

ASSESSMENT OF THE ECONOMIC IMPACT OF THE REPEAL OF THE TAX EXEMPTION ON TELECOMMUNICATION INVESTMENT IN MINNESOTA

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THE PURPOSE OF THIS STUDY IS TO ASSESS THE SOCIAL AND ECONOMIC IMPACT OF THE REPEAL OF MINNESOTA'S SALES TAX EXEMPTION ON TELECOMMUNICATIONS CAPITAL EQUIPMENT

- Since 2001, the State of Minnesota has enacted a sales and use tax exemption for telecommunications capital equipment
- However, in 2013, despite a recommendation from the Governor's State Broadband Task Force to preserve and expand the measure, the Legislature repealed the sales tax exemption
- As a result, the State will increase direct tax collection from telecommunications companies, estimated by the Legislature to bring in \$148.8 million in revenues between 2014 and 2017
- However, these revenues need to be considered in relation to the potential negative social and economic impact that a repeal would entail
 - Is a repeal of the tax exemption likely to trigger a decrease in the amount of investment in telecommunications?
 - If a decrease in investment is likely, by how much?
 - What is the potential impact of a decrease in telecommunications investment on the State's GDP, and its overall economic impact?
 - Would the repeal also affect the number of direct and indirect jobs created by the telecommunications industry investment in the State?
 - Is the repeal affecting the willingness of the telecommunications industry in Minnesota to continue investing?

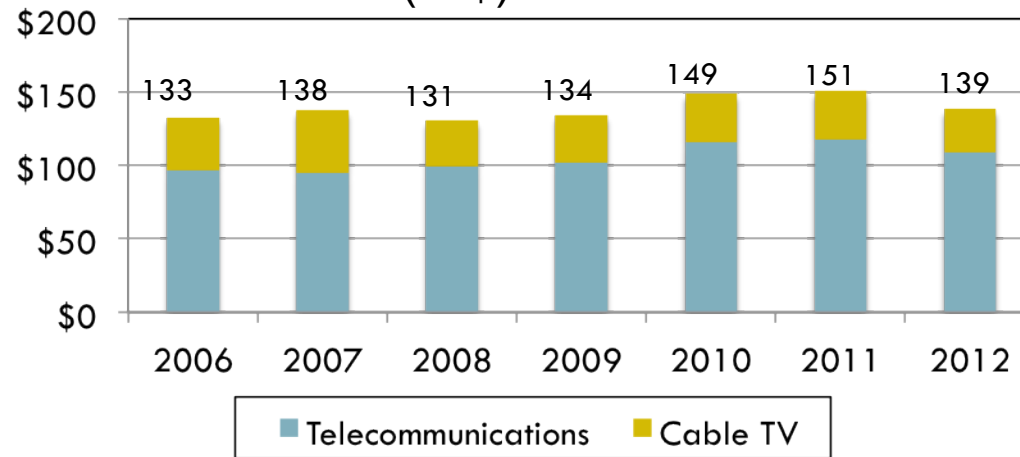
THE TELECOMMUNICATIONS INDUSTRIES IN MINNESOTA INVESTED A TOTAL OF \$5,167 MILLION BETWEEN 2006 AND 2012

MINNESOTA: TOTAL TELECOMMUNICATIONS INVESTMENT (2006-2012)
(in \$ millions)

	2006	2007	2008	2009	2010	2011	2012
Telecommunications	514.13	504.88	528.69	542.64	614.15	624.58	576.62
Cable TV	190.28	225.22	165.04	170.19	176.62	175.78	158.18
Total	704.42	730.10	693.73	712.84	790.77	800.36	734.80

Total Investment (2006-12)
\$ 5,167 million

TELECOMMUNICATIONS INVESTMENT PER CAPITA (2006-2012)
(in \$)

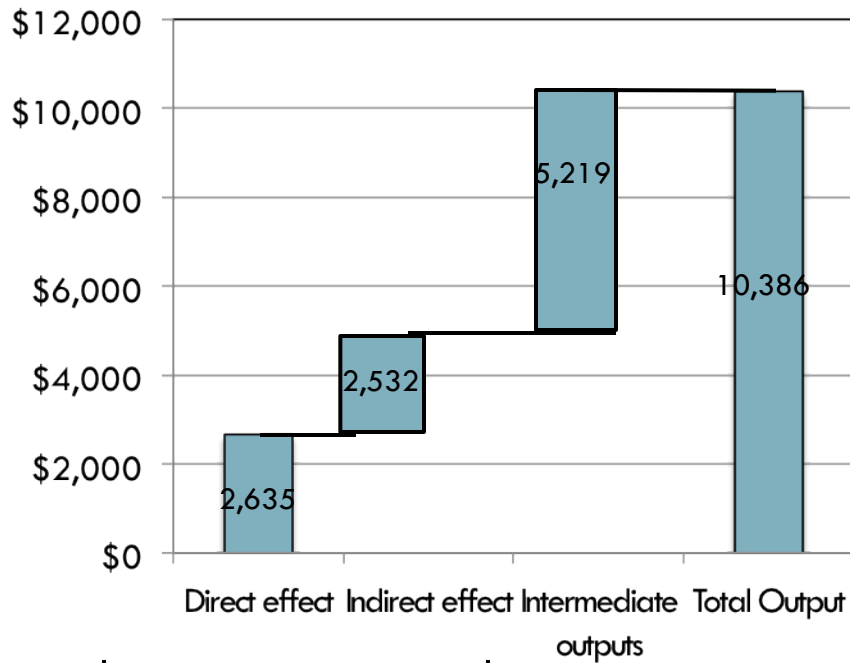


Source: Broadband Tax Institute; Minnesota Cable Communications Association; Minnesota Telecom Alliance; TAS analysis

TELECOMMUNICATIONS INVESTMENT IN THE STATE IN THE PAST SEVEN YEARS HAS HAD A POSITIVE IMPACT BOTH ON GDP GROWTH AND JOB CREATION

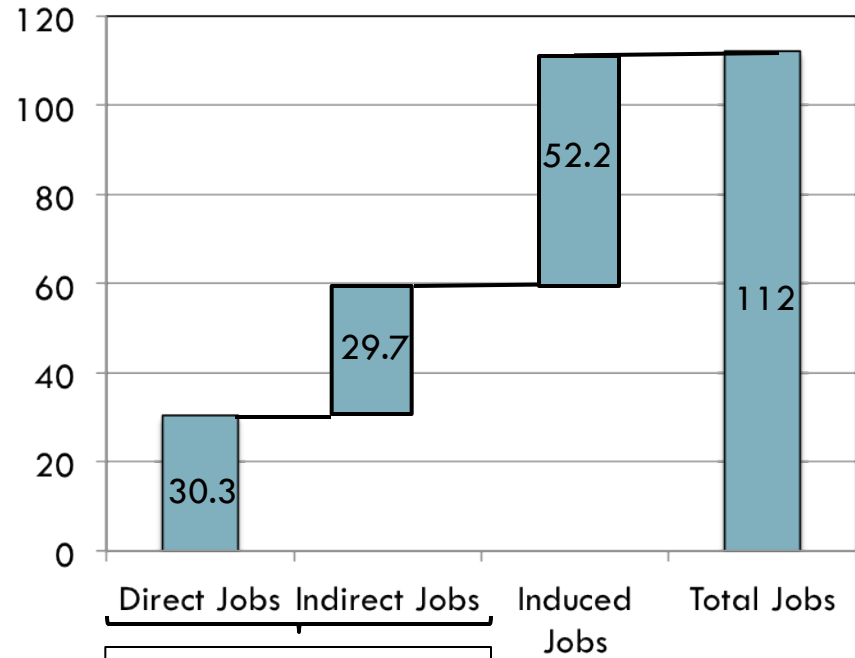
ECONOMIC IMPACT OF INVESTMENT (2006-12)

OUTPUT: \$10,386 million



$\text{Type I multiplier} = \frac{\text{Direct} + \text{Indirect}}{\text{Direct}} = 1.96$
 $\text{Type II multiplier} = \frac{\text{Direct} + \text{Indirect} + \text{Intermediate}}{\text{Direct}} = 2.01$

EMPLOYMENT: 112,000 jobs / year

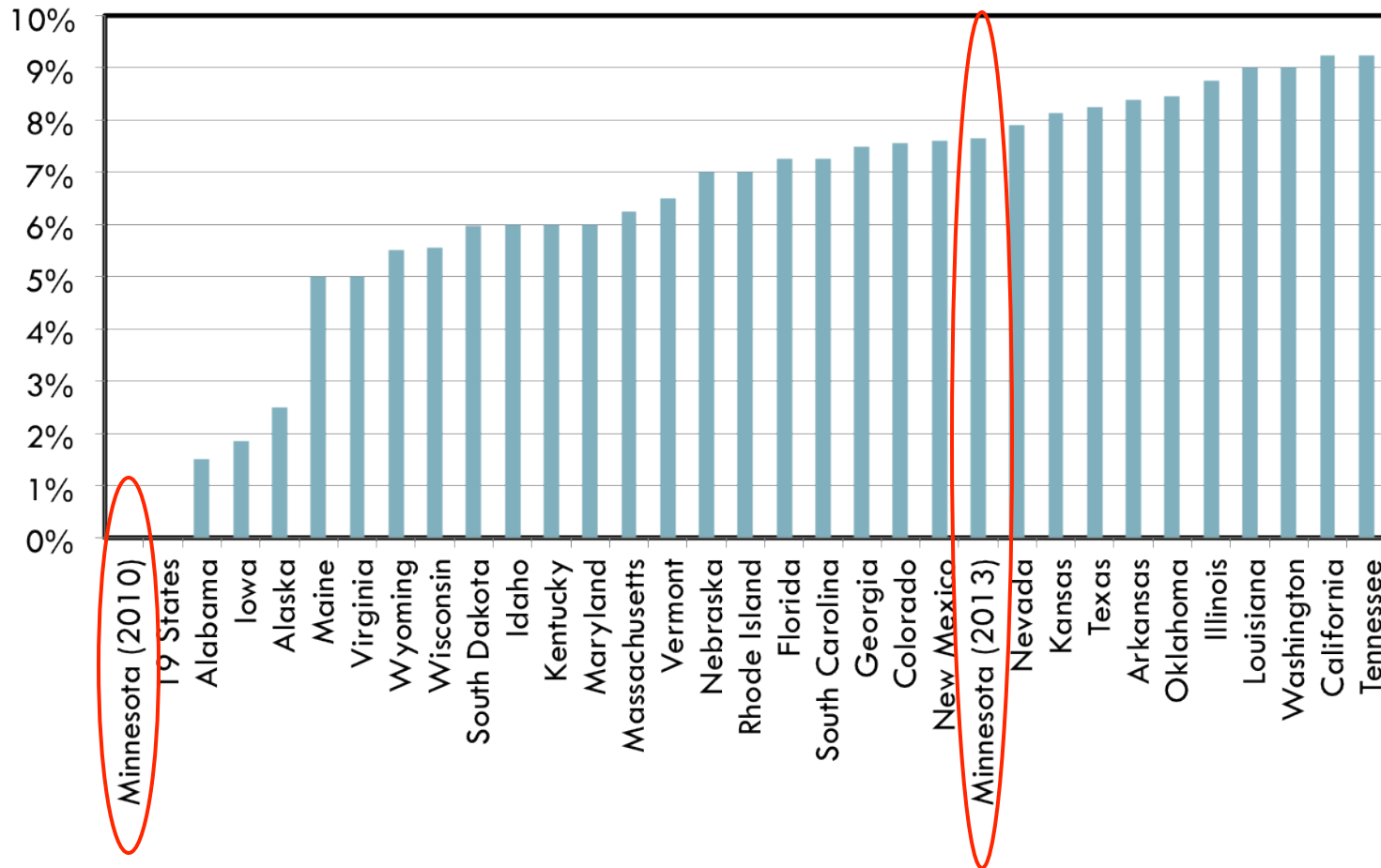


$\text{Type I multiplier} = \frac{\text{Direct} + \text{Indirect}}{\text{Direct}} = 1.98$
 $\text{Type II multiplier} = \frac{\text{Direct} + \text{Indirect} + \text{Induced}}{\text{Direct}} = 3.70$

Source: US Bureau of Economic Research; TAS analysis

WHILE UNTIL RECENTLY MINNESOTA WAS ONE OF THE 20 STATES OF THE UNION WITH A SALES TAX EXEMPTION, THE REPEAL POSITIONED IT AS ONE WITH THE 11TH HIGHEST TAX RATE

RANKING OF STATES BY SALES TAX RATE ON INVESTMENT IN TELECOMMUNICATIONS NETWORK EQUIPMENT



Source: Broadband Tax Institute; TAS analysis

ECONOMETRIC ANALYSIS INDICATES THAT AN INCREASE OF THE SALES TAX RATE REDUCES TELECOMMUNICATIONS INVESTMENT

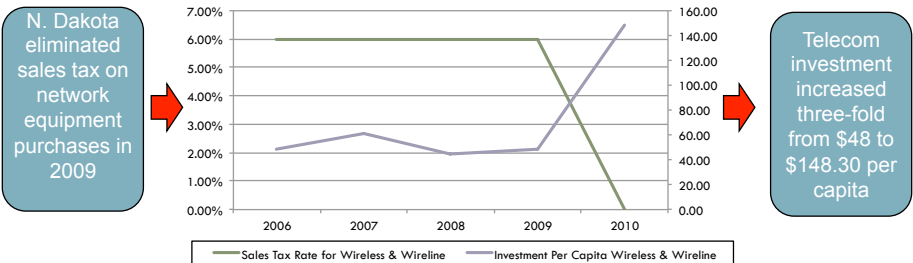
MODEL OF IMPACT OF SALES TAX RATE ON TELECOMMUNICATIONS INVESTMENT PER CAPITA

Independent Variables	Cable Investment	Wireless & Wireline Investment
Sales Tax Rate	-0.458 (**)	-0.933 (*)
GDP Per Capita (Thousands of 2010 Dollars)	0.0001 (0.040)	0.7598 (**) (0.398)
Population	0.330 (**) (0.150)	-0.388 (0.411)
Human Capital	5.29 (21.54)	-113.86 (110.71)
Rural Population	-7.217 (5.349)	-8.637 (18.566)
Investment the last year	0.762 (***) (0.075)	0.644 (***) (0.065)
% population with 60 years or more	99.297 (80.96)	-1,109.86 (883.66)
% population between 23/32 years	60.60 (162.90)	-1,798.65 (1,515.84)
Constant	-24.05 (45.31)	604.44 (484.55)
Adjusted R ²	79.67%	49.35%
Observations	200	200

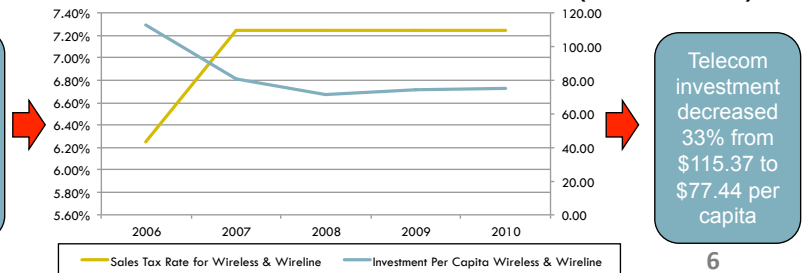
(***) Significant at 1%; (**) Significant at 10%; (*) Significant at 20%

Source: TAS analysis

NORTH DAKOTA: SALES TAX RATE AND TELECOM INVESTMENT (2006-10)



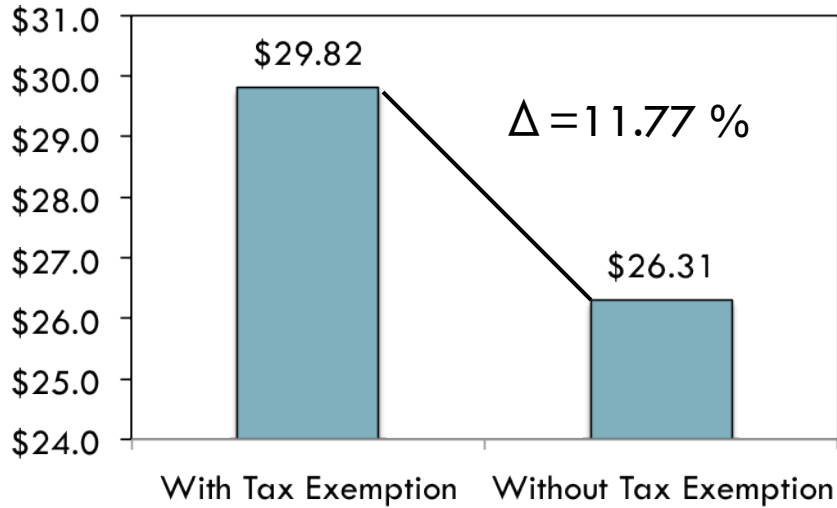
SOUTH CAROLINA: SALES TAX RATE AND TELECOM INVESTMENT (2006-10)



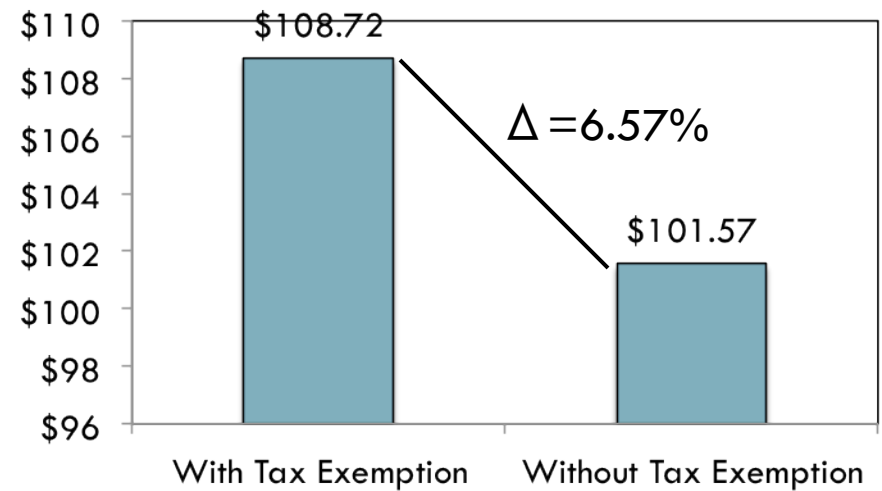
ACCORDING TO THE EVIDENCE, THE REPEAL OF THE SALES TAX EXEMPTION WOULD LOWER THE TELECOMMUNICATIONS INVESTMENT PER CAPITA IN THE STATE SIGNIFICANTLY

MINNESOTA: REDUCTION IN TELECOMMUNICATIONS INVESTMENT PER CAPITA

CABLE TV



WIRELINE AND WIRELESS



Source: TAS analysis

AS A RESULT, THE TOTAL DECREASE IN INVESTMENT OVER THE NEXT TWO YEARS WOULD AMOUNT TO \$153 MILLION

MINNESOTA: INVESTMENT IMPACT OF REPEAL OF THE SALES TAX EXEMPTION
(In \$ Millions)

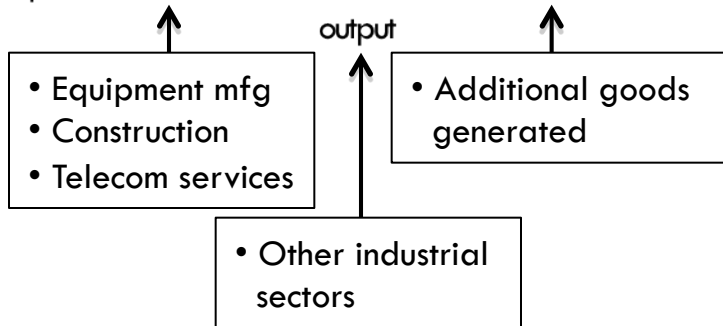
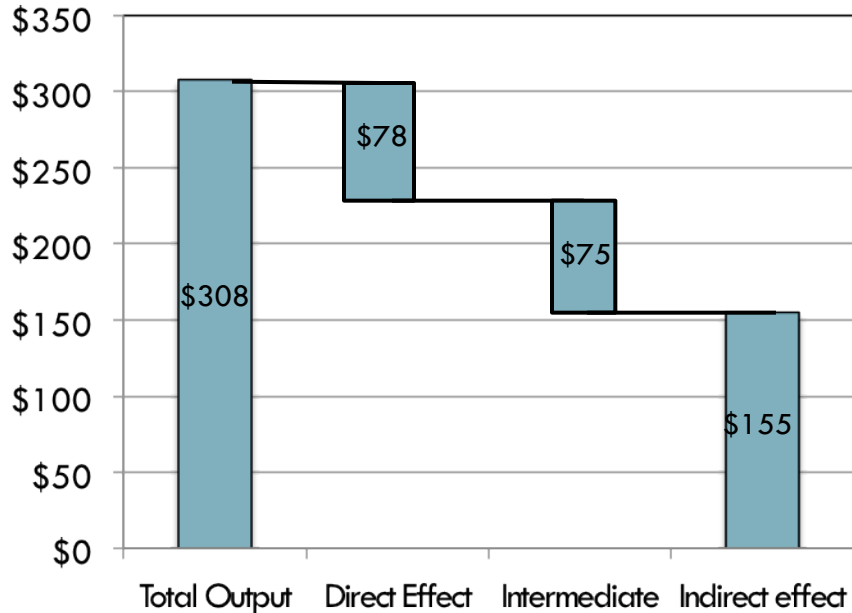
	Year 1 (2014)	Year 2 (2015)	Total
Investment Decrease	57.32	96.46	153.79
Future estimated Investment (after exemption repeal)	611.29	572.14	1,183.42
Investment focused on equipment (66% of total investment)	407.52	381.42	788.95
State revenue generated for elimination of sales tax exemption (rate: 7.66%)	\$ 31.22	\$ 29.22	\$ 60.44

Source: TAS analysis

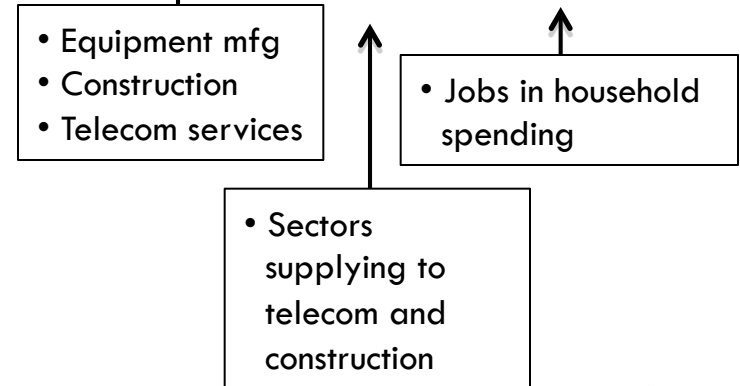
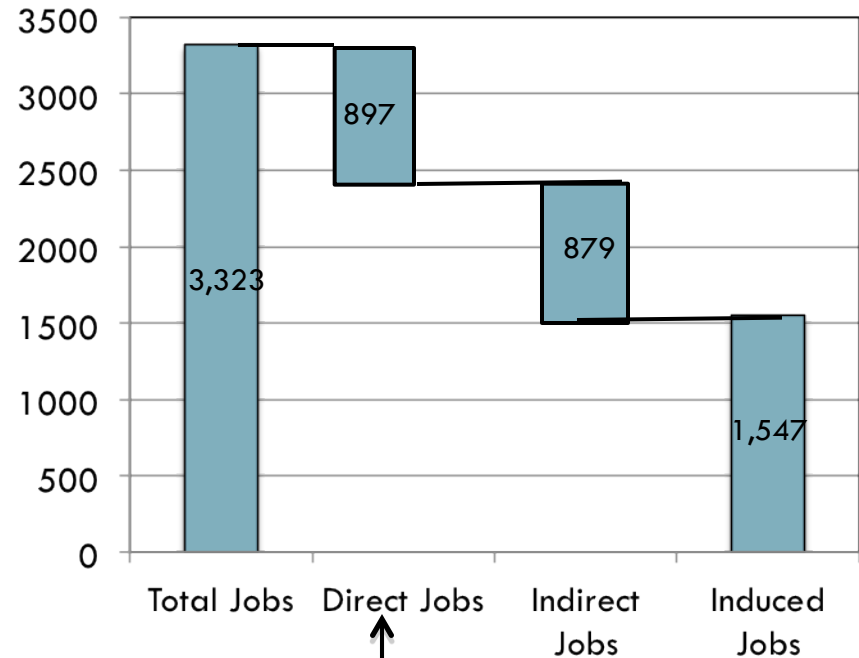
A DECREASE IN INVESTMENT OF \$153 MILLION OVER TWO YEARS WOULD RESULT IN A DECREASE OF \$308 MILLION IN GDP AND 3,323 JOBS

MINNESOTA: ECONOMIC IMPACT OF REPEAL OF SALES TAX EXEMPTION

OUTPUT: \$ 308 million



EMPLOYMENT: 3,323 jobs



Source: US Bureau of Economic Research; TAS analysis

ADDITIONALLY, DUE TO THE SPILLOVER EFFECTS OF TELECOMMUNICATIONS, THE NEGATIVE IMPACT ON THE ECONOMY COULD BE LARGER

- Research on the economic impact of the telecommunications deployment has shown that the benefits associated with communications networks are broadly distributed across the many businesses, governments, and non-profits that use information technology and communication services
- Therefore, capital investments made by communications companies improve infrastructure that benefits the entire economy, not just the companies making the investments
- Consequently, negative impact of decreasing investment could extend beyond the direct effects
- Models of economic impact estimate that a reduction in investment caused by a repeal of the sales tax exemption could reduce \$ 722 million in the State GDP over the long run

A SURVEY OF TELECOMMUNICATIONS COMPANIES OPERATING IN THE STATE INDICATED THAT 40% OF PROVIDERS WOULD REDUCE THEIR INVESTMENT IN 2014 UNDER THE CURRENT REGIME

MINNESOTA OPERATORS SURVEY

Are there planned deployment projects of broadband that you will consider cancelling or delaying as a result of the repeal of sales tax exemption?

Continued Repeal	Number of responses
Cancel or delay	17

How much more would you have been invested if the sales tax exemption had been extended?

Continued exemption	Number of responses
No change	14
Increase marginally	7
Increase >15%	7

What would have happened if the Legislature had expanded the sales tax beyond electronics to include any capital expenditures?

Exemption expanded	Number of responses
No change	12
Increase marginally	3
Increase >15%	5

Source: TAS analysis

IN CONCLUSION, THE REPEAL OF THE SALES AND USE TAX EXEMPTION ON TELECOMMUNICATIONS EQUIPMENT IS DETRIMENTAL TO THE ECONOMY OF MINNESOTA

- The telecommunications industry has made substantial investments in Minnesota reaching \$ 5.167 billion, between 2006 and 2012
- This investment contributed to the support of 112,239 jobs/year and generated US\$ 10.386 billion in output
- The repeal of the sales tax exemption would trigger a decrease in investment amounting to \$57 million (or a 8.53% decrease of an investment base of \$668.61 million) in Year 1 and \$ 96 million in Year 2
- Given the short term multiplying impact resulting from network deployment, a \$ 153 million reduction in spending over two years would trigger a reduction of 3,323 jobs and \$308 million in GDP
- Beyond this direct effect, econometric modeling indicates that eliminating the sales and use tax exemption on communications infrastructure would indirectly destroy over \$722 million in economic activity over the long run
- In the context of a recovering economy, which continues to exhibit significant duality between urban and rural locations, any policy initiative that has the potential to alter the rate of communications investment could have detrimental effects
- Consistent with the recommendations of the Governor's Broadband Task Force, the repeal should be reconsidered to allow communications service providers to continue playing a critical role in the economic recovery of the state

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