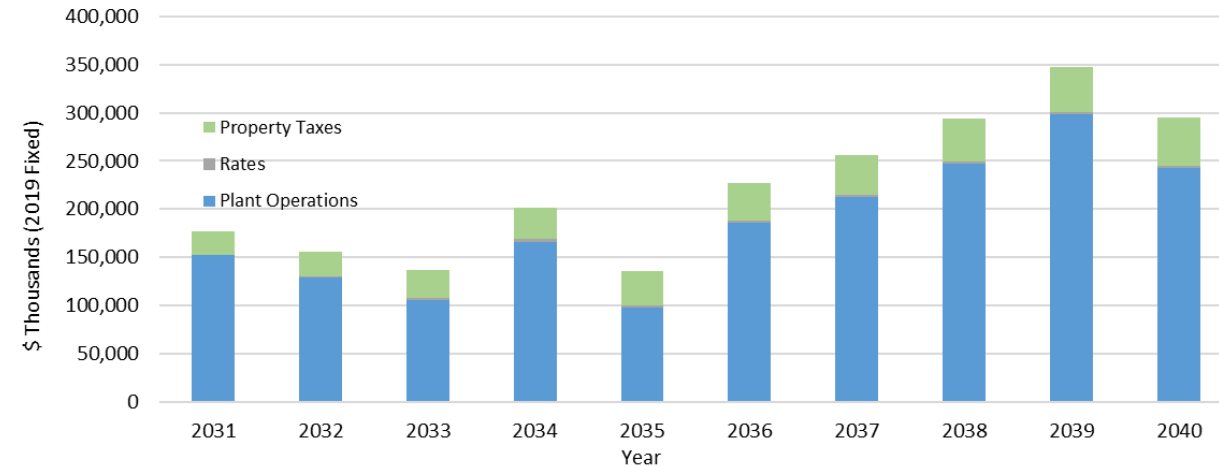
## Washington County



## Sherburne County



## Wright County



# Alternative Analysis—2018 Shutdown

## Impact on Sherburne County

Category	Units	2018 Impact
Total Employment	Jobs	-1,228
	<i>Percentage Change</i>	-3.2%
Gross Domestic Product	Dollars (Real 2019, Thousands)	-231,540
	<i>Percentage Change</i>	-6.1%
Disposable Personal Income	Dollars (Real 2019, Thousands)	-34,574
	<i>Percentage Change</i>	-0.9%
Population	Individuals	-622
	<i>Percentage Change</i>	-0.7%
Labor Force	Individuals	-422
	<i>Percentage Change</i>	-0.8%

# Jobs by Industry

## Sherburne County

Industry	Emp. Impact
Forestry, fishing, and hunting	0
Mining	0
Utilities	-316
Construction	-268
Manufacturing	-8
Wholesale trade	-10
Retail trade	-47
Transportation and warehousing	-17
Information	0
Finance and insurance	-2
Real estate and rental and leasing	-29
Professional, scientific, and technical services	-89
Management of companies and enterprises	0
Administrative, support, waste management, and remediation services	-83
Educational services; private	-1
Health care and social assistance	-19
Arts, entertainment, and recreation	-8
Accommodation and food services	-50
Other services (except public administration)	-22
State and Local Government	-257
Federal Civilian	0
Federal Military	0
Farm	0
<b>All Industries</b>	<b>-1,228</b>

# Findings Summary

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Findings report by CEE:

- Power plant closures will undoubtedly have a strong economic and financial impact on the communities that host them, and potentially, other Minnesota communities as well.
- Host communities are currently pursuing a variety of strategies to plan and prepare for power plant closures and the economic transition that they will require. None of those preparation strategies are expected to fully offset the economic impact of a plant closure, but they may help mitigate the negative effects.
- Workers, labor unions, and host communities may benefit from close coordination and communication in plant closure transition planning and preparation efforts.
- Not all of Minnesota's host communities receive benefits from the power plant they host.

# Q&A

