

## Repair Washington

Many sectors of Washington’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 the people of Washington.

Repairing Washington 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.

Investments to repair infrastructure in WA could create or sustain more than **77,900 jobs** each year throughout the economy.

REPAIRING WASHINGTON: A JOB CREATION OPPORTUNITY	
<b>Roads and Bridges</b>	Investing \$1.76 billion per year in roads and bridges over the next 20 years would create or sustain close to an estimated <b>48,790 jobs</b> throughout the economy each year. <sup>i</sup>
<b>Rail</b>	Investing \$97 million per year in freight rail over the next 20 years would create or sustain an estimated <b>1,930 jobs</b> throughout the economy. <sup>ii</sup>
<b>Transit</b>	Investing \$254 million a year in transit preservation and expansion over the next 20 years would create or sustain an estimated <b>9,180 jobs</b> throughout the economy each year. <sup>iii</sup>
<b>Waste Water</b>	Investing \$263 million a year in waste water infrastructure over the next 20 years would create or sustain an estimated <b>5,260 jobs</b> throughout the economy each year. <sup>iv</sup>
<b>Drinking Water</b>	Investing \$476 million a year in rehabilitating and replacing drinking water infrastructure over the next 20 years would create or sustain an estimated <b>9,500 jobs</b> throughout the economy each year. <sup>v</sup>
<b>Electricity</b>	Investing \$90 million on the Central Ferry-Lower Monumental transmission line will create or sustain an estimated <b>1,170 jobs</b> throughout the economy. <sup>vi</sup>
<b>Natural Gas</b>	Replacing the more than 522 miles of “elevated risk” natural gas pipelines with protected steel pipes would create or sustain an estimated <b>886 jobs</b> throughout the economy. <sup>vii</sup>
<b>Smart Grid</b>	Investing \$140 million in smart grid advanced metering infrastructure build out per year for 5 ½ years would create or sustain an estimated <b>3,300 jobs</b> throughout the economy each year. <sup>viii</sup>

The BlueGreen Alliance is a national partnership of labor unions and environmental organizations. This report provides solid evidence that investing in our public infrastructure has many benefits. It should be noted that this does not constitute an endorsement of any individual project by partners of the Washington BlueGreen Alliance.

For more information, see the full report at [www.bluegreenalliance.org/repairwa](http://www.bluegreenalliance.org/repairwa)

## ENDNOTES

- i. Roads and Bridges number calculated using jobs number from the Federal Highway Administration 27,800 jobs/\$1B highway investment (Levine 2009, p. 7) and investment number \$35.1 billion from the Washington State Transportation Commission (WSTC 2010, p. 6), annualized over 20 years.
- ii. 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 number \$6.75 billion from the Washington State Transportation Commission (WSTC 2010, p. 6), annualized over 20 years.
- iii. Transit number 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 number \$5.1 billion from the Washington State Transportation Commission (WSTC 2010, p. 6), annualized over 20 years.
- iv. Waste water number calculated using jobs number from Clean Water Council: 20,000 jobs per \$1B (Clean Water Council 2009, p. 1:6) and investment number \$5.26 billion from U.S. EPA (U.S EPA 2013b), annualized over 20 years.
- v. Drinking Water number calculated using same jobs number from above (see note iv) and investment number \$9.5 billion from the U.S. Environmental Protection Agency (U.S. EPA 2013, p. 18), annualized over 20 years.
- vi. 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 \$90 million for the Central Ferry-Lower Monumental transmission line (WECC 2011).
- vii. Natural gas number calculated using 522 miles of pipeline determined to be “elevated risk” (Nemec 2013) and *Market Sizing- Natural Gas Distribution* Excel spreadsheet (McCulloch 2014).
- viii. Smart Grid number calculated using jobs number from The Information Technology & Innovation Foundation 23,900 jobs/\$1B 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.
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## SOURCES

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2. Clean Water Council. 2009. *Sudden Impact: An Assessment of Short-Term Economic Impacts on Water and Wastewater Construction Projects in the United States*. Arlington, VA: Clean Water Council. <http://www.trenchlessonline.com/pdfs/webinar-sudden-impact.pdf>.
3. Levine, Linda. 2009. *Job Loss and Infrastructure Job Creation During the Recession*. Washington, DC: CRS (Congressional Research Service). <http://fpc.state.gov/documents/organization/122480.pdf>.
4. McCulloch, Rob. 2014. *Market Sizing- Natural Gas Distribution*. Microsoft Excel. Washington, DC: BlueGreen Alliance.



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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