Achieving a Zero-Emission Area in Los Angeles
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I. Context of Zero-Emission Area

II. How Los Angeles Defines a Zero-Emission Area

III. How Los Angeles Will Implement the Zero-Emission Area
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Evolution from Low Emission Zones

Vehicles conformed to emission standards can access the zone

Non-conformed vehicles are banned

OR

Non-conformed vehicles pay a fee
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London’s Ultra Low Emission Zone

- **2017**: T-charge and LEZ
- **2019**: ULEZ replaces T-charge. Introduction of Euro 6/VI diesel standard and change in charge and hours
- **2020**: EURO VI standard applies London-wide for heavy vehicles
- **2021**: ULEZ expands to inner London
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Our Commitment to Green and Healthy Streets

“establish a major area of the city a zero-emission by 2030”
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Targets for phasing out all new sales of combustion engine passenger cars

Phase-out target year
- 2025
- 2030
- 2032
- 2035
- 2040
- 2050

Image credit: ICCT
Why not replicate a low emission zone?
Why not focus only on zero-emission vehicles?

Three Revolutions in Urban Transportation

Business-as-Usual Scenario
20th Century Technology
Through 2050, we continue to use vehicles with internal combustion engines at an increased rate, and use transit and shared vehicles at the current rate, as population and income grow over time.

2 Revolutions (2R) Scenario
Electrification + Automation
We embrace more technology. Electric vehicles become common by 2030, and automated electric vehicles become dominant by 2040. However, we continue our current embrace of single-occupancy vehicles, with even more car travel than in the BAU.

3 Revolutions (3R) Scenario
Electrification + Automation + Sharing
We take the embrace of technology in the 2R scenario and then maximize the use of shared vehicle trips. By 2030, there is widespread ride sharing, increased transit performance—with on-demand availability—and strengthened infrastructure for walking and cycling, allowing maximum energy efficiency.

Number of Vehicles on the Road by 2050

<table>
<thead>
<tr>
<th>Scenario</th>
<th>Vehicles</th>
</tr>
</thead>
<tbody>
<tr>
<td>Business-as-Usual</td>
<td>2.1 billion</td>
</tr>
<tr>
<td>2 Revolutions</td>
<td>2.1 billion</td>
</tr>
<tr>
<td>3 Revolutions</td>
<td>0.5 billion</td>
</tr>
</tbody>
</table>

CO₂ Emissions by 2050

<table>
<thead>
<tr>
<th>Scenario</th>
<th>CO₂ Emissions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Business-as-Usual</td>
<td>4,600 megatonnes</td>
</tr>
<tr>
<td>2 Revolutions</td>
<td>1,700 megatonnes</td>
</tr>
<tr>
<td>3 Revolutions</td>
<td>700 megatonnes</td>
</tr>
</tbody>
</table>
Traffic congestion also has impacts on road safety and livability.

- More than 100 pedestrians and cyclist in Los Angeles are killed each year in traffic collisions with cars.
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A zero-emission area in Los Angeles can support bus riders.

Almost a million people took public transit in the county on a weekly basis--850,000 of whom were bus riders--before COVID-19 started in 2020.
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A zero-emission area is a diverse set of mobility interventions that together enable:

• Fewer vehicles overall
• All trips as zero-emission.
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Implementing the Zero-Emission Area in Los Angeles
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Use Data and Community Input to Determine the Pilot Location

- Data-based methodology prioritizes neighborhoods with:
  - High air pollution
  - High rates of asthma, lung, cardiovascular diseases
  - High walkability
  - Moderate to high traffic
Many of the neighborhoods we recommended already have high walking and public transit usage.

- Up to six times the average public transit usage of LA county.
- Up to three times the average walking rate of LA county.
- Up to 35% of the households do not have access to a car.
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Co-Develop Strategies with Communities to Reach Zero

The zero-emission area seeks to empower a neighborhood to design policies and street interventions that reduce pollution and shift to zero-emission mobility in an equitable way.
# Achieving a Zero-Emission Area in Los Angeles

## Measuring and Tracking Progress

<table>
<thead>
<tr>
<th>Project Goal</th>
<th>Metrics</th>
<th>Targets</th>
<th>Strategies</th>
</tr>
</thead>
<tbody>
<tr>
<td>Improve affordable transit options</td>
<td>Bus reliability</td>
<td>Buses meet reliability 75% of the time</td>
<td>NextGen Bus Plan</td>
</tr>
<tr>
<td></td>
<td>Bus frequency</td>
<td>75% of buses have 10-minute or less headways</td>
<td>BRT, bus-only lanes, level-boarding, high-quality bus stations</td>
</tr>
<tr>
<td></td>
<td>Network connectivity³⁷</td>
<td>Customer satisfaction is above 60%</td>
<td>Transit streets</td>
</tr>
<tr>
<td></td>
<td>Transit customer satisfaction³⁸</td>
<td></td>
<td>Multimodal integration. Bus stop infrastructure through City Sidewalk and Amenity Program (STAP)</td>
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<td>Create safer streets and public spaces for people of color, women, elderly, undocumented residents, people who identify as LGBTQ+, unhoused people, and people with disabilities</td>
<td>Community surveys of safety</td>
<td>More than 70% of ZEA residents feel safe on their own streets</td>
<td>Reduction in police presence, increased lighting, nonpolice traffic control (street design, speed cameras)</td>
</tr>
<tr>
<td></td>
<td>In-field observations of safety and risk</td>
<td></td>
<td>Improved street maintenance and cleanliness</td>
</tr>
<tr>
<td></td>
<td>Relative rates of police interactions as compared with other neighborhoods/streets</td>
<td></td>
<td>Community-oriented public amenities and programming</td>
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<td></td>
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<td>Community-based street teams and ambassadors</td>
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Aligning Projects in the Pipeline

Los Angeles Vision Zero
High Injury Network Streets
Thank you!

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