ECAP Action Language

Note that narrative will follow each action to provide additional context
(Updated 02/10/20)

Transportation + Land Use

TLU1: Align All Planning Policies & Regulations with ECAP Goals & Priorities

In the course of scheduled revisions, a~~Amend~~ the General Plan, Specific Plans, Zoning Ordinance, Subdivision Regulations, and ~~any other~~ appropriate planning policies or regulations to be consistent with the GHG reduction, adaptation, resilience, and equity goals in this ECAP. Specifically:

- Remove parking minimums and establish parking maximums ~~citywide~~where feasible, ensuring public safety and accessibility.
- Require transit passes bundled with all new major developments. ~~near existing or planned transit~~
- Revise zoning such that 90% of residents are within 1/2-mile of ~~daily needs~~the most essential destinations of everyday life.
- Provide density bonuses and other incentives for developments near transit that provide less than half of the maximum allowable parking.
- Update the Transit Oriented Development (TOD) Guidelines to further prioritize development of housing ~~of all income levels~~ near transit, including housing for low, very low, and extremely low-income levels.
- Require structured parking be designed for future adaptation to other uses.
- Institute graduated density zoning.
- Remove barriers to and incentivize development of affordable housing near transit.
- Incorporate policies addressing sea level rise, heat mitigation, and other climate risks into zoning standards and all long-range planning documents. Revise these policies every five years based on current science and risk projections.
- Identify and remove barriers to strategies that support carbon reduction, adaptation, resilience, and equity goals, including community solar and energy storage.

Notes:
- *Narrative will make it clear that active transportation is the first in the hierarchy for mobility in Oakland, and that land use policies are central to facilitating it.*

TLU2: ~~Free~~ Abundant and Accessible Public Transit

~~By 2023, develop a roadmap to provide free transit for low-income residents by 2030 and all residents by 2040.~~The City will work with public transit agencies to replace autos with public transit as a primary transportation mode for trips beyond walking distance, ensuring convenient, safe, and affordable public transit access within Oakland and to neighboring cities for all Oaklanders. Specifically:

- By 2023, the City shall work with public transit agencies to develop short- and long-term strategies to increase public transit ridership by at least 3% per year each year through 2050. Strategies will be based on modifying existing routes and creating new routes for increased reliability, frequency, speed, and efficiency; improving safety at bus stops, prioritizing Deep East and West Oakland; reducing travel times; and ensuring robust, quality service on routes that serve Deep East Oakland and West Oakland.

- To facilitate route efficiency, the City shall work with AC Transit to evaluate the need for new or changed routes in Oakland on an ongoing basis. AC Transit and the City will work as partners, with the City committing to improving travel time and passenger experience along major public transit corridors, and to implementing national and international best practices for prioritizing public transit on Oakland streets while accommodating other modes. The City shall work with public transit providers to ensure that economic disruptions of any roadway reconfigurations are minimized.

- The City shall work with public transit agencies, community organizations, and community institutions to ensure that all Oakland residents, regardless of location and disability status, can access the public transit network. To ensure accessibility and adequate service in hard to reach areas, the City and public transit agencies will consider supplementing the central transit network with zero-emission, short-distance, neighborhood-level transportation services such as shuttles, prioritizing areas with high percentages of zero-car or low-car households, persons with disabilities, low-income households, and senior citizens.

TLU3: Take Action to Reduce and Prevent Displacement of Residents and Businesses
Leverage City resources and partnerships to prevent residential and business displacement, and preserve and expand existing affordable housing. Specifically:
- Expand support of Community Land Trusts, Community Development Corporations, and limited equity cooperatives to prevent displacement of residents and businesses, prioritizing tenants at highest risk for displacement.
- Leverage new State funding, as well as identify ways to generate additional local funds, to provide ongoing capital financing for housing acquisitions and rehabilitation to preserve existing affordable housing and convert market rate housing to affordable housing.
- Ensure that all programs funding housing preservation align with climate goals, such as electrifying and weatherizing buildings.
- ~~Ensure that~~ Develop business anti-displacement programs that align with climate goals, such as increasing neighborhood-serving retail and electrifying and weatherizing buildings.
- Develop resources and incentives to support local entrepreneurs whose businesses are helping Oakland meet its climate goals, with an emphasis on entrepreneurs from frontline communities.
- Prioritize City support for community wealth building projects in Opportunity Zones, particularly where those projects align with ECAP goals.
- Prioritize workforce training dollars and business support for businesses that help meet ECAP goals, especially locally-owned and minority-owned businesses, and businesses primarily employing or creating wealth for frontline community members.

TLU4: Rethink ~~Parking~~Curb Space
Prioritize use of curb space throughout the city by function. In order of priority, allocate curb space for mobility needs for public transit and active transportation, such as walking and biking; access for people and commerce (loading zones and short-term parking); activation; and storage for long-term parking. Prioritize curb space based on surrounding land use and mobility needs, per the city's adopted Bike and Pedestrian Plans. Where on-street parking is provided, r~~R~~evise pricing, availability, and location of parking to encourage active transportation, public transit, and clean vehicles without increasing cost-burden to low-income residents and other sensitive populations such as seniors. Use parking revenues to fund public transit and active transportation improvements in frontline communities. Specifically:

- ~~Amend Article 27 of City Charter to allow parking revenues to be used for low carbon transportation investments~~
- Update parking pricing strategies for publicly accessible on- and off-street parking to adequately address demand and encourage mode shift.
- Require parking costs to be unbundled from residential and commercial leases.
- Enforce business compliance with parking cash-out requirements.
- Eliminate time limits, expand hours of meter operation, and implement demand-based pricing for on-street parking.
- Improve Pparking Mmonitoring and Eenforcement.
- ~~Establish Transportation Management Associations~~
- Establish Parking Benefit Districts with revenues to improve multi-modal access, public transit, and walkability of the commercial district.
- Build no new off-street, City-owned parking.
- Adopt an equitable fee structure in residential parking permit zones.

TLU5: Create a Zero Emission Vehicle (ZEV) Action Plan

By 2021, develop a ZEV Action Plan to increase adoption of electric vehicles and e-mobility while addressing equity concerns and prioritizing investment in frontline communities. The plan must set ambitious targets for ZEV infrastructure and must be coordinated with other land use and mobility options so that ZEV ownership is not necessary for access to ZEV trips, and ZEVs increase as a percentage of all vehicles while overall vehicle miles traveled decreases. The plan must address the following sectors: medium and heavy-duty vehicle electrification, including trucks and delivery vehicles; personal vehicle charging infrastructure in multifamily buildings, including affordable buildings; curbside charging; school and transit buses; and coordination with private and public fleet operators.

Notes:
- *In late 2018, the California Air Resources Board approved the Innovative Clean Transit Regulation, which requires public transit agencies to transition to 100% zero-emission buses by 2040, with all new bus purchases required to be zero emission by 2030. AC Transit initiated the Clean Corridors Plan to assure that the benefits of required zero-emission buses are provided first to environmentally impacted and low-income communities.*

TLU6: Ensure Equitable and Clean New Mobility

Ensure that new mobility platforms and technologies equitably support City carbon reduction goals, including integrated planning for vehicles, public transit, and active transportation networks and amenities. Specifically:
- Demonstrate that new mobility programs, including ride share programs, align with and support GHG reduction and equity goals in this ECAP.
- Apply Greenlining Institute's Mobility Equity Framework to policies and programs related to new mobility.
- Increase use of Intelligent Transportation Systems to give priority to transit and clean vehicles.
- Provide incentives for walking, biking, carpooling, and ride sharing, and disincentives for fossil fuel-based on demand delivery.
- Require carbon emission reduction plans for charging and rebalancing of micro-mobility fleets.

- Facilitate the establishment of Transportation Management Associations to enable distribution of public transit passes and invest in increased public transit and other mobility strategies, such as walking, biking and micromobility that can reduce vehicle miles travelled.
- Explore potential for a "mobility wallet" to pay residents to take carbon- and space-efficient travel modes.

Notes:
- *Need to make it clear in the action narrative that this Action includes new micromobility, including shared; mobility-as-a-service; and automated vehicles.*
- *Clarify in narrative that this action is about facilitating new clean+equitable modes as much as it's about responding to (and anticipating) new options from the private sector that are market-disruptive and that have potential to impact (positively or negatively) equity and emissions.*

TLU7: Align Permit and Project Approvals with ECAP Priorities

Amend Standard Conditions of Approval (SCAs), as well as mitigation measures and other permit conditions, to align with the City's GHG reduction priorities stated in this ECAP. In applying conditions on permits and project approvals, ensure that all cost-effective strategies to reduce GHG emissions from buildings and transportation are required or otherwise included in project designs, including off-site improvements like bicycle corridor enhancements, wider sidewalks, crossing improvements, public transit improvements, street trees, and green stormwater infrastructure. Where onsite project GHG reductions are not cost-effective, prioritize local projects benefitting frontline communities to receive GHG mitigation funding.

Notes:
- *Need more explanation in narrative: Daniel to author*

TLU8: Expand and Strengthen Transportation Demand Management (TDM) Requirements

Increase TDM performance requirements for new developments where feasible to support the mode shifts necessary to achieve a low carbon transportation system. Expand the TDM program to include requirements for existing employers. Fund ongoing monitoring and enforcement of TDM requirements.

Notes:
- *Define TDM in narrative; include examples*

~~TLU9: Expand zero-carbon~~ ~~shared-use bus and van~~ ~~shuttle service~~

~~Expand both fixed-route and dynamically routed,~~ ~~shared-use micro-bus, van, and mobility~~ ~~shuttle services~~ ~~using clean vehicle technology. Prioritize~~ ~~reliable~~ ~~service to low-income neighborhoods and affordable housing.~~

TLU~~10~~9: Expand Neighborhood Car Sharing

Expand the Neighborhood Car Sharing program, ensuring that all shared vehicles are electric vehicles by 2030 and that shared vehicle services address the needs of families, people with disabilities, and frontline communities. Coordinate program expansion with New Mobility programs, EV infrastructure planning, and with revised parking policies. ~~Evaluate feasibility of providing~~ Where feasible, work with partners including developers and property managers to provide dedicated EV car sharing services in

multifamily affordable housing buildings to increase access and reduce the car cost burden to lower-income families.

Notes:
- *Address safety and accessibility in narrative.*

TLU11~~1~~0: Establish Temporary and Permanent Car-Free Areas

Establish temporary open and car-free streets areas ~~and car-free zones citywide~~ to ~~enable~~ assess feasibility of creating~~on of~~ permanent car-free areas citywide. Use car-free areas for active transportation, parklets and green infrastructure, pop-up community and commercial activity, and other uses that address community needs. Develop and plan car-free areas together with community members to ensure that ~~both~~ community needs and equity impacts are adequately addressed.

Notes:
- *Stress in narrative that Active Transportation is first in the loading order for mobility, and this item is about shifting public perception about active transportation.*

~~TLU12: Evaluate the Potential for Road Pricing~~

~~By 2027~~~~5, assess the potential for road pricing options in Oakland. For any road pricing revenues, prioritize investment in transit and active transportation infrastructure in frontline communities.~~

Buildings

B1: Eliminate Natural Gas in New Buildings

~~Require~~ By 2023, prohibit new buildings and major renovations from connecting ~~to avoid connection~~ to natural gas infrastructure ~~by 2023~~.

B2: Plan for~~Require~~ All Existing Buildings to be Efficient and All-Electric by 2040

By 2022, develop a policy roadmap to achieve decarbonization of the existing building stock by 2040, without additional cost burden or displacement risk to frontline communities. The roadmap must address:
- Equitable process and outcomes, including avoiding bill increases, ensuring benefits flow to renters, and local green jobs;
- Incentives and requirements;
- Regulatory obstacles;
- Phasing of implementation;
- Financial assistance for low-income residents and businesses, including on-bill financing;
- Opportunities for integration of distributed renewable energy generation and energy storage; and
- Opportunities and needs for energy efficiency and building envelop upgrades, taking into account local, state, and regional energy efficiency incentive programs and focusing particularly on renters, low income populations, and populations with a disproportionate risk of housing and business displacement.

Notes:
- *Seattle plan (pg 18) economic signals*

B3: Prevent Refrigerant Pollution

By 2023, develop a refrigerant management program that:
- Establishes a phaseout timeline for high-GWP refrigerants in existing buildings;
- Integrates with existing local and regional energy efficiency and building electrification programs as appropriate;
- Ensures enforcement of performance measures;
- Identifies financial assistance for low-income residents and businesses; and
- Aligns with refrigerant management strategies adopted by the State of California.

Notes:
- *Refrigerant systems such as R-401A and R-22, present in building air conditioning systems among other locations, have extremely high greenhouse gas reduction potential. More than 90% of the GHG emissions associated with refrigerants is anticipated to occur either in leakage or in improper disposal.*
- *The City has not previously tracked refrigerant leakage in its GHG emissions inventory, missing an important piece of our emissions story.*
- *A refrigerant management program can leverage numerous existing energy efficiency and clean energy incentive, rebate, and technical assistance programs.*

B4: Reduce Lifecycle Emissions from Building Materials ~~Embodied Carbon in Buildings~~

By 2022, adopt a ~~model~~ concrete code for new construction that limits embodied carbon emissions. In subsequent building code updates, implement improved embodied carbon performance standards including additional materials and material-efficient building practices, with exemptions for cost barriers as needed to prevent these changes from directly increasing housing or rent costs. Ensure requirements are at least as stringent as the State of California procurement standards in effect at the time of the building code adoption. Explore ways of supporting local market development for low-lifecycle-emission and carbon-storing biogenic building materials.

B5: Require All Major Retrofits of City Facilities to be All-Electric

Effective immediately, retrofits of City-owned or controlled buildings shall not install any new natural gas infrastructure or equipment. All major retrofit projects shall eliminate gas infrastructure from the building and integrate energy storage wherever technically feasible and appropriate.

Material Consumption & Waste

MCW1: Eliminate Disposal of Compostable Organic Materials to Landfills

Fully fund and implement the requirements of California SB1383 and eliminate disposal of compostable organic materials to landfills. Ensure robust engagement with businesses and institutions, including

schools, and continued residential outreach to reduce wasted food and effectively keep compostable material out of the landfill-bound waste stream. Work closely with franchise hauler to ensure that the compostable material stream is uncontaminated so that compost created is high-quality.

Notes:
- *Define SB 1383 in a sidebar*
- *Point to and link together StopWaste's ongoing education about bay-friendly gardening + anyone who does education re: home (e.g. worm) composting (e.g. Pollinate, PJN) + the section on urban ag (e.g. City actions in 2012-2020 period to make urban ag easier) + OUSD gardening programs to show that localized, on-site, closed-loop composting is encouraged.*

MCW2: Establish a Deconstruction Requirement

Establish a deconstruction requirement to reduce demolition waste from construction and renovation and facilitate material reuse. Regulate hauling and processing of construction and demolition debris to ensure that salvageable materials are identified and removed for reuse instead of being recycled or disposed to landfill.

Notes:
- *Move this action down, put Reuse and Repair earlier*
- *This action item needs a pin with definition/explanation, also a link/reference to the low embodied carbon Action in MCW and clarification that this isn't about bulky pickup (it's about developers/contractors dealing with/hauling their own materials).*
- *Mention of role of private sector in narrative could include TH comment "BeeGreen, a company in East Oakland, is a good model for achieving this goal by rewards rather than regulation." Lots of questions and comments about who will pay for this, so discussion needs to be explicit that this is on developers to comply - and that will likely create markets. Talk to Peter for wording.*

MCW3: Expand Community Repair Facilities

Expand the City's existing tool lending library services to at least 5 other Oakland Public Library branches, recreation facilities, community centers, or other community sites facilities by 2030, prioritizing East and West Oakland and low income neighborhoodscommunities. Ensure tool lending facilities support repairable household items and active mobility transportation modes, including bicycles. Explore potential for onsite community partnership programming to teach repair skills and promote local repair businesses.

Notes:
- *Note that library is comfortable expanding their onsite food gardens to 5 locations, which I think we can exceed with multiple Departments and partners. In narrative, note the role that pop-up repair cafes and tool lending can have at both libraries and OPRYD facilities. Also talk about partnership role for OPRF and FOPL, and potential partnership with OUSD (can specifically cite Youth Commission's comments that repair curriculum is needed in schools). Action language encompasses including schools as partners.*

- *Narrative should mention rise in repair fairs, fix-it clinics, and the like in the last decade, and how this action would support and provide space for those activities.*
- *See if we can put this and the other repair item next to each other, and thus share the same discussion. That way we can discuss the important role of private businesses/orgs stepping up, the role of public-private partnerships, the role of education, and the overarching challenge of planned obsolescence (& EPR) all in one place. A few of the comments expressed concern about public $ going to this, but most were highly supporting and wanted more, including focusing on the role of public education and directly tackling the bigger issues.*

MCW4: Eliminate Single-Use Plastics and Prioritize Reuse in Food Preparation, Distribution, and Sale

By 2023, pass an ordinance to reduce the prevalence of single-use plastic in Oakland and to ensure that reusable food ware is the default in dining. Specifically:
- Require reusable food service ware for all dine-in establishments.
- Mandate that any single-use food ware (plates, bowls, cups) and accessories (straws, utensils, condiment cups) are BPI certified compostable fiber, except where certain materials may be deemed medically necessary or necessary to ensure equal access for persons with disabilities.
- Require that any single-use accessories (straws, utensils, condiment cups) are only available on demand.

By 2025, the City shall expand on its ban of expanded polystyrene food containers to other categories of single-use plastic and disposable food service ware as needed to meet the City's Zero Waste goals, and to ensure that all materials going to compost facilities within Alameda County are truly compostable.

~~By 2022, develop a plan to eliminat~~e single-use plastics, including any single-use food service ware that ~~is not compostable wi~~thin Alam~~eda County, in local food preparation, d~~istribution, and sale, ~~except where medically necessary or necessary to ensure equal access for perso~~ns with disabilities, by ~~2030. The plan shall incorporate both incentives and requirements and address equity concerns for~~ ~~small businesses. and~~ low-income residents, and peo~~ple with disabilities. By 2025, expand on the City's~~ ~~ban of expanded polystyrene food containers to other categories o~~f single-use pl~~astic and disposable~~ ~~food service ware, promoting reusable take-out and eat-in food service ware to consumers and food~~ ~~service establishments.~~

Notes:
- *In action narrative, be clear that we're not only talking about plastic, but about the disposable default in general. All disposable ware and food prep materials - including plastic and bioplastic - is addressed by this Action. We have to ensure we're not substituting "compostable" products that are not actually compostable (compostable plastics, paper containers lined with plastics) and that therefore emit methane in landfills or contaminate/reduce quality of compost. The point isn't to switch from plastic to another single-use material, but to transition to a default of materials that can and will be fully reused. Also explain exemptions for people with disabilities.*

MCW5: Strengthen Infrastructure and Partnerships for Edible Food Recovery

Support existing capacity, and develop new capacity, to recover edible food that is otherwise wasted, and distribute that food for human consumption. Engage with stakeholders including local food donation, recovery, and collection organizations to build robust collection and food storage capacity, and reliable and equitable distribution systems to the neediest populations. Engage with food generators such as supermarkets, wholesale distributers, large hotels, and institutions, to increase their access to food recovery organizations access to surplus edible food that food recovery partners want (or will accept) and to ensure food generators comply with the Edible Food Recovery requirements of SB 1383. Inform edible surplus food generators about strategies and best practices for preventing surplus food.

MCW6: Support the Reuse, and Repair, Recovery, and Refurbishment Economy

By 2025, create a community reuse and repair program to increase waste diversion, and reduce material consumption, and create green jobs. As part of creating this program, the City will also explore creating or designating live/work or other spaces dedicated to material repair and upcycling, and selling of repaired and upcycled goods. Specifically:

- Remove land use and other barriers to developing businesses that reuse or repair consumer goods, where doing so will not adversely impact the surrounding residential neighborhood.
- Develop resources to support direct donation to charitable organizations.
- Increase public awareness of and access to opportunities for reuse, product rentals, repair, and donation.
- Support, regulate, and expand the City's citywide reuse infrastructure.
- Establish a methodology to assess benefit of reuse and repair programs to goals for waste diversion, GHG emissions, and economic development.
- Partner with local vocational programs and/or OUSD to launch at least one high school or junior community college-level Repair Arts Academy.
- Develop a grant, recognition, or incentive program to celebrate and encourage local repair businesses or leaders.

Notes:
- *This will have a long discussion, including specifying examples of what types of items. See also notes for MCW-3 - want to pair these to have one discussion for both.*
- *Include EWDD as additional responsible dept.*
- *Aligns with WOCAP Action #1: "City... works with [West Oakland] property owners & local residents to redevelop [former CASS & other sites] with new businesses & light industrial uses that fit into a green economy." I'll also add in Brian Beveridge's comments from ad hoc. He's concerned that this could be interpreted as including more industrial applications; & that this won't be done in concert with zoning or other regs such that it'll add blight to the community.*
- *Consider adding to first bullet or creating another about different zoning designations for different types of repair / reuse / recovery (and even refurbishment) businesses, noting that all need to be increased but not all should be in certain neighborhoods/districts. PBD needs to be involved.*

City Leadership

CL1: Evaluate and Reduce Climate Impacts of City Expenditures and Operation
By 2021, develop a GHG Impact Analysis for incorporation into budget, capital, and work plans at the departmental level. By 2023, adopt the Good Food Purchasing Policy or similar policy for all food purchased by the City for City business/events or as part of City contracts for events and activities, to ensure that all such food has minimal carbon impacts, and maximum health, equity, and local economic benefits. By 2024, track annual embodied GHG emissions related to City expenditures for construction, building maintenance, travel, and food. By 2025, establish maximum GHG performance thresholds for these and other appropriate City purchases.

Notes:
- *Daniel to lead on narrative for this. Will need lots of clarification.*

CL2: Phase Out Fossil Fuel Dependency in All City Agreements and Contracts
Explore ways to eliminate fossil fuel reliance in all agreements and contracts entered into by the City of Oakland, including utility and contractor franchise agreements, facility and infrastructure design and construction contracts, and other agreements in which fossil fuels will be directly or indirectly utilized to conduct the City's business.

Notes:
- *Lots of explanation in narrative; Daniel to lead.*

CL3: Accelerate City Fleet Vehicle Replacement
By 2030, ensure that over 50% of the City's fleet uses alternative fuels, with 100% of all non-emergency response sedan purchases being zero emission vehicles. By 2030, ~~the increase~~ triple the number of electric vehicle chargers dedicated to fleet vehicles ~~by 300%~~ compared to 2020. By 2025, develop a feasibility study to identify zero emission and alternative fuel solutions for all City heavy-duty and emergency response vehicles and equipment.

CL4: Explore Creation of Public or Green Bank ~~Establish annual Climate Champion Awards.~~
Explore, with other East Bay cities and regional partners, creation of a regional Public Bank or Green Bank for the purposes of fossil fuel divestment in City investments and local climate-friendly reinvestment. Identify options and potential for using this mechanism or others to fund climate action activities. ~~Establish an annual public awards ceremony to celebrate residents and businesses who are advancing climate action within the community~~

Notes:
- *In narrative: This work will build on the analysis completed in Oakland, Berkeley, and Richmond in determining the form, scale, and timeline that support the desired community outcomes for such an institution.*

Adaptation

A1: Fund Creation and Operation of Resilience Hubs

Increase community resilience by (1) supporting community engagement and community-led disaster preparedness training ~~(i.e. Communities of Oakland Responding to Emergencies)~~, prioritizing frontline communities first; and (2) developing protocols and enhancing building systems to enable trusted community-serving facilities – including libraries, recreation and community centers, and parks – to reliably serve their communities as places of refuge during smoke days, extreme heat, and power outages. By 2022, identify and prioritize specific resilience needs and gaps in frontline communities, and ~~a. A~~ssess feasibility of establishing Resilience Hubs at both municipal and community facilities in areas with prioritized gaps. By 2025, partner with established community resilience groups to co-develop and pilot three Resilience Hubs: community-serving facilities that support residents year-round and support resource distribution and onsite services before, during, or after a natural hazard event.~~develop three Resilience Hubs that build community resilience in frontline communities~~ , Identify ways that the City can support decentralized community facilities to serve residents who are unable to travel to centralized resilience hubs during disasters and emergencies.

Notes:
- *Oakland's recreation centers are "resilience hubs" that protect people and get them ready for climate change impacts. Recreation centers can be brought up to 21st Century community needs by providing filtered and cool air for climate-intensified heat, smoke and poor air quality days. These centers can be powered by and store solar energy to provide emergency power during outages. Recreation Center Directors and Recreation Advisory Councils (RACs) can provide community leadership, develop protocols and implement strategies to protect the thousands of children and community members during critical climate events.*
- *Include description & background of CORE in narrative section.*

A2: Fund and Implement Citywide Vulnerability Assessment and Comprehensive Adaptation Plan

~~Update~~ Complete and/or update emergency plans, including the Local Hazard Mitigation Plan (LHMP), matching Federal requirements, including hazard identification and climate risk assessment. In conjunction with the update or adoption of the LHMP, complete ~~to include~~ a citywide vulnerability assessment and comprehensive adaptation plan, addressing climate risks using forward-looking projections and including community stakeholder engagement. Use results of these plans to identify existing and trusted community-serving facilities, including recreation and community centers and parks, as well as locally-trusted private facilities, to serve as shelter, evacuation, and/or clean air centers for future climate emergency events, prioritizing resources in frontline communities. ~~By 2025, i~~Implement key recommendations of these plans by 2025 to address major climate ~~addressing~~ risks in frontline communities first. Update these documents every 5 years with~~to incorporate~~ evolving climate and risk projections and adaptation best practices.

Notes:
- *Generally, ensure we prioritize community in the assessment, and concern about implementation / funding for assessment. Explain what LHMP is.*

A3: Wildfire Risk Reduction

Fully fund and implement a Vegetation Management Plan for high-fire risk areas. Require building owners in high-risk areas to maintain defensible space and implement low-cost fire prevention measures. Increase wildfire safety requirements for new construction or major renovations in high fire risk areas.

Notes:
- *Mention in narrative: goats can be one of many strategies; potential for green jobs; importance of homeowner/landowner education.*
- *Ensure that Finance section includes exploring possibility of parcel tax for LLAD.*

A4: Expand and Protect Green Infrastructure & Biodiversity

Fund and implement a green infrastructure program for the installation and maintenance of projects to improve stormwater management, support biodiversity, reduce air pollution exposure, and increase access to natural spaces, including trees. Prioritize investment in frontline communities, and particularly in residential neighborhoods dominated by concrete and asphalt with limited green space and elevated air pollution, in Priority Conservation Areas, and in areas where green infrastructure, including trees and other types of vegetated buffers, can effectively address stormwater management issues and reduce air pollution exposure among sensitive populations. By 2023, identify funding to expand green stormwater infrastructure citywide.

Notes:
- *Incorporate considerations and language from Urban Biofilter in action narrative (e.g. design based on site conditions). Include advocacy to CalTrans (plant&maintain buffers along freeways) and both CalTrans+MTC (evaluation criteria for repaving projects - Shayna still needs to talk to Mohammed Alaoui about this). Include mention of green jobs, youth training, and community building potential for this item. Specify in narrative that the bulk of the air pollution we're talking about comes from freeways (especially trucks along 880) and industrial sources.*
- *Discuss distinction among different types of green infrastructure for mitigating air pollution, SLR, stormwater inundation, UHI (from Urban Biofilter), and distinction between buffers near pollution source vs. near sensitive populations (former is better overall, latter is more targeted/surgical).*

A5: Identify and Reduce Financial Risks from Climate Change

By 2024, evaluate existing and potential financial risks posed by climate change to both City and community. Recommend strategies to mitigate these risks as available and appropriate, including options for insurance products, green infrastructure bonds, real estate strategy and other appropriate mechanisms.

Notes:
- *Add to Narrative: "*Climate change poses significant financial risk to the City, potentially diverting funds critical to the provision of essential services. Analyzing and planning for these risks can help minimize liability and reduce the cost necessary to adapt to these conditions."
- *Need to clarify in the Action narrative what we mean when we say that this action also includes community risks.*

- *Will probably reword to be consistent format with other actions.*

A6: Enhance Community Energy Resilience

Work with EBCE to develop a program and timeline for increasing resilience to power losses, including Public Safety Power Shutoffs (PSPS), and climate-driven extreme weather events for low income, medically dependent, and elderly populations through installation of renewable energy and onsite energy storage with islanding capabilities. Include energy efficiency building upgrades in any program, leveraging local and regional incentives. This program may include grants, incentives, rebates, and/or integration with other energy programs.

Notes:
- *Mention use of fossil fuel-powered generators during PSPS in Action narrative*
- *Remove barriers (re: individual & shared energy storage) for community resilience building*

Carbon Removal

CR1: Develop Local Carbon Investment Program

By 2023, Establish a program for both voluntary and compliance GHG mitigation fees to be invested locally. Prioritize projects in frontline communities, such as tree planting, building electrification, creek restoration, and neighborhood EV car share. Partner with Oakland businesses to establish a "Carbon Neutral Oakland Business" designation, with any offset or "Polluter Pays" fees invested locally, with priority benefit to frontline communities

Notes:

- *In narrative, need to address overall concerns: Don't enable more FF pollution; don't give co-pollutants a pass.*

CR2: Expand and Protect Tree Canopy Coverage

By 2022, create a fifty-year Urban Forest Master Plan that:

- Prioritizes strategies to address inequities among neighborhoods in tree canopy coverage;
- Ensures that carbon sequestration is a major factor in tree planting targets, selection of tree species, and tree management practices;
- Establishes a clear and sustainable funding mechanism for ongoing tree maintenance; and
- Establishes a protocol and goals for community partnerships for tree planting and maintenance

Notes:
- *In narrative, include language about green buffer zones / native trees / planting and maintenance strategy and funding (already in action!) / right tree right place - Where feasible, conduct work to be synergistic with GI efforts to provide or enhance buffers. Native trees: not always feasible, e.g. holes in concrete oft can't accept native trees; prioritize when conditions permit.*
- *Echo WOCAP in discussion (#10) ("City [to create] comprehensive, area-wide urban canopy & vegetation plan that identifies locations that trees can be added and maintained, such as parks & along Caltrans' ROWs, & develops a plan to protect existing trees that reduce exposure to air*

pollution emissions in W Oakland. This includes partnering with local nonprofit groups, encouraging trees on private property, & working with the community on tree maintenance & (as needed) removal."

CR3: Explore Carbon Farming

Explore potential for carbon farming on vacant public or private land, and in coordination with other public landowners in Oakland. Consider requirements and incentives and prioritize investments in frontline communities where feasible. By 2023̶5, establish a pilot carbon farming project to evaluate carbon removal opportunities.

Notes:

- *General fear of land use priorities / displacement / gentrification. Designated Carbon farming areas should remain so.*
- *In action narrative, discuss opportunities to partner with community orgs, including Sogorea Te, PJN, City Slickers, ANV, etc.. Mention potential opportunities for applying lessons to landscaping at City facilities, especially those that are community-facing. Mention potential overlap with organic urban agriculture that would also increase food security in low-income neighborhoods.*
- *Changed the date to 2025 because we have a lot of "by 2023" actions already.*

CR4: Rehabilitate Riparian Areas and Open Space

Identify funding to continue and expand programs to restore creeks and provide ecosystem services in coordination with stormwater management planning, prioritizing investment that reduces climate risks in frontline communities~~that reduces climate risks~~. Include funding for ongoing maintenance and public access.

Notes:

- *Include in discussion: local orgs like FOSC and Segorea Te; indigenous groups and knowledge in general; linkages to bike/ped Master Plans (if the linkage is there) re: expansion of paths into re-wilded areas to foster nature connections with community. Also concern about homeless populations that live in or utilize riparian areas - both for land/wildlife impacts, and for protecting the people.*
- *Note in discussion that this action includes daylighting covered creeks where that's feasible. Need to include a few sentences (have Kristin Hathaway review) to explain what we're already doing: City has an acquisitions program through Measure DD; has to be undeveloped land, generally can't be private property (constraints that have led the program to primarily operate in the flats - e.g. Coliseum, Lyon Creek, Cortland Creek, Peralta); we already have an acquisitions plan, just need more $ to implement creekside and watershed- beneficial projects. When DD expires, there will no longer be a mandate for creek restoration.*

CR5: Assess Feasibility for Sequestration Incubator

By 2025, evaluate the potential for a Carbon Sequestration Incubator in Oakland to incubate and develop green jobs in urban agriculture, urban forestry, aquatic and riparian restoration, engineering technology, and/or other forms of carbon removal. Assess market opportunities, policy drivers, potential locations, and existing businesses and non-profits that may benefit from co-locating in such a space.

Notes:

- *Narrative section will need lots of clarifying language about what this means, what it could entail, and role of EWDD.*

CR6: Explore Regional Aquatic Sequestration Opportunities

Coordinate with other Bay Area municipalities, non-profits, and agencies to develop a regional approach to aquatic sequestration in San Francisco Bay by 2030.

Port Leadership

PL1: Reduce Emissions from Port Vehicles and Equipment.

- ~~Deploy 44 zero emission yard tractors by 2025;~~ By 2022, develop a long-term plan for full electrification of drayage trucks.
- By 2024, develop a zero-emissions transportation master plan for all airport operations.
- ~~Deploy 14 battery electric trucks by 2021, and 21 battery electric trucks by 2027;~~ By 2026, develop and install sufficient electric charging infrastructure for 50% of all yard trucks and cargo handling equipment
- ~~Ensure new rubber tired gantry cranes are hybrid electric or best available technology~~ Plan electric charging infrastructure as part of a comprehensive backup power and climate resilience effort to insulate the Port of Oakland from the impacts of changing electric power reliability.
- Study the feasibility of renewable diesel in Port sources of GHG emissions as an interim strategy on the pathway to all-electric vehicles.
- Study the effect of the extra weight of battery electric trucks on the overweight corridor.
- Work with State and private businesses to develop and host a renewable hydrogen production, storage, and fueling infrastructure pilot project.
- Analyze the potential for establishing entry fees for GHG-producing vehicles as a funding source for PEV infrastructure

~~PL2: Explore additional low-emission vehicle and fuel options.~~

- ~~Study the feasibility of renewable diesel in Port sources of GHG emissions~~
- ~~Study the effect of the extra weight of battery electric trucks on the overweight corridor.~~

~~PL3: Educate Port stakeholders~~

~~Expand outreach to licensed motor carriers who drive short distances and target outreach on incentives programs in coordination with the BAAQMD~~

~~PL4~~ **PL2**: Reduce Emissions from Electricity

By 2023, Port of Oakland should procure 100% carbon-free electricity for Port operations and all electricity supplied to tenants or other end users.

~~PL5: Replace Airport vehicles with zero-emission vehicles.~~

~~Replace 50% of diesel and compressed-natural gas airport shuttles to with zero-emission airport shuttles by 2030.~~

PL6: OAK to pursue Airport Carbon Accreditation (ACA)

OAK to Oakland International Airport will achieve "Reduction" certification through ACA by 2022 and achieve "Optimization" Certification by 2025. Through the ACA's third-party certification, the airport will benchmark carbon emissions and demonstrate reduction.