



TO:	Edward D. Reskin City Administrator	FROM:	Fred Kelley Director, Oakland Department of Transportation
			G. Harold Duffey Director, Oakland Public Works
SUBJECT:	The Oakland Zero Emission Vehicle Action Plan and Related Ordinances	DATE:	September 19, 2022
City Administrator Approval		^{Date:} Sep 22, 2022	

RECOMMENDATION

Staff Recommends That The City Council Adopt:

(1)A Resolution (A) Approving The Oakland Zero Emission Vehicle Action Plan, (B) Adopting Appropriate California Environmental Quality Act (CEQA) Findings, And (C) Directing the City Administrator To Add One Full Time Transportation Planner II Position In The Department of Transportation Fiscal Year 2023-24 Budget Proposal To Implement The City Of Oakland's Zero Emission Vehicle Action Plan, And

(2)An Ordinance: (A) Amending Ordinance No. 13654 C.M.S (Which Adopted The Fiscal Year 2022-23 Master Fee Schedule), As Amended, To Establish Fees For Charging Electric Vehicles, And (B) Amending Municipal Code Section 10.48.010(B) To Add Fines For Parking A Vehicle In An Electric Charging Designated Space While Not Connected For Electric Charging Purposes; And (C) Adopting Appropriate California Environmental Quality Act (CEQA) Findings

EXECUTIVE SUMMARY

The Zero Emission Vehicle (ZEV) Action Plan is intended to improve community health, safety, and resilience by eliminating greenhouse gas (GHG) emissions and air pollution from vehicles by 2045, Oakland City Council's adopted Carbon Neutrality target. Vehicle emissions have deleterious health and environmental impacts, which disproportionately impact frontline communities including Black, Indigenous, and People of Color (BIPOC); low-income; elderly; and disabled communities.

Oakland's 2030 Equitable Climate Action Plan (ECAP), Action TLU-5 directed creation of a ZEV Action Plan. The Plan complements other City plans and resolutions as part of a broader City strategy to advance sustainable mobility. Oakland's Transit First Policy (1996), Complete Streets Policy (2013), Pedestrian Plan (2017), and Bicycle Master Plan (Let's Bike Oakland – 2019), combined with the ZEV Action Plan and Oakland's participation in East Bay Community Energy, ensure a holistic approach to mobility: *Transition as many people and activities away from private vehicles as possible; and ensure that all remaining vehicles run on carbon-free, renewable electricity.*

The ZEV Action Plan includes 36 Actions across 6 themes and proposes high-level funding strategies. In combination, the Actions are intended to facilitate an equitable transition to 100 percent of Oakland vehicles being zero-emission by 2045. Given the City's limited sphere of control related to transportation, and strong ZEV targets already set by the state of California, many of the Plan's Actions focus on ensuring that City processes related to prioritizing, siting, and building ZEV infrastructure are efficient and equitable.

The associated Ordinance amends the Master Fee Schedule to enable the City to recover electricity costs associated with private electric vehicle (EV) charging at City-owned EV chargers in the public right-of-way or in City-owned public parking facilities, and establishes a new fine for parking a vehicle in a EV designated parking space while not plugged in for the purposes of charging.

BACKGROUND / LEGISLATIVE HISTORY

The City of Oakland has been a leader in ambitious and equity-driven climate action for decades, frequently surpassing California statewide goals. Resolution No. 82129 C.M.S. (2009) directed staff to develop the City's first climate strategy with a GHG emission reduction target of 36 percent below 2005 levels; it also established a long-term GHG reduction target of 83 percent by 2050. In 2015, as a signatory to the Under2 Memorandum of Understanding and the Global Covenant of Mayors, the City declared its commitment to reducing its GHG emissions to levels consistent with the targets established in the 2015 Paris Climate Accord.

In 2016, California enacted Senate Bill (SB) 32, which built on the 2006 California Global Warming Solutions Act (AB 32) by requiring Statewide GHG emissions be reduced to 40 percent below 1990 levels by 2030. In 2018, Oakland City Council again demonstrated leadership through Resolution No. 87183 C.M.S., establishing a GHG emissions reduction target of 56 percent below 2005 levels by 2030. The same year, City Council adopted Resolution No. 87397 C.M.S., declaring a climate emergency and calling for regional collaboration and a "citywide just transition and urgent climate mobilization effort to reverse global warming … as quickly as possible towards zero net emissions."

In July 2020, Oakland City Council adopted the <u>2030 ECAP</u>, a comprehensive plan responsive to the abovementioned Resolutions. The ECAP addresses both GHG mitigation and climate resilience through an equity lens, leveraging the tools and policy levers available through the City's regulatory and legal spheres of control to reduce local GHG emissions on a path projected to exceed Council's adopted 2030 and 2050 reduction targets. Alongside the 2030

ECAP, Council also adopted a Carbon Neutrality Target of 2045 (Resolution No. 88268 C.M.S.). Achieving carbon neutrality will require complete decarbonization (ensuring that all mechanical systems run on clean electricity) of Oakland's transportation sector.

The City has also pursued numerous legislative and programmatic strategies to promote mobility access and sustainability for all Oaklanders. In 1996, Oakland City Council adopted a visionary Transit First Policy (Resolution No. 73036 C.M.S.), which established public transit as a priority mode of transportation and linked increased transit ridership to important City goals related to social equity and the environment. It also identified the importance of priority transit treatments like bus bulbs, transit signal priority, and dedicated bus lanes. In 2013, Council approved the Complete Streets Policy (Resolution No. 84204 C.M.S.), affirming the City's commitment to ensuring robust and accessible walking, biking, and public transit amenities for all Oaklanders of all abilities.

ZEVs have been the subject of state, regional, and local goals for climate action and air quality improvement. The 2018 Electric Vehicle Charging Infrastructure act (Assembly Bill 2127) directed the California Energy Commission (CEC) to assess the changing needs of an increasingly electric statewide truck fleet along with implications for the state's electricity grid through 2030. In 2020, CA Governor Gavin Newsom issued Executive Order N-79-20, mandating that 100% of new passenger vehicle sales be ZEVs by 2035, and that 100% of medium- and heavy-duty (MHD) vehicles be zero emission by 2045 where feasible, and by 2035 for all short-haul trucks and off-road vehicles and equipment.

In accordance with state goals, the California Air Resources Board (CARB) developed The Advanced Clean Truck regulation and the Innovative Clean Transit Rule, which require increasing percentages of the state's MHD and bus fleets to be zero emission over time, with zero-emission purchase requirements beginning in 2023 for large transit agencies, and up to 75 percent of sales of certain medium-duty trucks being zero-emission by 2035. Legislation including the 2021 Clean Freight Corridor Efficiency Assessment act (Senate Bill 671) embed equity goals within the transition, with SB 671 specifying that zero-emission freight must be deployed fastest in areas with "freight-adjacent" communities.

Assembly Bill 1236 (2015) and AB 970 (2020) required all California cities to streamline permitting processes for EV charging stations by expediting timeframes, limiting project review to health and safety requirements, and reducing parking requirements in cases of conflict between minimum parking space requirements and space constraints caused by installation of EV chargers.

In February 2017, City Council adopted building code requirements for all new multifamily and non-residential buildings to be "PEV (Plug-in Electric Vehicle) Ready" in excess of levels required by State code.

These policies were validated in the 2017 CURB Analysis, incorporated in Resolution No. 87183. The CURB model identified five goals necessary to achieve the City's interim and final GHG reduction targets, two of which were "Significantly shift people away from private auto trips," and "Accelerate the electrification of vehicles."

The adopted 2030 ECAP included multiple Actions to achieve the CURB goals and build on the *Transit First* and *Complete Streets* Policies, including land use- and transportation-related Actions intended to support a transition away from single-occupancy vehicle trips, and Action TLU-5, *Create a Zero Emission Vehicle (ZEV) Action Plan.*

ANALYSIS AND POLICY ALTERNATIVES

Eliminating the use of fossil fuel-powered vehicles will dramatically impact Oakland's climate profile. In 2017, the most recent year of analysis, 66 percent of Oakland's local GHG emissions came from the transportation sector. Additionally, the approval of the Plan will advance the following citywide priorities:

Housing, Economic, and Cultural Security

Switching to ZEVs reduces lifetime driving expenses thanks to reduced fueling and maintenance costs. This is a significant benefit to low-income community members who spend a disproportionate share of their income on transportation: the annual cost of maintaining an electric vehicle (EV) is \$600-\$949 less than for an internal-combustion car. Leasing or purchasing a ZEV is also becoming more affordable, thanks to the growing number of incentive programs like "Clean Cars for All" that make purchasing or leasing ZEVs more accessible to low-income people. In addition, the market for used ZEVs is growing rapidly. Finally, for those reliant on vehicles for their livelihood – from taxi or app-based drivers to long-haul truck drivers – the reduced fueling and maintenance costs of EVs can have a profound impact on financial stability.

Despite the benefits and increasing affordability of ZEVs, ownership in frontline communities remains stymied. Widespread ZEV use depends upon convenient access to EV charging and hydrogen refueling. Unfortunately, large portions of East Oakland, Fruitvale, and West Oakland are charging "deserts," with little public charging available to residents and workers. These are the same communities that experience disproportionally high levels of air pollution caused by vehicle emissions and who suffer from poorer health outcomes due to that exposure. They are also at disproportionate risk of harm from rising sea levels and other impacts of the climate crisis. Expanding publicly accessible charging infrastructure in these communities will enable more Oaklanders to consider purchasing, leasing, or using ZEVs, both new and used. Advocating for the expansion of state and Federal rebate and incentive programs will also help to ensure that low-income Oaklanders can benefit equitably from ZEVs.

Vibrant, Sustainable Infrastructure

In addition to their climate benefits, zero emission vehicles (ZEVs) reduce air pollution that disproportionately impacts frontline communities, leading to lower life expectancies along with increased risk of asthma and other diseases.

To date, Oakland has made inconsistent progress in expanding EV infrastructure and access. The City has installed EV chargers at eight City-owned parking facilities as grant funding has come available. The City's Fleet Services Division has purchased more than 40 new EVs and at least four hydrogen fuel cell (HFC) vehicles as older sedans are retired. In 2018-2019, Oakland

Public Works-Sustainability program staff convened a Multifamily Building EV Infrastructure Working Group to identify key challenges and needs for installing EV infrastructure in older apartment buildings, with a particular focus on affordable buildings. In 2019, Sustainability and Oakland Department of Transportation (OakDOT) staff partnered to secure a \$497,500.00 planning grant from Caltrans's Sustainable Communities grant program to conduct further community engagement and craft this ZEV Action plan.

Oakland's primary source of electricity is East Bay Community Energy (EBCE), an Alameda County-based joint powers authority (now also expanded to the City of Tracy) electricity supplier that prioritizes local renewable generation, green jobs, and lower electricity rates. EBCE's electricity generation was 85 percent carbon free in 2019 and will be fully renewable and carbon free well before 2030. There will be increases in Oakland's consumption of electricity as more vehicles are electrically powered, draw from a clean and equitable electric grid, and one that supports local economic development.

Responsive, Trustworthy Government

In addition to the climate, equity, and health imperatives, transitioning to a 100% zero-emission transportation sector is required by statewide and municipal legislation. To meet the required targets, Oakland must efficiently scale the city's ZEV infrastructure. To do so equitably, it must have a strategic approach that considers current trends in vehicle ownership, available building stock, current and projected traffic and mobility needs across diverse geographies within the city, investment opportunities, institutional barriers and opportunities, and disproportionate access across neighborhoods and demographics. There is a large and growing market for used EVs, and many incentive programs to assist low-income individuals in purchasing or leasing new or used EVs (e.g. Clean Cars for All). These programs must operate in concert with municipal efforts to strategically increase charging infrastructure, particularly in lower-income communities where the building stock cannot easily accommodate private chargers.

Plan Approach

The Plan is one piece of a broader City strategy to advance sustainable mobility, as set forth in the ECAP and primed by several preceding plans and policies championed by the City's Department of Transportation. These include the Bicycle Master Plan (Let's Bike Oakland), Pedestrian Plan, and Transit First Policy. These three items, the ZEV Action Plan, and Oakland's participation in EBCE ensure a holistic approach to mobility consistent with <u>Oakland's</u> <u>2017 CURB (Climate Action for Urban Sustainability) Report</u>: *transition as many people and activities away from private vehicles as possible; and ensure that all remaining vehicles run on carbon-free, renewable electricity*.

As directed by the 2030 ECAP, the Plan takes an equity-centered approach to achieving that goal. The Plan accounts for Oakland's share of specific statewide targets for ZEV proliferation, to ensure that frontline community members benefit first and foremost from the transition, and sets as its ultimate goal a 100% zero emission transportation system (not including pass-through trips) by 2045, the year targeted for carbon neutrality per Resolution no. 88268 C.M.S.

Within these frameworks, the Plan identifies 39 Actions the City can take to facilitate the transition from internal combustion engine vehicles to ZEVs across 6 sectors:

- City Leadership: This section includes Actions the City can pursue to both lead and facilitate the shift to ZEVs. This includes action through the City fleet and at municipal facilities such as parking garages to increase ZEV use and charging access across Oakland. It also encompasses improving internal City processes and leveraging the City's regulatory authority to remove barriers and better equip private entities to install and access infrastructure and vehicles.
- 2. Existing and Multifamily Buildings: Lack of access to charging is a key barrier to purchasing and using ZEVs. While a majority of today's EV drivers charge their vehicles at home, Oakland includes many older buildings and properties with multiple onsite tenants, making it difficult to install onsite chargers in many locations. Charging at home is generally preferred because of convenience, lower electricity rates compared to public sites, and because overnight charging is generally the least-taxing approach for the electricity grid. Charging at workplaces is a second-best option because of long dwell times and the ability to take advantage of the period when solar energy is abundant. This section addresses the needs and challenges of existing residential and commercial buildings for EV charger installation, from outreach and education to specific building upgrades. It includes Actions to remove barriers to upgrades and to encourage and, as appropriate, require, building owners and managers to install chargers and related equipment in their buildings. This section includes linkages to the forthcoming Building Electrification Roadmap, expected Summer 2023 in keeping with ECAP Action B-2. It also pays special attention to apartment buildings, particularly those catering to lowerincome residents, building on the outcomes of the Multifamily Building EV Infrastructure Working Group.
- 3. Curbside and Public Charging: Improving access to EV charging and hydrogen fueling infrastructure will require important actions in the public right-of-way in addition to the building upgrades discussed above. In some cases, the age and condition of a building, or inadequate off-street parking, may make home or workplace charging infeasible. This is a particular challenge in older and lower-income neighborhoods. Drivers commuting long distances also need convenient places to charge as part of their business, shopping, or other activities. This section includes Actions to ease the regulatory pathways for permitting and installing curbside EV chargers in commercial and residential neighborhoods, with particular focus on expanding and accelerating public charging access in frontline communities.
- 4. **Medium- and Heavy-Duty (MHD) Vehicles:** MHD vehicles, such as trucks and delivery vans, are a small fraction of vehicles on the road but account for a disproportionate share of air pollution. Most goods-movement routes and businesses are inherently regional, making Transitioning these vehicles to zero-emission technologies, as well as exploring innovative options to shift certain activities to non-vehicular modes, will require complex public-private partnerships, as well as strategies related to both land use policies and economic development strategies. These are the subject of this chapter, which also surveys actions being taken by key partner agencies including EBCE, the Port of Oakland, and AC Transit.
- 5. Electric Micromobility: Straddling the themes of system-wide electrification and active mobility, this section envisions an increasing role for electric scooters and bicycles (e-

scooters and e-bikes), as well as other similar modes. "E-micromobility" has the potential to help many Oaklanders eliminate vehicle use, while still engaging in activities that do not easily accommodate traditional active mobility (e.g. package delivery, chauffeuring passengers, traversing steep hills). This section addresses the need for improved and accessible charging amenities, and equitable, safe deployment in neighborhoods with lower-income residents and public transportation barriers.

6. ZEV Economy: Transitioning to a zero-emissions transportation system will require changes across the economy, from manufacturing to local supply chains to workforce development. This section addresses the ways in which the City can support this shift to ensure that the new ZEV economy will be one that enhances equity, supports "thriving wages," and protects local jobs and businesses. Numerous local training, industry, and labor partners were engaged in identifying the needs and potential solutions included in this chapter.

With a structure similar to that of the ECAP, Plan describes each Action in detail, including milestone years, and provides the broader context for the Action. This structure is meant to make the Plan relevant to community members interested in better understanding the City's resources, intentions, and policy constraints; and to provide clear guidance for City staff and partners charged with implementation.

Flexibility, Efficiency, Specificity

Similar to the ECAP, the Plan establishes priorities and a policy roadmap for the largest component of sustainable mobility, while providing flexibility for a rapidly evolving market. Transportation is a sector over which the City has limited direct control: the City cannot compel residents or businesses to purchase or use certain types of vehicles; nor can it compel property or fleet owners to install infrastructure without significant cost and equity implications. This Plan, therefore, sets a small number of specific deployment targets where available data supports them; establishes broad goals for ZEV deployment in the sectors detailed above; and places a heavy emphasis throughout on equity and efficiency in infrastructure deployment, consistent with the equity principles and targets in the ECAP and the ECAP's Racial Equity Impact Assessment and Implementation Guide.

Market forces outside the City's control largely drive trends within the transportation sector. These forces include global gas prices, the pace at which automakers are developing and manufacturing new ZEV types, and available battery technologies (i.e. battery costs and ranges). This limitation is balanced by California's strong transportation decarbonization targets.

Analytical Approach

To set preliminary targets for ZEV and EV charger deployment, staff assessed Oakland's likely share of statewide ZEV adoption needed to achieve California's ZEV targets in 2030. Staff then assumed that 100% of vehicles registered in Oakland would be zero-emission by 2045 to achieve the City's adopted carbon neutrality targets. From these figures, staff conducted two types of analysis to assess deployment priorities:

Building Sector: Staff estimated the proportions of ZEV infrastructure (i.e. EV chargers) likely to be needed in different sectors (i.e. single-family homes, apartment buildings, workplaces, and in the public right-of-way). This analysis is challenged by numerous factors outside of the City's control. Here are three examples:

- Faster-than-expected advances in battery technology: Greater EV range could reduce the need for home charging in older buildings where equipment installation is more difficult, since EV users will feel more comfortable with longer intervals between charging. This would lead to a greater percentage of charging occurring away from home, and a smaller absolute number of chargers being needed across the city.
- Advances in electric load management technologies: Enabling more EVs to charge with lower power needs and vehicle-to-grid functionality could pave the way for apartment building owners to install chargers, since more buildings would be able to accommodate the amenity without cost-prohibitive electrical upgrades. This would reduce the number of needed public and workplace chargers.
- Greater success than expected in Oaklanders switching from private vehicle use to active mobility, public transit, or shared mobility: Success in any of these areas, each of which has its own set of diverse influences, would reduce the total number of ZEV chargers or fueling stations needed throughout the city.

Despite these uncertainties, this analysis provides a range of what types of infrastructure will be needed in which sectors, enabling staff to focus on appropriate policy development for each sector.

Equitable Distribution: While data limitations prevent creation of specific targets for different types of ZEV infrastructure by zip code, the Plan includes data-driven protocol for equitable distribution that incorporate data from the Department of Race and Equity as well as OakDOT's Equity Toolbox. For example, in a neighborhood that stands out for high numbers of apartment buildings, renters, and older buildings, more public EV chargers will be needed because home charging will be infeasible for many. Conversely, in an area with higher proportions of owner-occupied, single-family homes, less intervention from the City will be needed because most EV drivers are likely to install and use home chargers. This approach is critical to ensure resources are targeted where there are more barriers to ZEV access stemming from historic and present inequities. Such targeting could take the form of targeted direct investments, enhanced outreach, demonstration pilots, or other strategies.

Staffing Needs

At present, the City has no full-time staff position dedicated to the planning or engineering of ZEV infrastructure. Currently, the implementation of ZEV projects and programs is spread out among multiple staff in the Parking & Mobility Division and the City's Sustainability program. Staff estimates that leading the implementation of the ZEV Action Plan will require a full-time equivalent (FTE) staff position within the Department of Transportation at the Transportation Planner II level. This will directly implement Action City Leadership (CL) – 1, "Fund dedicated staff for Zero Emission Vehicle Infrastructure implementation" in the ZEV Action Plan. Due to the comprehensive nature of this Plan, dedicated planning staff will be needed to implement it efficiently. Staff are also needed to pursue grants to implement infrastructure to prevent the City

from missing out on grant funding. Implementation of EV-related projects can require months of staff time for grant writing and management, policy development, permit review, coordination across multiple teams and outside agencies, public engagement, site inspection, etc. Even with grant funding, projects have experienced delays due to a lack of full-time staff to manage them.

This new staff position would be located within OakDOT's Parking & Mobility Division (PMD). PMD is responsible for standing up and overseeing programs ranging from bike share stations and metered parking to EV chargers and wayfinding systems. The dedicated staff position would manage and oversee ZEV projects, implement each of the actions in the ZEV Action Plan, and serve as the single-point for ZEV-related programs, thereby improving interdepartmental and interagency coordination on ZEV issues while relieving pressure on existing staff. The full cost of a full-time equivalent Transportation Planner II, including all overhead, is \$262,419 per year. Staff recommend that the City Administrator be directed to include a provision for this on-going cost in the City's 2023-24 mid-cycle budget. Funds for this new position should be appropriated into General Fund 1010, Organization 35247 in the Fiscal Year 2023-24 budget cycle.

Tracking Progress

Given the profoundly inequitable current distribution of ZEVs, ZEV infrastructure, and non-vehicular mobility modes, and the numerous factors outside the City's control mentioned above, staff will continuously track implementation progress and update the Plan as needed every five years. Staff will track key performance indicators listed in the Plan, as well as other relevant data that arise over time, to determine (1) if the City is reaching its equity targets for ZEV deployment, and (2) if overall and sector-specific ZEV deployment is on track to meet the City's climate targets.

Community Cost Implications

For passenger vehicles, the switch from internal combustion engines to EVs will most often reduce lifetime driving expenses. However, for all vehicle types, the switch requires upfront costs that, without significant incentives or rebates, are currently prohibitive to some. Groups that face challenges with upfront costs include low- and lower-middle income residents; owners of older buildings; and many medium- and heavy-duty vehicle or fleet owners.

A number of factors will reduce costs. The City amplifies and advocates for expansion of statewide ZEV incentives, which lower initial costs of both new and used ZEVs and which are often structured to provide higher incentives to those with lower incomes. As demand for ZEVs increases, prices for new vehicles will likely decrease, and the market for used ZEVs will expand. As public ZEV charging and fueling expand, drivers can more readily access ZEVs without installing their own infrastructure.

Linkages to other Plans and City Policy

In the same way that it complements existing City policies and plans, the Plan implementation will require additional future Council Action. These will include adoption of the following:

- Building Electrification Roadmap: Expected in Summer 2023, this plan will identify specific pathways to transition all buildings within Oakland from a reliance on methane (i.e. "natural") gas to efficient, all-electric systems, including EV charging capability where appropriate.
- "EV-ready" Ordinance for Major Retrofits.
- o Ordinance governing EV charging in the Public Right-of-Way.
- o Potential Actions to authorize various pilot and demonstration programs.

FISCAL IMPACT

The City will bear some costs in the ZEV transition, largely from investments in charging infrastructure in City facilities and the public right-of-way, as well as the dedicated FTE Transportation Planner II position and additional staff time spent reviewing plans for EV chargers and hydrogen fueling stations. The full cost of a FTE Transportation Planner II, including all overhead, is \$236,680.00 per year. However, there are some cost recovering revenues from individuals paying to charge private vehicles at City-owned EV chargers and from permit fees and some additional revenues from enforcement of "EV-Only" parking spaces per the proposed Ordinance. In addition, designated staff for ZEV related work will be able to apply for and win grants from regional, state and federal agencies to install ZEV infrastructure and purchase ZEVs.

PUBLIC OUTREACH / INTEREST

OakDOT staff led public engagement for the creation of this Plan in partnership with multiple community-based organization (CBO) partners TransForm, Spanish Speaking Citizen's Foundation, and West Oakland Environmental Indicators Project. Public engagement included:

- o Community workshops in Fruitvale and West Oakland neighborhoods;
- A series of stakeholder group meetings to discuss the Plan's specific topic areas;
- A three-part stakeholder workshop series focusing on the workforce development aspects of both building electrification and the ZEV transition;
- An online survey provided in English, Spanish and Chinese languages;
- An interactive map for collecting data on Oakland residents' thoughts on ZEV;
- An interactive online advanced draft of the Plan to collect public comments;
- In-depth conversations with five community advisors representing underserved priority neighborhoods in the City; and
- Various other pop-up engagement events designed to meet residents where they were and engage them in hands-on activities to make climate action relevant and accessible.

In all, over 1,000 Oaklanders were directly engaged in the Plan's creation, including over 22 community meetings or outreach events attended, over 300 subscribers to the ZEV Action Plan mailing list, over 100 OakDOT and Sustainability staff hours in the community, over 200 suggestions for ZEV charging locations, over 190 survey responses, and over 1,000 views of the ZEV Action Plan draft document online.

Additionally, the topics addressed in this Plan were major points of discussion in the extensive community engagement conducted by City Sustainability staff in development of the 2030 ECAP. ECAP community engagement was conducted in partnership with a local Equity Facilitator team, led by Environmental / Justice Solutions and the Oakland Climate Action Coalition, with a particular focus on engaging frontline communities, including Black, Latino, non-English speaking, and low-income Oaklanders. More than 2,100 Oaklanders directly engaged in the process, with at least 2,000 more indirectly engaged through volunteer door-knocking and other grassroots efforts. Passenger vehicle electrification, equitable access to EV chargers, eliminating emissions from trucks and buses, and workforce development efforts associated with the ZEV transition were all topics that arose during the process. The ECAP Equity Facilitator's Preliminary Equity Analysis of the ECAP Actions concluded that all ECAP Actions, including the development of a ZEV Action Plan (ECAP Action TLU-5), fully addressed equity goals as written.

COORDINATION

Collaboration for this effort included Oakland Department of Transportation; Oakland Public Works, Bureau of Facilities and Environment; Planning and Building Department, Bureau of Planning; Economic and Workforce Development Department; Department of Race and Equity, and the Office of the City Attorney.

SUSTAINABLE OPPORTUNITIES

Economic: The transition from a transportation system fundamentally reliant on internal combustion engines to one powered by zero-emission vehicles that complement a robust network of non-vehicular mobility options has important economic benefits. Direct long-term economic impacts include more cost-effective commute options resulting from the lower average lifetime driving expenses of EVs – a benefit that will particularly benefit lower-income Oaklanders. Given Oakland's participation in EBCE, the transition will also lead to a greater share of Oakland wealth being reinvested locally in the renewable energy that powers Oakland's electricity. Indirect economic benefits are likely to include reduced wealth diverted for medical expenses, thanks to a lower incidence of the many respiratory diseases that are caused or exacerbated by traditional automobile pollution.

Environmental: The burning of fossil fuels to power internal combustion engines is an acute source of emissions that cause climate change. There is broad consensus among climate scientists that the world cannot limit global warming to 1.5 degrees Celsius – the limit to avoid catastrophic impacts – without drastically limiting CO2 emissions, of which transportation is a primary source. The reduction of greenhouse gas emissions from a zero-emission transportation system will help mitigate climate change and its negative effects such as extreme heat events, droughts, intense storms, flooding, and displacement. Full implementation of this Plan is necessary for the City to achieve its climate targets, as set forth in the 2030 ECAP and the 2017 CURB report. Failure to significantly reduce GHG emissions will result in continued increases in sea level rise that could put at risk Oakland homes and businesses, public facilities, and portions of major local and regional transportation infrastructure. Additional direct impacts of

an unmitigated climate crisis likely to affect Oakland, as described in the Intergovernmental Panel on Climate Change (IPCC) reports and the 2030 ECAP, include severe weather events, increasing droughts, more frequent heat events and wildfires, smoke inundation from regional fires, erosion, flooding, and landslides. Continued reliance on internal combustion engine-powered vehicles for Oaklanders' mobility needs would have the additional impact of exacerbating health disparities that contribute to overall structural inequity.

Race & Equity: Ensuring that all vehicles in Oakland are zero-emissions will have numerous equity benefits. ZEVs offer improved air quality and less exposure to pollutants known to increase risk of early death from heart attacks, strokes, diabetes, and respiratory diseases. Each of these disproportionately impact Black and Brown communities, low-income communities living along the Interstate-880 Corridor, and vulnerable populations like children and seniors.

ZEVs, and EVs in particular, have lower average lifetime costs, often referred to as total cost of ownership. This is due to the simpler drive train that requires less maintenance. The annual cost of maintaining an EV is \$600-\$949 less than for an internal-combustion car, according to the American Automobile Association and the U.S. Department of Energy. Leasing or purchasing a ZEV is also becoming more affordable, thanks to the growing number of incentive programs like "Clean Cars for All" that make purchasing or leasing ZEVs more accessible to low-income people, as well as to a growing market of used ZEVs.

All of these benefits disproportionately improve wellbeing in frontline communities, who face higher baseline levels of pollution exposure and pay a higher proportion of income for energy.

There is significant potential for high-road green jobs to result from the ZEV Action Plan and associated Ordinance – jobs that can flow to local Oaklanders, including youth and those who are unemployed, underemployed, or with lower education. These include electricians installing EV chargers and performing associated building upgrades, and technicians maintaining public EV chargers. EBCE also continues to expand their local renewable energy generation infrastructure—work that goes hand-in-hand with increasing numbers of EVs, and that similarly provides good, green jobs with lower educational requirements.

CALIFORNIA ENVIRONMENTAL QUALITY ACT (CEQA)

The resolution is exempt from CEQA under CEQA Guidelines sections 15061(b)(3) and 15308 due to the fact it is a regulatory action for the protection of the environment and that there are no reasonably foreseeable adverse impacts that would result from this action. As a result, there is no possibility that the activity in question would have a significant effect on the environment.

The ordinance is exempt from the California Environmental Quality Act ("CEQA") pursuant to Public Resources Code Section 21080(b)(8) and CEQA Guidelines Section 15273 (Rates, Tolls, Fares, and Charges) because CEQA does not apply to the establishment, modification, structuring, restructuring, or approval of rates, tolls, fares, or other charges by public agencies which the public agency finds are for the purpose of meeting operating expenses or obtaining funds for capital projects, necessary to maintain service within existing service areas.

ACTION REQUESTED OF THE CITY COUNCIL

Staff Recommends That The City Council Adopt:

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For questions regarding this report, please contact Michael Ford, Parking & Mobility Division Manager, 510-238-7670.

Respectfully submitted,

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Attachments (1):

A: Zero Emission Vehicle Action Plan