Achieving a Zero-Emission Area in Los Angeles

EXECUTIVE SUMMARY

ITDP

The climate crisis is real. There are more frequent wildfires and heat waves, as well as longer droughts in Los Angeles. Transportation, accounts for 40 percent of the greenhouse gas emissions in Los Angeles and is a top contributor to air pollution.[1] We must act immediately.

In 2017 Los Angeles Mayor Eric Garcetti signed C40's Green and Healthy Streets Declaration. This includes a commitment to establish a major area of the city as zero-emission by 2030. A zero-emission area (ZEA) seeks to reduce greenhouse gas emissions and air pollution by working with the community to transition to zero-emission mobility. A ZEA is a diverse set of mobility interventions that together enable:

- Fewer vehicles overall
- All trips as zero-emission

While Los Angeles is often perceived as car-centric, many of the city's residents—including people of color, immigrants, and low-income families—rely on public transit, bicycling, and walking to get around and live their lives. For far too long the most diverse and disadvantaged of Los Angeles' communities have been burdened by toxic air caused by gas-powered vehicles. Through a ZEA the City can transform its streets and make it easier for people to thrive.

A ZEA in Los Angeles would combat climate change by making it easier for people using transit, driving clean cars, biking, scooting, or walking to get around. A ZEA can also create positive health benefits by decreasing air pollution and making streets safer for walking and rolling. A ZEA will be successful in Los Angeles by moving forward in collaboration with the community and addressing equity.

This guide, created by the Institute of Transportation and Development Policy (ITDP), explores possible opportunities for a city like Los Angeles in achieving a zero-emission area. Through feedback from technical and community experts as well as reviewing existing City and regional plans, this paper offers a model for a ZEA that is uniquely Los Angeles. The success of a ZEA in Los Angeles should also come from deep community engagement: The guide provides a set of recommendations to support community partnership in the design and implementation of the project.

A SNAPSHOT OF HEALTH IMPACTS OF TRANSPORTATION IN LOS ANGELES

- The city has twice as many pedestrian fatalities for children under 4 and people over 70 as the national rate.[2]
- More than 2,000 premature deaths per year in greater Los Angeles are attributed to air pollution from vehicles.[3]
- Communities of color in California are exposed to key air pollutants from vehicles at disproportionately higher rates: Black residents have a 43% higher exposure rate than white Californians, Latinx 39% more, and Asian Americans 21% more.[4]

Los Angeles' CicLAvia, pictured above, is described as a lifeline of the city and currently rotates neighborhoods throughout the year.

1 Los Angeles Department of City Planning, Mobility Plan 2035: An Element of the General Plan, 2016.
2 City of Los Angeles Mobility Plan 2035.
3 City of Los Angeles Mobility Plan 2035.
4 Union of Concerned Scientists, Inequitable Exposure to Air Pollution from Vehicles in California, 2019.

TIMELINE TO 2030

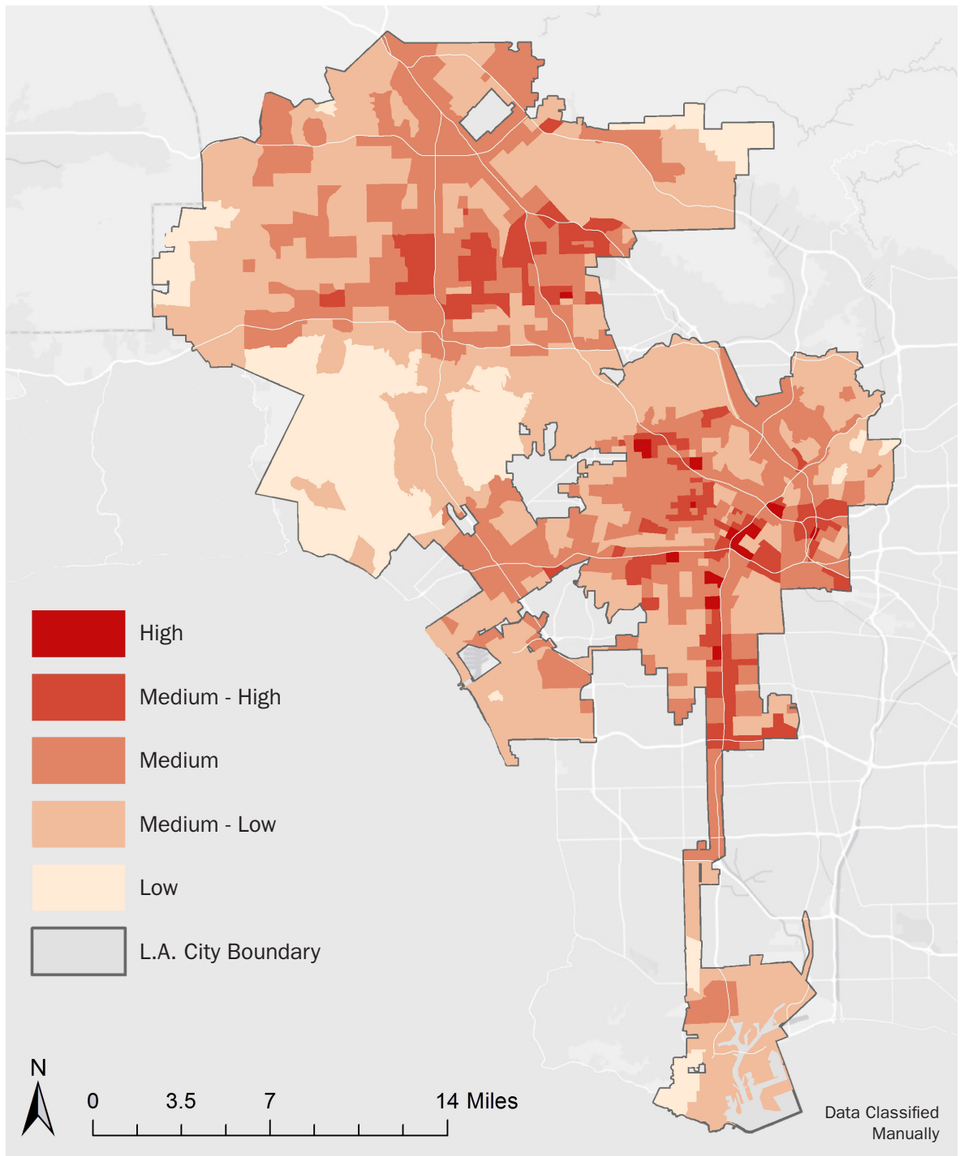
According to the C40 Green and Healthy Streets Declaration, a zero-emission goal is to be achieved by 2030. This gives the City and community members almost a decade to pilot, test, reconfigure, and work toward the ambitious goal. The first phase of the project is also a time to explore pilots or temporary measures to support and enable deeper community participation. Initial steps to achieve the goal for the City include:

- Selecting a neighborhood or neighborhoods for initial implementation;
- Developing an engagement practice with the community;
- Co-creating a vision supported by objectives and targets with the community;
- Conducting an inventory of existing plans and planned projects; and
- Planning, designing, and securing funding for new infrastructure and policy changes.

A ZEA should also align with long-term mobility commitments, goals, plans, and mandates made by the City of Los Angeles, L.A. Metro, L.A. County, and the state of California. Many of these changes will be implemented and made law during this 10-year period. Understanding the timeline for these efforts is critical for a ZEA to identify gaps in implementation.

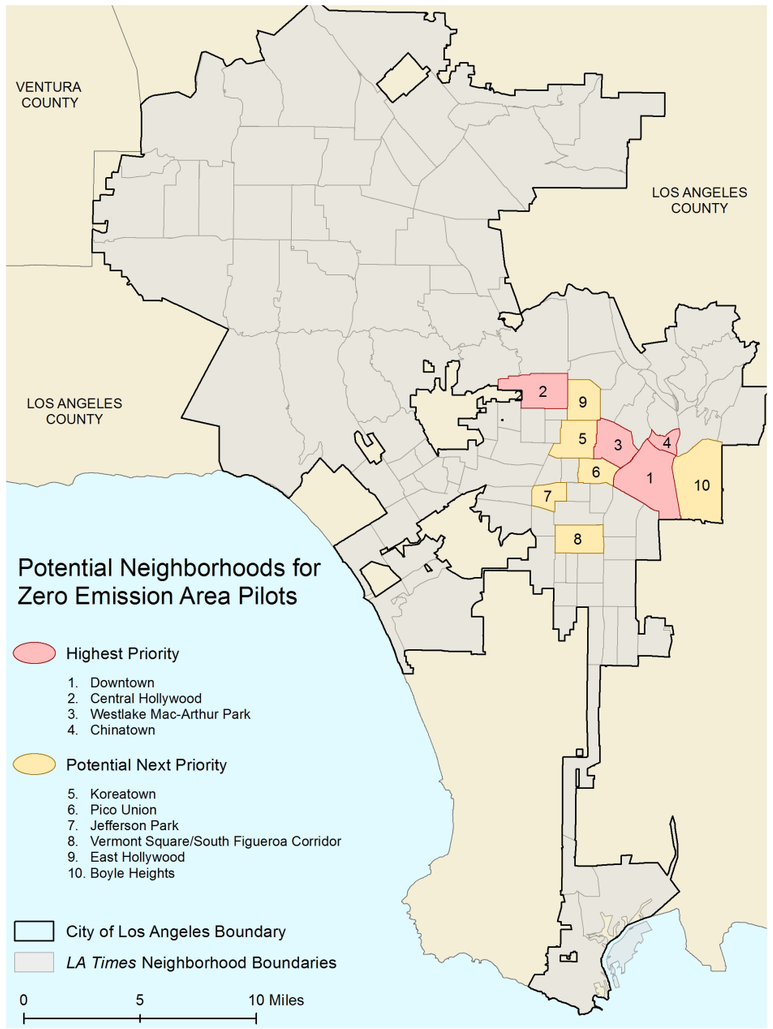
ZEA SITING AND LOCATIONS

For the purposes of analysis and research, ITDP created a data-based neighborhood prioritization process. The methodology prioritizes communities with both a higher burden of air pollution and associated health impacts as well as dense, walkable neighborhoods with significant potential for public transit use, biking, and walking.



The methodology ranks census tracts across the whole city. A ZEA score is applied to the census tracts to guide implementation based on where it would bring greatest benefits. Those census tracts with a high score (dark red) are where implementation can be prioritized in the short-term, while those with a low score (beige) are lesser priority.

While most neighborhoods in Los Angeles would benefit from ZEA investments, the methodology ranks census tracts across the whole city and identified 10 priority neighborhoods: Downtown, Central Hollywood, Westlake-MacArthur Park, Chinatown, Koreatown, Pico Union, Jefferson Park, South Figueroa Corridor/Vermont Square, East Hollywood, and Boyle Heights. These neighborhoods represent communities living with high air-pollution burdens, including high rates of asthma and cardiovascular disease, but also the built environment that supports density, public transit, walking and cycling, therefore making the shift to zero-emission mobility achievable.



MAP: Alejandro Blei

This map illustrates the potential neighborhoods to pilot a ZEA based on high scoring census tracts under ITDP's methodology. The process of defining actual ZEA boundaries should be collaborative with stakeholders, most critically city council districts and community residents.

STRATEGIES TOWARD ZERO EMISSION MOBILITY

Getting more people to walk, roll, or choose public transit instead of using a private vehicle will reduce greenhouse gases and air pollution. Sustainable mobility is also more affordable, creates opportunities for active daily movement, and builds social cohesion. For some trips a vehicle will continue to be the best option and vital for residents' economic livelihoods. Moderate- and low- income households and drivers will need support to switch to electric vehicles. While the final combination of strategies will be created with the community, the following measures support the 2030 zero-emission goal:

INTERSECTIONAL IMPACTS

In Los Angeles, a ZEA should evaluate climate mitigation strategies with a racial, economic, and social equity lens. In achieving a zero-emissions goal, the project should not displace current residents, disadvantage communities of color and their present needs, undermine economic gains of small businesses, or put undo economic burden on struggling community members.

Improve Bus Service and Infrastructure

Focusing on transit means improving bus stops so they are shaded and comfortable. Investment in affordable and safe public transit is an essential prerequisite for meeting ZEA goals around climate change, air pollution, and equity.

Prioritize Walking, Cycling, and Micromobility

A ZEA can make streets and sidewalks become safer, more welcoming places to be, particularly for children and older adults. A ZEA will bring together existing pedestrian safety programs and efforts for a cumulative impact on street safety.

Potential pedestrian plaza on Alvarado Street, across from MacArthur Park.

This rendering of South Alvarado Street between 7th and Wilshire demonstrates the potential of a pedestrian street in the neighborhood of MacArthur Park, where public transit usage is six times higher than Los Angeles County and rates of walking are three times as high as the county rate.[5] Located next to a subway stop and MacArthur Park, this rendering converts Alvarado Street into a pedestrian space that would allow residents and visitors to safely and easily access the area's popular street vending.

Create People-First Streets

Fewer vehicles means more space for trees, sidewalk cafés, pop-up parks, and places for kids to play. A street that restricts some vehicle access can provide transformational changes as well as opportunities for social interaction, active recreation, and building community.

5 U.S. Census Bureau, The American Community Survey, 2018.

Potential Transit Street on Broadway at 9th Street in Downtown L.A.

This rendering of 9th Street and Broadway in Downtown Los Angeles shows the potential of a transit street on 9th Street where buses, bikes, micromobility, and pedestrians are prioritized. Without easy light rail or Metro access, Broadway would benefit from high-quality bus service and connections throughout its length.

Manage Demand for Private Car Trips

Congestion in a ZEA can be reduced by changing financial incentives for personal vehicles. A ZEA should concentrate existing efforts on parking reforms, building codes, and congestion pricing—some of which can also generate local funds for further interventions in a ZEA.

Support the Switch to Electric Vehicles for Low-Income Households and Drivers

The transition toward electric vehicles is on its way as market changes, manufacturer commitments, and state mandates usher in a new era. Yet, moderate- and low-income households and drivers, including ride-hail and urban delivery, will need more support to make the transition to electric vehicles when they best meet their daily or economic needs.

ZEA IMPLEMENTATION GUIDANCE

The success of a ZEA depends on how it is planned and implemented. To get to the zero-emissions goal in an equitable way, the project requires collaboration across agencies as well as thoughtful processes to create partnership with the community. Best practices on strengthening internal structures will enable the following:

- **Governance and Interagency Collaboration**
  City agencies should act in partnership to leverage their respective powers, set targets, break down barriers, and better understand community needs. Interagency collaboration is critical to the success of a ZEA.

- **Inclusive Community Engagement**
  Dignity-infused community engagement and human-centered planning are key tenets of inclusive engagement. To get this right, cities will need to be intentional, listen to the community, and compensate community contributors for their time. The engagement process allows cities to demonstrate to a neighborhood that ZEAs are genuine investments in the local community and its people.

- **Measuring and Tracking Progress**
  A ZEA sets the ambitious goal of achieving 100-percent zero-emission mobility by 2030. It is critical that the project measure key impacts and targets to track its progress to meeting this goal.

- **Aligning Projects in the Pipeline**
  A ZEA could allow current and upcoming projects, investments, and commitments to work together as a cohesive package in creating transformative changes.

- **Coordinating and Identifying Resources**
  A ZEA must secure funding by aligning with capital improvement plans, collaborating across agencies, and anticipating proposal deadlines. Budgets must include direct funds for community engagement and implementation as well.

- **Communications and Branding**
  Early, culturally appropriate, and consistent communication to community members is critical. It can support behavior change and create positive responses to a policy or interventions.

KEY TAKE-AWAYS

This guide provides cities and local community partners with a path forward to a ZEA—a bold and important step in fighting climate change and getting cleaner air, using the City of Los Angeles as an example. Dedicated staff can be guided by these actions:

- **Meet the Urgency of Climate Change**
  To reduce GHG emissions before it's too late, the 2030 deadline for a ZEA provides an ambitious yet achievable goal to test, pilot, reconfigure, and find what works best for the community and contribute to a healthier city and planet.

- **Use Data and Community Input to Determine a ZEA Neighborhood**
  This project proposed data-based neighborhood prioritization that focuses on identifying neighborhoods with high air pollution and high potential to rapidly shift to sustainable mobility.

- **Co-Develop Strategies to Reach Zero**
  It's critical that cities work in partnership with communities to develop a strategy that aligns with community needs. ITDP recommends investing in public transit, walking, and rolling and supporting moderate- and low-income households and drivers to make the transition to EVs.

- **Processes and Practices Matter**
  The guide recommends that cities focus on best practices on interagency collaboration, community engagement, tracking progress, funding, and communications to reach success.

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