On behalf of the Colorado Association of Commerce and Industry (CACI), we are writing today concerning ozone regulations proposed by the Environmental Protection Agency (EPA). This proposal conveniently relies upon a small subset of scientific research that the larger body of scientific evidence does not support. Therefore, the EPA has not demonstrated a health-based need for this regulation. In addition, the EPA’s proposal threatens regulatory consistency by accelerating compliance timelines and jeopardizing the economic well-being of workers and employers, housing providers and businesses. Through the experience of our members, we can assure you the hardships of this regulation would have real and immediate economic effects, particularly when the EPA’s suggested health benefits do not justify the egregious costs.

Multiple studies have shown that no matter whether the proposed rule is at 60ppb, 65 ppb, or 70ppb: the economic ripple effects of this regulatory burden will be felt by all consumers and businesses. In some areas, studies have shown ozone reductions to the levels suggested could actually have negative health benefits. This one-size-fits-all approach by the EPA is not appropriate for application in Colorado for a number of reasons, the least of which is that the day this rule would take effect, 88 percent of Colorado’s geographic area would immediately be reclassified as being in non-attainment of the standards, resulting in instant and profound impacts for the vast majority of Colorado’s businesses and industries.

EPA Has Not Demonstrated Effectiveness

Ozone Changes For Health Benefits: We agree with the EPA that the NAAQS should protect public health. However, the EPA’s own scientific findings have, at best, shown conflicting or inconclusive results regarding the benefits of proposed ozone levels and, at worst, shown lower ozone levels correlated to higher mortality rates. According to Dr. Honeycutt, Director of the Texas Commission on
Environmental Quality (TCEQ), Toxicology Division, "Either this indicates that lowering the ozone standard defeats its stated purpose of protecting human health, or it indicates that something is wrong with the EPA’s interpretation of the data. Either way, it’s not a good argument for lowering the ozone standard."

Within the draft of the Health Risk and Exposure Assessment (HREA), the EPA refers to “positive results” without indicating how or whether those results are scientifically or statistically significant. Given reliance on only a few conflicting studies, we think the EPA does not have a thorough body of evidence to support its proposed lower standard.

Additionally, we think that the EPA has relied upon assumptions and a select few scientific studies that support a lower ozone standard while ignoring a much larger body of evidence to the contrary. For example, the EPA relied upon results not replicated by any other studies, but the favored numbers are referenced, highlighted and relied upon throughout EPA’s rule package for the basis of the 65ppb - 70ppb proposal, weighting “positive” results more heavily than statistically relevant and conclusive studies.

**Negative Health Effects:** Whether looking at end-points, biological markers, asthma hospitalizations, cardiovascular health or deaths attributable to air particles, Dr. Honeycutt reviewed the science EPA relied upon, in addition to over 90 epidemiology studies, 8 controlled human exposure studies, 11 experimental animal studies and 26 biomarker studies. Among these 135 reviewed studies, there were no consistent findings showing that reducing ozone below current standards would positively affect public health. In fact, the TCEQ found that the economic impacts of job losses on health had almost 40 times greater impact on human health than if ozone levels were decreased by 10ppb. Alcohol mortality, when unemployment increases by just 3 percent, had more than 30 times more impact than 10ppb decrease in ozone.

In fact, the economic stressors of job insecurity, reduced pay, job losses and poverty have very serious and negative health effects on workers as well as their families. Healthy workers are 83 percent more likely to report health problems if they join the ranks of the unemployed, according to a study by Dr. Kate Strully, an assistant professor at the State University of New York at Albany. Previous work by Strully found 80 percent of workers would be diagnosed with a new health problem following lay-offs. A 2006 Yale study found that layoffs more than doubled older workers’ risk of heart attacks and strokes. A 2009 study found that persistent perceived job insecurity may be worse than layoffs on long-term health, actually taking years away from life expectancy. Additionally, reduced parental income and poverty has a far worse effect on children than hunger or lack of health and mental health care because childhood poverty leads to higher adult mortality rates (regardless of eventual adult socioeconomic status) and this effect extends for two generations of families.

The negative economic impact of the proposed ozone rules will have very real effects on public health, as businesses are forced to comply with ozone standards and still find ways to continue operations. If businesses are crushed under regulatory burdens, jobs will become less secure for many workers while businesses and manufacturers will face potential closures and lay-offs. With a lack of evidence supporting greater ozone reductions and data showing laid-off workers are more likely to have fair or poor health, CACI would like to register our unequivocal concern that the EPA’s proposal is based on weak data and this weak data should not be reason enough to put two-thirds of the country into non-attainment. The EPA’s proposal has no demonstrable health benefits, but would have massive economic costs and extensive negative health consequences.

**Effectiveness of Previous Ozone Rules:** The ozone rules imposed in 2008 had barely begun implementation when new rules were suggested by the EPA in 2010. The 2010 rules were put forth well
before the EPA, industry or science community had the opportunity (or capability), to determine the previous rules’ effectiveness, particularly when proper averages use three years of data. The 2010 proposed rules were delayed two years by the Obama Administration due to cost and economic loss concerns. However, two years later the EPA proposed those rules again using the same data from 2010. Notably, the EPA’s 2012 proposed ozone rules were re-released months ago, but the 2008 rules were just finalized three weeks ago, in February 2015.

CACI has previously communicated to EPA Administrator McCarthy, the Region 8 Government Affairs Liaison and the Colorado congressional delegation our support for maintaining ozone requirements at 75ppb via its February 10, 2015, letter. Despite broad-range support for maintaining the current 2008 regulations in effect for just one month, the current EPA-proposed rule has suggested a range of 65ppb - 70ppb. Even more alarming, CACI and its members have heard directly from the EPA Region 8 Director that the EPA is seriously considering an even lower attainment level of 60 ppb for health considerations, despite a large data pool showing a lack of correlation between ozone levels below 75ppb and positive health benefits. Without question, 65ppb and 70ppb attainment levels are unwarranted and would be profoundly detrimental to the Colorado economy. Attainment levels at or near 60ppb would be disastrous and would result in all but two Colorado counties falling out of attainment -- setting our state up for regulation-imposed economic failure.

Looking back, the EPA initially targeted the largest stationary emitters to achieve the most reductions. The power sector alone reduced its NOx emissions by 73 percent from 1990 to 2013. (NAM) However, with the majority of existing coal-fired power plant capacity equipped with some form of NOx controls (NAM) and the expectation that more controls be installed because of other EPA regulations, the opportunity for additional NOx reductions via power plant retrofits is rapidly fading. Through its own analysis, the EPA has stated that in order to achieve a 60 ppb ozone standard, several other sectors, such as manufacturing and agriculture, and commercial and residential buildings will have to pay for controls or replace costly equipment.

These NOx reduction strategies come with very high price tags for individual consumers and businesses across the state. Bringing federal regulation to the micro-level of apartment buildings and commercial businesses, this proposal is going to increase housing and business rent costs across all income levels, particularly as building owners have to pass along compliance burdens. By also targeting aggressive agricultural NOx reductions, the proposal is going to increase the cost of growing, raising and supplying the nation’s food sources by piling on more regulatory compliance burdens.

The implications of the above EPA statements are stark and frankly, unrealistic: the EPA has only identified one-third of possible reduction sources that will be required in order to reach its proposed attainment levels. According to the U.S. Chamber of Commerce, 60 percent of the technologies needed to meet the EPA’s proposed regulation do not exist today. Very simply, this means that developing and implementing the measures and technologies necessary to fully achieve the EPA’s proposed attainment levels would be devastatingly expensive for Colorado’s businesses. The current proposal presents (as an identified attainment solution) the most expensive, most individually intrusive and least attainable options. When new regulations are pushed forward before the previous set are even fully implemented, the EPA has and will create a lose-lose timetable for compliance. We believe regulating without looking at results is presumptive governance, rather than leadership working to effectively partner with businesses and communities for focused results.

It is as true today as it was from 2010-2012: the EPA has still not effectively demonstrated that additional regulatory burdens of ozone reduction are necessary or effective, particularly when the rule’s enormous costs to the economy will translate to job losses, in addition to loss of economic opportunity and loss of per household income. The 2008 rules remain relevant and effective today for maximum
health benefits, and are clearly still being implemented in 20 counties in Colorado, and many other states are still working toward compliance with 75ppb.

**Economic Impact Would Be Devastating**

We are proud to say that Colorado and the rest of the country have seen a 33 percent drop in ozone levels since 1980. That 33 percent drop is a measurable, laudable success. In October, the Colorado Division of Air Quality showed downward trends in all of the state’s monitor sites. Our reduction in ozone levels represents businesses becoming more efficient, investing in better technologies and being good stewards of the environment. In fact, CACI members have a lot of experience at reducing ozone levels via state regulations, of melding provisions and making partnerships workable. Right now the “no action alternative” is actually extensive action at the state level, aimed at compliance, investment in developing technologies and achieving common-sense solutions toward more efficiencies. However, dropping new rules into this thriving environment would actually hinder state-level efforts at ozone reduction and only serves to further complicate compliance. In other words, right now there is a carrot-and-stick balance for state efforts in complying with the 75ppb standard. Adding new ozone regulation is all ‘stick’ with no ‘carrot’ in sight. We believe manufacturers and businesses have every economic reason to be more efficient in order to provide the best product or service to their customers. However, when businesses are not given regulatory certainty, they are unable to plan ahead for efficiency investments, capital expenditures or hiring.

When businesses do not have regulatory certainty, they must be overly cautious with budgets, capital expenditures and hiring. Uncertainty chills the ability of businesses to make the decisions and investments needed to plan and grow, and instead forces them to focus on efforts to mitigate the exorbitant, fluctuating costs of complying with both existing regulatory standards and newly proposed EPA rule packages. For example, in the U.S. chemical industry, more than $125 billion in investment was planned or underway in 2014, and would create or support more than 700,000 permanent new American jobs by 2023 – but those plans became uncertain as soon as the EPA’s most restrictive rules were proposed last year. This scenario of holding back planned investment due to regulatory uncertainty holds true across the U.S. in virtually every sector.

The EPA has acknowledged, and the business community has underlined, the fact that EPA’s proposed ozone regulations are disastrously expensive in realized losses. However, it is important to recognize that the proposed ozone standards and the compliance costs they would require do not exist in a vacuum but must be considered within the context of countless local, state and federal regulations that increasingly require businesses to spend more on compliance than on running and growing their operations. Furthermore, the EPA’s NAAQS rules are proposed with the belief that businesses and consumers will not just need to comply, but that compliance with a litany of other regulations will make new ozone attainment “easy.” This is simply not the case.

CACI and the Colorado business community are currently responding to regulations pertaining to 111(d) permitting and Clean Power Plan rules’ impacts (“hundreds of billions of dollars of cost”), changes to “Waters of the U.S.” definitions, Maximum Achievable Control Standards (MACT), Mercury and Air Toxics Standards (MATS, $9.6 billion/year), Tier 3 standards ($10 billion in capital and $2.4 billion/year cost), NOx standards and “regional haze” rules, “start-up, shutdown malfunction” (SSM) emissions rulings, upcoming methane rules and more. These regulatory burdens are particularly devastating when you consider that businesses and communities are forced to focus more on regulations than on the needs of their own operations. And while we believe the EPA has not demonstrated the effectiveness of previous ozone regulations nor the proposed health benefits, the
business community has demonstrated the cost these proposed rules would place on hiring, investment, growth and the overall economy.

In fact, in September 2011, when these same rules were proposed by EPA, the President stepped in with a two-year respite from implementation – noting the new regulations would add uncertainty to the economy at the very time that we needed to, “minimize regulatory costs and burdens, particularly in this economically challenging time.” As evidenced by this quote, even the President recognizes the regulatory costs and downward drag that uncertainty and the cumulative regulatory burden generated by the introduction of new NOx attainment standards on the economy. If the proposed rule was too costly and too detrimental to jobs and the economy in 2010, it is still too costly for implementation now.

At this point, it is also worth reiterating that compliance with federal regulation is the single heaviest burden on business today. Here in Colorado, the costs to comply with proposed NOx regulations are conservatively projected to cost $11 billion from Colorado’s economy in addition to almost 25,000 jobs losses. Colorado’s economy is getting back to healthier employment and manufacturing levels, but job losses here would be disproportionately worse – 11.3 percent of the nation’s job losses would come from Colorado alone. When looking at incomes losses, consumers in Colorado could lose an average of $830 per year of disposable income through this proposal as well.

For the bigger picture, and by the EPA’s own estimates, the proposed ozone bill (at 65ppb - 70ppb) will cost upwards of $50 billion per year from our nation’s GDP; NAM numbers show that a stricter 60ppb rule would reduce GDP by $140 billion per year. Accompanying these disturbing economic losses would be commensurate job losses. Proposed EPA ozone rules could mean losses of up to 220,000 jobs nationally, where job losses have been shown to carry 10 times more negative effects on health than elevated ozone levels. For comparison, February 2015 jobs numbers released March 6, show 292,000 jobs were added by businesses across the country; January saw 257,000 created. If the proposed rules are implemented, however, the rule would be wiping out the equivalent of 8-10% of last year’s positive employment numbers – just as unemployment rates are recovering.

In the long term and played out over the next 15 years, projections show job losses would actually be closer to 1.4 million nationally (only 2.76 million were added last year), and in addition, the U.S. Chamber of Commerce found disposable income losses across the country could be as high as $550 billion over the next 23 years. When looking at the long-term economic impact of the above numbers, the proposed rule impact adds up to the astronomical total of $1.7 trillion lost from the GDP from implementation of the EPA’s proposed rules from 2017 through 2040.

All of the above numbers demonstrate concretely that the newly-proposed ozone regulations (of 60ppb and 65ppb - 70ppb) can and will do incredible damage to our economy, communities, public health and businesses. After hearing recent testimony of regional air quality experts, CACI has even graver concerns today than ever before about the EPA’s process for reviewing proposed regulations. Air quality experts and others in the business community have been given the impression by EPA authorities that the EPA is not required to consider monetary or economic costs of proposed regulation, and may in fact simply disregard or not consider such aspects of submitted comments, despite President Obama’s Executive Order #13563 decreeing that all new regulations ‘must take into account benefits and costs, both quantitative and qualitative’.

The Wall Street Journal also noted the importance of this statement, quoting President Obama as adding to his Executive Order, “But creating a 21st-century regulatory system is about more than which rules to add and which rules to subtract. As the executive order I am signing makes clear, we are seeking more affordable, less intrusive means to achieve the same ends—giving careful consideration to
benefits and costs.” Given the scientific community’s concerns regarding effectiveness and benefits of proposed ozone rules, in combination with Executive Order #13563, we too question these findings and the resulting costs to the economy.

Simply stated, failure by the EPA to consider the economic ramifications of its proposed actions is unacceptable, particularly as American businesses within and beyond Colorado are operating within an increasingly globalized and thus increasingly competitive marketplace. CACI and our members believe considering cost of implementation, economic impact and resulting job losses within submitted comments, and given the lack of demonstrable benefits of a NAAQS standard lower than 75ppb, is a good faith step the Agency must take. This step would demonstrate that the EPA is working with the businesses and communities that will ultimately be forced to implement the EPA’s final ozone regulations.

One Size Does Not Fit All

As noted before, CACI has requested the EPA consider maintaining the current 75ppb standard. However, regardless of what level the EPA implements via their newest proposal, our members feel that the EPA has not given enough consideration to the unique factors contributing to Colorado’s ground-level ozone readings. The EPA’s proposal does not take into consideration Colorado’s industries, unique topography, elevation or our higher naturally-occurring background ozone levels relative to other states and regions. More specifically, this blanket rule does not account for the fact that scientific research shows higher elevations are more susceptible to atmospheric ozone dipping down into ground-level ozone. And in our state, that atmospheric ozone brings several notable Colorado mountain towns situated at higher elevations out of current attainment levels. Indeed, scientists have consistently shown that the greater Western states area has higher, naturally-occurring background ozone levels than the rest of the United States. In areas like Crested Butte, Colorado, where there is little-to-no manufacturing, ozone monitors regularly register between 64ppb - 68ppb. Virtually all of the Crested Butte ozone levels are attributed to naturally-occurring background ozone. In Mesa Verde, Colorado, during recent season-high ozone readings, 90 percent of the reading was attributed to background ozone. And for Colorado as a whole, background ozone levels are typically 50 percent or more of all readings taken.

Among other mitigating factors, seasonal ozone differences are also not adequately accounted for in the EPA proposal. There are regularly parts of Colorado (and Wyoming and Utah) that are only out of attainment during winter months when basins, valleys and bowls in the geography create inversions of warmer and cooler air, trapping higher-than-normal ozone levels closer to the ground and ground-level monitors. Additionally, the presence of the Rocky Mountains and other smaller mountain ranges in our state means we experience very unique weather and wind patterns which tend to both funnel and trap ozone levels from neighboring states, forest fires and even foreign nations.

The “Good Neighbor” provision, most recently implemented by the finalized 2008-level requirements last month, also highlights the growing challenge for downwind states like Colorado. Scientists and the EPA have shown that California, Arizona, Utah and Wyoming all contribute “significantly” to ozone transport ultimately recorded here in Colorado. To achieve this level of significant transport, our downwind neighbors are contributing one percent or greater levels of transport ozone across monitors at our borders, and those states are out of the 75ppb attainment levels themselves. In other words, Colorado has taken serious steps and made serious investments to reduce emissions, reduce ozone levels and increase efficiencies, but we are not getting credit for those efforts, and neighboring states are increasingly contributing to Colorado’s non-attainment zones.
In looking at meteorological influences, 2014 was one of the best attainment years for Colorado to-date, but local air quality scientists have said last year was historically wetter than normal. This additional rain and snow had a greater effect on ozone reduction than can be attributed to regional reduction efforts. However, whether it is an uncommonly wet or dry year, the EPA has not adequately addressed this mitigating factor for ozone level reductions (or increases), nor how businesses would be penalized or have penalties alleviated if ozone levels are attributable to weather patterns that either help or hinder attainment.

And lastly, ozone levels attributed to by foreign particulate matter are carried into the U.S. by winds, and areas like Colorado which are directly impacted by those ozone sources are not properly considered by the EPA’s proposal (see U.S. Chamber foreign particulate map). As much as two percent – five percent of foreign ozone levels have been attributed to Asia. As the current proposal reflects, areas not reaching attainment due to foreign ozone transport sources are not given a break by the EPA, such as designating a state to be within attainment after deducting foreign source levels. Rather, as those non-attaining states are monitored, the entire area will still be considered out of attainment, but aren’t required to submit a State Implementation Plan (SIP) for the first year of non-attainment. After the first year, a SIP submission to the EPA would be required regardless of ozone source. Our members have serious concerns that once a SIP is established, and even once a state is back in attainment, the state remains beholden to restrictive, proscriptive EPA oversight, limiting local ability to more creatively address long-term air quality.

As noted above, there are many external factors contributing to Colorado’s ozone levels, but our members believe the EPA’s proposal goes too far, particularly when ozone transport and other naturally occurring contributors are not factored-in and when there are real-world consequences to states in non-attainment. Not only do non-attainment states risk losing federal highway funds after the first year of non-attainment, those states remain under EPA oversight – even after a state is able to reach and maintain attainment levels. Here in Colorado, if the EPA proposes middle-of-the-road 70ppb, only 32 percent of our 68 counties would be in compliance. At 65ppb, an even more concerning 88 percent of Colorado counties would be in non-attainment today. If considering a 60ppb regulation, as acknowledged for consideration by the EPA, only two Colorado counties would be in compliance today.

In fact, the proposal goes so far and is so stringent that the Grand Canyon would fail the proposed 70 ppb standard, and Yellowstone National Park would fail the proposed 65 ppb standard. At 65 ppb, 2,000 counties in 45 states would be in nonattainment, based on EPA’s most recent complete data. At 70 ppb, nonattainment would affect 1,300 counties in 40 states. In non-attainment areas like Colorado’s Front Range, companies building or expanding would be required to reduce ozone-forming emissions regardless of cost, and economic development could not move forward unless emissions were reduced from other sources. Regardless of Colorado’s extensive efforts to place itself on the forefront of emissions reductions and energy efficiency efforts over the last ten years, Colorado is not getting due credit for the efforts that have made our state a national leader in emissions reductions. Furthermore, if areas are non-attaining for one reason or another, those areas cannot pursue economic development, building, manufacturing expansions and even some road projects if a Clean Air Act permit is needed.

In areas where non-attainment is attributable to background sources or transport ozone, this community will still pay the economic price for being unable to promote or encourage economic growth. In areas where a major city is non-attaining, that city puts the entire surrounding area out of attainment as well. This also results in a zero-sum game for many producers and manufacturers because in order to move forward with production, or any sort of expansion, businesses would need to effectively reduce one-and-a-half times the amount of emissions projected in order to proceed with a project. Because one private business has no authority over another private business, the only realistic
way to attain an air permit is to shut down operations for as long as is needed to reduce the requisite ozone levels. In practice, this means businesses will be required to shut down in order to attempt growth, and at the same time try to overcome the financial losses of a shut down. Regardless of the proposal’s intent, the proposed rule sets businesses and the economy up for failure.

Conclusion:

In our comments, we want to emphasize that Colorado businesses have been working hard to comply with existing and recently implemented EPA rules. Colorado has taken many important steps to earn its way to the forefront of environmental standards in America. Colorado businesses found solutions for statewide air quality standards with the “Clean Air, Clean Jobs Act”, for minimum setbacks, with water conservation and particularly energy efficiency standards. Businesses in Colorado ensured we worked with our communities and state government as a team. Despite the scope of the EPA’s ozone proposal, we would request that the federal government and the EPA pause and take note of business input on these proposed standards, particularly considering the lack of data supporting the proposed lower ozone standards’ benefits to public health. If the EPA is truly concerned about public health, it is imperative that compliance costs and economic impact are considered given the large body of research – relied upon by the Obama Administration in other contexts – that indicate the direct causal correlation between unemployment and poverty and, therefore, poor health outcomes.

Colorado Businesses work hard to be good corporate citizens and responsible stewards of our environment. Colorado’s continued economic promise is a bright spot in the nation’s economy, and our state has established itself as a place where economic prosperity and compliance with environmental regulations can co-exist. However, the newly proposed NAAQS attainment standard threatens both Colorado’s economic strength and our ability to maintain regulatory compliance. Therefore, CACI’s Energy and Environment Council and Federal Council join with many other voices in asking the EPA to keep ozone standards at their current level (75ppb). We are not opposed to ozone standards, but respectfully request the current standards be given more time and the opportunity to work as originally envisioned. We want Colorado to be the best state in the nation in which to do business, but the EPA’s onerous proposed regulations will take us in the opposite direction. Thank you for your consideration.