

REPAIR MINNESOTA SUMMARY

Minnesota’s infrastructure systems are in dire need of repair. Our state’s roads and bridges, water, waste water, transit, energy, and communication systems need increased investment to become efficient, safe, and productive for Minnesotans.

Investments to repair infrastructure in Minnesota could create or sustain more than **114,000 jobs** each year throughout the economy

Repairing Minnesota will create good jobs, make our systems more efficient and less polluting, and safeguard communities from the impact of climate change, like severe weather such as floods and droughts. The numbers below represent economy-wide jobs created and maintained by investment in infrastructure. These estimates include:

- The number of direct jobs from sectors impacted, for example construction laborers, equipment operators, and maintenance workers.
- The number of indirect jobs from the industries that service those sectors and supply chain, including the manufacturing of materials, components, and equipment.
- The number of induced jobs supported as those workers buy goods and services, including increased demand for retail, housing, and financial services.

REPAIRING MINNESOTA: A JOB CREATION OPPORTUNITY	
Roads and Bridges	Investment in roads and bridges at \$1.5 billion per year over the next 20 years would create or sustain an estimated 41,700 jobs throughout the economy each year ¹
Rail	Investment of between \$310 million and \$475 million a year over the next 20 years would create or sustain an estimated 6,200 to 9,500 jobs throughout the economy each year ²
Transit	Investment in transit at \$1.05 billion a year in the metro area over the next 20 years would create or sustain an estimated 37,910 jobs throughout the economy each year Investment at \$150 million a year for Greater Minnesota over the next 20 years would create or sustain an estimated 5,410 jobs throughout the economy each year ³
Waste Water	Investment of \$180 million a year in waste water infrastructure over the next 20 years would create or sustain an estimated 3,600 jobs throughout the economy each year ⁴
Drinking Water	Investment of \$368 million a year in rehabilitating and replacing drinking water over the next 20 years would create or sustain an estimated 7,360 jobs throughout the economy each year ⁵
Electricity	Investment of \$400 million per year on electricity infrastructure in Minnesota over the span of five years is creating or sustaining an estimated 5,200 jobs throughout the economy each year ⁶
Natural Gas	Investment to replace the 43 miles of old cast and wrought iron natural gas pipelines would create or sustain an estimated 490 jobs throughout the economy ⁷
Smart Grid	Investing \$140 million per year in a smart grid advanced metering infrastructure build out for 5 ½ years would create or sustain an estimated 3,370 jobs each year ⁸

For more information, see the full report at www.bluegreenalliance.org/repairmn

ENDNOTES

- Roads and Bridges number calculated using jobs number from the Federal Highway Administration 27,800 jobs/\$1 billion highway investment (Levine 2009, p. 7) and investment number \$30 billion; level of projected need outlined in the Minnesota Department of Transportation (MnDOT) 20-Year State Highway Investment Plan (MnSHIP) (MnDOT 2013, p. ES-11), annualized over 20 years.
- Rail number calculated using jobs number from Gauging Growth 20,000 jobs per \$1 billion invested in rail (McCulloch, Pollack, & Van Gilder 2011, p. 7) and investment numbers \$6.2 billion to \$9.5 billion from MnDOT's Minnesota Comprehensive Statewide Freight and Passenger Rail Plan (MnDOT 2010, p. ES-5), annualized over 20 years.
- Transit numbers calculated using jobs number from American Public Transportation Association: 36,108 jobs per \$1 billion investment in public transportation (Weisbrod & Reno 2009, p. 28) and investment numbers from MnDOT's Study of Long-Range Funding Solutions: \$21 billion in the metro and \$3 billion in Greater Minnesota (MnDOT 2009, p. 6-7), annualized over 20 years.
- Waste water number calculated using jobs number from Clean Water Council: 20,000 jobs per \$1 billion (Clean Water Council 2009, p. 1:6) and investment number \$3.6 billion from projects identified by the Minnesota Pollution Control Agency (Anderson 2012, p. 5), annualized over 20 years.
- Drinking Water number calculated using same jobs number from above (see note 4) and investment number \$7.36 billion from the U.S. Environmental Protection Agency (U.S. EPA 2013, p. 18), annualized over 20 years.
- Electricity number calculated using Working group for Investment in Reliable and Economic electric Systems (WIRES) jobs number 13,000 full-time-equivalent ("FTE") years of employment per \$1 billion of U.S. transmission investment (Pfeifenberger & Hou 2011, p. ii) and investment number \$2 billion for the CAPX2020 transmission project (CAPX2020 2011) annualized over 5 years.
- Natural gas number calculated using 43 miles of cast/wrought iron pipeline identified by the Pipeline and Hazardous Materials Safety Administration (PHMSA 2013) and Market Sizing- Natural Gas Distribution Excel spreadsheet (McCulloch 2013).
- Smart Grid number calculated using jobs number from The Information Technology & Innovation Foundation 23,900 jobs/\$1 billion smart grid investment (Atkinson et al. 2009, p. 2) and average smart grid project investment \$775 million annualized over 5.5 years from p. 13 of the same report.

SOURCES

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The BlueGreen Alliance is a national, strategic partnership between labor unions and environmental organizations dedicated to expanding the number and quality of jobs in the green economy.

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