

BEFORE THE COLORADO AIR QUALITY CONTROL COMMISSION

IN THE MATTER OF PROPOSED REGULATION 22 FOR A NEW EMPLOYEE TRAFFIC REDUCTION PROGRAM (“ETRP”) AS PART OF THE STATE’S EFFORTS TO REDUCE GHG EMISSIONS AS DIRECTED IN § 25-7-105, C.R.S.

JOINT PREHEARING STATEMENT OF BUSINESS ALLIANCE FOR REGULATORY ECONOMIC SENSIBILITY (BAERS) AND NORTHERN COLORADO LEGISLATIVE ALLIANCE(NCLA)

EXECUTIVE SUMMARY

The Business Alliance for Economic Regulatory Sensibility and Northern Colorado Legislative Alliance (BAERS-NCLA) respectfully submit this Prehearing Statement for the Employer Traffic Reduction Program (ETRP) rule portion of the above-captioned hearing regarding the Air Pollution Control Division’s (“Division’s”) proposed revisions to Colorado Air Quality Control Commission (“Commission” or “AQCC”) Regulation No. 22.

Summary of Content and BAERS/NCLA Position

BAERS-NCLA provides policy arguments for removing the numeric Single Occupancy Vehicle (SOV) drive rate targets from the ETRP program. We describe factors that limit employers’ ability to influence commuting behaviors, transportation planning efforts in Colorado that will reduce emissions independent of an ETRP program and the adverse effects of a mandatory program on disproportionately impacted communities and female employees.

BAERS-NCLA compares the Division’s proposed drive rate targets and the consequent drive rate reductions projected for Colorado to the drive rate reductions observed in other jurisdictions on an annual basis. This comparison to historic results shows that the annual rate of change implied in the Division’s proposal is so much greater than the annual rate of change observed in other jurisdictions that it is not attainable. This disparity between the Division’s proposal and the results seen in other jurisdictions argues in favor of removing the numeric drive rate targets.

BAERS-NCLA recognizes that the annual rate of drive rate reductions implied in the Division’s proposal depends on Colorado’s baseline SOV drive rate, and that the Division’s assumption of a baseline 100% drive rate is not accurate. This inaccurate assumption leads the Division to substantially overstate the program’s emission reductions in its Economic Impact Analysis. The Division also fails to account for several costs that employers will incur. Together, these inaccuracies make the rule appear more cost-effective than it actually is. Even using the Division’s analysis of cost-effectiveness, the proposed ETRP rule costs far more per ton of emissions reduced than other Commission regulations. The proposed rule is not cost-effective.

A voluntary or incentive-based program that allows employers to take reasonable and customized actions to reduce SOV driving is preferable to a mandatory program. BAERS-NCLA recognizes

that the Division advocates for a more mandatory approach with numeric SOV drive rate targets that large employers must attain. BAERS-NCLA desires a truly voluntary approach but can accept the requirements for large employers to survey their employees and implement an ETRP plan for affected worksites if the numeric drive rate targets are removed. Removing the targets will increase flexibility and reduce costs while ensuring that large employers take action to reduce SOV driving.

Request for Time

BAERS-NCLA requests 40 minutes of testimony time.

I. BAERS supports measures to reduce transportation sector emissions of GHG emissions and ozone precursors.

Colorado must reduce transportation sector emissions to achieve its HB 19-1266 GHG reduction goals. Vast wildfires across the western United States, extreme weather, and persistent ozone concentrations demonstrate that Colorado needs effective mechanisms to combat Greenhouse Gas Emissions and reduce emissions of ozone precursors. It is evident, based on the APCD's 2021 Greenhouse Gas Inventory Update DRAFT published in January of 2021, that Colorado's largest projected single source of GHG emissions is a result of the transportation behaviors of our residents.¹ Transportation is also the largest anthropogenic source of ozone at three monitoring sites where exceedances most frequently occur, including the Chatfield Reservoir, National Renewable Energy Laboratory, and Rocky Flats North.

However, the draft ETRP rule should be significantly revised because it will not achieve the claimed reductions in GHG and ozone precursor emissions, is not cost effective, cannot be successfully implemented as drafted, and is strongly opposed by the public. Based on the Division's assumed baseline 100% SOV drive rate, the resulting SOV drive rate reduction targets are approximately 13 to 36 times greater than the average annual reductions that similar programs in other jurisdictions have achieved. BAERS/NCLA believes the SOV drive rate cannot be reduced so quickly. If the SOV targets can be obtained, the VOC and NO_x emission benefits are estimated by the Division to cost approximately 20 times more per ton of emissions avoided than other recent AQCC regulations. The GHG benefits are also not cost effective and depend on the same unattainable SOV targets. The proposed rule needs substantial modifications before it can be successfully implemented, to include defining key terms, revising the formula for calculating the SOV drive rate, and revising the survey to collect the data needed for the SOV drive rate calculation.

BAERS/NCLA believes the proposed mandatory SOV targets will adversely affect disproportionately impacted communities. Low-income workers are least able to work remotely, have less access to transit, and can least afford to add unpaid time to their daily commute by using inconvenient transportation options.

Colorado's business community wishes to partner with the state to reduce transportation sector emissions and solve Colorado's long-standing transportation capacity shortfalls. BAERS/NCLA members wish to partner with CDPHE to reduce emissions and believes that voluntary partnerships

¹ [Colorado 2021 Greenhouse Gas Inventory Update DRAFT Publication](#), APCD, January 2021 Pg 30. Exhibit 2-2: Projected Colorado Emissions by Sector 2020-2050(MMTCO_{2e}).

will accomplish more than top-down mandates. Colorado businesses have a record of supporting transportation improvements. The business community supported \$5 billion in transportation funding through Senate Bill 21-260 and the NCLA supported SB 21-260 with amendments. But employers have only a limited ability to change their employees' commuting behavior. Employers do not wish to be saddled with unachievable and expensive mandates that position employers as the scapegoats for future emissions.

BAERS/NCLA believes that Colorado has more effective tools to incentivize alternative modes of transportation and reduce transportation sector emissions. SB 21-260 will accelerate the transition to electric vehicles. Employers are already expanding remote work opportunities as America emerges from the pandemic and employees demand a greater ability to work from home. Employers are working with Transportation Management Agencies, Metropolitan Planning Agencies, and local governments to expand transit and mobility options in areas where they can be most successful. The Division's GHG Emissions Inventory anticipates significant reductions in transportation sector emissions and states they are "dropping by 50% compared to 2005 levels in 2030."²

BAERS/NCLA proposes to revise the draft ETRP rule by (1) retaining the requirement for large employers to develop and implement ETRP plans, (2) retaining the requirements to survey commuting practices and report the results each year (3) removing the mandatory SOV drive rate targets, and (4) defining key terms and revising the SOV calculation method so the rule can be successfully implemented. These changes will allow the Commission to reduce the SOV drive rate, partner with employers to change transportation behavior, and gather information about commuting while removing the risk of enforcement and reducing public opposition to the rule.

II. Members of BAERS-NCLA currently implement voluntary trip reduction programs and other sustainability initiatives.

Numerous Colorado employers, including members of BAERS-NCLA, implement voluntary programs to reduce vehicle miles travelled and achieve other environmental goals. Several of these programs involve employers providing free transit passes to all employees. For example, one member company is currently paying for all employee bike-related costs such as bike leases, bike parking, maintenance, and rentals as a means towards encouraging green mobility.³ Several employers currently make showers available for bikers and running staff. At least one BAERS-NCLA member has been recognized by the Colorado Department of Public Health and Environment as a Gold Leader of its Environmental Leadership Program. Additional programs embrace the utilization of renewable energy and carbon reduction, to include commitments of sourcing 100% of purchased electricity from renewable energy by 2025.⁴

Many metro area employers offer their employees' transit passes for Regional Transportation District (RTD) bus and light rail service. RTD provided data indicating that approximately 800 employers participated in the EcoPass program before the pandemic. RTD anticipates that as employees return to the office and worksites, the benefit of the EcoPass program will increase.

² Id. Pg 12.

³ [Amazon Launches New Commuter Benefit in the US.](#)

⁴ [Anheuser-Busch 2025 Sustainability Goals.](#)

The RTD official indicated that her staff are actively renewing a large number of passes daily. Additionally, RTD is embarking on a Fare Study and Equity Analysis to take a holistic look at all fare passes. Discounts are offered to evaluate the most cost-effective programs for employers. As Colorado emerges from the pandemic, employers' ridership programs are anticipated to regain popularity without the ETRP mandate.

Voluntary employer-provided commuting benefits are common. These programs provide transit benefit cards to employees. The cards are purchased through third-party vendors such as [Wage Works](#) and [Commuter Benefits/Edenred](#). The employer loads value onto the cards, and the employee uses them to buy transit passes. These transit programs provide measurable sustainability benefits. Federal tax law allows an employee to receive \$270/monthly in transit as pre-tax income. The widespread adoption of voluntary transit incentives demonstrates that voluntary programs work. Instead of mandating SOV drive rate targets, Colorado should incentivize employers to provide additional employee benefits for alternative transportation.

III. There are limits to employers' ability to influence employee's behavioral choices

An effective trip reduction program should start with realistic expectations and goals. Organizations “need to have realistic expectations for what their transit benefits program can accomplish.”⁵ Employers can have an impact on their employees' commuting behavior, but many other factors exert a stronger influence on employee behavior. Commuting patterns are dictated by the locations of homes/worksites, the worker's individual situation and needs, zoning laws, parking codes, access to transit, and other factors.

Arlington County, Virginia's Mobility Lab spelled out the simple truth that “[w]hen it comes to transportation choices, people generally do what is best for themselves.” The Mobility Lab explained that “[c]onvenience is a big factor – and if it's not there, we can't sell it.” Other significant factors affecting commuter decisions are costs, commute distance and life events, particularly parenthood.⁶

Other research confirms that employer incentives are only one of many factors influencing transportation choices – and this appears to be a global norm. For example, researchers in Sri Lanka identified three broad categories of factors affecting transportation mode choice as shown below.⁷

Characteristics of the trip maker	Characteristic of the journey	Characteristic of the transportation facility
<ul style="list-style-type: none"> • Age/Gender • Income • Vehicle ownership • Household structure • Possession of a driver's 	<ul style="list-style-type: none"> • Trip purpose • Time of the day • Whether the trip is undertaken alone or with others 	<ul style="list-style-type: none"> • Vehicle in time • Monetary cost • Availability and cost of parking • Reliability of travel time

⁵ Analyzing Effectiveness of Commuter Benefit Programs at 2.

⁶ Mobility Lab, “Understanding the Basics Behind Transportation Choices” (Feb. 24, 2017). BAERS/NCLA Exh 02.

⁷ Madhuwanthi, *et al*, “Factors Influencing to Travel Behavior on Transport Mode Choice,” Int'l J. of Affective Engineering, doi: 10.5057/ijae.IJAE-D-15-00044 (Dec. 16, 2015). BAERS/NCLA Exh 03.

license • Residential density.		<ul style="list-style-type: none"> • Comfort and convenience • Safety
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Employer-sponsored commuter transit programs affect travel behavior. However, studies show a wide range of effects reported among individual worksites, which may reflect a variety of transit ridership factors.⁸ A study of worksites covered by mandatory commuter traffic reduction programs found that impacts on transit ridership “ranged from decreases in transit use to increases in transit use and that the effects were very small, on average, across all worksites in these areas.”⁹ Also, it is unclear whether employees use transit for non-work trips or make changes in commute and non-commute behavior. Transit availability plays a vital role in determining the level of increases in transit ridership. Programs primarily serve existing transit riders. Transit benefits have little impact on transit use on those you are not already using transit.¹⁰

Employers can implement policies and incentives to alter the cost of transportation and availability and cost of parking, but the large majority of factors affecting transportation choices are outside the employer’s control. BAERS-NCLA asks the Commission to recognize this fact and evaluate the SOV drive rate reductions that can realistically be expected from an ETRP program before establishing numeric drive rate targets.

IV. Employee attitudes toward change and mandates

It is challenging and problematic for employers to intrude into employees' personal lives. For example, some workers resent workplace requirements for a COVID vaccine – and that is a one-time (or two-time) action. Public health officials fear that requiring COVID-19 vaccination on the job will create a counterproductive backlash among employees. A survey of fifteen Fortune 500 companies found that while strong pro-vaccine messages can successfully encourage vaccinations, mandates could anger certain employees.¹¹ The report notes, "if the purpose of a mandate is to ensure that the largest number of people get vaccinated, a backlash to a mandate...is the opposite of the outcome you want to get." Many employees object when an employer crosses the line between personal choice and employment practices. Mandated ETRP programs are likely to have similar effects on employee attitudes.

Change in workplace requirements can be upsetting, especially in a fragile environment as Colorado business emerges from the pandemic. Too many changes can create a state of change fatigue among employees, which experts say can significantly increase the intensity and duration of the upheaval employees experience and delay their adjustment to change.¹² The Karten article notes that if employees are still reeling from other recent changes (returning to work after a pandemic), it may be wise to delay a change.

Employers are likely to face challenges when asking employees to change their personal choices.

⁸ [Analyzing the Effectiveness of Commuter Benefits Programs](#), The National Academies of Sciences Engineering Medicine, The National Academies Press at 10.

⁹ Id. at 4 (emphasis added).

¹⁰ Id. at 44.

¹¹ [Corporations Encourage Employee Vaccination But Stop Short of Mandates](#), Health News Florida, May 26, 2021.

¹² [The Importance of Timing when Implmenting Change](#), Naomi Karten, TechWell Insights, February 27, 2017.

Research shows it is much harder to change employees' ongoing non-work behavior, especially when those changes involve personal decisions. In a survey among 500 executives, managers reported that only one in two attempts to change employee behavior were effective, and only one in ten managers can effect change in a sustainable way.¹³ Change creates anxiety and uncertainty in employees. When additional requirements are placed on employees, they may lose their sense of security, and the range of reactions when change is introduced is unpredictable. As a result, resistance to change often occurs.¹⁴ As employees and employers resume work environments in an already uncertain atmosphere due to the economic impacts of COVID and health-related concerns, ETRP may add one more change that will cause stress and anxiety in the workplace.

Finally, mandatory numeric targets put employers in an adversarial relationship with employees. If an ETRP-affected worksite fails to achieve the regulatory SOV drive rate reduction requirements, employers will need to pressure their employees to change their off-duty behaviors. If unsuccessful, the employer may face financial consequences, which may include implementing alternative compliance measures to achieve equivalent or greater emission reductions and submitting documentation of the alternative compliance emissions reductions achieved.¹⁵

This puts the employer in a precarious position. Current employment situations are unstable, especially in the service industries. Workers are hard to find and retain. Regulation 22's ETRP proposal intensifies this situation by making the employer the face of the SOV drive rate reduction requirement. Employees who feel pressured to change their off-duty behavior will blame the employer, not the Division. BAERS-NCLA asks the Commission to reduce this potential workplace friction by removing the numeric SOV targets.

V. Senate Bill 21-260 provides a more effective tool for reducing transportation sector emissions.

The General Assembly recently passed Senate Bill 21-260, a sweeping transportation funding bill that provides approximately \$5 billion for transportation improvements and GHG reductions. SB 21-260's attendant programs for electric vehicle (EV) adoption, reduction in induced demand, and limitations on highway capacity improvements will significantly advance Colorado's transportation sector GHG reduction goals. SB 21-260 will provide GHG and air quality benefits without the economic consequences and mandated behavior changes of the proposed ETRP rule.

A. SB 21-260 will achieve substantial transportation sector GHG reductions

In 2019, the passage of House Bill 19-1261 established statewide goals reduce carbon emissions and led to the adoption of the [Greenhouse Gas Reduction Roadmap](#). Following the significant commitments of the utility sector to address their contribution to carbon emissions, the transportation sector was identified as the next largest contributor of GHG emissions in the state. The Commission's October 23, 2020 "Resolution to Ensure Greenhouse Gas Reduction Goals Are Met" established a goal of reducing GHG emissions from the sector 40% by 2030 from a 2005 baseline. This translates to a reduction of 12.7 million metric tons of carbon dioxide equivalent

¹³ [Changing Employee Behavior](#), Professor Shlomo Ben-Hur and Karine Avagan, April 2018.

¹⁴ [How to Reduce Employee Resistance to Change](#), Susan Heathfield, February 4, 2021.

¹⁵ Draft Reg. 22 Part B §§ III.G and III.G.5.

emissions.

Colorado's GHG Roadmap spells out actions to accelerate the shift to electric cars, trucks and buses.¹⁶ The Roadmap includes a "key finding" that making changes to transportation planning and investment and land use planning to encourage alternatives to driving is an important goal.¹⁷

The introduction of [Senate Bill 21-260, the Transportation Sustainability Act](#), changed the dialogue on how a sustainable transportation system can meaningfully and significantly address the contributions of the transportation sector in carbon emissions outlined and detailed in the Roadmap. Passage of the bill set in motion a multitude of new directives and opportunities in the transportation sector to meet the 40% GHG reduction target, including enticing EV adoption, reducing induced demand, limiting highway capacity improvements, shifting transportation planning and investment and interjecting in local land use planning. The passage of SB 21-260 therefore provides a more effective pathway than the proposed ETRP rule to reducing transportation sector GHG emissions.

B. SB 21-260 funds substantial incentives for electric vehicles

To accelerate the shift in electric vehicles, newly inaugurated Governor Polis signed his first executive order in January 2018 to accelerate the electrification of cars, buses, truck and other vehicles in Colorado. The Governor set a goal of 940,000 electric vehicles on the road by 2030.¹⁸

The funding, enterprise structures, and policy directives encompassed within SB 21-260 work to realize the goals of Executive Order B 2019 002 and the GHG Roadmap. An analysis of SB 21-260 published by the Southwest Energy Efficiency Project (SWEET) finds that "we can expect about 75% of 2030 [GHG] reductions to come from more energy-efficient and EVs. SB260 makes clear progress toward vehicle electrification while setting the stage for future policies to lower VMT."¹⁹

SB 21-260's EV provisions were structured to lower the upfront cost of EVs, increase model availability, and expand EV charging infrastructure. The bill's funding components will raise \$734 million for EVs, the largest investment in EVs of any state outside California. SB 260 creates 3 new state enterprises to increase EV penetration:²⁰

1. Community Access Enterprise: \$310 million to fund EV charging stations and rebates for EV and electric bicycles for low-income households. According to SWEET, "the Community Access Enterprise builds on the success of the [Charge Ahead Colorado](#) and [EV Fast-Charging Corridors](#) programs, which have leveraged Volkswagen Settlement funds to support over 1000 new EV charging stations in Colorado. In particular, the new Enterprise will focus on

¹⁶ GHG Roadmap at 53.

¹⁷ Id. at VIII.

¹⁸ Executive Order B 2019 002, Supporting a Transition to Zero Emission Vehicles.

¹⁹ [Frommer, Matthew, "A Breakdown of Colorado's Giant Transportation Funding Bill", Southwest Energy Efficiency Project \(SWEET\), June 15, 2021.](#)

²⁰ SWEET, June 15, 2021.

expanding EV charging infrastructure in low-income and pollution-burdened communities.”²¹

2. Clean Fleet Enterprise: \$289 million to subsidize private and government EV fleets, including delivery trucks, school buses, and vehicles for rideshare Transportation Network Companies, particularly in disproportionately-impacted communities.
3. Clean Transit Enterprise: \$134 million to subsidize the electrification of public transit buses.

C. Induced Demand, Capacity Improvements, Transportation Investments and Land Use Planning Achieve VMT Reductions

SB 21-260 was built to provide new revenue streams for all types of transportation needs in Colorado and to entice EV adoption. SB 260 was also largely built and written to reduce vehicle miles traveled in the state, an additional tenet of the GHG Reduction Roadmap related to transportation. Specifically, the roadmap calls for a 10% reduction in VMT by 2030 to meet the GHG Reduction.

Relative to all other strategies to reduce VMT outlined in SB 260, the proposed ETRP plan provides minimal benefit to reduce VMT yet the breadth of the provisions in SB 260 — EV and VMT reduction strategies — can achieve the GHG Reduction goals from transportation without the economic costs and all other negative implications and consequences outlined in our statement and that of our fellow parties conveying their opposition or concern.

VI. Mandatory SOV drive rate targets would adversely affect disproportionately impacted communities and female employees

Promulgating an ETRP rule with specific numeric SOV drive rate targets will place unequal burdens on disproportionately impacted communities, particularly low-income workers and female employees. A voluntary program would allow employers to tailor their ETRP plans to avoid such adverse effects.

A. Low income workers will incur longer commutes because they have fewer options for commuting

Low income and hourly employees are more likely to hold positions that must be performed in person at the worksite. Positions in the service industry and those that involve manual labor usually cannot be performed remotely. White collar and professional employees can often perform their work remotely and may reduce their time spent commuting by doing so. Low income and hourly employees would instead increase their time spent commuting. Commuting by mass transit, carpool, or vanpool takes more time than driving directly from home to work with no stops. These employees would lose time out of their day.

Low income and hourly employees are also more likely to be impacted by increased parking

²¹ SWEEP, June 15, 2021.

charges if the employer selects that as a trip reduction strategy. Some researchers have found that parking charges are more effective than transit incentives at reducing SOV drive rates. “Employer parking strategies, i.e., parking surcharges and subsidized parking for ride-sharers, are widely acknowledged to be among the

most effective at promoting ride-sharing.”²² The Division has proposed “the institution or increase in parking charges” as a trip reduction strategy. Draft Reg. 22, Part B § III.C.1.o.(iv)(A). Low income and hourly employees are more susceptible to parking charges because they have less ability to work remotely, may live in neighborhoods with less access to transit, and are less able to afford the parking charges when they drive to work.

B. Mandatory SOV drive rate targets may have unequal impacts on women

Studies show that women are more likely to link different trips, or “trip chain,” on the way to and from work. (Rosenbloom, 1988; Rosenbloom, 1989; Strathman and Dueker, 1994; Al-Kazily, Barnes and Coontz, 1994). This is especially true for women with younger children. Id. Yet restricting an individual’s ability to drive to work makes trip chaining difficult or impossible. The alternative commute measures would likely increase commute time, while at the same time limiting an individual’s flexibility to combine trips to accomplish other tasks, e.g., pickup from daycare. An employer’s implementation of alternative commute measures that limits this flexibility may significantly burden women, who are more likely to trip chain, and therefore impose a disparate impact.

ETRP could diminish work and advancement opportunities for women and compound the current “She-Cession.” The pandemic’s economic upheaval created disproportionate negative impacts for women and work requirements for trip reductions will greatly impede women’s recovery as their job opportunities could be limited due to required commute considerations. Despite the unfolding economic recovery from the pandemic, the impacts to women continue. In the U.S., over 2.1 million women left the labor market entirely since the beginning of the pandemic and are not yet looking to return to work.²³

The Common Sense Institute coined the phrase “She-Cession” to describe the phenomenon occurring during the pandemic and attribute the disparate impact to the burdensome cost of child care, the transition to remote learning, and the mass job losses in various industries most affected by COVID-19, impeded women’s abilities to compete in the Colorado economy. Nationally, women accounted for 54.5% of all the jobs lost in 2020, yet women make up just 47% of the labor force.²⁴

According to CSI, the labor force participation rate for women (LFPR) dropped from 63% in February, to 54% in May, the lowest point in 2020, indicating 175,000 fewer women in the labor

²² Farkas, “Employer trip reduction programs: how effective and at what cost?” (January 2001), *citing* Feeney, B. "A Review of the Impact of Parking Policy Measures on Travel Demand," *Transportation Planning and Technology*. No. 13, 1989, pp. 229-244; Wilson, R. and Shoup, D. "Parking Subsidies and Travel Choices: Assessing the Evidence," *Transportation*, Vol. 17, No. 2, 1990, pp. 141-158. BAERS/NCLA Exhibit 04.

²³ <https://www.bls.gov/bls/newsrels.htm#latest-releases>.

²⁴ Chris Brown, Abigail Giannou, Nicole Riehl, [The She-Cession in Colorado: The Impact of COVID-19 on Women in the Workforce in 2020](#), Common Sense Institute, (CSI) February 17, 2021.

force. While the overall female participation rate recovered through the end of the year, the December LFPR for Colorado mothers remained 6% below the February 2020 level of 79%. This indicated, in total, a little over 20,000 Colorado mothers left the labor force and have not yet re-entered.²⁵

Additionally, as you look at the impacts across educational attainment levels you begin to see that impacts to women with less education were four times higher than for those with an associate degree or higher. While both men and women with lower levels of education faced higher unemployment rates, the changes over the course of 2020 were quite staggering for women in particular. The unemployment rate in the first quarter of 2020 started at 4.5% for women with an associate degree and higher, the fourth quarter rate declined to 3%. At the same time the UE rate for women with some college or less, increased from 9% to 12.9% from the first to fourth quarter.²⁶

Separate from the imposition of any ETRP requirements, the ability and decision for these women to re-enter the workforce is dependent upon their accessibility to jobs that consider their ongoing responsibilities and their time constraints.

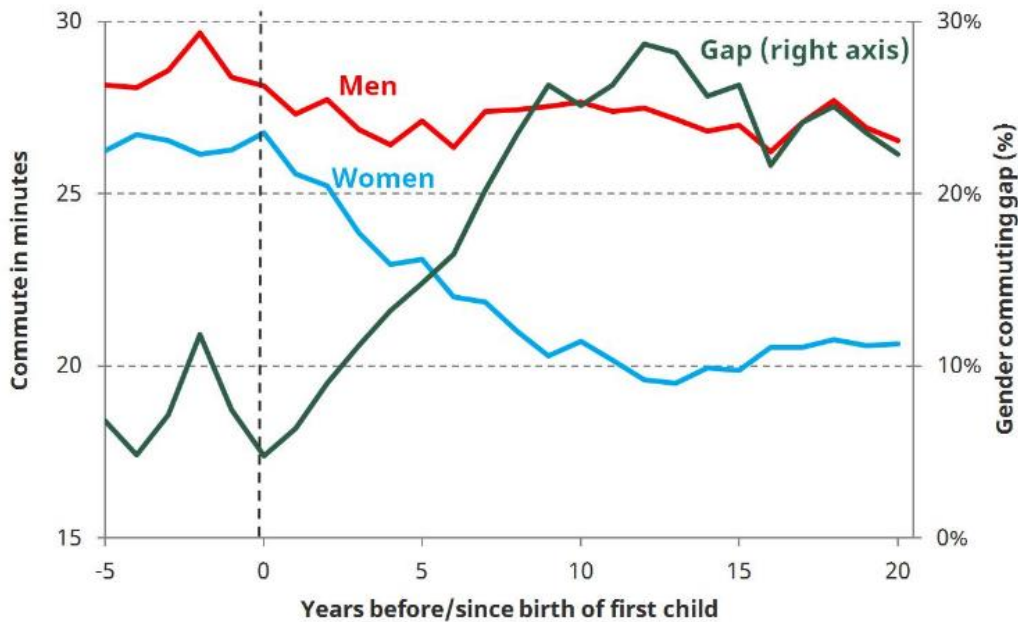
Research from the UK suggests a gender commuting gap is a reality that may impact women's wages and work opportunities. According to the study by the Office for National Statistics (ONS), women are more likely than men to commute for 15 minutes or less. Men, on the other hand, made two-thirds (65%) of the commutes lasting an hour or more.²⁷

²⁵ Brown, Giannou, Riehl, The She-Cession in Colorado, CSI.

²⁶ Brown, Giannou, Riehl, The She-Cession in Colorado, CSI.

²⁷The commuting gap: men account for 65% of commutes lasting more than an hour, Office for National Statistics, November 7, 2018.

Figure 1. Average time spent commuting by time to/since birth of first child



Source: Data from BHPS 1991-2008 and Understanding Society 2009-15.

Looking at different data, the think tank the Institute for Fiscal Studies (IFS) analysed the commuting patterns of men and women before and after they had children. As the chart (Figure 1) shows, before the birth of their first child, women had slightly shorter commutes than men on average. But in the decade after having a first child, the average commuting time among women fell while remaining largely the same for fathers.²⁸ Statistics suggest women's shorter commutes result from working closer to home and have a lot to do with who takes on the primary care giver role.

Working closer to home due to parental responsibilities may limit women's chances of finding a high-paying job, or one that offers the best prospects for developing their careers, and it may be yet another of the many factors that contribute to the gender pay gap.

Women across the world continue to shoulder a larger share of unpaid caring duties, and this is reflected in their travel patterns, according to the World Bank, which financed a survey exploring the gender commuting gap in Buenos Aires.

The research found that women in the Argentinian capital spent as much time commuting as men, but made more trips covering shorter distances. This was the case particularly for mothers who

²⁸ Robert Joyce and Agnes Norris Kieller, [The 'gender commuting gap' widens considerably in the first decade after childbirth](#), Institute for Fiscal Studies, November 7, 2018

also travelled more slowly, and frequently during off-peak hours, for example to drop off and pick up children from childcare.²⁹ The World Bank says its survey echoes findings in Europe, the US, and in developing nations like Peru and Vietnam. The constraint on longer commutes has “inevitable consequences” for women’s wage rates and employment opportunities, says the Bank. In parts of greater Buenos Aires, fathers have access to 80-100% more jobs than mothers.

The prospect for women under a mandatory ETRP workplace environment, in consequence, will have a compounding detrimental impact upon women emerging from the pandemic, reentering the workforce, career advancement and accelerating economic condition.

VII. The proposed SOV drive rate targets represent annual reductions that are significantly more aggressive than the reductions achieved in other jurisdictions and are likely unattainable

A. The Division assumes large SOV drive rate reductions for Colorado

The proposed ETRP rule would require large employers to implement ETRP plans designed to achieve an SOV drive rate of 75% between July 2022 and June 2023, and 60% by June 2025.³⁰ The SOV drive rate reductions expected under the ETRP rule are not stated and the Division did not publish an evaluation of the baseline SOV drive rates. However, the Initial EIA assumes an SOV drive rate baseline of 100% when calculating the rule’s costs and benefits.³¹ Therefore, at least for purposes of conducting a cost-benefit analysis, the Division’s proposed SOV drive rate targets equate to a drive rate reduction of 40% in three years, or a reduction of 13.3% per year. This annual rate of change is 36 times more aggressive than the 0.37% average annual rate of change observed in other jurisdictions (calculated below).

The assumption that 100% of employee commutes currently involve SOV driving is clearly not accurate. During the May 2021 request for hearing, a member of the public asserted that Colorado or the Front Range is currently achieving or nearly achieving the initial 75% SOV drive rate target. BAERS/NCLA is not in a position to say whether 75% is an accurate baseline SOV drive rate. Nonetheless, if the baseline is assumed to be 75%, the 60% June 2025 target would equate to a drive rate reduction of 15% in three years, or a reduction of 5% in one year. This annual rate of change is 13 times more aggressive than the 0.37% average annual rate of change observed in other jurisdictions.

B. Programs in other jurisdictions have not achieved the SOV drive rate reductions assumed in the Division’s Economic Impact Analysis

BAERS/NCLA calculated the average annual SOV drive rate reduction achieved in other jurisdictions using the data reported by the RAQC in its March 2021 table of “Travel Demand Management Ordinances: Best Practices.”³² The RAQC provided examples “primarily from areas

²⁹ [Are women ‘forced’ to work closer to home due to other responsibilities? Does this contribute to gender wage differentials?](#), World Bank Blogs, February 20, 2014.

³⁰ Draft Reg. 22 Part B § III.D.1, III.D.2.

³¹ Initial EIA at 22.

³² BAERS_NCLA PHS_EX-05.

that have successfully reduced VMT over the last decade as well as other illustrative examples.”³³ The RAQC reported the beginning SOV drive rate and ending SOV drive rate over specified time periods for each program for which the RAQC could obtain data.

BAERS/NCLA compiled the data reported by the RAQC into a table and calculated the average annual reduction or increase in SOV drive rate observed in these jurisdictions.³⁴ For example, the RAQC reported that SOV drive rates in Massachusetts decreased from 74% to 70% between 2006 and 2018.³⁵ This 4% reduction over 12 years equates to an annual reduction of 0.333% per year. Oregon and its Employee Commute Options Program had a reduction goal of 10%, yet from 2006 to 2018, Oregon saw an increase of 1% in SOV. Out of the programs the RAQC described as successful, the highest SOV drive rate reduction was 17%. The average annual SOV drive rate reduction across all 19 jurisdictions reported by the RAQC was 0.37% per year, as shown in BAERS_PHS_EX-05.

Some individual workplaces have achieved dramatic SOV drive rate reductions or cost savings from traffic management programs, but these isolated special cases are the exceptions that prove the rule. For example, the Division has pointed to the success of Seattle Children’s Hospital and noted that the hospital avoided spending \$30 million³⁶ on a parking garage.³⁷ However, Seattle Children’s Hospital did not achieve the annual SOV drive rate reduction rate assumed in the Division’s EIA. Its SOV drive rate declined from 75% in 1995 to 38% in 2015, an annual decrease of 1.85% per year.³⁸ Googlemaps indicates that Seattle Children’s is within 500 feet of a transit bus stop. Although very few worksites enjoy Seattle Children’s traffic reduction advantages, the Division’s proposed target implies SOV reductions between 2.7 and 7.2 times faster than Seattle Children’s achieved, depending on Colorado’s baseline SOV drive rate.

BAERS/NCLA encourages the Commission not to adopt binding SOV drive rate targets before it determines Colorado’s baseline SOV rates and evaluates the aggressiveness of the proposed goals. The experiences of other jurisdictions show that the Division’s proposed drive rate targets are likely not achievable.

VIII. The proposed ETRP rule is not cost effective

A. The Division's initial Economic Impact Analysis (EIA) shows the program is not cost-effective

The Division’s initial EIA estimates the costs and benefits of the proposed ETRP rule. The Division calculated the reductions in volatile organic compounds (VOCs), nitrogen oxides (NOx),

³³ Id. at 1.

³⁴ BAERS_PHS_EX-06.

³⁵ [Travel Demand Management Ordinances: Best Practices](#), Regional Air Quality Council,

³⁶ Seattle Children’s Hospital is located in one of the nation’s most expensive real estate markets. In 2016 its zip code of 98105 was rated the “25th hottest in the country, according to Realtor.com.” BAERS_PHS_EX-###. The cost of living comparison site www.bestplaces.net gives zip code 98105 a current housing cost score of 429.8, meaning housing costs are approximately 430% of the national average. The same site gives zip code 80202 (LoDo) a housing cost score of 220.8.

³⁷ See, e.g., July 1, 2021 email from David Beckstrom, “ETRP Information – Large Employers and Public Comments,” BAERS_PHS_EX-07.

³⁸ Practice Greenhealth, “Case Study: Employee Commute Single Occupancy Vehicle Rate Reduction,” BAERS_PHS_EX-08.

carbon monoxide (CO) and GHGs (presumably carbon dioxide (CO₂) or CO₂ equivalent) using the GREET model. The initial EIA presents the emission reductions in tons per year and the cost-effectiveness in dollars per ton of emissions reduced for 2025. The EIA presents the following cost-effectiveness numbers:

	2025 Emissions Reduction	\$/ton Reduced
Ozone Precursors (VOC + NO _x)	579 tpy	\$34,359 - \$605,552 per ton reduced
GHGs	751,752 tpy	\$26 - \$466/ton

The projected emissions reductions are not cost-effective. In December 2019, the Division summarized the VOC and NO_x cost-effectiveness (cost per ton reduced) values that the Division had estimated in prior AQCC rulemakings. BAERS_PHS_EX-###, slides 28-29. With one exception, the Division reported that its proposed rules would reduce either NO_x or VOC emissions for less than \$10,000/ton and often around \$1,000-\$3,000/ton of NO_x or VOCs reduced. The one exception was in the 2017 ozone SIP revision when Colorado was federally required to adopt ozone control measures consistent with the EPA’s Control Techniques Guidelines for oil and gas operations. The Division estimated that those control measures would reduce NO_x and hydrocarbons, individually, at a cost of just under \$20,000 per ton. Colorado was legally required to adopt those control measures, or other measures achieving approximately equivalent reductions, regardless of cost. The Division’s December 2019 summary also identified one regulation adopted by the South Coast Air Quality Management District, which is an “extreme” ozone nonattainment area, that cost up to \$32,000 per ton of NO_x reduced.

No Colorado regulation has approached the lower estimate of \$34,359/ton of VOC or NO_x reduced, let alone the upper estimate of \$605,000/ton reduced. And if the EIA did not take the unusual step of combining the VOC and NO_x reductions, the rule would cost approximately \$65,900/ton of VOC reduced and \$71,800/ton of NO_x reduced at the low end.³⁹

The projected GHG reductions are not cost-effective either. BAERS/NCLA understands the Division intends to address the social cost of GHGs in its prehearing statement and will respond in its rebuttal statement. For purposes of the prehearing statement, BAERS-NCLA states only that GHG cost-effectiveness cannot be determined solely or primarily by a direct comparison of the estimated cost per ton to the social cost of GHGs. This metric must be used appropriately and the limits of this metric must be recognized.

Nonetheless, even if the Commission makes a direct comparison of the GHG social cost metric to the rule’s projected economic costs, the projected midpoint and upper bound economic costs of the GHG reductions from the ETRP rule exceed the upper bound social costs of CO₂ estimated in the August 2016 federal Interagency Working Group’s “Technical Support Document: Technical Update of the Social Cost of Carbon for Regulatory Impact Analysis Under Executive Order 12866.” That document estimated the social cost of CO₂ at a 2.5% discount rate to be \$62/ton in 2020 and \$95/ton in 2050. The Division’s EIA estimated the GHG cost-effectiveness of the ETRP

³⁹ This is based on the Division’s low end cost estimate of \$19,893,600 per year and its estimates of 302 tpy of VOC reduced and 277 tpy of NO_x reduced in 2025. Initial EIA at 26.

rule to range from \$26 to \$466/ton. Both the midpoint of \$246/ton and the upper bound of \$466/ton are much higher than the social cost of CO₂, making the proposed ETRP rule not cost-effective on a GHG basis.

B. The proposed ETRP rule is less cost-effective than estimated in the initial EIA

BAERS/NCLA respectfully submit that the initial EIA does not accurately estimate costs. First, the EIA relies heavily on assumptions. Table 9 of the EIA sums up nine discrete cost elements of an ETRP program. The notes below Table 9 state that six of the nine cost elements are based on assumptions. Two of the three cost elements not based on assumptions are assigned a zero cost. Cost data may be available from other jurisdictions that have experience with ETRP programs. The EIA does not indicate whether such data is available or was researched.

Second, the initial EIA omits several costs that employers would incur if they select certain incentives or strategies suggested in the draft rule. It omits costs for various other program options, including parking cash-out programs, guaranteed rides home, locker rooms and showers for bicyclists, company-provides ZEVs, and on-site daycare facilities.

Third, the initial EIA overestimates the emission reductions that are likely to result from the program. The benefits of the rule are based on an assumed 100% SOV drive rate baseline. The Division does not dispute that this assumption is inaccurate. Because the baseline SOV drive rate is less than 100%, the emission reductions associated with achieving the proposed 75% and 60% SOV drive rate targets are smaller than projected in the initial EIA. If the baseline SOV drive rate is 75%, as was stated in public comments during the request for hearing, the reductions would be 15% instead of 40%. If the rule achieves less than half of the assumed emission reductions, the cost per ton of emissions avoided will increase significantly.

The EIA does not include some potential substantial that employers may incur to implement options around an ETRP. For example, an employer may decide to provide on-site child care as an option to meet ETRP requirements. This typical cost for the implementation of an onsite child care facility that would provide care for 80 children would be an estimated \$1,500,00 to \$2,000,000 for the facility alone in addition to the land cost. Estimates from an organization that provide on-site child care programs for employers estimates the first year's annual cost would be \$300,000.⁴⁰

If a voluntary program is implemented, the Division could effectively capture actual costs associated with an ETRP. These costs are critical when analyzing the effect the proposal will have on business, the Colorado economy, and ultimately the air quality.

IX. Colorado should not mandate specific SOV drive rate targets for employers

The Division has asserted that numeric SOV drive rate targets are necessary because they provide a benchmark for employers to use when designing ETRP plans and avoid disparities in the stringency of such plans. The Division contends that regulatory SOV drive rate targets will spur greater reductions. These arguments are not supported by data and do not withstand scrutiny.

⁴⁰ KinderCare Education Onsite Scenario Presentation pg 2-3, BAERS_NCLA PHS_EX-09.

The RAQC's summary of trip reduction programs in other jurisdiction reports those jurisdictions' trip reduction goals where available. The goals established for those programs do not bear any noticeable relationship to the reductions actually achieved. For example, the State of Washington set a trip reduction goal of 15% over four years and 35% over 14 years, and achieved a 2% reduction over 11 years.⁴¹ The city of Bellevue, Washington, had greater success without a numeric goal. Bellevue set a qualitative goal of reducing vehicle miles travelled and SOV and achieved a 15% SOV reduction in 11 years.

The Division has also argued that promulgating a mandatory goal will provide a roadmap for Colorado to achieve certain SOV reductions. This is not the case. Colorado's baseline SOV drive rate is unknown, or at least is not in the administrative record. Without knowing the baseline SOV drive rate, setting a numeric drive rate target does not shed light on the reductions to be achieved.

Research reports on voluntary programs indicate they are as effective as mandatory programs. Farkas 2001 reported that "[w]hether the trip reduction measure was legally mandated or voluntary was not important in explaining trip reduction."⁴² Farkas cited Kneisel, R. "Voluntary Ridesharing After Deregulation: Findings from Work Sites Exempted from California Rule 2202, On-Road Motor Vehicle Mitigation Options," Transportation Research Record, 1765, 2001, pp. 20-26. Farkas also cited findings by COMSIS, Inc., that program elements including parking charges, financial incentives, and the presence of transit, vanpooling and carpooling had a greater impact than legal mandates.

Further, a one size fits all approach is unworkable. The unique differences between employers across Colorado and within the proposed catchment area of ETRP, between rural and urban Colorado, between men and women, between socio-economic classes, between employees and their work are what makes Colorado special. These unique differences, however, make the proposed regulatory SOV drive rate targets unworkable due to their inflexibility for considering the unique differences among Colorado employers.

Every employer in Colorado has unique needs, a unique employee mix, and a unique location. For some, a remote work structure is very achievable but for others, the type of work they perform cannot be done remotely or cannot accommodate significant modifications to work schedules.

For these reasons, including a numeric SOV drive rate target in the regulation will not lead to more consistent ETRP plans or greater overall SOV reductions.

X. Issues to be Resolved by the Commission -

BAERS-NCLA requests that the Commission resolve the issues listed and explained in Sections V-IX above. In particular, BAERS-NCLA requests that the Commission resolve the redline changes to the Proposed Rules attached to this prehearing statement.

⁴¹ The years of reported data do not align with the goal years.

⁴² Farkas, Z. Andrew, "Employer trip reduction programs: how effective and at what cost?" (January 2001), BAERS-NCLA_PHS_EX-04.

XI. Exhibits to be Introduced at the Hearing-

BAERS-NCLA is not submitting any exhibits with its prehearing statement and does not currently intend to introduce any written testimony at the hearing, but reserves the right to introduce any exhibits or written testimony necessary to rebut any alternate proposals or revisions raised by the Division or other parties to this rulemaking.

XII. Witnesses and Description of Testimony –

Each of the following witnesses may testify on the topics and comments articulated in the BAERS-NCLA prehearing statement regarding the policy and SOV target arguments presented.

Sandra Hagen Solin – Business Alliance for Economic Regulatory Sensibility

Ann Hutchison – Fort Collins Chamber of Commerce & Northern Colorado Legislative Alliance

Debbie Brown – Colorado Business Round Table

Rich Werner - Upstate Colorado

Mindy McCloughan - Loveland Chamber of Commerce

Jaime Henning - Greeley Chamber of Commerce

Kristen Blessman - Colorado Women’s Chamber of Commerce

Chris Colclasure – Beatty Wozniak

XIII. Conclusion

BAERS-NCLA appreciates the opportunity to submit this Prehearing Statement. For the foregoing reasons, BAERS-NCLA requests that the Commission thoughtfully consider and adopt its proposed revisions to the ETRP rule.

/s/ Sandra Hagen Solin

Sandra Hagen Solin

Business Alliance for Economic Regulatory Sensibility
(BAERS)

/s/ Ann Hutchison

Ann Hutchison

Northern Colorado Legislative Alliance (NCLA)

CERTIFICATE OF SERVICE

I hereby certify that on this 9th day of July, 2021, a true and correct copy of the foregoing Prehearing Statement was sent via electronic mail to the following addresses:

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By: /Signed/Tari King_____

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