

Impact of EPA 2010 Ozone NAAQS Proposal on North Carolina's Economy

In January 2010, the Environmental Protection Agency (EPA) proposed a rule to lower the primary National Ambient Air Quality Standard (NAAQS) for ozone from the current 2008 standard of 75 parts per billion (ppb) to a level between 60 and 70 ppb. Under the Clean Air Act, areas that do not meet the new standard would then be considered “non-attainment”. A non-attainment designation can hinder economic development and limit business expansion in an already struggling economy. EPA cites no new health studies as the reason for lowering the standard, but believes the prior administration did not go far enough in 2008 when the standard was lowered from 80 ppb to 75 ppb. NERA Economic Consulting and Sierra Research conducted a [study](#)ⁱ on the estimated economic impact and found EPA’s proposal would negatively impact North Carolina’s economy.

A 60 ppb standard in 2020 would:

- Reduce jobs by 115,000, a 2.5 percent decrease relative to baseline;
- Reduce gross regional product by \$10.9 billion;
- Reduce disposable income by \$5.1 billion; and
- Reduce state tax revenue by \$1.0 billion.

The table below summarizes the estimated economic impacts in North Carolina of a 60 ppb ozone standard in 2020, 2025 and 2030 relative to baseline projections.

Baseline	Units	2020	2025	2030	
Employment	Million Jobs	4.5	4.6	4.8	
Gross regional product	Billion 2010\$	\$431	\$484	\$551	
Disposable income	Billion 2010\$	\$404	\$451	\$512	
State tax revenue	Billion 2010\$	\$70	\$77	\$85	

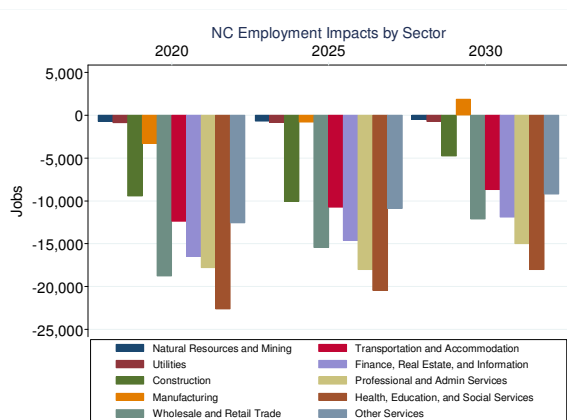
Change	Units	2020	2025	2030	PV
Employment	Jobs	-115,000	-102,000	-79,000	-1,111,000*
Gross regional product	Billion 2010\$	-\$10.9	-\$10.3	-\$8.7	-\$82.7
Disposable income	Billion 2010\$	-\$5.1	-\$5.7	-\$4.8	-\$43.7
State tax revenue	Billion 2010\$	-\$1.0	-\$0.4	-\$0.1	-\$4.1

% Change	Units	2020	2025	2030	
Employment	%	-2.5%	-2.2%	-1.6%	
Gross regional product	%	-2.5%	-2.1%	-1.6%	
Disposable income	%	-1.3%	-1.3%	-0.9%	
State tax revenue	%	-1.4%	-0.5%	-0.2%	

Note: Present values (“PV”) are sums of annual impacts from 2020 to 2030 discounted to 2020 using a real annual discount rate of 7 percent.
 (*) The PV for employment impacts is an undiscounted sum of person-years.

Employment Impacts by Sector

The figure to the right shows estimated changes in North Carolina employment by sector in 2020, 2025, and 2030 due to a potential 60 ppb ozone standard. The positive estimated impacts for manufacturing reflect potential production in North Carolina of low-emission technologies.



Note: The change in jobs shown for a given year is the total difference in jobs relative to the baseline in the given year. Source: NERA

ⁱ NERA Economic Consulting and Sierra Research (2010). Estimated Economic Impacts on North Carolina of EPA 2010 Ozone Proposal. Available at http://www.ncenergyforum.com/uploads/files/16/OzoneEconomicsStudy_NC.pdf