GRINDING TO A HALT

POTENTIAL TRANSPORTATION IMPACTS OF EPA OZONE REGULATIONS

DENVER REGION
**What is Ozone?**

Ozone is a gas composed of oxygen molecules that occurs naturally in the atmosphere and is formed after combustion in sources such as vehicle engines or manufacturing and industrial activities. Since 1980, the United States has cut ozone related emissions in half. In 2008, EPA tightened ozone standards from 80 to 75 parts per billion (ppb)—a level that some areas of the country (including Denver) have yet to meet.

**What’s on the Table Now, and What Does It Mean?**

Now, the Obama Administration is proposing a new standard of 65 to 70 parts per billion. 331 counties will be in violation of the new standard, and another 227 in compliance with the 2008 standard will now once again find themselves in trouble. These areas will face red tape and regulatory restrictions that cripple business investment and job growth. In Colorado alone, the rule is projected to reduce employment by 11,000 jobs annually, and decrease average household incomes by $430.

**Can’t These Areas Find Ways to Comply?**

It will be very difficult to meet the new standards. Cost-effective solutions to achieve compliance have largely been exhausted, and in many cases the technology simply doesn’t exist to meet the new standards. EPA itself admits that in order to comply with a 65 ppb standard, 40 percent of reductions must come from “unknown controls” that don’t currently exist.

**EPA’s proposed level is so stringent that even the Grand Canyon, Yellowstone, and Yosemite National Parks will likely violate the new regulations.**

**Don’t Just Take Our Word for It**

“Unfortunately, the Proposed Rule seeks to impose new regulatory standards at or below background ozone levels for many western air quality control regions, meaning that no amount of technological innovation (or costs expended) will allow those regions to reach attainment status.”

— States of ND, AL, IN, WY, MS, and WV

**What Happens if A Region Cannot Comply?**

The federal government will impose penalties. In addition to harsh regulatory restrictions that serve as a handcuff on economic development, the Clean Air Act authorizes EPA to withhold transportation funding for projects of all types—from highways to mass transit. Since Metropolitan regions are reliant on federal funding for many critical projects, numerous improvements would be at risk.

Adding insult to injury, construction delays resulting from withheld transportation funding will only worsen traffic congestion, thereby increasing ozone-forming emissions. State and local governments, which already devote scarce resources to prepare plans that comply with regulations, have expressed serious concerns about the additional burdens imposed by this new ozone rule.

**Regional Snapshot and Current Ozone Compliance Challenges**

**Population and economy:** Since 1980, population in the Denver metropolitan region has doubled from 1.5 million to over 3 million people. Steady growth is expected to continue, and the region is projected to add another million residents over the next 25 years, further increasing strains on the region’s transportation and exacerbating ozone compliance challenges.

**Transportation:** Because population and vehicle traffic have increased at rates that greatly exceed growth in highway capacity, the Denver metro area now suffers from stifling traffic congestion. The Denver Regional Council of Governments reports that 386 miles of freeways and arterial roads are considered severely congested—a problem that will only continue to worsen in the absence of expanded transportation capacity.1

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1 Denver Regional Council of Governments Regional Transportation Plan February 2015.

2 Texas Transportation Institute

*Cover image: Ron Reiring, Flickr creative commons*
**Ozone levels:** Despite major challenges presented by high levels of background ozone and rapid growth in population and economic activity in recent decades, state and local air quality officials have successfully achieved gradual declines in ozone levels in the Denver metro region. Current ozone design values (i.e. levels used for regulatory decision-making) in Denver are 82 parts per billion (ppb), which exceed the 2008 standard of 75 ppb as well as EPA’s proposed new standard of 65-70 ppb. As a result, EPA recently declared the region to be in “moderate nonattainment” with the current standard, a designation that triggers significant restrictions on existing and potential new sources of emissions.

![Denver Region Ozone Levels](image)

**Potentially Impacted Transportation Project: I-70 East Reconstruction and Expansion**

An example of the type of project that could be impacted by EPA’s ozone rule is the long awaited improvements to I-70. Beginning in 2017, the Colorado Department of Transportation will undertake the largest project in its history: reconstruction and expansion of the Interstate 70 corridor through Denver and Aurora between I-25 and Tower Road. The $1.8 billion project will widen lanes, replace the aging I-70 viaduct and add a tolled express lane in each direction between I-25 and I-225 to address congestion. The Colorado Department of Transportation (CDOT) also plans to lower the interstate along this segment and build a 4-acre lid over the lowered interstate.

According to CDOT, if the project does not move forward, it will take about one hour to travel between I-25 and Tower Road on I-70 in the future. After reconstruction, travel time using new managed lanes will shave 30-40 minutes off of the trip, illustrating the project’s importance to residents and commerce throughout the region.

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1. Colorado Department of Transportation

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"Coloradans care deeply about the environment. After the great progress we have made on air quality, our state should be praised, not punished. This ozone proposal out of Washington, D.C. scares my constituents, because it could hamstring our regional economy and cost jobs. We have worked so hard to bring manufacturing jobs to Colorado, and by moving the goal posts on ozone, the EPA is going to chase manufacturing jobs away from our state. This plan could also gum up the approval process for badly needed road and transportation investments, which will make our traffic worse, and make it much harder to attract new industries, grow existing businesses, and strengthen Colorado’s middle class.”


[Source: Center for Regulatory Solutions]
Status and Outlook:
This project has been in development since 2003. The final Environmental Impact Statement for this project is expected to be completed in early 2016, after which construction would begin in 2017 and proceed through at least 2021. Funding for the I-70 project is expected to come from a combination of federal, state, local and potentially even private sources, and construction will be phased as funding becomes available.

Potential Ozone Regulation Impacts:
If the Denver metro region is unable to demonstrate “transportation conformity” compliance with EPA’s proposed ozone standard the I-70 East project would be put at risk of a cutoff in federal funding and a freeze on federal permits and approvals that are necessary for the project to proceed through planning, development, and construction phases. EPA penalties could impact other capacity-expanding highway projects as well. Such penalties could have a ripple effect, as delays and inflation result in increased project costs, and state and local governments divert resources to avoid and address potential violations. Compliance measures necessary to avoid transportation penalties may also result in impacts to stationary sources of emissions, such as industrial facilities or power plants.

Where Can I Learn More?
A complete description of compliance challenges and threats to transportation funding presented by EPA ozone regulations are available at www.energyxxi.org/grindingtoahalt

TAKE ACTION:
Visit www.energyxxi.org/grindingtoahalt to learn more and help protect critical transportation funding.

“Colorado citizens work hard to not only be good corporate citizens, but we also work hard to be responsible stewards of the land. Colorado’s continued economic promise is a bright spot in the nation’s economy, in addition to being a good example of existing environmental standards. Thus CACI joins with many other voices in asking the EPA to keep ozone standards at their current level (75ppb). We want Colorado to be the best state in the nation in which to do business, but the EPAs onerous regulations will take us in the opposite direction.”
– Chuck Berry, Colorado Association of Commerce and Industry

“A standard of 65 ppb, for example, would amount to a seriously costly and complex challenge for Colorado, and the Front Range in particular, and be out of reach for the foreseeable future.”
– Denver Post editorial

“The Denver Post”

“INSTITUTE FOR 21ST CENTURY ENERGY
U.S. CHAMBER OF COMMERCE”