



Community Environmental  
Advisory Commission

CONSENT CALENDAR  
February 23, 2021

To: Honorable Mayor and Members of the City Council  
 From: Community Environmental Advisory Commission  
 Submitted by: Ben Gould, Chairperson, Community Environmental Advisory Commission  
 Subject: Prohibition on the Use of City Streets for Operating, Parking, or Idling  
 Combustion Vehicles by 2045

RECOMMENDATION

Review and refer to the City Attorney for finalization the attached ordinance prohibiting the use of City-owned streets for the operation, parking, or idling of combustion vehicles beginning in 2045, and establishing an offset-driven fee-based enforcement mechanism.

POLICY COMMITTEE RECOMMENDATION

On January 20, 2021, the Facilities, Infrastructure, Transportation, Environment & Sustainability Policy Committee moved to send the item with a positive recommendation for Council to take no action on the item but to provide the item to staff as background for consideration, particularly as the Federal landscape changes under the new administration and to explore whether the City has the legal authority to pursue. Vote: All Ayes

SUMMARY

Achieving carbon neutrality by 2045 and an 80% reduction in greenhouse gas emissions by 2050 will require aggressive policies to phase out the use of fossil fuels for transportation. This proposed ordinance would prohibit vehicles which rely on burning fossil fuels (or other carbon-based fuels) from operating, parking, or idling on local City-owned streets. Enforcement is proposed to be through a fee structure similar to a congestion pricing zone, with pricing set to cover the cost of enforcement and of purchasing carbon offsets in order to achieve carbon neutrality.

FISCAL IMPACTS OF RECOMMENDATION

Some staff time for review. Additional staff time may be required leading up to 2045 to develop and establish a carbon offset program for combustion vehicles, though any such program would also be required for offsetting any residual emissions present in the

city at such time. No ongoing net fiscal impacts, as any fiscal impacts associated with enforcement or program management are to be offset by levied fees.

Adoption of the ordinance may expose the City to other potential direct or indirect fiscal impacts, including a potential lawsuit, or impacts to sales, property, and other tax or fee revenues resulting from public behavior changes.

### CURRENT SITUATION AND ITS EFFECTS

Citywide, transportation is the single largest source of greenhouse gas (GHG) emissions, contributing 60% of the city's total emissions. The City of Berkeley has adopted goals of being a Fossil Fuel Free city and becoming a net carbon sink by 2030, achieving carbon neutrality by 2045, achieving an 80% reduction in GHG emissions by 2050, and has declared a Climate Emergency, calling for "a just citywide emergency mobilization effort to end citywide greenhouse gas emissions as quickly as possible." However, greenhouse gas emissions from transportation are currently expected to grow.

Berkeley's Strategic Plan sets the goal of being a global leader in addressing climate change, advancing environmental justice, and protecting the environment. In line with this, City staff are working aggressively to develop a comprehensive action-based Electric Vehicle (EV) roadmap to find opportunities to increase equitable access to EV's within Berkeley's diverse community. This roadmap – currently in draft form – identifies the key barriers to electric mobility adoption, analyzes equity challenges and opportunities, and provides a comprehensive set of strategies to expand access to electric mobility choices throughout the city, including approaches which specifically tackle equity concerns in electric mobility, work towards net zero carbon, expand alternatives to driving, and call for city leadership.

In preparing this roadmap, staff has found that in order to reach the goal of carbon neutrality by 2045, given current vehicle turnover rates, the rate of EV uptake would need to accelerate dramatically, reaching 100% of new vehicle registrations by 2030 in order to achieve roughly 100% electrification by 2045. To achieve the City's voter-ratified goal of an 80% reduction in greenhouse gas emissions by 2050, roughly 100% of new vehicle registrations would have to be EVs by 2035.

Berkeley's current rate of EV uptake is not high enough to achieve this without significant policy changes. In 2017, only 16% of new personal vehicle registrations in Berkeley were EVs. This is a significantly higher adoption rate than much of the rest of California, but achieving Berkeley's goals would require this to be accelerated further still. At the current rate of uptake growth, Berkeley's newly registered vehicles would be

100% EVs in 2055. Assuming an average vehicle lifespan of ~15 years<sup>1</sup>, there would still be combustion vehicles registered in Berkeley through at least 2070 – 25 years past the target date for carbon neutrality.

Expanding equitable access to electric mobility options for Berkeley residents is critical for driving uptake, including improving alternatives to driving and expanding public charging infrastructure. The EV roadmap currently being prepared will be effective in the 5-10 year timeline it considers, and will help to substantially move the needle on Berkeley residents' EV uptake.

While the EV roadmap's efforts are critical, they will still fall short in achieving overall carbon neutrality. Many people who work, shop, or study in Berkeley either cannot afford or choose not to live in Berkeley, and so are less likely to be directly impacted by the EV roadmap's initiatives. Most other Bay Area cities have EV uptake rates even lower than Berkeley's, and are often doing less to accelerate the transition to EVs. In addition, Berkeley is served by numerous freight and delivery trucks bringing goods to Berkeley's businesses and residents, and these trucks are unlikely to be impacted by the EV roadmap.

The limited scope of the EV roadmap means it is unable to address the entire picture of Berkeley's greenhouse gas emissions from transportation, and should not be considered as the only set of approaches Berkeley can take. Other policies which support and align with the EV roadmap can help add to its effectiveness.

Without significant action, including the proposals in the EV Roadmap and more, it is extremely unlikely that Berkeley will be able to achieve the dramatic reduction in greenhouse gas emissions called for by the voters and its carbon neutrality goal.

At a regular meeting on Thursday, November 14, 2019, the Community Environmental Advisory Commission unanimously approved a motion to send the *Prohibition on the Use of City Street for Operating, Parking, or Idling Combustion Vehicles by 2045* recommendation to City Council (M/S/C) Gould, Hetzel. Ayes: Simmons, Varnhagen, Hetzel, Goldhaber, Gould. Abstained: De Leon. Absent: Ticconi.

## BACKGROUND

In 2006, Berkeley voters overwhelmingly supported Measure G, calling to reduce greenhouse gas emissions by 80% below 1990 levels by 2050. Berkeley's original award-winning Climate Action Plan was built around this goal.

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<sup>1</sup> Based upon DMV data on roughly 30 million registered automobiles and light trucks (<https://www.dmv.ca.gov/portal/wcm/connect/5aa16cd3-39a5-402f-9453-0d353706cc9a/official.pdf?MOD=AJPERES>), and California New Car Dealers Association data on roughly 2 million new vehicle sales annually (<https://www.cncda.org/wp-content/uploads/Cal-Covering-2Q-19.pdf>), the lifespan of a typical vehicle in California is roughly 15 years.

Following this, on June 12, 2018, Berkeley City Council unanimously declared a Climate Emergency, calling for “a just citywide emergency mobilization effort to end citywide greenhouse gas emissions as quickly as possible.” Berkeley also set a goal of being a Fossil Fuel Free city, becoming a net carbon sink by 2030, and achieving carbon neutrality by 2045.

Citywide, transportation is the single largest source of greenhouse gas emissions, contributing 60% of the city’s total emissions. Berkeley is home to, and a route for, tens of thousands of combustion-powered automobiles, trucks, and other vehicles which annually emit roughly 360,000 metric tons of carbon dioxide and other greenhouse gases. Unfortunately, this share – and the total level of emissions – is currently expected to grow.

The generally accepted accounting methodology for greenhouse gas emissions, which was used to generate this estimate, only considers vehicle trips on public roads which either start or end within city limits as affecting the City’s overall greenhouse gas emissions. In order to achieve carbon neutrality under that accounting methodology, therefore, the City must ensure that vehicle trips which start or end within city limits, traveling upon City streets, are carbon neutral by 2045.

The proposed policy would prohibit the use of City-owned streets for operating, parking, or idling combustion vehicles<sup>2</sup> beginning in 2045. Under the policy, combustion vehicles found to be operating, parked, or idle would be levied a fee to cover the cost to the City of purchasing a carbon offset to neutralize the emissions (along with an administrative fee to cover the cost of enforcement). In effect, this policy creates a zero-emission zone covering all local surface streets in Berkeley (with exceptions for state and federal highways), similar to congestion pricing zones in other cities.

This would be a novel and unprecedented policy approach which relies upon the principle of local police power over city streets to regulate the operation of certain vehicles. While this policy is novel, it effectively works as a zero-emission pricing zone – similar to a congestion zone, where vehicles are charged for their use of limited streetscape, vehicles are instead charged to offset the impact of their emissions. Vehicle operators who choose to operate a combustion vehicle do *not* face criminal penalties.

This unusual policy raises numerous questions and special considerations, which are elaborated upon in Attachments 2 and 3.

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<sup>2</sup> A combustion vehicle is defined in the policy as any on-road land motor vehicle which relies upon the combustion or oxidation of any carbon-based fuel (such as gasoline, diesel, or compressed natural gas [CNG]) for power or propulsion. Combusting or oxidizing carbon-based fuels results in the creation of carbon dioxide, regardless of whether it is emitted.

### ENVIRONMENTAL SUSTAINABILITY

Prohibiting the use of City streets for the operation, parking, or idling of combustion vehicles within City limits will reduce fossil fuel use and prevent the release of greenhouse gases into the atmosphere. Requiring violators to cover the cost of carbon offsets would, if effective, ultimately bring the overall environmental impacts of combustion transportation down to effectively zero. Driving consumer shifts towards non-combustion vehicles, like electric vehicles, will reduce overall greenhouse gas emissions globally: on a life-cycle basis, electric vehicles have significantly lower overall greenhouse gas emissions<sup>3,4</sup>.

### CALIFORNIA ENVIRONMENTAL QUALITY ACT (CEQA)

The proposed policy is categorically exempt from CEQA under CEQA Guidelines Sections 15307 and 15308.

### RATIONALE FOR RECOMMENDATION

CEAC recommends adopting the attached ordinance to prohibit the use of City streets for the operation, parking, or idling of combustion vehicles beginning in 2045, with certain exemptions, in order to achieve the City's carbon reduction and fossil-fuel-free goals.

In order to reach carbon neutrality without a significant, dramatic, and costly annual expenditure in carbon offsets to neutralize emissions, Berkeley needs a long-term strategy to both drive behavior change among all who work, play, or frequent our city, and to raise any funds that may be required to procure the necessary offsets in 2045. This proposed policy achieves that without encountering insurmountable legal barriers.

Berkeley is extremely unlikely to meet its carbon reduction and fossil-free goals without aggressive action on transportation decarbonization. Expanding efforts to drive EV uptake is critical, and CEAC believes that setting a sunset date for combustion vehicles will dramatically improve the success of EV uptake efforts. It may ultimately be the only way to ensure a full citywide transition to decarbonized transportation.

Structuring enforcement of the prohibition as enforcement of an emissions-free zone throughout most streets in the city, with a fee to enter with a combustion vehicle, aligns the policy with existing domestic and international legal precedent for congestion and low-emission zones, and ensures it is not a de facto mandate or an undue burden. Depositing any excess fees collected into a restricted fund for sustainability projects and programs, and particularly zero-emission transportation initiatives, ensures the fees are used appropriately.

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<sup>3</sup> Cleaner Cars from Cradle to Grave, Union of Concerned Scientists: <https://www.ucsusa.org/clean-vehicles/electric-vehicles/life-cycle-ev-emissions> (accessed September 2019)

<sup>4</sup> Life Cycle Analysis of Electric Vehicles, University of British Columbia: [https://sustain.ubc.ca/sites/default/files/2018-63%20Lifecycle%20Analysis%20of%20Electric%20Vehicles\\_Kukreja.pdf](https://sustain.ubc.ca/sites/default/files/2018-63%20Lifecycle%20Analysis%20of%20Electric%20Vehicles_Kukreja.pdf) (accessed September 2019)

In order to ensure full compliance with all applicable state and federal law and precedents, CEAC recommends a limited set of exemptions to minimize undue burdens to interstate commerce, ensure ongoing public services and public safety, and comply with other state and federal preemptions.

#### ALTERNATIVE ACTIONS CONSIDERED

CEAC considered taking no immediate action and instead waiting to see the impacts of the City's planned EV roadmap. However, upon consideration and recognition of the roadmap's finding that consumers must begin planning for full decarbonization 15-20 years in advance, we determined that waiting 5-10 years to evaluate the impacts of the EV roadmap strategy would not ensure Berkeley is able to meet its carbon neutral target. Instead, CEAC believes that this policy would lend weight and import to the EV roadmap strategy, as it is short- to medium-term plans like the EV roadmap that will make this larger, full decarbonization effort feasible in 25 years – without both working together, neither are likely to be successful.

CEAC considered a gradual, phased approach that would restrict combustion vehicles on a narrower set of streets initially, and over time expand that to include more of the city. While the city can expect a gradual, phased increase in the use of electric vehicles, it is likely to be dispersed throughout the city as residents, apartments, and businesses install chargers or purchase vehicles over time. Other policies, such as those proposed in the EV roadmap, will help encourage and accelerate this gradual uptake; however, phasing certain streets into a combustion-free zone did not provide a clear benefit and could, ultimately, reduce in an *increase* in greenhouse gas emissions as combustion vehicles attempt to route around limited areas which are combustion-free.

CEAC also considered a less stringent enforcement mechanism, but determined that weaker enforcement would dramatically reduce the effectiveness of the policy. CEAC also recognizes the ability of Council to direct the City Manager on enforcement priorities.

CEAC considered leaving excess fees collected as unrestricted revenue, but determined that would potentially hamper the ability of the city to achieve a just citywide zero-emission mobility transition.

#### CITY MANAGER

The City Manager takes no position on the content and recommendations of the Commission's Report.

#### CONTACT PERSON

Ben Gould, Chair, Community Environmental Advisory Commission, 510-725-9176

Attachments:

- 1: Ordinance
- 2: Frequently Asked Questions
- 3: Analysis of Legal Considerations

ORDINANCE NO. -N.S.

AMENDING BERKELEY MUNICIPAL CODE TITLE 14 TO PROHIBIT THE  
OPERATION OF COMBUSTION-POWERED VEHICLES

BE IT ORDAINED by the Council of the City of Berkeley as follows:

Section 1. That the Berkeley Municipal Code Chapter 14.94 is added to read as follows:

**Chapter 14.94**  
**OPERATION OF COMBUSTION VEHICLES**

**Sections:**

<b>14.94.010</b>	<b>Findings</b>
<b>14.94.020</b>	<b>Purpose</b>
<b>14.94.030</b>	<b>Definitions</b>
<b>14.94.040</b>	<b>Prohibition</b>
<b>14.94.050</b>	<b>Enforcement</b>
<b>14.94.060</b>	<b>Exemptions</b>
<b>14.94.070</b>	<b>Severability</b>

14.94.010 Findings

A. Climate change, caused by the generation of carbon dioxide and other greenhouse gases, is harmful to human health and public safety, acting through increased risks of wildfire, drought, landslides, heat stress, sea level rise, disease, pests, environmental degradation, and other pathways.

B. The City of Berkeley has adopted a goal of carbon neutrality by 2045, becoming a fossil fuel free city, and reducing greenhouse gas emissions by 80% below 1990 levels by 2050.

C. The State of California has adopted the goal of carbon neutrality by 2045, and reducing greenhouse gas emissions by 80% below 1990 levels by 2050.

D. Combustion vehicles are responsible for over 60% of the greenhouse gas emissions attributable to the City of Berkeley.

E. At present, over 95% of all vehicles traveling through the City of Berkeley are combustion vehicles. In 2017, only 17% of new vehicles registered in the City of Berkeley were plug-in vehicles.

F. In order to reach carbon neutrality by 2045, projections show that there must be an aggressive and unprecedented transition to electric vehicles.



G. Berkeley's current rate of uptake is not projected to reach the goal of carbon neutrality before 2045.

H. The California Vehicle Code (CVC § 21101 (c)) grants cities the authority to regulate the use of certain roads by certain vehicles.

I. The City of Berkeley is a charter city with jurisdiction over municipal affairs, including the use of public right of way.

J. Due to improvements in battery technology and declining costs, the prices of electric vehicles are expected to decline, becoming cost-competitive with traditional combustion vehicles in under 10 years and likely subsequently declining further, while the available range continues to further increase.

K. Disadvantaged and low-income communities have traditionally shouldered the brunt of the impacts associated with combustion vehicles.

L. Combustion vehicles, by the mechanics of their engine operation, exacerbate noise and heat issues in already increasingly noisy, hot cities and neighborhoods.

M. Combustion vehicles, by necessity of their design, transport and store hazardous, polluting chemicals as fuel – such as gasoline – which pose risks of contamination to air and water.

N. Combustion vehicles, by necessity of their design, transport and store hazardous polluting chemicals as fuel which pose serious risks of fire and explosion, threatening health, property, and public safety.

O. Advancing the adoption of non-combustion vehicles helps make them more affordable and supports the expansion of supportive infrastructure.

P. The State of California, as well as Bay Area counties, cities, and community choice energy providers are working to increase equitable access to alternatives to combustion vehicles, such as by supporting electric vehicles and charging infrastructure.

Q. Achieving a transportation system which is nearly 100% decarbonized is feasible and viable by 2045.

R. Significant action at the local and state level is required to drive full decarbonization by 2045.

14.94.020 Purpose

The purpose of this chapter is to promote the health and safety of Berkeley residents and visitors, to address environmental impacts and prevent climate change from the emission of greenhouse gases resulting from the combustion of fossil fuels used for transportation, and to fulfill upon the intent of the voters as expressed in Berkeley's 2006 Measure G.

#### 14.94.030 Definitions

For the purposes of this chapter, the following words and phrases shall have the meaning respectively ascribed to them by this section:

A. "Combustion vehicle" shall mean any on-road land motor vehicle which uses the combustion or oxidation of any carbon-based fuel to provide power or propulsion.

B. "Carbon offset" shall mean a competitively procured, third-party verified project or program which, with the funding provided through the purchase of the offset, results in the permanent, indefinite storage or sequestration of carbon dioxide.

C. "Greenhouse gas" shall mean any planet-warming chemical which is a gas at standard temperature and pressure, and for which anthropogenic sources are disproportionately responsible for their presence in the atmosphere including, but not limited to, carbon dioxide, methane, nitrous oxides, hydrocarbons, hydrofluorocarbons, hydrochlorofluorocarbons, and others.

D. "Combustion Vehicle Carbon Offset Program" shall be any program through which the City of Berkeley assesses its attributable share of emissions from any combustion vehicles passing through its city limits using a standard and widely accepted methodology, and acquires and retires carbon offsets equal to the attributable emissions from those combustion vehicles.

E. "Green Initiative Fund" shall be any program through which the City of Berkeley dedicates and allocates funding for programs and projects which improve environmental sustainability, including but not limited to reducing greenhouse gas emissions, improving energy efficiency, reducing or diverting waste, reducing or cleaning up pollution, reducing or cleaning stormwater runoff, improving resiliency, and reducing dependency on automobiles.

#### 14.94.040 Prohibition

Beginning January 1<sup>st</sup>, 2045, it shall be unlawful to operate any combustion vehicle upon any public streets or highways exclusively under the jurisdiction of the City of Berkeley.

Beginning January 1<sup>st</sup>, 2045, it shall be unlawful to park or idle any combustion vehicle upon any public street or highway exclusively under the jurisdiction of the City of Berkeley.

#### 14.94.050 Enforcement

- A. Beginning January 1<sup>st</sup>, 2045, any combustion vehicle operating, parked, or idling upon any public street or highway exclusively under the jurisdiction of the City of Berkeley shall pay a fine for each calendar day in which it is found operating, parked, or idling.
- B. The City of Berkeley shall set the fine amount annually based upon the cost of operating the Combustion Vehicle Carbon Offset Program and the cost of enforcing and collecting the fine.
- C. Fines collected shall be used to pay for the Combustion Vehicle Carbon Offset Program and the staff time required to enforce and collect the fines.
- D. At the end of each fiscal year, any fines collected in excess of those needed to cover the full cost of the Combustion Vehicle Carbon Offset Program and the staff time spent enforcing and collecting the fines, shall be deposited into the City's Green Initiative Fund, to support programs and projects which facilitate and encourage the use of zero-emission modes of transportation, including but not limited to pedestrian improvements, bicycle and scooter lanes, public transit infrastructure, public electric vehicle charging, and/or educational programs.
- E. Fines shall be levied equally across all combustion vehicles, independent of vehicle make, manufacturer, type, class, model year, date of manufacture, date of sale, operator, place of registration, or other factor.

#### 14.94.060 Exemptions

This Section shall not apply to:

- A. Combustion vehicles owned or operated by: government bodies, utilities or telecommunications providers, healthcare providers, emergency services, paratransit services, or passenger stage corporations (as defined in PUC § 1031).
- B. Combustion vehicles operating, parked, or idling upon the I-80/I-580 corridor, State Route 123 (San Pablo Ave), State Route 13 (Ashby Ave, and Tunnel Road between Claremont Ave and Hiller Dr.), or other designated state or federal highways at the time of enforcement.
- C. New motor vehicles, as defined in the Clean Air Act under 42 U.S. Code § 7550(3), where "the term 'new motor vehicle' means a motor vehicle the equitable or legal title to which has never been transferred to an ultimate purchaser." However, for imported vehicles, the term "new motor vehicle" means "mean a motor vehicle and engine, respectively, manufactured after the effective date of a regulation issued under [42 U.S. Code § 7521]... which is applicable to such vehicle or engine (or which would be

applicable to such vehicle or engine had it been manufactured for importation into the United States).”

#### 14.94.070 Severability

If any section, subsection, sentence, clause or phrase of this chapter is for any reason held to be invalid or unconstitutional, such decision shall not affect the validity of the remaining portions of this chapter. In addition, the City Council hereby declares that it would have passed the ordinance codified in this chapter, and each and every section, subsection, sentence, clause or phrase not declared invalid or unconstitutional without regard to whether any portion of this chapter would be subsequently declared invalid or unconstitutional.

## Frequently Asked Questions

### *Is this even legal?*

In developing this approach, several potential legal barriers were considered and evaluated. None were found to expressly prohibit, and several actually reinforce the underlying legal principles behind this approach. See Appendix 2 (Attachment 3) for more information.

### *Why set policy so far in advance? Why not take a more incremental approach?*

Traditional policy approaches have worked on much narrower time horizons, such as 3-5 years. However, traditional policy approaches have never attempted a wholesale transformation as complete and thorough as that which we must achieve within the next 30 years to maintain a habitable planet. Nor have the stakes ever been this high.

Fundamentally, this policy is intended to help reshape public expectations and decision-making at a grand scale – while traditional policies have aimed to achieve incremental, progressive improvements, this one aims to achieve a world in which we truly achieve zero emissions. The types of decisions and planning which must be made to achieve that cannot be affected by implementing this policy one street at a time.

### *Electric vehicles are expensive. Won't this disproportionately impact low-income and disadvantaged communities?*

An additional concern raised by this proposed policy is equity concerns and access to electric vehicles by low-income and disadvantaged communities.

Electric vehicles across all on-road types are expected to be widely available and achieve cost parity, if not savings, within the next decade (by 2030). Both Bloomberg and the International Council for Clean Transportation expect price parity for passenger vehicles to be achieved between 2022<sup>5</sup> and 2028<sup>6</sup>, respectively. Bloomberg has already found that electric buses are cheaper today, in 2019, on a total cost of ownership basis across nearly all use cases, and will achieve unsubsidized parity by around 2030<sup>7</sup>. For trucks, McKinsey Energy Insights expects light- and medium-duty trucks running regional and urban trips to reach cost parity by roughly 2028. Long-haul trips and heavy-duty trucks may not achieve cost parity until after 2030, although they have economical use cases much sooner<sup>8</sup>.

Because EVs are anticipated to reach parity before 2030, there is almost certain to be a wide variety of options available, both new and used, at a mix of price points, by the

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<sup>5</sup> <https://about.bnef.com/blog/bullard-electric-car-price-tag-shrinks-along-battery-cost/>

<sup>6</sup> <https://theicct.org/publications/update-US-2030-electric-vehicle-cost>

<sup>7</sup> <https://about.bnef.com/blog/electric-buses-cities-driving-towards-cleaner-air-lower-co2/>

<sup>8</sup> <https://www.mckinseyenergyinsights.com/insights/new-reality-electric-trucks-and-their-implications-on-energy-demand/>

time this policy takes effect in 2045. Furthermore, the availability of EVs for low-income communities in 2045 depends heavily on consumer and government choices over the next 25 years; a policy like this would likely only expand the availability of EVs compared to a business-as-usual scenario.

Low-income and disadvantaged communities today are disproportionately impacted by the effects of air pollution and climate change. Implementing this policy will result in significant benefits to these communities.

*How will this be enforced? Won't it disproportionately impact low-income and disadvantaged communities?*

As 2045 approaches, Berkeley could further ensure the policy will be enforced in an equitable fashion by adding flexibility through amendments or direction to the city Manager on enforcement approaches.

A variety of mechanisms exist for enforcement. Because any combustion vehicle has a tailpipe, it is relatively easy to spot a combustion vehicle during ordinary parking enforcement activities or on standard police patrols, minimizing surveillance concerns. If Berkeley chooses to invest in automated billing systems (such as for a congestion pricing zone), or if vehicle position information is shared on a network (such as for autonomous vehicles), billing could be done automatically.

Equity and affordability challenges could be addressed by setting a cap on fees levied annually based on a certain percentage of household income, or a permitting system could be established to grant exemptions to enforcement. Either of these approaches would work with a variety of enforcement mechanisms. Due to the likelihood of significant technological change in the intervening decades, and the uncertainty around non-combustion vehicle uptake and availability for low-income households, these issues would need to be evaluated at a future date.

Furthermore, low-income and disadvantaged communities today are disproportionately impacted by the effects of air pollution and climate change. Implementing this policy will result in significant benefits to these communities.

*Where will all these electric vehicles charge? What about people who can't charge at home?*

City staff are in the process of developing an EV Roadmap, which will include recommendations for expanding EV charging citywide, particularly to serve low-income and multi-unit building residents. These approaches will include expanded workplace and public charging (e.g., at grocery stores and parking garages), as well as curbside charging in neighborhoods and commercial districts. Over the next 25 years, Berkeley should have ample time to prepare for a dramatic increase in the usage of electric vehicles.

*Have other cities enacted similar policies?*

The City of London has enacted a low-emission zone<sup>9</sup> and, within it, an ultra-low emission zone<sup>10</sup>. These zones charge fees to drivers of polluting vehicles on a daily basis to drive within the zone, with a comprehensive program for enforcement across vehicle types and considering needs for discounts and exemptions. Numerous additional cities in Europe have created low-emission zones<sup>11</sup>, frequently targeting diesel vehicles (which are more prevalent due to the popularity of diesel automobiles). The city center of Paris prohibits larger and older vehicles<sup>12</sup>, while Barcelona is in the process of establishing a similar low-emission zone<sup>13</sup> for older vehicles which do not meet more modern emission standards.

No city has yet enacted a low-emission zone in the United States, though New York has discussed congestion pricing<sup>14</sup> and San Francisco has set forth the goal of achieving 100% of trips taken by sustainable modes by 2040<sup>15</sup>. Berkeley could be the first city in the world to pass a law establishing a future zero-emission zone, and play a leadership role in supporting other cities regionally, nationally, and globally in moving towards a clean and sustainable future for transportation. Berkeley's unique political environment empowers it to advance groundbreaking, socially conscious environmental policy, helping clear the way for other cities to follow suit.

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<sup>9</sup> Transport for London, "Low Emission Zone": <https://tfl.gov.uk/modes/driving/low-emission-zone>.

<sup>10</sup> Transport for London, "Ultra Low Emission Zone": <https://tfl.gov.uk/modes/driving/ultra-low-emission-zone>.

<sup>11</sup> Wikipedia, "Low-Emission Zone": [https://en.wikipedia.org/wiki/Low-emission\\_zone](https://en.wikipedia.org/wiki/Low-emission_zone).

<sup>12</sup> Environmental Badge, "Ecological zone Paris": <https://www.environmentalbadge.com/eco-zone-paris/>.

<sup>13</sup> Distintivo-Ambiental.es, "The LEZ Barcelona/City environmental zone": <https://www.distintivo-ambiental.es/en/info-menu/die-umweltzonen/barcelonacity-lez.html>

<sup>14</sup> The New York Times, "Confused about congestion pricing? Here's what we know": <https://www.nytimes.com/2019/04/24/nyregion/what-is-congestion-pricing.html>

<sup>15</sup> Mayor's Electric Vehicle Working Group Electric Mobility Subcommittee, "Proposed Electric Vehicle Roadmap for San Francisco": [https://www.sfmta.com/sites/default/files/reports-and-documents/2019/07/evroadmap\\_final\\_june2019.pdf](https://www.sfmta.com/sites/default/files/reports-and-documents/2019/07/evroadmap_final_june2019.pdf)

## **Analysis of Legal Considerations**

In reviewing the potential legal barriers to implementation, CEAC consulted with environmental lawyers with particular expertise in clean air and transportation issues from Coltura, EarthJustice, Sierra Club, and Environmental Defense Fund. The considerations identified are explained below.

### **Federal Preemption**

Federal laws which conflict with state or local laws trump those laws, under the Supremacy Clause of the U.S. Constitution. There are several federal laws which may potentially conflict with this proposed policy. Fortunately, in determining federal preemption, the courts generally start “with the assumption that the historic police powers of the States were not to be superseded by the Federal Act unless that was the clear and manifest purpose of Congress.” *Medtronic, Inc. v. Lohr*, 518 U.S. 470, 485 (1996).

In passing the Clean Air Act, Congress found that “air pollution prevention (that is, the reduction or elimination, through any measures, of the amount of pollutants produced or created at the source) and air pollution control at its source is the primary responsibility of States and local governments” (42 USC § 7401(a)(3)). In *Huron Portland Cement Co. v. Detroit*, 362 U.S. 440, 442 (1960), the Supreme Court found that “Legislation designed to free from pollution the very air that people breathe clearly falls within the exercise of even the most traditional concept of what is compendiously known as the police power.”

As a result, local laws to regulate air pollution, such as the emission of carbon dioxide and other greenhouse gases, fall under the traditional scopes of local authorities. Federal laws which may conflict must demonstrate clear legislative intent to supersede this authority.

### **Relating To Consideration**

When federal laws are intended to preempt local regulations, they frequently prohibit states and cities from implementing laws “related to” the area under federal concern. For example, the Clean Air Act prohibits states and cities from adopting standards “relating to” the control of emissions; the Energy Policy Conservation Act prohibits states and cities from adopting laws “related to” fuel economy standards; and the Federal Aviation Administration Authorization Act (FAAAA) prohibits states and cities from enacting laws “related to” the price, route, or service of any motor carrier.

Under an extremely broad interpretation of “related to”, it is possible that just about any policy could be construed as “related to” a preempted area, as it could have indirect effects on that area. For instance, the recent increase in bridge tolls throughout the Bay Area to raise funds for public transportation could be construed as “related to” the price of motor carriers, as higher bridge tolls leads to higher prices, and thus it could be argued that it would be pre-empted under the FAAAA.



However, prior case law indicates that laws and regulations which are not directly related are not preempted. For example, in *Californians for Safe and Competitive Dump Truck Transportation v. AFL CIO*, the Ninth Circuit Court of Appeals found that while California's Prevailing Wage Law has effects on price, routes, and services of motor carriers, it is only an indirect, remote, and tenuous effect and thus not pre-empted by the FAAAA.

More broadly, the Supreme Court decision in *California Division of Labor Standards Enforcement et al. v. Dillingham Construction, N.A., Inc., et al* provides further precedent as to what laws are considered "related to" under federal preemption: the unanimous opinion finds that laws are preempted if they impose requirements by reference to, or a connection with, an area of preemption. In a concurring opinion, Justice Scalia, joined by Justice Ginsburg, wrote that "the 'relate to' clause of the preemption provision is meant, not to set forth a test for preemption, but rather to identify the field in which ordinary field preemption applies."

As a result, "related to" can broadly be understood to apply if the laws under question are within the field identified by the area of preemption, and if the laws also impose requirements by reference to, or in connection with, an area of preemption.

### **Potential Federal Preemption**

#### **Clean Air Act (CAA)**

The Clean Air Act grants the federal government authority to set emission standards for new vehicles (and provides California the opportunity to set its own, subject to findings by the EPA). Local jurisdictions are expressly prohibited from setting emission standards for, or otherwise regulating emissions of, new vehicles, as stated in 42 U.S. Code § 7543(a): "No state or any political subdivision thereof shall adopt or enforce any standard relating to the control of emissions from new motor vehicles or new motor vehicle engines subject to this part."

Two key components of § 7543(a) must be further defined. Firstly, as used in this section, a "standard relating to the control of emissions" means an emission standard, as defined in 42 U.S. Code § 7602(k): "The [term]... 'emission standard' mean[s] a requirement established by the State or the Administrator which limits the quantity, rate, or concentration of emissions of air pollutants on a continuous basis, including any requirement relating to the operation or maintenance of a source to assure continuous emission reduction, and any design, equipment, work practice or operational standard promulgated under this chapter."

Secondly, 42 U.S. Code § 7550(3) defines "new motor vehicles" as "...a motor vehicle the equitable or legal title to which has never been transferred to an ultimate purchaser."

Ultimately, this means that states and cities are clearly preempted from setting standards that affect how vehicles are manufactured (with the exception that California may be granted a waiver from this preemption). Case law<sup>16,17</sup> has found that requirements to purchase certain vehicles based upon emissions is similarly subject to preemption.

This policy does not attempt to enforce standards for how vehicles are manufactured or sold based on emissions. Berkeley does not need to, and should not, make any attempt to set or enforce standards for emissions from new vehicles.

To achieve its goal of carbon neutrality under the standard greenhouse gas accounting methodology, Berkeley need only address the use of combustion vehicles for trips which start or end in Berkeley. However, combustion vehicles may be sold in Berkeley and stored or used on private property, or transported outside of the city and operated elsewhere, while having no impact on the city's overall emissions.

As a result, new vehicles (following the definition in § 7550(3)) are explicitly exempted from this policy (14.94.060.C).

As far as state and national emission standards for new motor vehicles are concerned, Berkeley's state and national elected leaders are champions for the environment and public health, and the city can reasonably rely upon them to advocate for the city's best interests in setting state and national policies on new vehicle emission standards.

Under the Clean Air Act, 42 U.S. Code § 7543(d) states that "Nothing in this part shall preclude or deny to any State or political subdivision thereof the right otherwise to control, regulate, or restrict the use, operation, or movement of registered or licensed motor vehicles."

While the Clean Air Act does preempt cities from regulating new vehicles, it largely defines those as unsold vehicles. Otherwise, it reinforces the principle that cities are permitted to use local police power to regulate the operation of vehicles.

#### Energy Policy and Conservation Act (EPCA)

The EPCA grants the federal government authority to set fuel economy standards for new vehicles, and subsequently prohibits local jurisdictions from "adopt[ing] or enforc[ing] a law or regulation related to fuel economy standards..." (49 U.S. Code § 32919(a)).

Berkeley is unconcerned with fuel economy (distance traveled per unit of energy), and this proposed policy has no relation to fuel economy standards.

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<sup>16</sup> *Engine Manufacturers Association v. South Coast Air Quality Management District*, 2004

<sup>17</sup> *Metropolitan Taxicab Board of Trade v. City of New York*, 2009

As with the Clean Air Act, Berkeley is concerned with the emission of greenhouse gases associated with the operation of combustion vehicles. The fuel economy of a new vehicle is not relevant. Furthermore, vehicles sold in Berkeley could be transported and operated outside of the city, or on private property, or pass through without stopping, without affecting the City's greenhouse gas emissions, and so Berkeley does not need to, and should not, make any attempt to regulate fuel economy of new vehicles.

This policy does not attempt to do so.

#### FAA Authorization Act (FAAAA)

The FAA Authorization Act (49 US Code § 14501) prohibits states and cities from enacting laws related to the price, route, or service of any motor carrier (a person providing motor vehicle transportation for compensation).

As previously discussed, under an extremely broad interpretation of "relating to", it is possible that this policy could be construed as "relating to" price, route, or service, as it could have indirect effects on prices or routes, or service (if the vehicle's method of propulsion is considered an element of a motor carrier's service).

However, this policy does not specifically reference or have a direct connection to motor carriers; nor does it directly affect prices, routes, or services; nor is it within the field of preemption intended under the FAAAA. As a result, under the precedent for areas of "related to" preemption, it is unlikely to be found to be in violation of the FAAAA.

#### Interstate Commerce

The "dormant commerce clause," derived from inferences of the Commerce Clause of the U.S. Constitution, requires that any local or state law which affects interstate commerce must not discriminate against out-of-state commerce, and must not be unduly burdensome, with exceptions available if there is no other way to achieve an important goal.

This policy may have impacts on interstate commerce, as either individuals or goods may travel across state lines to conduct business in Berkeley using a combustion vehicle. However, Berkeley's voters clearly consider reducing greenhouse gas emissions and achieving carbon neutrality to be an important goal, as evidenced by the overwhelming 82% support from voters for the 2006 Measure G. As Berkeley cannot physically prevent combustion vehicles from entering the city, there is no other way to achieve carbon neutrality without collecting the revenue necessary to offset the emissions associated with combustion vehicle trips.

The burden on interstate commerce is minimized by exempting the state and federal highways passing through Berkeley, and ensuring there are no criminal penalties associated with operating a combustion vehicle. Furthermore, Berkeley is a city well-

served by exceptional local and regional transit services, as well as bicyclist and pedestrian infrastructure, reducing the need to drive into or within the city. It is also in close proximity to ports, freight rail yards, and regional distribution centers, reducing the need for goods to be delivered by long-haul truck directly from the point of origin, and thereby reducing any burden from haulers which choose to switch to a zero-emission vehicle for final delivery within the city to avoid the carbon offset fee.

### **Potential State Preemption**

#### **Municipal Affairs**

Generally, local jurisdictions are preempted from regulating in areas which are subject to state control. Charter cities like Berkeley are granted authority over municipal affairs, but what exactly is considered a municipal affair is typically decided by the courts on a case-by-case basis. Frequently, courts will overturn arguments based upon municipal affairs if the state has already issued extensive regulations or legislation on the issue, or if there exists a paramount need for state control over the subject.

To date, the State of California has taken a mixed approach to achieving its statewide emissions reductions goals. In some areas, like energy, the State has taken a highly regulatory approach, setting renewable portfolio standards and implementing cap-and-trade. However, in areas relating to transportation, and in particular the strategies that local governments can deploy to reduce greenhouse gas emissions from transportation, the State has to date treated it as a municipal affair. SB 375, the Sustainable Communities and Climate Protection Act of 2008, has served as the cornerstone of the State's strategy for reducing vehicle miles traveled for over a decade. SB 375 directs the California Air Resources Board to set targets for regional emissions reductions from passenger vehicles, and subsequently wholly recognizes the right of regional and local governments to custom-tailor their approach to reducing VMT and transportation GHGs based upon local conditions and needs. Berkeley has traditionally set policies regulating the use of its local roads to achieve GHG and VMT reductions as though it is a municipal affair.

Berkeley's voters also clearly consider local reductions in greenhouse gas emissions to be a municipal affair. In 2006, an overwhelming 82% of Berkeley's voters supported Measure G, which proposed establishing a goal of 80% reduction in greenhouse gas emissions by 2050 and advising the Mayor to work on a Climate Action Plan. This direct mandate by Berkeley's voters calls for the city to take aggressive action, particularly if it finds the state's actions alone will not achieve the city's goals.

#### **California Vehicle Code**

The state's vehicle code generally sets the rules of the road and requirements for vehicles to ensure safety. In addition, CVC § 21101 (c) states "Local authorities, for those highways under their jurisdiction, may adopt rules and regulations by ordinance or resolution on the following matters... Prohibiting the use of particular highways by certain vehicles," except for passenger stage corporations, as provided in the Public

Utilities Code. Passenger stage corporations are granted an exemption from the proposed policy.

Based upon this section, it appears that the State considers regulating the use of local streets to be a municipal affair, and that prohibiting the use of local city streets by combustion vehicles is an application of local police power authorized under both state and federal law.

No other applicable laws, legal principles, examples from case law, or precedents were identified. As such, based upon review of the above considerations, there do not appear to be insurmountable existing federal or state legal barriers to implementing a policy of this type.

