

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 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” (NA). An NA 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. EPA’s proposal would have the following effects in New Hampshire:

- Rockingham, Hillsborough, and Sullivan counties would exceed the new standard ;
- New Hampshire businesses and individuals would incur control costs of up to \$2 million.

### **Impacts on Economic Development**

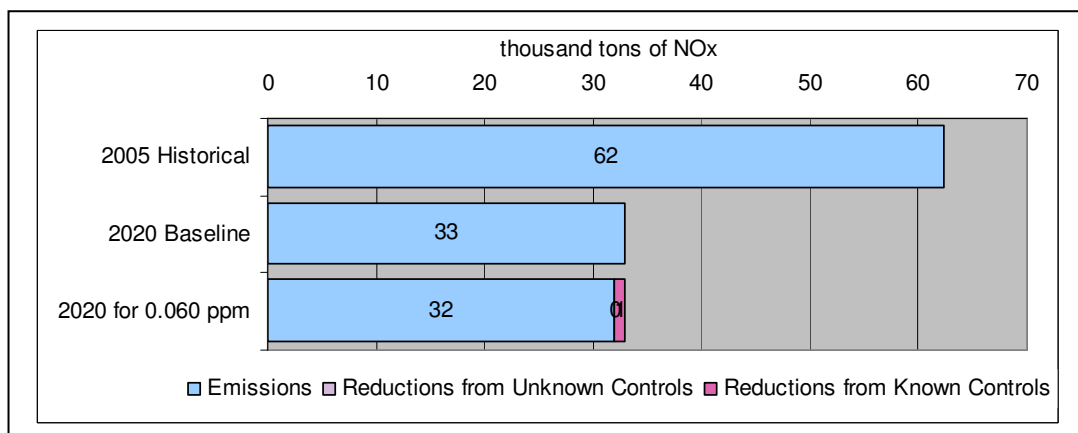
Consequences of ozone non-attainment for Manchester and other urban areas in New Hampshire can include:

- Restrictive permit requirements that discourage companies from building major manufacturing facilities in the area. These requirements include offsetting new emissions and installing the maximum emission reduction technology without consideration of costs.
- Loss of federal funding for highway and transit projects unless the state demonstrates that the projects will not increase emissions.
- Costly compliance that will make New Hampshire businesses less competitive and thus lead to direct employment losses—resulting in larger overall losses through multiplier effects.

A more detailed discussion on the detrimental impact to New Hampshire’s economy can be found in “[Impact of EPA 2010 Ozone NAAQS Proposal on Hew Hampshire’s Economy](#)”<sup>1</sup>

### **Statewide Reductions**

The figure below shows NO<sub>x</sub> emissions in New Hampshire in 2005, in 2020 under baseline conditions, and in 2020 for a new 60 ppb standard. The standard would require NO<sub>x</sub> emissions in 2020 to be 3 percent below their projected baseline level and 49 percent below their 2005 level. Known controls achieve 100 percent of the necessary reduction from the 2020 baseline.



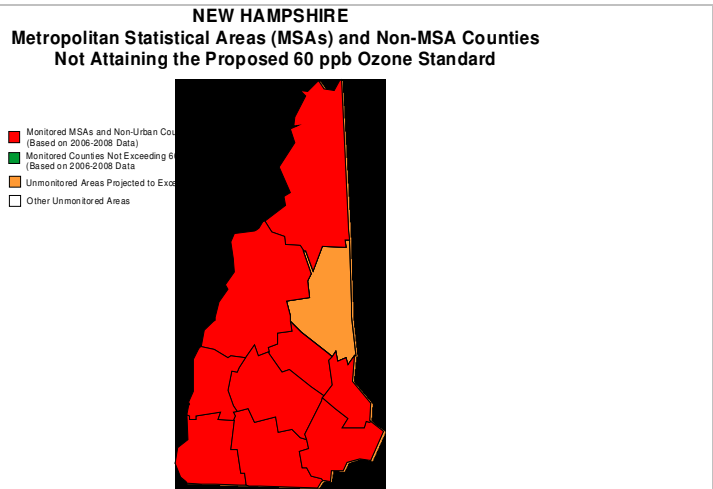
Note: Known controls include EPA’s Modeled Control Strategy and supplemental controls. Sources: EPA data in ozone docket

<sup>1</sup> Impact of EPA 2010 Ozone NAAQS Proposal on New Hampshire’s Economy (2010). Available from [http://www.nhenergyforum.com/uploads/files/14/OzoneEconomicImpact\\_NH.pdf](http://www.nhenergyforum.com/uploads/files/14/OzoneEconomicImpact_NH.pdf).

**State Impact**

The map at right shows projected NA counties, shaded in ■, under a new ozone standard of 60 ppb based on EPA data. Because data are not available for many counties in ■, the actual number of NA counties could be substantially larger than those identified by EPA.

Source: EPA, *Final Ozone NAAQS Regulatory Impact Analysis* (2008), Table 3a.18



**NOx Reductions from Unknown Controls**

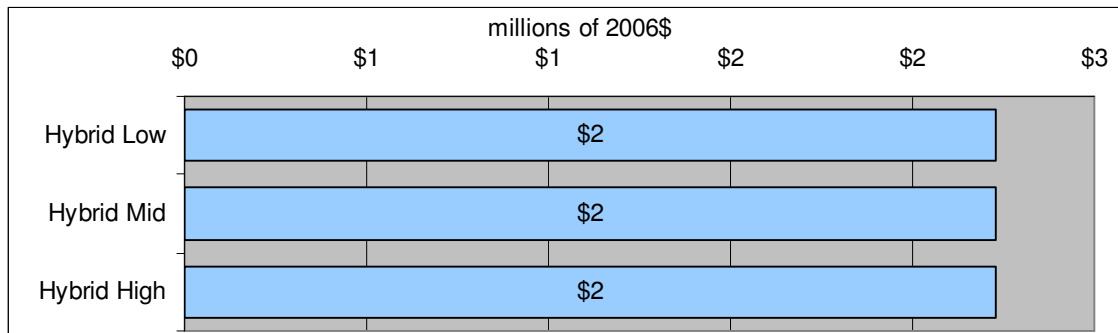
The map at right shows that NOx reductions from unknown controls would be required in no New Hampshire counties to meet a new 60 ppb standard. Counties in western New Hampshire would need to reduce NOx emissions N/A percent through unknown controls relative to their emissions in 2020 after application of known controls in the Modeled Control Strategy.

Source: EPA, *Supplemental Ozone NAAQS Regulatory Impact Analysis* (2010), Figure S2.2



**Statewide Control Costs**

The figure below shows ranges of EPA’s estimated emission control costs for New Hampshire in 2020 under an ozone standard of 60 ppb (assuming these controls can be achieved). The estimates assume that unknown controls become more expensive as the level of necessary emission control increases. As noted by EPA, this assumption aligns with the expectation that the average costs of unknown costs should be highest in areas relying most heavily on unknown controls relative to known controls. The cost estimates range from \$2 million to \$2million.



Notes: Cost estimates reflect known and unknown controls for NO<sub>x</sub> emissions; Hybrid Low, Mid, and High refer to alternative techniques for estimating the costs of unknown controls assuming marginal costs increase linearly from \$15,000/ton with low, mid, and high slopes  
 Sources: EPA data in ozone docket