

GREENHOUSE

TO A HEALTHY

## POTENTIAL TRANSPORTATION IMPACTS OF EPA OZONE REGULATIONS

DALLAS-FORT WORTH REGION





## What is Ozone?

Ozone is a gas comprised of oxygen molecules that occurs naturally in the atmosphere and is formed after combustion in sources such as vehicle engines, 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 Dallas-Fort Worth) have yet to meet.

## What's on the Table Now, and What Does It Mean?

In October 2015, the Obama Administration finalized a new rule tightening the standard to 70 ppb. As a result, well over 200 counties nationwide are expected to be in violation of the new regulation. These areas will face red tape and regulatory restrictions that cripple business investment and job growth. Texas officials and businesses have warned that the rule will force investment capital and the jobs that come with it elsewhere, effectively forming "No Growth Zones" throughout the state.

## 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 70 ppb standard, 23 percent of reductions must come from "unknown controls" that don't currently exist.

EPA's final standard is so stringent that many rural areas far from population centers and economic activity will violate the new regulation. In fact, nine different national parks-including Rocky Mountain, Sequoia, and Yosemite-measured ozone levels in 2015 that exceed EPA's tightened standard.

*"In addition to federal control strategies currently in place in the DFW nonattainment area, both State and local efforts have led to significant decreases in recorded ozone levels; however, [these] strategies are not sufficient to reach the proposed 65 – 70 ppb range. Due to incoming background levels estimated to be as high as 55 ppb during the peak ozone season...locally enforced control strategies will have significantly less impact in keeping the DFW area air quality monitors' limits below the standard."*

– Mike Cantrell, Chair, Regional Transportation Council,  
North Central Texas Council of Governments

## 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. Locally-funded projects could be impacted as well, because EPA's penalties can include a freeze on all federal permits and approvals necessary for projects to proceed.

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:** The Dallas-Fort Worth metropolitan area continues to be one of the most rapidly growing regions in the country. Since the 1970s, the region has grown by more than 150 percent to a population nearing 7 million people, making it the fourth-largest metropolitan area in the country. With its favorable economic climate, steady growth is expected to continue, as the region's population is projected to approach 10 million by 2035. This growth will further increase strains on the region's transportation system and exacerbate ozone compliance challenges.

**Transportation:** Because population and vehicle traffic have increased at rates that greatly exceed growth in highway capacity, the Dallas-Fort Worth area now suffers from stifling traffic congestion. The North Central Texas Council of Governments has identified \$95 billion of highway and transit projects necessary to alleviate the worst of the region's congestion problems, including \$40 billion for construction and expansion of freeways to accommodate additional vehicle capacity.<sup>1</sup>

Federal funding and permitting of these projects will be placed at risk if the region is unable to demonstrate that they will not contribute to violations of EPA's tightened standard.

<sup>1</sup> <http://www.nctcog.org/trans/mtp/2035/documents/2014ExecutiveSummary.pdf>  
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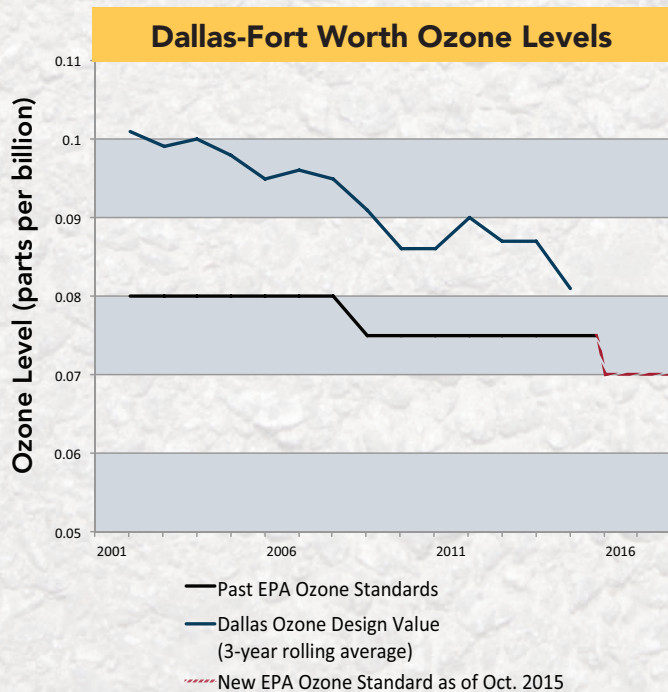


## Dallas-Fort Worth Traffic By the Numbers<sup>2</sup>

<b>50%</b>	Increase in traffic volume since 1995
<b>53</b>	Average commuter hours lost each year due to traffic congestion
<b>22</b>	Average gallons of fuel wasted in traffic delays per consumer
<b>\$1,185</b>	Annual congestion costs per commuter in wasted fuel and time
<b>20<sup>th</sup></b>	National Rank, Commuter Stress Index

**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 Dallas-Fort Worth region.

Current ozone design values (i.e. levels used for regulatory decision-making) in Dallas-Fort Worth are 81 parts per billion (ppb), which exceed the 2008 standard of 75 ppb as well as EPA's new standard of 70 ppb. As a result, EPA has 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. State and local officials have indicated that meeting EPA's tightened standard will be extremely difficult if not impossible for certain locations in Texas, potentially triggering harsh penalties on transportation projects.



## Potentially Impacted Transportation Project: I-820 Loop Southeast Corridor Reconstruction

An example of the type of project that could be impacted by EPA's ozone rule is the planned reconstruction and expansion of the I-820 Loop Southeast Corridor between Fort Worth and Arlington. One of the most congested roads in North Texas, the I-820 Loop around Fort Worth is currently undergoing a massive reconstruction effort to add additional capacity and improve safety. The Southeast corridor portion of the effort includes six different segments that will be constructed in phases. Upon completion, key stretches of the freeway will be widened from 4 to 8 lanes and new toll-managed and HOV lanes on I-20, I-820, and U.S. 287 will allow express connections through the interchange.<sup>3</sup>

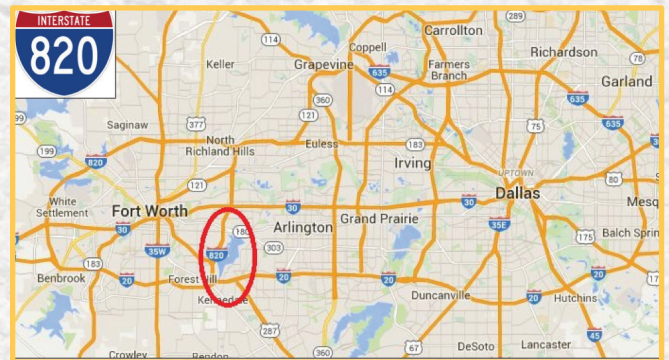


Image: I-820 Southeast Corridor Reconstruction Project Area

The project's estimated cost is \$838 million, which will be provided through federal, state, and local funding. Construction is expected to begin in approximately 2019-2020, and the individual project segments are scheduled to become operational between 2019 and 2028.

*"Highway sanctions and transportation conformity lapses jeopardize the ability to plan and ultimately deliver transportation projects on time and result in infrastructure delays. Such delays may impact the safety of the traveling public, waste funds, and contribute to congestion (thereby increasing travel time and wasting fuel). It is not clear how these issues were considered when the CAA was amended, but fast forward 25 years and transportation funding cannot keep up with maintenance and demand, making congestion much worse."*

— Texas Department of Transportation

<sup>2</sup> Texas Transportation Institute

<sup>3</sup> <http://www.nctcog.org/trans/mtp/2035/documents/2014AmendmentHighwayFactSheets.pdf>



If the Dallas-Fort Worth region is unable to demonstrate "transportation conformity" compliance with EPA's tightened ozone standard, the I-820 Loop reconstruction 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 the planning, development, and construction phases. Numerous other local highway and transit projects would be similarly impacted by EPA noncompliance penalties. 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.




In order to avoid or resolve a lapse, transportation planners have few options. Advanced vehicle and fuel technologies have been the only way the region has been able to demonstrate compliance to date, but those avenues have largely been exhausted. Even if the region were to redirect all highway capacity expansion funds to non-highway projects, it may still not be able to meet the stringent transportation conformity requirements. Therefore, compliance measures necessary to avoid conformity lapse penalties could result in more stringent requirements on stationary sources of emissions, such as industrial facilities or power plants.


*"EPA's proposed stringent ozone standards could limit business expansion in nearly every populated region of the United States and impair the ability of U.S. companies to create new jobs. EPA's proposed range would immediately add red tape to companies seeking to grow even in areas that can attain those standards. The Clean Air Act carries even stiffer consequences for nonattainment areas, directly impacting the economic vitality of local communities and making it difficult to attract and develop business. Increased costs associated with restrictive and expensive permit requirements would likely deter companies from siting new facilities in a nonattainment area. Making America a less attractive place to do business in this way only increases the risks that domestic businesses will move investments and job opportunities overseas."*


– Texas Association of Business

### 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](http://www.energyxxi.org/grindingtoahalt)**

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