City of New Orleans

Electric Transportation Roadmap

Draft for Public Comment

May 12th, 2025

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1. Introduction and Project Scope

The City of New Orleans Climate Action Plan has targeted to reduce greenhouse gas (GHG) emissions by 50% by 2035 and to achieve net-zero greenhouse gas emissions by 2050. A key aspect of reducing overall greenhouse gas emissions is to reduce transportation emissions which largely stem from the combustion of petroleum gas and diesel in cars, trucks, and buses. These emissions account for nearly 43% of the City's total GHG emissions.[1] Accordingly, the City's Climate Action Plan also sets a goal of 40% of passenger and light-duty vehicles being electric by 2035. The City of New Orleans Electric Transportation Roadmap defines a strategy that will reduce the City's transportation emissions in a resilient and equitable manner while helping the City achieve the previously stated goals.

In this Roadmap, electric transportation refers to vehicles that utilize electric power as their source of energy rather than gasoline or diesel. These vehicles use rechargeable batteries to power electric motors which propel the vehicle. The electric vehicles discussed in this Roadmap include passenger and light-duty EVs, medium/heavy-duty EVs such as electric trucks, electric school buses (ESBs), electric transit buses, and e-bikes. The Electric Transportation Roadmap outlines several pathways to reduce transportation emissions specifically through increasing electric vehicle (EV) and electric transit adoption throughout the City, as well as increasing public-facing EV charging infrastructure. The Roadmap connects these pathways to specific policy recommendations (reference *Section 4.1: Policy Recommendations*) and imminent project opportunities for the City.

As a city with a rich and diverse history but high-income inequality[2], as noted in the City's Plan for Generational Economic Development (PGET), the City has a unique opportunity to ensure that its electric transportation strategy improves the quality of all New Orleanians rather than some. This Roadmap's recommendations for electrifying transportation are focused on increasing income equality and equitable access to economic opportunities and EVs, as discussed in *Section 2: Public Engagement and Community Outreach* and *Section 3.3: Economic and Workforce Development Opportunities*.

Additionally, as a coastal city with a low-lying topography dealing with increasing frequency of extreme weather from climate change, New Orleans must ensure that electrifying transportation, which can increase energy demand on the local grid, bolsters environmental and climate

[1] City of New Orleans. December 2022. Net Zero by 2050: A Priority List for Climate Action in New Orleans. https://nola.gov/nola/media/Climate-Action/2022/Net-Zero-by-2050-A-Priority-List-for-Climate-Action-in-New-Orleans.pdf (accessed April 8, 2025).

[2] Office of Economic Development City of New Orleans. May 4, 2023. Plan for Generational Economic Transformation. https://nola.gov/nola/media/Economic-Development/PGET-5-4-23.pdf (accessed April 8, 2025).

resilience instead of challenging City operations, as discussed in *Section 3.4: Transportation Resiliency*. A key aspect to increasing EV adoption is to influence fleets throughout the City to purchase more EVs and to deploy sufficient and reliable infrastructure which will encourage residents to consider EVs, as discussed in *Section 3.1: Charging Infrastructure Needs, Section 3.2: Non-City Fleet Vehicles,* and *Section 4: Electrification Policy Recommendations*.

There are also many potential partners arising from this Roadmap, so it is important that each one is engaged with a clear intention and role for that partner to play in the City's electric transportation journey. Additionally, the City is already in the process of pursuing and completing several existing electric transportation initiatives. The lessons learned from these projects should be applied to the recommendations from the Roadmap. These topics are discussed in *Section 5.1: Knowledge Sharing*. Lastly, the City's Office of Resilience and Sustainability (ORS) and partner City departments should pursue the recommendations summarized from each analysis in this Roadmap provided in *Section 5.2: Roadmap Recommendations*.

2. Public Engagement and Community Outreach

Through the public engagement and community outreach initiative, the Roadmap seeks to foster a broader understanding of electric mobility and how it touches New Orleanians' everyday lives while connecting the recommendations from this Roadmap to community input. Between October and November of 2024, the City engaged residents via a public survey, in-person community meetings, press releases, and media engagement through three lenses: environment, equity, and economic development (further detailed in Appendix A). Nearly 300 survey responses and 80 meeting attendees offered valuable insights into the community's priorities and concerns around electrifying transportation. These efforts pursued diverse representation, with a focus on historically underserved communities, aligning the Roadmap with the City's climate action and equity goals.

This initiative has uncovered a growing public interest in electric transportation while also highlighting critical barriers to adoption, including affordability, infrastructure gaps, and education. Addressing these challenges is key to making electric mobility accessible for all New Orleans residents.

2.1. Engagement Activities Outcomes and Insights

2.1.1. Survey Insights and Recommendations

Key themes from the survey responses include the critical need for equitable, easily accessible charging infrastructure, improved grid reliability, and financial incentives to support EV adoption.

Respondents also highlighted opportunities to promote e-bike usage and emphasized the importance of public education on cost savings and environmental benefits. Furthermore, the survey underscored the urgency of incorporating resilience planning into EV infrastructure, particularly for hurricane and flooding scenarios.

This community feedback should serve as pillars for the City's future initiatives, ensuring that planning efforts align with the needs and priorities of New Orleans residents. The major themes from the survey are summarized below. A complete breakdown of the survey results and residents' feedback are in Appendix A.

1. Public Investment is Needed for Electrification Infrastructure

81% of respondents emphasized unreliable or unavailable charging stations as a barrier to EV adoption, particularly in workplaces, schools, and shopping areas. For example, one respondent stated "I would love for my next vehicle to be an EV, but I have no way to charge it at home (no garage, no driveway, I live on the second floor). Having accessible charging stations, ideally in places I already go, is key to whether I choose an EV". Additionally, 67% of respondents found workplace charging "very helpful," highlighting an opportunity to partner with employers to expand access. Addressing this gap is critical to making EV ownership practical and accessible. Neighborhood preferences indicated higher demand for chargers in areas such as Mid-City (160 respondents), the Central Business District (147 respondents), Bywater/Marigny (125 respondents), and Lakeview (122 respondents). The desire for EV chargers spans a range area of neighborhoods, underlining the importance of broad geographic coverage to increase EV charger access for the whole City. The utilization of local, federal government, and private funding, later discussed in *Section 6: Implementation and Funding Opportunities* will be key to addressing infrastructure gaps.

> *"I would love for my next vehicle to be an EV, but I have no way to charge it at home (no garage, no driveway, I live on the second floor). Having accessible charging stations, ideally in places I already go, is key to whether I choose an EV"*

2. Cost as a Barrier to Adoption

39% of respondents identified financial incentives as essential, particularly for low-income individuals. Subsidies should aim to reduce upfront costs and encourage broader adoption. 41% of respondents cited purchase cost as a major barrier, yet 66% highlighted "never paying for gas" as a key benefit. Future outreach should therefore emphasize long-term savings and

environmental impacts. Passing policies that create or add on to existing incentives, later discussed in *Section 4.1.3: Policy Recommendation #3* will be key to addressing this barrier.

3. Home Charging Access as a Barrier to Adoption

78% of respondents stated that having a charger at home would be "very helpful," and 85% of current EV owners primarily charge their vehicles at home. However, many residents face challenges in accessing home charging, especially renters and those in multi-family properties. Expanding home charging options is critical to equitable adoption and reducing reliance on public infrastructure.

4. Make e-Bikes a Viable Mode of Transportation

46% of respondents expressed willingness to use e-bikes for some trips, provided that infrastructure like safe and protected bike lanes are in place. Promoting awareness of the City's e-bike rebate funding from the Climate Pollution Reduction Program (CPRG) and other policy recommendations, later discussed in *Section 4.1.2: Policy Recommendation #2*, will address e-bike usage.

5. EVs Must Be Reliable in Evacuation and Flooding Scenarios

59% of respondents highlighted the importance of charging station availability along key evacuation routes, emphasizing the need for fast chargers along highways. Reliable infrastructure is essential for disaster preparedness. 49% of respondents expressed concerns about grid reliability. One respondent brought up several concerns by stating *"My biggest concern about having an EV in New Orleans is what would happen during a hurricane evacuation. If you are stuck in traffic, how could you charge your battery? Are there adequate charging stations in Mississippi, Alabama, other states which we would have to drive through? Also, what happens when the power goes out in New Orleans for several days after the storm and you can't evacuate because your battery is dead? These are the main reasons why I would consider a hybrid rather than full EV."* Investing in grid resilience through innovative solutions is a prerequisite for public confidence and wider EV adoption, which is addressed in *Section 3.4: Transportation Resiliency*.

2.1.2. Community Meeting Insights and Recommendations

The structure of the feedback stations at the community meetings (further detailed in Appendix A) allowed the City to receive comprehensive feedback which addressed EV charger siting and accessibility, benefits and concerns of EVs, important considerations for larger-scale electrification beyond personal vehicles, and any other gaps to consider. Detailed feedback from each station is in Appendix A. While much of the residents' feedback follows similar themes as the survey, this feedback calls for opportunities beyond the City's initial considerations. The feedback

to incorporate into the City's future initiatives can be structured by three categories addressed later again in the Roadmap:

1. **Access and Awareness:** Residents consistently emphasized the need for accessible and equitable EV charging infrastructure. This includes expanding the availability of chargers in low-income neighborhoods and ensuring they are conveniently located at workplaces, schools, grocery stores, and high-traffic areas. Education and outreach were also highlighted as crucial, with residents advocating for educational programs to increase awareness of EV benefits, cost savings, and available incentives, which is addressed in *Section 4.1.1: Policy Recommendation #1.*
2. **Resilience:** Community members underscored the importance of planning EV infrastructure to withstand extreme weather events and ensure reliable access during emergencies. Participants stressed the need for charging stations along evacuation routes and their concern for frequent electricity outages making EV charging less reliable, underscoring the need for measures to bolster grid reliability. Next steps to address resiliency concerns are discussed in *Section 3.4: Transportation Resilience*.

3. **Community and Workforce Development:** Feedback from the meetings pointed to the opportunity for workforce development programs that support the growth of EV adoption and maintenance through organizations such as New Orleans Career Center, Delgado Community College, The Urban League, New Orleans Apprenticeship Administrators, Southeastern Louisiana Building and Construction Trades Louisiana, Community Lighthouse and automotive dealerships. Residents suggested partnerships with these institutions to create or promote training and certification programs for EV-related careers. Broader engagement with community organizations, such as schools, religious and faith community institutions, neighborhood associations, non-profit organizations, shopping malls, surface parking lots like those owned by Premium Parking, casinos, grocery stores, hospitals, universities, hotels, and the Superdome was also recommended to address gaps in electric transportation growth. Next steps to address workforce development feedback are discussed in *Section 3.3.4: Human Capital and Workforce Development*.

3. Assessment of Needs and Opportunities

To address public input and categorize recommendations for achieving 40% of passenger and light-duty vehicles being electric by 2035, the Roadmap assesses charging infrastructure needs, non-City fleet transitions, economic and workforce development opportunities arising from electric transportation, and transportation resiliency during emergency situations.

3.1. Charging Infrastructure Needs

Significant additional public and private sector investment in EV charging infrastructure will be required to meet the City's goal of 40% of passenger and light-duty vehicles being electric by 2035. To meet this growing need, this Roadmap evaluates future EV charging demand, identifies potential sites for public-facing charging (operated by either the City or the private sector), and prioritizes investments in underserved communities. This section summarizes the results of the technical analysis conducted to develop EV charging infrastructure recommendations for the City of New Orleans.

3.1.1. Charging Infrastructure for Transportation Electrification

This assessment includes discussion of existing and projected EV penetration, recommended quantities of charging stations to support future adoption, and existing conditions analysis performed to identify ideal sites for infrastructure investment.

Current Charging Landscape

As of early 2025, the City of New Orleans has 125 publicly accessible Level 2 charging ports located at 58 sites throughout New Orleans. There are currently only 13 direct current fast charging (DCFC) ports within the City, with 12 of these located at a single Tesla Supercharger site at the Jung Hotel in Downtown New Orleans and the 13th one located at Rouses Market. Despite recent investments in public charging, the current footprint of charging ports is low compared to the estimated need in 2030 (discussed further below).

The City of New Orleans is making strides in closing this gap. In partnership with the City, in 2023 Entergy installed 30 Level 2 ChargePoint charging stations at 25 locations, including New Orleans Recreation Development Commission facilities, libraries, and public parks. All are open to the public and free to use.[3] Additionally, the U.S. Department of Transportation awarded the City a grant through the federal Charging and Fueling Infrastructure (CFI) program to install EV charging stations at 58 locations. However, the future of the CFI program is uncertain due to recent Executive Orders rescinding federal funding awards for EV infrastructure.

[3] Entergy. "City, Entergy New Orleans complete final installation of Level 2 public EV charging program ." October 5, 2023. https://www.entergynewsroom.com/news/city-entergy-new-orleans-complete-final-installation-level-2-public-ev-charging-program/ (accessed March 28, 2025).

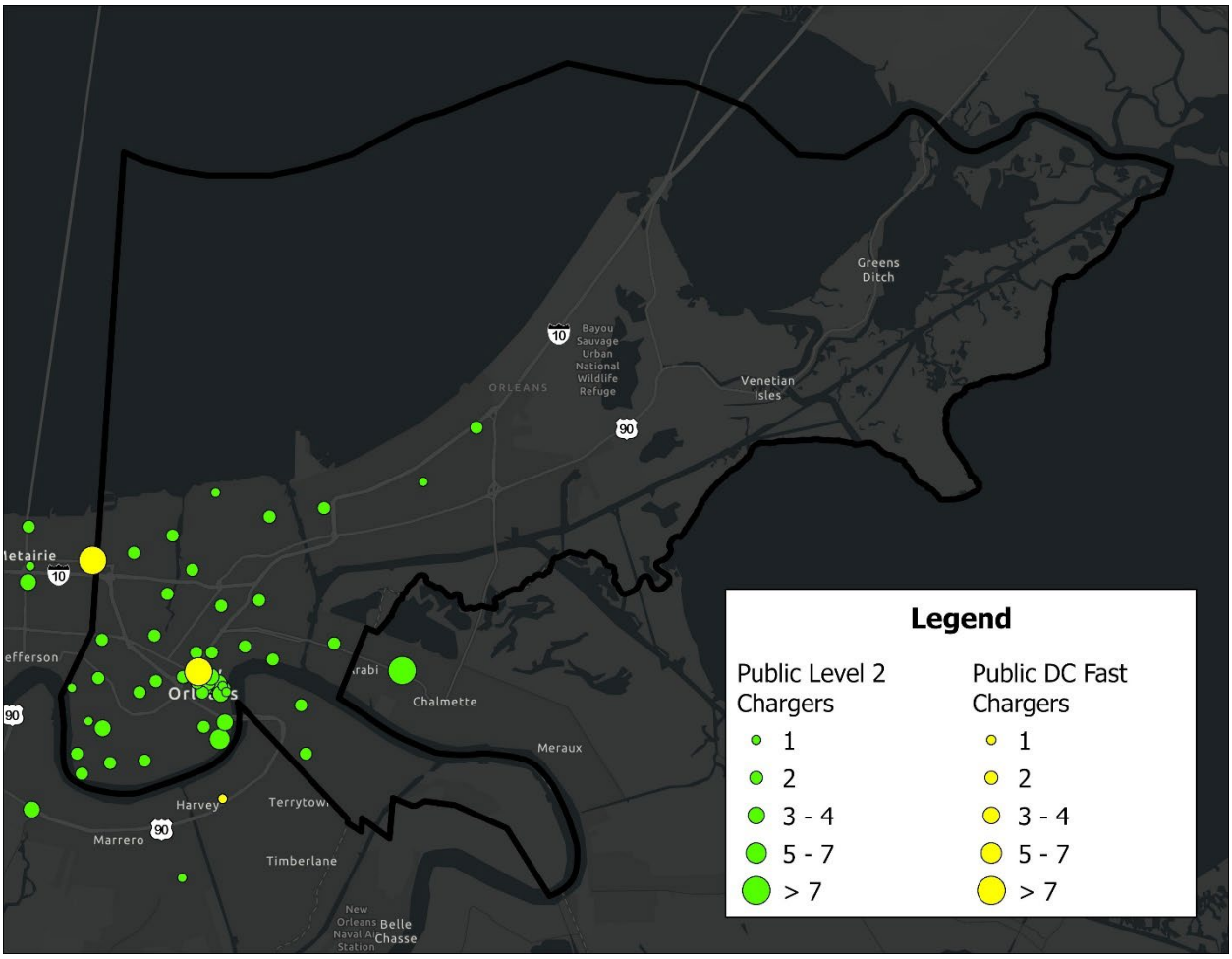

Figure 1: Map of Existing Charging Infrastructure in New Orleans

Existing and Projected Fleet Penetration

The consultant team projected EV adoption using vehicle registration data for the City of New Orleans and typical turnover rates for vehicle fleets. Two scenarios were developed to establish upper and lower boundaries for future adoption:

- The low adoption scenario assumes EV adoption aligns with projections from the Energy Information Administration (18% in 2050).[4]
- The high adoption scenario assumes the City achieves its target of 40% EV adoption by 2035, with EV adoption leveling off at 50% in 2050.

[4] U.S. Energy Information Administration. 2023. Annual Energy Outlook. https://www.eia.gov/outlooks/aeo/pdf/AEO2023_Narrative.pdf (accessed March 28, 2025).

Relatively low EV adoption rates are seen in both the City (.8%) and the State of (.2%, ranking 49th in the country)[5]. For both scenarios, the projections assume the total number of registered vehicles (including both EVs and ICE models) will remain constant.

The growth curve below shows that adoption grows rapidly at first, then slows as market penetration approaches the assumed maximum. This "S-curve" shape has been observed in other geographies with higher rates of EV registration and is commonly used to describe technology adoption (e.g., smartphones).

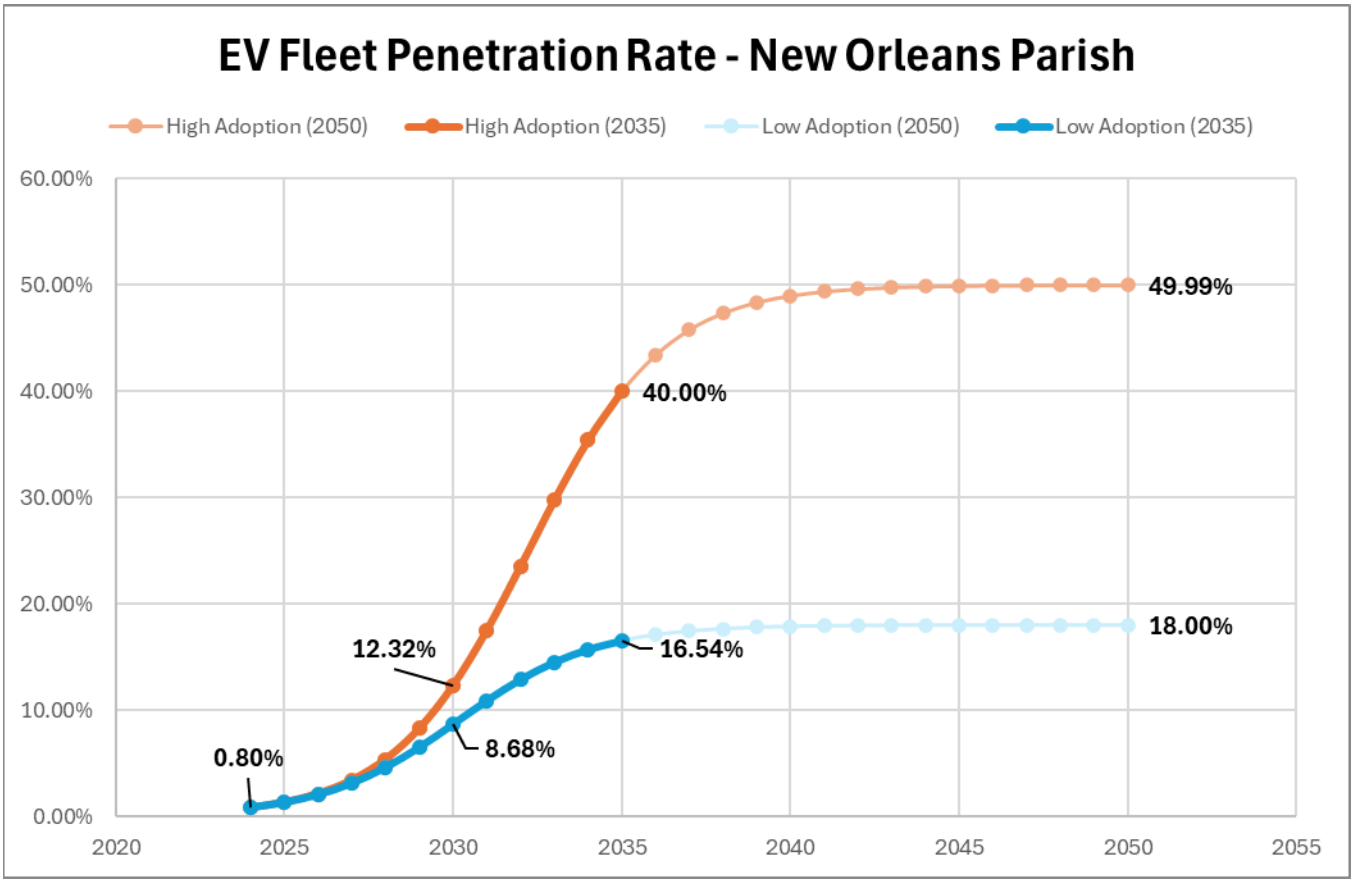

Figure 2: EV Fleet Penetration Rate for City of New Orleans

Recommended Charging Footprint

The projected number of EVs traveling in the City of New Orleans helps inform how many charging ports will be required to adequately serve EV drivers' needs.

[5] Alliance for Automotive Innovation. 2024. Get connected Electric Vehicle Quarterly Report. Second Quarter 2024. https://www.autosinnovate.org/posts/papers-reports/Get%20Connected%20EV%20Quarterly%20Report%202024%20Q2.pdf (accessed March 28, 2025).

The easiest and typically least expensive way to charge an EV is overnight at the driver's house, either with a Level 1 or Level 2 charger, as seen in Table 2: EV Charger Types (adapted from the U.S. Department of Energy Alternative Fuels Data Center). However, public charging options are important to ensure that visitors, workers, and those without easy access to a charger at home also have ways to charge their EV. To ensure that different needs and trip types are accommodated, most EV drivers will need a mix of Level 2 and Level 3/Direct Current Fast Charging (DCFC) stations available to the public. It will be equally important for cities and private entities to develop community-level charging infrastructure that supports in-town trips, workplace charging, and residential charging as well as high-powered fast charging on heavily-trafficked highways.

Table 1: EV Charger Types (adapted from the U.S. Department of Energy Alternative Fuels Data Center)

Charger Type	User Profile	Typical Locations	Miles/Hour Charge (depending on vehicle)
Level 1	Park for 6-8+ hours	On-street parking, multi-family housing, parking garages, workplaces, airport long-term parking	5
Level 2	Park for 2-4 hours	Shopping centers, On-street parking, multi-family housing, parking garage, hotels, airport short-term parking	10-60
Level 3/Direct Current Fast Charging (DCFC)	Park for 15-60 minutes	Shopping centers, service stations along highway corridors, airport rental car centers	175-500

Unlike gas stations, EV charging stations can be more closely intertwined with existing land uses and parking areas. Gas stations require underground storage tanks and additional circulation space, whereas EV charging stations can be added to existing parking with minimal site impacts. Gas stations are also more difficult to re-purpose into new land uses in the future due to the environmental hazards involved in removing storage tanks and remediating the site. This requires a change in thinking for how most drivers plan for refueling/recharging. Rather than waiting for the tank to reach a quarter full (or less) and making a specific trip to a gas station, EV drivers can charge their vehicles at destinations in a wide range of parking scenarios. Charging the vehicle while

grocery shopping or seeing a movie provides a sufficient charge for around-town trips, also referred to as "topping off."

There are three broad categories for EV charging infrastructure:

- **Residential charging** is expected to be the most commonly used charging infrastructure, for EV owners who will charge their vehicle at home, likely overnight while the vehicle is parked in their driveway, garage, or, where viable, on-street.
- **Workplace charging** refers to charging infrastructure that is privately owned and dedicated for employees. Workplace charging helps support EV drivers who commute longer distances to work or lack charging options at home.
- **Public charging** includes a wide range of potential settings that are open to all EV drivers, though some may have use restrictions. For example, businesses that have EV charging in their parking facility would be considered "public" even if it is only available to customers of that business.

An EV charging station can have one or more EV charging ports (commonly referred to as chargers). An EV charging port charges one vehicle at a time even though it may have multiple connectors (see Figure 9: EV Charging Station (source: Alternative Fuels Data Center)). The connector, sometimes called a plug, goes into the vehicle. There are currently four types of connectors in the United States: J1772, SAE Combined Charging System (CCS), CHAdeMO, and J3400. Most EV models on the market can charge using the CCS connector, and efforts are being made to better standardize the connector types.

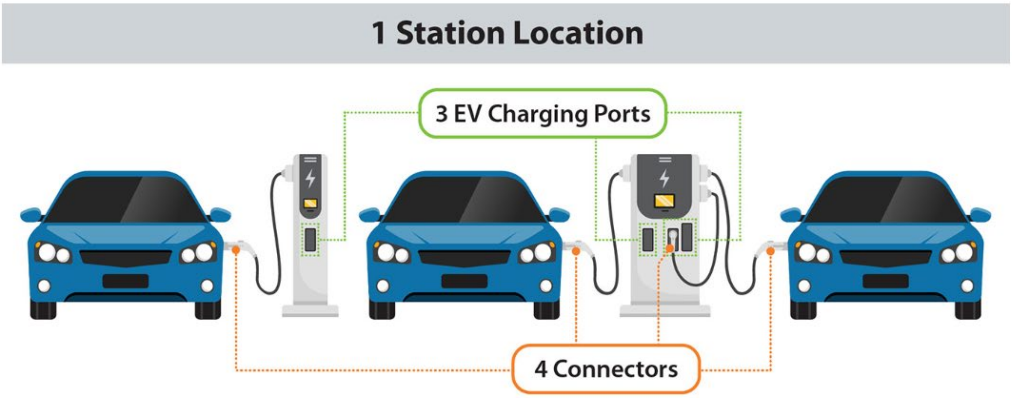

Figure 3: EV Charging Station (source: Alternative Fuels Data Center)

Table 2: Recommended Charging Ports in City of New Orleans depicts the recommended numbers of public EV ports (or chargers--both Level 2 and DCFC) required to serve the level of adoption observed in the conservative and aggressive projections. The ratio of required chargers is based

on recommendations from the National Renewable Energy Lab.[6] These recommendations assume the total number of registered vehicles in the City of New Orleans remains constant over time.

Based on these estimates, a significant number of EV chargers will be necessary to support long-term EV adoption in New Orleans. For example, by 2035, under a low adoption scenario 700 Level 2 plugs and 100 DCFC plugs will be needed. By 2050, the city will need 800 Level 2 plugs and 100 DCFC. A high adoption scenario in 2050 would require 2,100 Level 2 plugs and 250 DCFCs. While the City will be largely responsible for overseeing the deployment of publicly available EV charging infrastructure in the community, significant participation by community stakeholders and businesses will be necessary to achieve this level of infrastructure buildout.

Table 2: Recommended Charging Ports in the City of New Orleans

	2030		2035		2040		2045		2050	
	Aggressive	Conservative	Aggressive	Conservative	Aggressive	Conservative	Aggressive	Conservative	Aggressive	Conservative
Projected EV Registrations in New Orleans	30,900	21,800	100,400	41,500	123,000	44,900	125,300	45,200	125,500	45,200
Recommended Number of Level 2 Ports	500	400	1,700	700	2,000	800	2,100	800	2,100	800
Recommended Number of DCFC Ports	100	50	200	100	250	100	250	100	250	100

Priority Locations for Charging Infrastructure

This Roadmap recommends priority locations for EV charging through a charging heat map. The heat map is a result of combining various layers of the City's geographic and spatial data such as the City's existing charging network, current EV travel patterns, nearby major highways, future use cases for land, the Equitable Communities Index, high-voltage power lines, and natural hazards. Each of these layers were assigned to a weighted scoring to create the charging suitability metric in the maps below. The detailed methodology and specific mapping data layers incorporated into the heat maps are in Appendix B.

Once all of the data layers were combined and processed in the ZEVDecide™ model, the resulting heat maps below show how locations rank for overall charging site suitability, taking into account demand, site characteristics and equity considerations. The Roadmap presents two maps to prioritize the buildout of future charging infrastructure:

- The first map shows recommended locations for Level 2 charging, focused on providing medium- to long-duration community charging in places where people live, work, and run errands. (Figure 3).

[6] 16 Level 2 chargers and 1.7 DCFCs per 1,000 EVs

- The second map prioritizes sites for DCFC installation, which prioritizes cost-effective buildout of short duration charging at locations with high demand and compatible land uses. (Figure 4)

Table 3 below shows how each layer is weighted in the ZEVDecide™ model for each scenario based on City and stakeholder input. The weighting considers land use, equity measures, and transportation and utility infrastructure. Existing charging stations (for the Level 2 scenario) and flood zones are weighted negatively, meaning that they subtract points from the total score for a given "cell" within the model. Natural areas, wetlands, and water bodies are excluded from consideration.

Table 3: Data Weighting

Level 2 Scenario		DC Fast Charging Scenario	
Land Use		**Land Use**	
Residential Multi-Family	100	Residential Multi-Family	
Mixed-Use High Density	100	Mixed-Use High Density	50
General Commercial	90	General Commercial	100
Residential Medium-Density	80	Residential Medium-Density	
Institutional	80	Institutional	25
Mixed-Use Medium Density	70	Mixed-Use Medium Density	50
Downtown Exposition	70	Downtown Exposition	25
Business Center	60	Business Center	25
Neighborhood Commercial	60	Neighborhood Commercial	75
Residential Low-Density Pre-War	50	Residential Low-Density Pre-War	
Parkland and Open Space	50	Parkland and Open Space	
Mixed-Use Low Density	30	Mixed-Use Low Density	25
Industrial	20	Industrial	25
Planned Development Area	10	Planned Development Area	
Residential Low-Density	10	Residential Low-Density	
Residential Rural	10	Residential Rural	
Cemetery	10	Cemetery	
Equity		**Equity**	
Final Index Score	50	Final Index Score	50
Infrastructure		**Infrastructure**	
Proximity to Substations/High Voltage Power Lines	0	Proximity to Substations/High Voltage Power Lines	100
AFC Connections	0	AFC Connections	50
EV Traffic Volumes	25	EV Traffic Volumes	50
Existing Level II Charging Stations	-25	Existing Level II Charging Stations	
Exclusion/Avoidance		**Exclusion/Avoidance**	
Natural Areas	Excluded	Natural Areas	Excluded
Water Bodies	Excluded	Water Bodies	Excluded
Flood Zones	-50	Flood Zones	-100

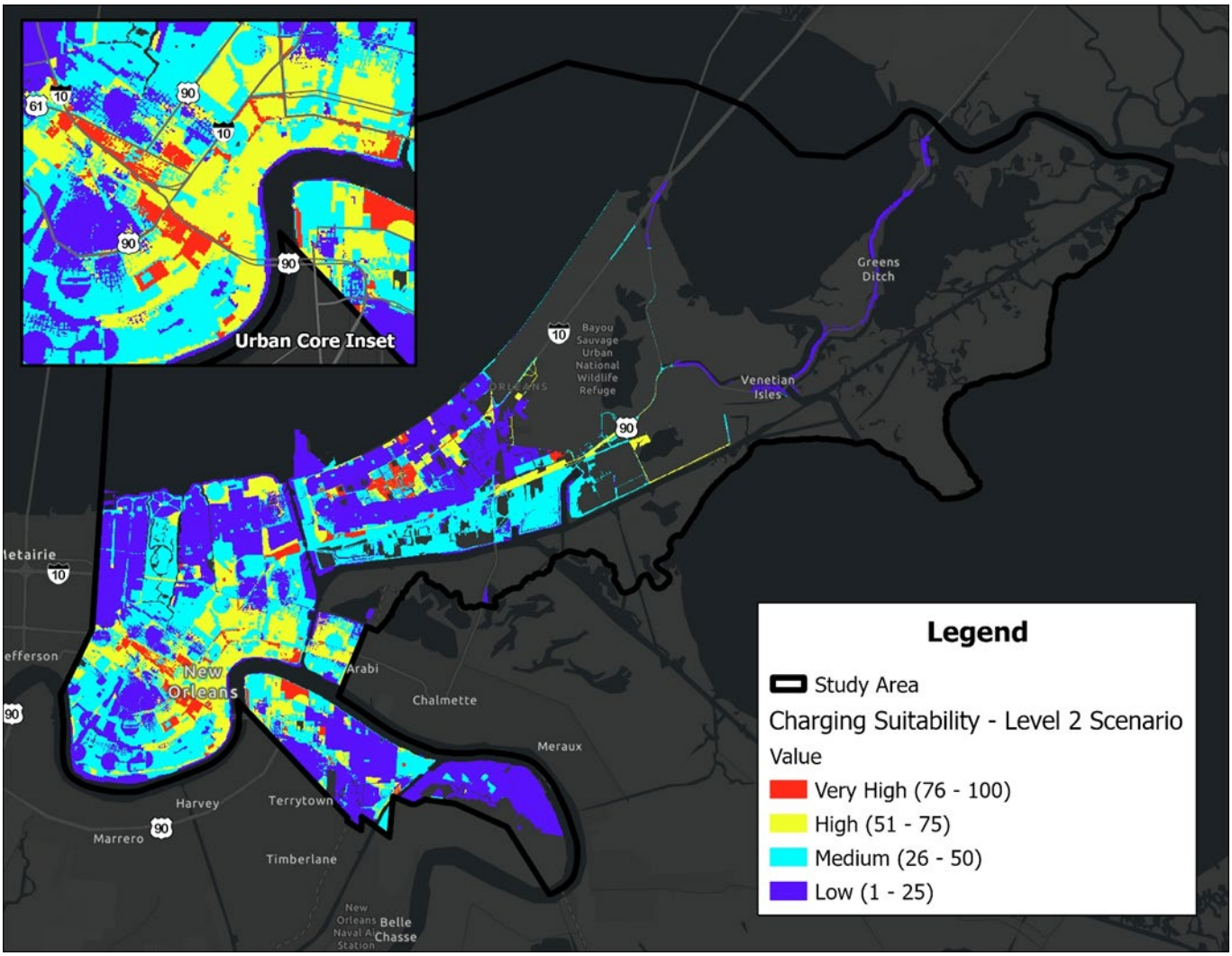

Figure 4: Level 2 EV Charging Suitability

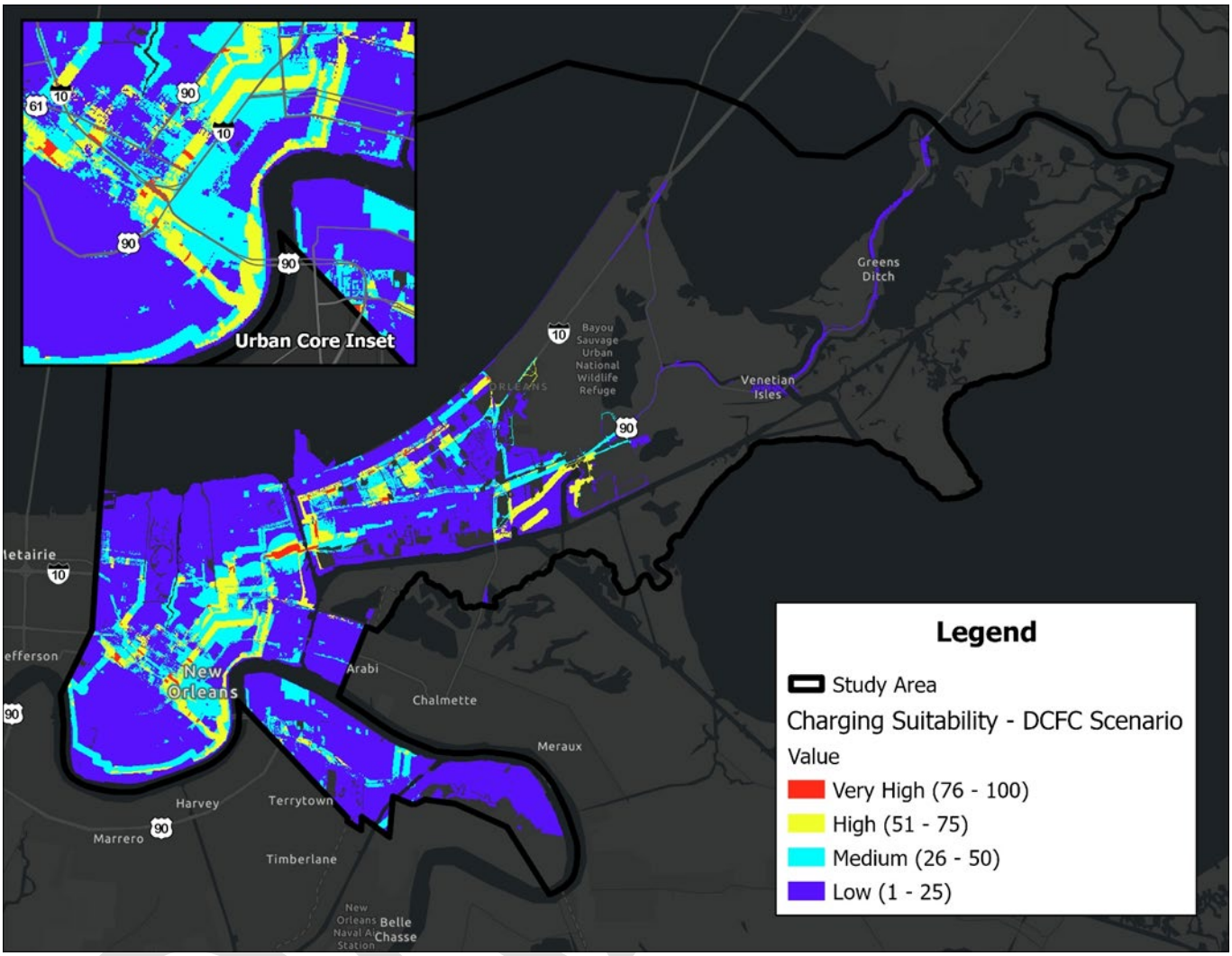

Figure 5: DCFC EV Charging Suitability

Table 4 includes a summary of neighborhood-specific recommendations for Level 2 and DCFC siting.

Following the development of overall heat maps for each scenario, chargers were allocated to neighborhoods using a GIS-based methodology. For each scenario (Level 2 and DCFC), the total area of "Very High" and "High" suitability areas was calculated for each neighborhood. The percent distribution of this area was used to allocate the charger ports to each neighborhood in 5-year increments. Table 4 below shows the recommended allocation for 2030. Some recommended counts round to 0 based on this allocation method, while “#N/A” indicates there are no “Very High” or “High” locations within the neighborhood.

Table 4: Neighborhood Specific Recommendations for Charger Ports Siting

Year	Neighborhood	Level 2 Low Adoption	Level 2 High Adoption	DCFC Low Adoption	DCFC High Adoption
2030	Algiers Point	0	1	#N/A	#N/A
2030	Audubon	1	1	#N/A	#N/A
2030	B. W. Cooper	6	7	1	2
2030	Bayou St. John	0	1	0	0
2030	Behrman	10	12	0	1
2030	Black Pearl	1	1	#N/A	#N/A
2030	Broadmoor	0	1	#N/A	#N/A
2030	Bywater	9	11	0	1
2030	Central Business District	21	26	0	1
2030	Central City	24	30	2	4
2030	City Park	4	5	0	0
2030	Desire Area	9	11	3	6
2030	Dillard	9	11	2	3
2030	Dixon	4	5	0	0
2030	East Riverside	0	0	0	0
2030	Fairgrounds	1	2	0	0
2030	Fischer Dev	0	1	0	0
2030	Florida Area	3	4	0	0
2030	Florida Dev	0	0	#N/A	#N/A
2030	French Quarter	10	12	0	1
2030	Freret	0	0	#N/A	#N/A
2030	Garden District	1	1	#N/A	#N/A
2030	Gentilly Terrace	1	1	0	1
2030	Gentilly Woods	5	6	1	1
2030	Gert Town	13	16	2	3
2030	Hollygrove	8	10	1	1
2030	Holy Cross	3	4	#N/A	#N/A
2030	Iberville	1	1	#N/A	#N/A
2030	Irish Channel	2	2	0	1
2030	Lake Catherine	0	0	#N/A	#N/A
2030	Lake Terrace & Oaks	11	14	0	0
2030	Lakeshore - Lake Vista	0	1	#N/A	#N/A
2030	Lakeview	0	0	0	1
2030	Lakewood	0	0	0	0
2030	Leonidas	3	4	0	0
2030	Little Woods	19	23	5	10
2030	Lower Garden District	10	13	3	5
2030	Lower Ninth Ward	20	25	0	0

Year	Neighborhood	Level 2 Low Adoption	Level 2 High Adoption	DCFC Low Adoption	DCFC High Adoption
2030	Marigny	4	5	0	0
2030	Marlyville - Fontainebleau	1	1	0	0
2030	McDonogh	4	5	#N/A	#N/A
2030	Mid-City	10	12	2	4
2030	Milan	2	2	#N/A	#N/A
2030	Milneburg	0	0	#N/A	#N/A
2030	Navarre	0	1	0	0
2030	New Aurora - English Turn	2	3	0	0
2030	Old Aurora	6	7	0	0
2030	Pines Village	4	6	3	5
2030	Plum Orchard	1	1	0	0
2030	Pontchartrain Park	4	5	0	0
2030	Read Blvd East	9	12	1	1
2030	Read Blvd West	0	0	0	0
2030	Seventh Ward	21	26	3	6
2030	St. Anthony	0	1	#N/A	#N/A
2030	St. Bernard Area	3	3	0	0
2030	St. Claude	17	22	1	3
2030	St. Roch	11	14	2	5
2030	St. Thomas Dev	2	3	0	1
2030	Tall Timbers - Brechtel	3	4	0	1
2030	Touro	2	3	#N/A	#N/A
2030	Treme - Lafitte	5	7	1	2
2030	Tulane - Gravier	13	17	1	3
2030	U.S. Naval Base	10	12	#N/A	#N/A
2030	Uptown	0	0	#N/A	#N/A
2030	Viavant - Venetian Isles	18	22	9	17
2030	Village De Lest	10	12	1	2
2030	West Lake Forest	15	18	3	6
2030	West Riverside	2	2	0	1
2030	Whitney	9	11	0	0

3.1.2. Next Steps for Charging Infrastructure

In addition to the Entergy program providing 30 free charging stations at 25 locations, the New Orleans Community Electric Vehicle Charging Program was awarded a $9.3 million CFI grant (mentioned again in *Section 5.1: Knowledge Sharing*). This program calls for a total of approximately 118 chargers—a combination of Level 2 and DC Fast Chargers-- to be installed at publicly owned locations across all five City Council districts, with 60 percent of the chargers to

be in disadvantaged communities. Chargers will also be installed at Dillard University and Xavier University.[7] It is important to note that these funds are not yet obligated and subject to review, further discussed in *Section 5.1: Knowledge Sharing*.

However, the City recognizes that public charging will need to grow beyond these two programs to serve future needs. This analysis will guide the city in scaling EV charging in the following ways:

- Periodic review of adoption: As EV market penetration grows, the City should evaluate registration data against the interim projections required to achieve 40% EV adoption in 2035.
- Future assessment of citywide charging availability compared to NREL recommendations: Based on the actual level of adoption, the City should re-assess total EV registrations against the current supply of chargers. Understanding where the City stands compared to NREL recommendations will provide guidance on whether infrastructure investment is keeping pace with adoption.
- Prioritizing sites for infrastructure investments: The mapping outputs from the charging location prioritization heat map, both for Level 2 and DCFC charging stations, can help the City target both public and private infrastructure investments in the future. Periodic review of charger locations and quantities compared to areas of need can help identify gaps that may be prioritized through public funding or by encouraging private sector investment.

3.1.3. EV Hardware and Software Market

As the City expands public and fleet charging infrastructure throughout the City, below are several market leaders for EV hardware and software providers to consider. These vendors are leaders in the U.S. market not only due to the number of stations deployed throughout the country, but also due to the size and scale of the vendors' DC fast charging networks.[8,9] As EV adoption increases amongst residents, the demand for reduced charging wait times and DC fast charging will increase. The availability of DC fast charging is also critical to support resiliency in a city like New Orleans which experiences frequent extreme weather events and evacuation scenarios.

[7] NOLA News Wire. "City of New Orleans Awarded $9.3 Million to Expand Electric Vehicle Charging Infrastructure" January 14, 2025. https://nolanewswire.com/government/city-of-new-orleans-awarded-9-3-million-to-expand-electric-vehicle-charging-infrastructure/ (Accessed April 8, 2025).
[8] Momentum Electrical Team. "Top EV Charger Companies Leading the Market in 2024" November 6, 2024. https://momentum-electric.com/top-ev-charger-companies-leading-the-market-in-2024 (Accessed April 8,2025).
[9] U.S. News. "A Comprehensive Guide to U.S. EV Charging Networks " July 30, 2024. https://cars.usnews.com/cars-trucks/advice/ev-charging-stations (Accessed April 8, 2025).

Table 4: Market Leaders for EV Hardware and Software

Vendor	Hardware	Software
chargepoint	Level 2 Chargers • CP6000 • CT4000 • CPF50 DC Fast Chargers • Express 250 (125 kW) • Express 280 (160 kW) • Express Plus (500 kW)	• Provides EV fleet management software that can automate charging and manage load
electrify america	DC Fast Chargers • CHAdeMO connectors (50 kW) • Ultra-Fast (150 kW) • Hyper-Fast (350 kW)	• Plug&Charge software for Electrify America account holders provides seamless charging with minimal steps/interaction needed with charger
EVgo	• Focused on DC fast chargers which provide outputs from 50 – 350 kW	• Provides turnkey solutions for fleet vehicles • Provides Optima smart charging software • EVgold provides uptime guarantees and other O&M services
Shell Recharge	• Level 2 AC chargers up to 22 kW • DC chargers voltage output ranges from 50-350 kW • Installation of chargers can be wall or pole mounted	• Shell Sky software provides managed and smart charging as well as advanced analytics and an activity dashboard • Provide end-to-end charging solution for fleets

The vendors listed above have different technological solutions and each solution's applicability should be reviewed on a case-by-case basis through the City's procurement processes to understand how different ownership models and use cases could play a role in the City's selection of a vendor. It is also important to note that the EV and EV charging industry is constantly evolving as are the industry market leaders and their offerings. The information above should be regularly reviewed and updated to reflect new trends in the industry.

3.2. Non-City Fleet Vehicles

The activities of fleet owners will be a key contributor to the City's zero-emission and electrification targets. This section provides guidance to the City on how to support EV uptake within fleets that the City *does not operate directly.* Although non-City fleet vehicles have differing use cases and vehicle types from City resident vehicles and are outside the purview of the City government, electrifying these vehicles are still critical to decrease City-wide emissions.

This section considers the following fleet types:

- **Non-City government public entities like transit, and sewer and water vehicles:** Shifting to EVs for these large fleets can help improve air quality for some of the City's most vulnerable residents. Such large fleet sizes will help meet emissions reduction and electrification targets while showcasing the City as an EV leader.

- **Privately-owned City-regulated fleets like school buses, taxis, hired cars, ride hailing vehicles (e.g., Lyft, Uber) and private buses:** School bus fleets nationwide are beginning to electrify for not only cost savings, but to improve air quality for schoolchildren. New Orleans' tourists rely on for-hire vehicles, so shifting to EV fleets can not only impact the City's emissions but also allow the City to market itself as a "green" transportation destination. In addition, EVs can boost incomes for full-time ride-hailing drivers due to reduced fuel, maintenance and repair expenses.[10]
- **City contractors delivering services for City government (e.g., waste haulers, road construction, etc.):** Fleets doing business with the City should be considered an extension of the City's own fleet, setting an example, and helping meet targets—especially because these heavy duty vehicles are typically large emitters.
- **Privately-owned non-City contractors (e.g., rental cars, freight services, parcel delivery, food delivery, messenger services):** Urban freight, parcel and food delivery is rapidly growing, leading to concerns about air quality and environmental justice—particularly for those living on highly trafficked routes. Electrifying these fleets can help mitigate emissions from these sources. These types of vehicles are also conducive to electrification based on their relatively short travel distances in a day and frequent idling time.
- **Two-wheeled road legal EVs (e.g., e-bikes, e-scooters):** Operators of these e-mobility services need to ensure their vehicles are readily available and charged throughout the day, which can be challenging with high usage and limited charging infrastructure.

Analysis includes fleet transition plans for existing non-City fleets in New Orleans such as the Regional Transit Authority (RTA), Orleans Parish School Board (OPSB), and Port of New Orleans; and a gap analysis based on fleet transition cases for other cities. Additionally, the City's current policy and regulatory mechanisms that could influence non-City fleets to transition to EVs are detailed in *Section 4.1.6*: *Current Policies to Influence Non-City Fleets*.

3.2.1. Fleet Transition Plans for Non-City Fleets

Key non-City fleet stakeholders in New Orleans include the RTA, Orleans Parish School Board (OSPB), and the Port of NOLA. Their plans to transition their fleets to electric are summarized below.

[10] Rocky Mountain Institute. 2018. "Ride-Hailing Drivers are ideal candidates for Electric Vehicles." https://rmi.org/ride-hailing-drivers-ideal-candidates-electric-vehicles/

Regional Transit Authority

Although the RTA does not have a specific fleet transition plan, the agency already has a robust electric streetcar system as well as some electric bus efforts underway. RTA is pursuing electric transit buses for several reasons: potential lower maintenance costs; lower per mile/long-term cost; lower emissions; and less noise.

In 2023, RTA received $71 million from the Federal Transit Administration's Low or No Emissions (Low-No) grant program to buy 20 electric buses, charging equipment, a microgrid and to support EV workforce training programs. RTA received funds from the same program in 2021 to pilot three electric buses. The Low-No funding was also used to install four enroute chargers, in addition to the total of 16 chargers at RTA depots. RTA aims to build out infrastructure for up to 50 electric buses until the next procurement round in 2030 (to replace buses purchased in 2018). The RTA representatives stated that the agency will likely always have diesel-hybrid vehicles as part of the fleet due to extreme weather events requiring evacuations (perhaps only 10-20% of the fleet), but future technologies could change this.

Currently all of RTA's paratransit vehicles are gasoline powered. RTA representatives report that the range of electric vans is too short at this time. RTA has one electric maintenance van, and RTA will replace 26 gas SUVs with hybrid SUVs. RTA expressed some concerns about transitioning to EVs, including workforce recruitment and development; the performance of EVs in storms, flooding, and power outages; long lead times to procure EV equipment; and using EV buses for grid backup, which can detract from the agency's core purpose.

The City's Climate Action for a Resilient New Orleans plan calls for the City to work with RTA to explore opportunities to improve fuel efficiency of transit in New Orleans, and looking at ways to generate renewable energy sources like solar panels to reduce costs to streetcars and future electric buses.[11]

Orleans Parish School Board

The Orleans Parish School Board (OPSB) oversees the operations of charter schools throughout the Parish. While OPSB does not directly own and operate school buses, its member charter schools operate 470 buses. Currently three different bus vendors service the district's schools. Most of these buses use diesel fuel, some use gasoline, and a few run on propane. OPSB oversees bus fleet compliance, and the City's Ground Transportation Bureau inspects the buses. Each charter operator makes independent procurement decisions and applies for their own external funding.

[11] City of New Orleans. 2017. Climate Action for a Resilient New Orleans. nola.gov/nola/media/Climate-Action/Climate-Action-for-a-Resilient-New-Orleans.pdf

OPSB is interested in electric school buses (ESBs) to both reduce emissions and lower operating costs. Crescent City Schools (a charter management organization) is fully transitioning to ESBs, with the recent addition of 18 buses funded under the EPA's Clean School Bus Program. Crescent City is continuing to explore collaboration opportunities with other organizations, but OPSB suggested that some charter operators and vendors prefer to operate independently. An electric bus charging station is proceeding at the George Washington Carver High School in East New Orleans. OPSB can influence fleet decisions by providing the infrastructure, showing cost reductions, and exploring shared technical resources.

OPSB indicated there will likely be some diesel or gasoline vehicles in the fleet for the foreseeable future, particularly as small operators and vendors struggle to procure new technology cost effectively, which can pose a challenge to a full EV fleet across the district. However, other small vehicles (e.g., cars and light duty trucks) could be easier to transition. And unlike transit fleets, school bus fleets tend to have downtime to charge vehicles in the middle of the day while school is in session.

Port of New Orleans

The Port of New Orleans is considered a "landlord port" in which most port operators are private. However, the Port organization has approximately 15 fleet vehicles at its administration building, including staff vehicles, police cars, and maintenance vehicles (mostly pickup trucks), as well as a fleet of about 85 vehicles like dump trucks and bucket trucks. There are two passenger EVs for administrative staff and two plug-in hybrid EV pickup trucks. The Port has two EV chargers for the EVs, two for the hybrid pickup trucks, and two chargers available for employees' personal vehicles, with a total of six chargers.

Some of the port's facilities have electric equipment, including ship-to-shore cranes and rubber-tired gantry cranes. Recently funding was received to help terminals install charging stations and procure up to 14 electric yard tractors. Some cargo tenants have converted their forklifts to electric.

The Port is Green Marine certified and is involved in the American Association of Port Authorities' Roundtable for ports to discuss EVs and fleet conversions and hydrogen-fueled vehicles and operations. The Port also tracks fuel purchases for Scope 3 emissions monitoring.[12]

While the Port does not have any formal EV fleet transition plans, in addition to being part of national organization conversations, it has received funding to support low or no emissions vehicles. The first two EV chargers were funded by a grant from the New Orleans Regional Planning commission. The Port was a partner in the Louisiana Department of Transportation and

[12] Indirect emissions from upstream and downstream of an organization's value chain, but not from the organization's own activities or assets. From Scope 3 Inventory Guidance | US EPA.

Development's successful application to the EPA Clean Ports Program, which awarded $3 million for port GHG emissions planning across the state.[13] The Port's future electric fleet planning will consider anything that docks at port, but the organization admits that a full transition will take time. Some challenges include the port's institutional structure wherein the Port as an organization has limited ownership, slow acceptance of new technologies, and battery life concerns. However, among the Port fleet vehicles, administrative and police vehicles do not drive far, minimizing the need for long battery ranges. The Port is interested in exploring collaborative funding with the City.

3.2.2. Fleet Transition Case Studies

Case study examples from leading cities across the US can help guide New Orleans' efforts to influence non-City fleets. The team looked at four different cities to get insight on how some of this influence could manifest. Highlights from each city are included below and are integrated into final recommendations.

Boston

The City of Boston is evaluating opportunities to enact policies and programs to support the electrification of ride-hailing vehicles, including requiring companies to give EV ride-hailing drivers a weekly stipend and offering reduced per-mile fees or exemptions. To better support e-bikes, Boston's Electric Vehicle Readiness Policy for New Developments allows developers to install e-bike parking as an option to meet the EV readiness policy requirements.[14] The City is also looking at offering subsidies for personal e-bike ownership, ways to support small businesses and delivery services in incorporating e-bikes into their fleet and providing education and outreach about e-bikes. [15]

New York City

The Department of Citywide Administrative Services (DCAS) coordinates a network with the City's Department of Transportation (DOT), Business Integrity Commission, the Department of Consumer and Worker Protection, the Mayor's Office of Climate and Sustainability, and others to coordinate public and private fleet conversion across the City. This network maintains a contact list and communication network for public, private, and non-profit fleets, has a regular

[13] Clean Ports Program Selections | US EPA

[14] Policy requires new development to have 25% of total parking spaces be EVSE-installed and the remaining 75% to be EV-Ready.

[15] Boston Department of Transportation. Recharge Boston. https://www.boston.gov/departments/transportation/recharge-boston-electric-vehicle-resources

newsletter, trainings, shares best practices, and enables private fleet owners to have input into the NYC Clean Fleet Transition Plan.[16]

The City's Taxi and Limousine Commission is working with stakeholders to electrify all licensed vehicles operating in the City. The Battery Electric Vehicle Taxi Pilot Program provides incentives for EVs and EV charging options for the NYC Yellow Medallion Taxicab fleet.[17] The DOT's e-cargo bike program has supplied private delivery services with 350 e-cargo bikes, especially for last-mile freight delivery.[18] The Clean Truck Program facilitated the purchase of five fully electric trucks in 2021, and is expanding to Industrial Business Zones citywide.[19] DCAS is also running a pilot program to offer general public access to EV fleet chargers during off-peak times.[20]

Lastly, in 2024 NYC DOT launched a first in the nation e-bike battery charging pilot for food and package delivery drivers who use e-bikes, providing them with battery swapping cabinets to change out batteries. This came as an effort to reduce often hazardous at-home charging used by most drivers---many of whom are immigrants and independent contractors earning less than minimum wages. The public-private partnership funded the swapping stations, and over 100 test users were provided unlimited free charging service as part of the pilot.[21]

San Francisco

The San Francisco Environment Department's Electric Vehicle Roadmap identifies proposed actions for medium- and heavy-duty private fleet vehicles, including cataloguing delivery vans and trucks, commuter buses and shuttles, courtesy shuttles, and paratransit to prioritize fleets for EV pilots; evaluating options to install charging infrastructure for trucks at port facilities; and developing recommendations for incentives and regulations for electrification of medium- and heavy- duty fleets.[22]

[16] New York City Department of Citywide Administrative Services (2021). "Clean Fleet Update." https://www.nyc.gov/assets/dcas/downloads/pdf/fleet/NYC-Clean-Fleet-Update-September-2021.pdf

[17] NYC Mayor's Office of Climate and Environmental Justice. https://climate.cityofnewyork.us/subtopics/electric-vehicles/

[18] ibid.

[19] Ibid.

[20] NYC Department of Administrative Services. https://www.nyc.gov/assets/dcas/downloads/pdf/fleet/electric-vehicle-public-charging-rules.pdf

[21] NYC Department of Transportation. 2024. Safer Charging, Safer Deliveries. Safer Charging, Safer Deliveries: Lessons from NYC DOT's Public E-Bike Charging Pilot

[22] San Francisco Environment Department. Electric Vehicle Roadmap. https://www.sfenvironment.org/media/10683/download?inline

The City will collaborate with micromobility operators and property owners to develop charging sites for e-bikes and e-scooters throughout the City, with a focus on the downtown core, and is working with ride-hailing and taxi drivers for better access to DC fast chargers.

Seattle

The City of Seattle aims to permit or track goods delivery in Seattle to create a baseline for 30% of goods delivery to be electric by 2030. The City's Fleet Evaluation Program will implement a low emission zone in the urban core, with a focus on delivery and other private fleet vehicles.[23] The Office of Sustainability and Environment launched the Heavy Duty Vehicle Electrification Incentive Pilot, which provides point-of-sale rebates to help truck drivers with up-front EV transition costs and to trade in diesel trucks for new electric vehicles. The public utility Seattle City Light's Fleet Electrification Program provides free EV fleet transition advising and EV charger rebates to current customers. The program added a new make-ready incentive that covers the costs of installing electrical infrastructure for organizations operating within environmental justice communities.

In 2024, as part of its Zero Emissions Freight Plan[24] the Department of Transportation began a commercial e-cargo bike program that includes guidelines and tools for e-cargo bike standards, a new permitting system, and designated curb space for cargo bike parking and loading. The Department is also evaluating options to offer an e-Cargo Bike Lending Library to aid small and medium-sized businesses as they test e-cargo bikes on a trial basis before making a full fleet transition.

The City will create a roadmap for all shared and micro mobility (e.g., bikes, scooters) to be zero-emission vehicles by 2030, including plans for charging infrastructure and battery swapping stations.[25]

A 2022 Executive Order called for the electrification of transportation network companies or TNCs (e.g., Uber, Lyft), taxis and carshares in Seattle by 2030. The Office of Sustainability and Environment, City Light, the Department of Transportation, and the Department of Finance and

[23] Seattle City Light. Fleet Electrification Program. https://seattle.gov/city-light/business-solutions/renewable-energy-services/fleet-electrification-program

[24] City of Seattle Department of Transportation. 2023. Zero Emissions Freight Plan. https://www.seattle.gov/documents/Departments/SDOT/ParkingProgram/Curbside%20Climate/Seattle%20C40_ZEF_Final%20Report_Layout.pdf

[25] City of Seattle Department of Transportation. 2022. Seattle's Clean Transportation Electrification Blueprint: 2022–2023 Actions. https://seattle.gov/documents/Departments/OSE/ClimateChange/TE/TE_blueprint_2022-23%20Actions%20Report_Final.pdf

Administrative Services are developing a Shared Mobility Electrification Report of recommendations, in consultation with TNC and taxi drivers, Uber, Lyft, the Port of Seattle and the Drivers Union.[26]

Nationwide, few cities are considering policy and funding mechanisms to influence EV adoption by non-city fleets. New Orleans would therefore be a leading city in the South—and the nation--by using city policy to influence these fleets. Available fleet transition case studies for Boston, New York City (NYC), San Francisco, and Seattle yielded common takeaways applicable to New Orleans' non-City fleets:

- Support electric urban delivery vehicles through financial incentives, pilots, and special zones.
    - For example, NYC DOT's e-cargo bike program has supplied private delivery services with 350 e-cargo bikes, especially for last-mile freight delivery.[27] Seattle has designated a low emissions urban core focused on delivery and other private fleets and is exploring an e-cargo bike lending library.
- Provide financial incentives for transportations network companies (TNCs) such as Uber and Lyft, and taxis to convert to EVs and allow access to public and/or city EV charging infrastructure (further addressed in *Section 4.1.3: Policy Recommendation #3*).
- Support e-micromobility (electric and shared bikes and scooters) with charging infrastructure, including battery swapping cabinets (further addressed in *Section 4.1.5: Policy Recommendation #5*).
- City sustainability and climate plans should include reduced emissions targets for non-city fleets.
- Non-city fleet stakeholders need to be involved in working groups and strategy development.
- Initiatives typically involve departments of transportation and sustainability, and they coordinate closely with taxi, TNCs, and micromobility operators.
- Funding comes from city budgets and some utilities for initial support.

3.2.3. Potential Mechanisms for EV Adoption in non-City Fleets

The following section details potential mechanisms the City of New Orleans can implement to influence non-City fleet transitions. These are organized around several broad categories based on national best practices.

[26] Ibid.
[27] ibid.

Data Management

EV charger utilization data is useful to monitor city-wide progress towards emissions targets and to identify needs for additional charging infrastructure. The City should explore data management plans with non-City fleets to access utilization data, particularly those fleets using public or other City right-of-way chargers like ride-hailing, taxis, micromobility or e-cargo charging. The City can also engage non-City fleets to access data about fleet size, vehicle types (EV and otherwise), and usage a joint pursuit to increase EV adoption. If there are data privacy concerns, the data sharing can be limited to solely number of vehicles by vehicle type in a fleet. While Louisiana state law prohibits municipalities from requiring such data from TNCs, regularly engaging these operators in overall EV efforts may be helpful.

Equity and Accessibility

As with any publicly available EV chargers, fleet charging should attempt to make charging stations accessible for a diverse set of drivers and passengers. The City can work with non-City fleet stakeholders to create accessible signage and wayfinding guidelines and regulations, ensure ADA compliance where appropriate, integrate universal design elements, have options for cash-based payment, and offer multiple language options at any public facing charging stations. These are especially important for non-City fleets that are used by the public, like e-bikes and e-scooters, as well as by food delivery drivers relying on their personal vehicles. Any outreach the City conducts with non-City fleet stakeholders about EV fleet transitions should also be accessible to a wide range of community members, and the City may want to leverage its existing relationships with local community organizations, which are listed in *Section 5.1: Knowledge Sharing*, in these efforts.

Partnerships

The City can engage other public agencies (i.e. transit, sewer and water, hospitals) to exchange best practices about EV fleet transitions, coordinate procurement requirements, RFP templates, pursue bulk purchases, and partner on grant funding applications. Creating regionally consistent regulations and policies can ease the burden for private fleets and help attract new businesses and vendors by making New Orleans a welcoming place for EVs. The City could also evaluate the use of public land as charging site co-hosts (e.g., Parish property within the City). Finally, should federal funding programs for zero-emissions fleets continue, it will be important to coordinate with other public agencies like RTA and OPSB to prioritize requests regionally and avoid multiple requests to the same funding program in one round, while also coordinating on best practices for overall electrification progress.

The City can engage private fleet owners to align new EVSE regulations, standards, permitting as discussed above, pursue charging station sponsorship or co-hosting/sharing from the private sector (especially for ride-hailing, taxis, and micromobility), work together to identify workforce training needs (addressed in *Section 3.3.4: Human and Capital Workforce Development*), and share

overall best practices about fleet transitions. New Orleans may want to explore partnering with some private fleet owners for funding applications, depending on eligibility.

Parking

The City can coordinate with non-City fleets to create EV charging parking site requirements relevant to fleets (e.g., design, bollards, cord storage, consistent signage information), and develop a broad range of typical site layouts and cost estimates. Any EV charging parking regulations should consider private fleets who may use City right-of-way or public chargers (e.g., ride-hailing, taxis).

3.3. Economic and Workforce Development Opportunities

With the City's commitment to have 40% of passenger and light-duty vehicles being electric by 2035, a robust and inclusive economic and workforce development strategy is critical. Electrification offers the dual promise of environmental sustainability and economic opportunity, but realizing this vision requires an intentional approach to economic and workforce development.

The City's economic development strategy for electric transportation aligns with the strategies from the City's Plan for Generational Economic Transformation (PGET)[28], specifically: Innovation and Entrepreneurship in Priority Industries, Place-Based Economic Development, Systems for Economic Development, and Human Capital and Workforce Development, with all of these strategies being interlinked.

3.3.1. Innovation and Entrepreneurship in Priority Industries

The City of New Orleans and the greater region have several institutional industries including tourism and hospitality, oil and gas operations, and transportation, trade and logistics. However, as the PGET states, the City's "current economic base of tourism, oil and gas, and transportation is no longer adequately supporting the city, and the city has seen increasing inequality." In order to increase equitable opportunities within the economy, the City should diversify its economy, with one growing economy being electric transportation. As the City's institutional industries evolve and modernize, there are opportunities to grow the electric transportation economy in the City and greater region by building off of and within these industries.

For example, the thriving tourism industry in the City creates an opportunity for tourism-related vehicles to convert from ICE to electric and increase EV adoption across non-City fleets, as discussed in *Section 3.2: Non-City Fleet Vehicles*. The City and larger region's energy industry has been historically focused on petrochemicals. There is an opportunity to add clean and innovative energy components to the City's energy industry, such as electric vehicle, battery, and/or EV

[28] Office of Economic Development City of New Orleans. May 4, 2023. Plan for Generational Economic Transformation. https://nola.gov/nola/media/Economic-Development/PGET-5-4-23.pdf (accessed April 8, 2025).

charger component manufacturers, as seen in other Southern states. As these states have experienced a significant increase in EV and battery manufacturing investments in the last five years, the City of New Orleans should advocate for similar investments as nationwide demand for EV and battery energy systems continues to grow. For example, Mercedes-Benz opened a lithium-ion battery plant in Bibb County, Alabama in early 2022. At the time of opening, Mercedes said up to 600 jobs would be created in Bibb County.[29] Similarly, Hyundai Mobis announced a battery module plant in Montgomery, Alabama in 2022, promising about 400 jobs.[30] Kentucky has also seen a boom with several battery production factories such as the Envision AESC gigafactory in Bowling Green, Ford Motor Company and SK Innovation's battery plants in Hardin County, and the Shelbyville Battery Manufacturing Plant.[31] These investments will intend to create nearly 8,600 new jobs in the state.[32] As EV and battery manufacturing activity continues to grow in the South, the City of New Orleans should utilize its economic development tools and collaborate with the State to provide tax incentives for manufacturers, further discussed below.

Regarding the transportation, trade, and logistics industry, there are opportunities to encourage heavy-duty vehicle electrification with the installation and increase of access to EV chargers at hubs such as Port of NOLA, the Louis Armstrong New Orleans International (MSY) Airport, and other transportation and logistics facilities. There are already tangible opportunities here, as the Federal Highway Administration (FHWA) awarded the Port of NOLA $7.1 M through the Reducing Truck Emissions at Port Facilities (RTEPF) grant program to deploy light- and heavy-duty EVs and support electrification efforts. Part of this funding will also support workforce development. While the MSY airport already has parking spaces dedicated to EV charging at parking garages, there is an opportunity to scale EVs in the city to also install chargers at rental car facilities. This would encourage visitors and tourists to rent EVs in the city, further electrifying the tourism industry in New Orleans. Medium to large-scale projects supporting the construction of many chargers can attract temporary labor which can lead to long-term employment.

The City, through the Office of Workforce Development (OWD) has successfully implemented such programs on past construction projects such as the new Louis Armstrong New Orleans

[29] Made in Alabama. "Mercedes-Benz opens battery factory for Alabama-built electric vehicles" March 15, 2022. https://www.madeinalabama.com/2022/03/mercedes-benz-opens-battery-factory-for-alabama-built-electric-vehicles/ (Accessed April 8, 2025).

[30] The Office of Alabama Governor. "Governor Ivey Announces Hyundai Mobis Plans EV Battery Module Plant in Montgomery, Creating 400 Jobs" October 27, 2022. https://governor.alabama.gov/newsroom/2022/10/governor-ivey-announces-hyundai-mobis-plans-ev-battery-module-plant-in-montgomery-creating-400-jobs/ (Accessed April 8, 2025).

[31] Lexington Herald Reader. "Beshear: Shelbyville battery manufacturing plant to bring more than 1,500 jobs to Kentucky" November 17, 2024. https://www.kentucky.com/news/politics-government/article295605229.html (Accessed April 8, 2025).

[32] Office of the Governor. "Gov. Beshear: Envision AESC's Investment in 30GWh Kentucky Gigafactory Creates 2,000 New Jobs and Solidifies the Commonwealth as New Electric Vehicle Battery Capital" April 13, 2022. https://www.kentucky.gov/Pages/Activity-stream.aspx?n=GovernorBeshear&prId=1273 (Accessed April 8, 2025).

International Airport. On the MSY project, OWD funded temporary labor and on-the-job training that resulted in a high percentage of workers being hired permanently.[33] Similarly, OWD and ORS can collaborate to promote opportunities for employers to hire locally and train in the EV industry. While these programs incentivize hiring, they can also reduce barriers to entry for smaller businesses, which often proves to be a driver of economic development.

3.3.2. Place-Based Economic Development

To further develop the city's economy through electric transportation opportunities, ORS and the Office of Economic Development (OED), and OWD should form a partnership to create an electrification economy agenda and highlight priorities for this agenda. The agenda should focus on attracting electrification-related business (e.g. companies that sell and deploy EVSE, EV and battery manufacturers) and increasing employment in the electrification economy. To generate interest, OED and ORS should prioritize stakeholder input of commercial corridors. Designated commercial corridors are where most small businesses are located in the City and could have a lot to gain from participating in the electric transportation economy. A key strategy of the PGET is to revitalize these commercial corridors. This revitalization process can include the siting of EV chargers at small businesses to increase EV charging availability to potential customers and encouraging the contracting of local electrician businesses. One use case of attracting electrification-related businesses to the City's commercial corridors is contracting charge point operators to install, deploy, and maintain public facing EV chargers around hubs of small business activity with street parking. To attract such business, the City should explore streamlining its current permitting process for curbside EV charging through the Department of Safety and Permits. This process requires applicants to obtain three separate permits: an electrical permit, an EV charging station application, and a right of way permit, Each permit has a fee, requires engagement and communication with different departments, and a different timeline for approval. These separate processes make it challenging to effectively deploy EV chargers in the City and may discourage EV charge point operators from conducting business in New Orleans. This Roadmap recommends that the City explore combining its EV charger permitting process into a single application to reduce administrative burden on both City departments and EV market participants.

Strategic partnerships to revitalize commercial corridors with electrification businesses and opportunities should include organizations such as Greater New Orleans (GNO) Inc. and Entergy New Orleans (mentioned again in *Section 5.1: Knowledge Sharing*). GNO Inc. is a key partner to consult as it is one of the main organizations focused on economic development in Southeast Louisiana by helping to grow businesses in the area, public policy advocacy, and focus on improvement in quality of life. As the local utility, Entergy New Orleans is also a key partner as they

[33] Based on the Consultant Team's workforce development experience hiring 40% of OWD labor placed on the MSY project.

are directly impacted and responsible for supporting the power requirements stemming from increased electric transportation. Coordination and partnerships with Entergy New Orleans will be key to ensuring a sustainable outlook on the City's grid. This engagement could explore ways to incentivize electrification businesses to conduct business in the City through the OED's economic development incentives, further discussed in the below section. The City could also explore the creation of new incentives to attract electrification business to the City. New incentives must be passed by the City Council and Mayor and will therefore require engagement with the aforementioned groups.

3.3.3. Systems for Economic Development

Within the Systems for Economic Development strategy, one of OED's key actions is to reform their current economic incentives. OED's current incentive programs are typically tax or property based. OED can reform or refine these incentives to apply to an electric transportation economy in New Orleans. For example, the Industrial Tax Exemption Program (ITEP) offers attractive property tax incentives to manufacturers that commit to increased job and wages within the state.[34] Given the City's historical industrial sector, this tax exemption program is very applicable. For example, the State of Louisiana approved use of the ITEP for an $80 million tax break for an EV chemical solvent plant in Jefferson Parish in 2023.[35] To shift focus onto booming industries in the South, the ITEP should also be used to attract EV and battery manufacturers to the Greater New Orleans region, similar to the manufacturing investments that Alabama and Kentucky have benefitted from.

Other incentive programs that could attract interest include the Quality Jobs program and Enterprise Zone program. The Quality Jobs program provides a refundable tax credit to encourage businesses to locate their operations in Southeast Louisiana, leading to high-quality jobs.[36] Utilizing this program could especially attract electrification-related employment such as maintenance electricians and technicians for EV charging companies or manufacturing jobs at electrification component plants. Long-term and stable job opportunities related to electrification include:

- Installing EV charging stations
- Maintaining and troubleshooting EV charging stations
- Maintaining EVs
- Vehicle/battery/charger component manufacturing

[34] Office of Economic Development. Industrial Tax Exemption Program. https://nola.gov/next/economic-development/programs/industrial-tax-exemption-program/ (Accessed April 8, 2025).
[35] Louisiana Illuminator. "Louisiana board approves $80 million tax break for EV battery chemical plant with 9 permanent jobs" December 8, 2023. https://lailluminator.com/2023/12/08/ev-battery-2/ (Accessed April 8, 2025)
[36] Office of Economic Development. Quality Jobs Program. https://nola.gov/next/economic-development/programs/quality-jobs-program/ (Accessed April 8, 2025)

An important long-term and material impact from increasing electrification economic activity within the City and greater region must include equitable distribution of economic benefits, especially to economically distressed or disadvantaged communities. A key program to incentivize businesses to prioritize equity is the OED's Enterprise Zone program. Enterprise zones are designated as economically distressed zones in the City, with the program being a package of tax credits and rebates for businesses located in designated zones.[37] This program can be marketed to electrification-related businesses to locate in designated enterprise zones. The City should assess challenges they may face in getting approval to use the ITEP, Quality Jobs, and Enterprise Zone programs for EV and battery infrastructure manufacturing. Marketing these three economic incentives to EV-related businesses will be a critical goal of ORS and OED's partnership.

3.3.4. Human Capital and Workforce Development

As the PGET states, "economic development is fundamentally about people." Increased long-term stability and income for New Orleanians will help to measure the success of the electrification economy's development in the City. The workforce development strategy should focus on equipping residents with the necessary skills for installing and maintaining commercial and residential EV charging stations, upgrading and modernizing electrical grids, deploying and managing renewable energy technologies, servicing and maintaining EVs, and EV/battery manufacturing. Prioritizing equitable workforce development ensures that historically underserved and underrepresented communities have access to training programs and employment opportunities in the growing EV sector. This includes proactive outreach, financial assistance for training, and partnerships with local organizations to remove barriers to participation. Logical partners to design curricula and invest in training include the City's Job1 Office, Delgado Community College (Delgado), New Orleans Career Center (NOCC) and the regional electrical unions such as the International Brotherhood of Electrical Workers (IBEW) Local 130.

To grow the electrification economy, the City should cultivate a robust labor force with an emphasis on developing expertise in roles such as electricians skilled in EV infrastructure and grid integration, renewable energy technicians capable of deploying solar and battery storage technologies to pair with EVSE (further described in *Section 3.4.8: Battery Storage and Solar Paired with EVSE*), and EV maintenance professionals trained to service growing EV fleets. When cultivating this labor force, the City should especially ensure professionals are equipped to problem-solve when integrating electrification projects with aging infrastructure throughout the City. Although EVs require less maintenance than ICE vehicles, the specialized skills required to maintain EVs and their supporting infrastructure make programs to train permanent jobs

[37] Office of Economic Development. Enterprise Zone. https://nola.gov/next/economic-development/programs/enterprise-zone/ (Accessed April 8, 2025).

necessary. The International Council on Clean Transportation asserts that the U.S. could see 160,000 jobs added to the EV industry with almost 50% of those jobs focused on the installation and maintenance of EV charging stations.[38] By supporting local entrepreneurs and small businesses with electrical skillsets (e.g., Stuart Services and MK Electric Man), particularly those owned by disadvantaged groups, this strategy seeks to offer technical assistance and mentorship to help businesses enter the electric transportation sector and facilitate access to contracts and funding opportunities related to EV infrastructure projects.

Current training programs that can be utilized and strengthened to cultivate a workforce for electrification and offer technical assistance include:

- Delgado's several electrician and automotive degree programs and partnership with Mercedes-Benz USA.[39, 40] These existing programs can be further enhanced, combined, or added to new programs in collaboration with industry leaders, to meet the specific needs of the EV industry and challenges unique to New Orleans such as hurricanes, flooding, and heat. Furthermore, diversity and inclusion initiatives within these programs will ensure that training programs are accessible to all, with targeted efforts to include underrepresented groups in the clean energy workforce. Delgado's Mercedes-Benz Campus program, a part of the college's Motor Vehicle Technology degree program, provides hands-on training focused on electric vehicles, electrical systems, and other cutting-edge technologies.

- University of Louisiana at Lafayette's Electric Vehicle Fundamentals course, which is an online credential course focused on the fundamentals of electric vehicles and provides a starting point for career pathways in the electric vehicle industry.

- The International Brotherhood of Electrical Workers (IBEW) and IBEW 130's robust apprentice program to train journeyman electricians. The union has also been training their members about EVs for the past three years.

[38] International Council on Clean Transportation. "New Study Estimates Over 160,000 Jobs to be Created by U.S. Electric Vehicle Charging Infrastructure Buildout by 2032" January 23, 2024. https://theicct.org/pr-new-study-estimates-over-160000-jobs-to-be-created-by-uss-ev-charging-infrastructure-buildout-jan24/ (Accessed April 8, 2025).

[40] Delgado Community College. "Delgado Announces a New Partnership with Mercedes-Benz USA to Implement the MB Campus Program" March 24, 2023. https://www.dcc.edu/news/mercedes-benz-meeting.aspx (Accessed April 8, 2025).

- The Electric Vehicle Infrastructure Training Program (EVITP), which provides online training certification across the United States, including in Louisiana.[41]

Efforts to build onto existing training programs and create new ones will require the City partnering with educational institutions, industry leaders, and community organizations, and integrating EV and EV charging infrastructure training into existing vocational and technical education programs. For example, Delgado could provide an alternative EV infrastructure certification that encourages non-electricians to enter the industry by becoming certified for EV charger installation, operation, and maintenance. Today, many online certification programs require an electrician and or multiple years of experience. For existing electricians, Delgado could also develop an extension course on operating and maintaining EV charging infrastructure catered towards those with electrical experience, building off of its experience with the Mercedes-Benz Campus.

The ultimate aim is to ensure that New Orleans residents are equipped to fill critical roles in the electrification industry, reducing the need to rely on labor and companies from outside the city. Although the Hire NOLA ordinance requires contractors to have 50% of their work hours completed by local workers and 30% of their work hours completed by disadvantaged local workers,[42] the workforce development strategy can go further by promoting economic equity, identifying and planning for future jobs, and fostering local partnerships.

- Promote Economic Equity: Ensure that historically underserved communities, particularly low-income and minority populations, have access to training and job opportunities in electrification sectors.
- Identify and Plan for Future Jobs: Build a workforce capable of implementing and maintaining technologies that enhance the city's resilience against climate risks.
- Foster Local Partnerships: Collaborate with local businesses, educational institutions, and community organizations to create training programs aligned with industry needs.

[41] University of Louisiana Lafayette. Electric Vehicle Fundamentals. https://careerpathways.louisiana.edu/training-programs/electric-vehicle-fundamentals-evf/ (Accessed April 8, 2025).
[42] Office of Workforce Development. Hire NOLA. https://nola.gov/next/workforce-development/topics/hire-nola/ (Accessed April 8, 2025).

Promote Economic Equity

One of the key goals of New Orleans' PGET is to invest in people and build wealth and mobility for all New Orleanians, "particularly those who have been historically marginalized."[43] To address barriers that marginalized groups may face within the electric transportation industry, the workforce development strategy should emphasize targeted outreach efforts to ensure that these communities are aware of and can access business opportunities, training programs and future jobs in electrification. The City can promote economic equity by utilizing the partnership between ORS, OED, and OWD to create an EV-focused outreach committee.

Community outreach efforts will raise awareness about the opportunities available in the EV industry. This initiative should focus on educating the local business community and residents about existing training programs and job opportunities mentioned above. The partnership between Delgado and Mercedes Benz, to train mechanics in both ICE and EVs, speaks to the need of labor with specialized training as well.[44] The broader benefits of electrification ensuring widespread participation and support and should be integrated with the electric transportation education and awareness program mentioned in *Section 4.1.1: Policy Recommendation #1*. Historically, the City has been successful in promoting and doing business with local businesses.[45] Consistent with past performance, the City's outreach efforts should highlight electrification as a great opportunity for local electricians to position their businesses to provide installation and maintenance services.

Identify and Plan for Future Jobs

As the electrification sector evolves, it is essential to identify and plan for future jobs that will emerge in response to technological advancements and policy changes. The workforce strategy should include regular and ongoing labor market analysis to anticipate dynamic trends in electrification, battery technology, energy storage, smart grid deployment, and EV and EVSE manufacturing. As the recommendations from this Roadmap may merit ORS increases in staff to implement the Roadmap, the potentially new staff can conduct this analysis as well. By proactively developing and building off of existing training programs and educational curricula that align with

[43] Office of Economic Development City of New Orleans. May 4, 2023. Plan for Generational Economic Transformation. https://nola.gov/nola/media/Economic-Development/PGET-5-4-23.pdf (accessed April 8, 2025).
[44] Delgado Community College. "Delgado Announces a New Partnership with Mercedes-Benz USA to Implement the MB Campus Program" March 24, 2023. https://www.dcc.edu/news/mercedes-benz-meeting.aspx (Accessed April 8, 2025).
[45] Keen Independent Research. 2018. City of New Orleans Disparity Study Summary Report. https://nola.gov/nola/media/Economic-Development/Supplier%20Diversity/KeenIndependentNOLADisparityStudySummaryReport04112018.pdf (Accessed April 8, 2025).

these emerging opportunities, New Orleans can ensure that its workforce remains competitive in the evolving EV landscape. This forward-looking approach will enable the city to attract new businesses, create sustainable employment pathways, and position itself as a hub for innovation in the electrification sector.

Developing robust training programs and curricula is vital to preparing the workforce for emerging opportunities in the clean energy sector. Popular trade training programs, offered by Delgado, local unions, and even New Orleans Career Center (NOCC), are primarily focused on construction or building (legacy) trades. Therefore, even local certified electricians may have a skill gap in EV maintenance, EVSE deployment, and maintenance due to the City's training institutions' limited EV industry curriculum. Existing programs, such as Delgado's Mercedes-Benz Campus, can be further enhanced, combined, or added to new programs in collaboration with industry leaders, to meet the specific needs of the EV industry and challenges unique to New Orleans such as hurricanes, flooding, and heat. Furthermore, diversity and inclusion initiatives will ensure that training programs are accessible to all, with targeted efforts to include underrepresented groups in the clean energy workforce.

A tangible opportunity is to disburse the funds from the Climate Pollution Reduction Grant (CPRG), which is further described in *Section 5.1: Knowledge Sharing*. The grant intends to expand the City's Blue Bikes e-bike fleet and support workforce training for e-bike maintenance. This funding will help increase the e-bike fleet and also provide rebates for e-bikes purchased at local shops and additional subsidies for low-income residents. ORS and OWD could consider partnering with private e-bike fleets (like those offered for multi-day rentals) on shared charging infrastructure and utilizing workforce training funds to build off of existing training programs.

Foster Local Partnerships

Collaboration with local businesses, educational institutions, and community organizations is essential to designing training programs that align with industry needs and provide practical experience for participants. By working with industry leaders, the City can ensure that training curricula remain up to date with evolving technologies and market demands. Partnerships with community organizations will help engage underrepresented populations, ensuring equitable access to training and job opportunities (mentioned again in *Section 5.1: Knowledge Sharing*). See below for a few groups that should be considered for partnership:

- Professional Associations – groups such as Automotive Service Excellence (ASE), Associated Builders & Contractors (ABC), and the National Association of Minority Contractors (NAMC) all focus on education, training and cultivating business opportunities for their membership.

- Groups that Support Underrepresented Businesses – National Urban League, The Collaborative and the supplier diversity offices of local and state government help raise awareness and prepare their contractors to participate in growing industry opportunities.

Additionally, local businesses will play a crucial role in offering internships, apprenticeships, and employment opportunities, reinforcing a strong pipeline of skilled workers within the New Orleans job market.

Workforce Development Grant Funding

Several grant programs can potentially support EV industry workforce development and training in New Orleans.

1. National Science Foundation (NSF) Advanced Technological Education (ATE) Program[46]: This program focuses on two-year Institutions of Higher Education (IHEs) and supports the education of technicians for the high-technology fields that drive the economy. The program involves partnerships between academic institutions (grades 7-12, IHEs), industry, and economic development agencies to improve education of science and engineering technicians. There is approximately $74.0 million of anticipated funding for awards in FY2025.
2. Louisiana Workforce Commission (LWC) Community Service Block Grants (CSBG): This program provides grants for Community Action Agencies that provide supportive services to help low-income individuals become or stay self-sufficient. These services may include employment and training. There is one Community Action Agency in the Orleans Parish - Total Community Action Inc.

To develop new sources of grant funding, the City can look to how several automobile manufacturers have provided grant funding or support for building the workforce in this industry:

1. General Motors (GM) made a grant of $600,000 to the American Association of Community Colleges (AACC) to research and knowledge share on expanding advanced manufacturing programs around the country.[47]

2. Nissan partnered with the Central Mississippi Planning and Development District (CMPDD) Southcentral Mississippi Works and Holmes Community College to prepare

[46] National Science Foundation. Advanced Technological Education (ATE). https://new.nsf.gov/funding/opportunities/ate-advanced-technological-education (Accessed April 8, 2025).
[47] General Motors. "Investing in local community colleges to support advanced manufacturing". https://www.gm.com/stories/manufacturing-curriculum-college (Accessed April 8, 2025).

workers for Nissan's new EV assembly line. AccelerateMS, an organization focused on transforming Mississippi's workforce, provided a 1.5M grant to the partnership to retrain employees.[48]

3. The Ford Fund invested $2 million last year in 292 schools to train automotive technicians through the Ford Auto Tech Scholarship. This scholarship "creates opportunities for rewarding, well-paying careers as the industry moves toward electrification and software integration."[49]

Although the auto-manufacturer grant programs above have already had monies disbursed to specific recipients, these programs can inform the City on the types of partnerships to pursue when attracting investors to the region to build manufacturing activity that increases long-term employment for the City's residents.

3.4. Transportation Resiliency

The City must prioritize resiliency in transportation and electricity on its path to 40% of passenger and light-duty vehicles being electric by 2035. To ensure resilient electric transportation, personal and fleet EVs and EV chargers should always be reliable, especially during emergency events.

3.4.1. Addressing Frequent Flooding

The most common emergency event faced by the City of New Orleans is flooding, based on interviews with key personnel from the New Orleans Police Department (NOPD). Given the low-lying topography of New Orleans, flooding occurs frequently and unpredictably during rain events. Emergency event challenges arising from flooding include flooded roads, grid outages, and potential traffic crashes. NOPD coordinates with other public safety departments such as the New Orleans Fire Department (NOFD), Emergency Medical Services (EMS), and New Orleans Homeland Security and Emergency Preparedness (NOHSEP) to send out public communications regarding flooded streets and areas to avoid.

The impacts from common flooding events are critical to consider when building out EV charging infrastructure across New Orleans. For example, if siting chargers on street curbs, the City should coordinate with NOPD, NOFD, EMS, and NOHSEP to ensure a portion of future EV chargers are sited on streets less prone to flooding risks. Also, these future EV chargers should not be sited on streets or areas that are usually barricaded due to high water and flooding and should be sited on high-

[48] Central Mississippi Planning & Development District. "CMPDD Partners with Nissan and Holmes Community College for new EV Project" July 25, 2023. https://cmpdd.org/cmpdd-partners-with-nissan-and-holmes-community-college-for-new-ev-project/

[49] https://media.ford.com/content/fordmedia/fna/us/en/news/2024/03/04/ford-dealers-and-ford-fund-invest--2-million-to-train-future-aut.html

ground areas. According to City officials, there are cameras installed at repeating flood locations which can also help inform this siting criteria. When siting chargers in areas prone to flooding, the City should explore ways to harden the equipment such as high-quality silicon sealing around cable entries, mounting chargers on a pedestal above typical flood levels, and a weatherproof enclosure box.[50]

3.4.2. Resilient Infrastructure & Addressing Evacuation Concerns

Community meetings attendees and survey respondents expressed uncertainty around EVs due to concerns of losing battery while evacuating or idle in traffic, not being able to charge an EV if charging stations lose power during severe storms, and neighboring areas not having sufficient EV charging availability. It is important to note that passengers with ICE vehicles may also face difficulties in refueling while evacuating, such as waiting in lines at gas stations for hours, and gas stations that lose power. Emergency evacuation presents a challenge to all evacuees regardless of mode of transportation used when leaving the City, and the City can mitigate some EV-related evacuation challenges through its future planning. While certain factors such as EV range, infrastructure in other states, and fast charging on state highway corridors outside City limits may be out of the City's control, the City should site future EV chargers on designated evacuation routes, with resilient backup power solutions, described below, deployed to ensure operation during emergencies. Furthermore, the location, updates to evacuation routes, and backup power details of these locations should be shared publicly to address evacuation concerns and show the City's commitment to implementing effective solutions.

3.4.3. Ensuring Resilient Fleet Operations

NOPD's marked police vehicles also require a high amount of power during operation for flooding and other emergency events. The sustained time spent successfully blocking off streets or clearing accidents requires existing ICE vehicles to be running continuously due to the additional technology in the vehicle such as running sirens, cameras, and computers. Additionally, officers are in marked vehicles for 12-hour shifts and these vehicles typically don't dwell from shift to shift. Given the 24-hour operating nature and life-saving services of emergency vehicles during flooding events, it may be challenging to electrify all NOPD vehicles in the short-term. However, as mentioned in *Section 3.2: Non-City Fleet Vehicles*, the City Council's fleet transition ordinance requires all City vehicles to phase out from ICE vehicles. To encourage compliance with this ordinance, the City should conduct a fleet conversion study focused on NOPD vehicles and recommend simple use cases for NOPD vehicles to go electric. For example, non-emergency and non-pursuit passenger cars and SUVs would be a strong use case for NOPD's fleet electrification.

When assessing resilience at critical City facilities that house EVs, the City should determine the EVs' operational continuity requirements, likelihood of flooding in that specific location, the

[50] https://emagine.ae/protecting-your-ev-charger-from-floods/

demand for backup off-grid power, and level of protection required for any EV charging infrastructure. By assessing these factors, the City can adjust operations to have existing backup power system connected to EV charging infrastructure and elevate and waterproof chargers as necessary to not have infrastructure damaged by flooding. One example of adjusting operations may be to co-locate EVs currently in high-risk flood zones to another facility with existing charging stations on higher elevation ground.

Given the frequency and unpredictability of heavy rainfall and flooding, the City should ensure that electric transportation initiatives mitigate the risks from these emergency challenges and do not add on to the burden of the challenges that arise from frequent flooding and evacuation due to tropical storms. The City should develop several EV charging solutions that support resiliency for the community and the City's fleet operations rather than challenge it, described below.

3.4.4. Resilient Technologies

The technologies and solutions below can provide energy resiliency for personal and fleet EV charging infrastructure during grid outages and even be utilized for emergency scenarios that require evacuation.

Bidirectional Charging

Description: Electric vehicles with bidirectional capabilities can not only receive energy from EV chargers but also provide energy, or discharge, to a different load when paired with an EV charger. This capability allows for bidirectional EVs with charged batteries to send electricity to a microgrid, building (vehicle to building), or the grid (vehicle to grid).[51]

Resiliency Benefits: A bidirectional EV can charge a home that has lost power during an extreme weather event such as flooding, heavy rain, or a hurricane. As mentioned in the Public Engagement and Community Outreach section, many residents voiced concerns regarding charging or losing charge during evacuation. While mitigating these risks during the City's next steps, it is also important to communicate the resiliency EVs can provide during extreme weather. It's important to note that the City will likely have to review and adjust its building and mechanical codes to allow specifically for bidirectional home charging in the event of extreme weather and grid outages.

[51] U.S. Department of Energy. Bidirectional Charging and Electric Vehicles for Mobile Storage. https://www.energy.gov/femp/bidirectional-charging-and-electric-vehicles-mobile-storage#:~:text=A%20bidirectional%20EV%20can%20receive,with%20a%20similarly%20capable%20EVSE. (Accessed April 8, 2025).

Case Study: During Hurricane Helene, an Asheville resident's Kia EV6 provided 3.6 kW of output to the resident's home, enough to power the refrigerator, lights, and other electronics.[52]

Vehicle to Grid (V2G) Charging

Description: A form of bidirectional charging, V2G charging is when an EV discharges energy to the grid. This is mostly relevant to fleets of larger battery EVs, such as electric buses or heavy-duty trucks.[53] The V2G model uses a bidirectional battery typically as a demand management resource. This model is especially applicable to electric school buses, which have long stretches of idle down-time during the day and sometimes at peak demand hours. It is important to note that V2G charging can accelerate EV battery degradation due to increased charge-discharge cycles. Improved battery management systems, charging at lower power capacities, and managing state of charge (SoC) of a vehicle between 20-80% can mitigate battery degradation.

Resiliency Benefits: V2G charging can help to alleviate electricity demand on the local utility grid especially during peak consumption hours, typically during the late afternoon and evening. This is a critical resource to ensure enough power generation for the City and provide a source of zero-emission power generation. Similar to bidirectional charging, V2G charging will likely require the City to work with Entergy New Orleans to establish a utility tariff for this type of energy provision.

Case Study: In December of 2020, five electric school buses within the White Plains, NY school district began providing power to the customers of that region's utility, Con Edison.[54]

Mobile Microgrids

Description: A microgrid is a system of interconnected energy assets that can operate independently from the local utility grid. Microgrids are critical to providing backup power when buildings or homes experience grid outages.[55] Mobile microgrids are a portable version of

[52] Joint Office of Energy and Transportation. "Electric Vehicle Keeps Asheville Residents Charged During Hurricane Helene" November 14, 2024. https://driveelectric.gov/news/asheville-electric-vehicle-hurricane-helene (Accessed April 8, 2025).
[53] U.S. Department of Energy. Bidirectional Charging and Electric Vehicles for Mobile Storage. https://www.energy.gov/femp/bidirectional-charging-and-electric-vehicles-mobile-storage#:~:text=A%20bidirectional%20EV%20can%20receive,with%20a%20similarly%20capable%20EVSE. (Accessed April 8, 2025).
[54] Microgrid Knowledge. "Vehicle-to-Grid Programs Give Rise to Mobile Microgrids" September 24, 2021. https://www.microgridknowledge.com/electric-vehicles/article/11427706/vehicle-to-grid-programs-give-rise-to-mobile-microgrids (Accessed April 8, 2025).
[55] Siemens Government Technologies. "Mobile microgrids: the ultimate emergency backup power source for critical government and defense operations". https://www.siemensgovt.com/insights/articles/article-mobile-microgrids#:~:text=Whereas%20a%20traditional%2C%20stationary%20microgrid,power%20when%20infrastructure%20assets%20are (Accessed April 8, 2025).

microgrids, hence smaller. This broad definition also allows bidirectional EVs to act as mobile microgrids.

Figure 6: A mobile microgrid as pictured on the Siemens website

Resiliency Benefits: Mobile microgrids can be installed and deployed much more quickly than a stationary microgrid, which requires more construction, equipment, and costs. This is especially helpful during grid outages after flooding and hurricane scenarios. Mobile microgrids can also be deployed to charge an EV fleet while the grid is offline.

Case Study: Three bidirectional Nissan Leaf EVs acted as a mobile microgrid by exporting energy to Con Edison in New York through a pilot program that compensates EV drivers for utilizing their vehicles as distributed energy resources[56]. This kind of resource is especially beneficial for providing an additional energy resource during peak energy hours of the day when there may be a demand strain on the grid.

Mobile Charging

Description: Different types of charging infrastructure that can be portable and deployed as needed to charge EVs. Contrary to permanent charging stations, mobile chargers avoid the installation costs and construction timelines associated with in-the-ground charging stations[57]. Mobile charging can come in several forms: charging vans, trailers, or temporary stations set up in

[56] Microgrid Knowledge. "NYC Vehicle-to-Grid Pilot Shows How EVs – as Mobile Microgrids – Can Earn Income for Drivers and Fleets" January 3, 2024. https://www.microgridknowledge.com/electric-vehicles/article/33016981/nyc-vehicle-to-grid-pilot-shows-how-evs-as-mobile-microgrids-can-earn-income-for-drivers-and-fleets (Accessed April 8, 2025).

[57] BP Pulse. "What is mobile EV charging and is it right for your fleet" https://bppulsefleet.com/what-is-mobile-ev-charging-and-is-it-right-for-your-fleet/ (Accessed April 8, 2025).

parking lots. Mobile charging stations can also be powered by propane fuel to generate electricity[58].

Resiliency Benefits: Mobile charging is an alternative option to increase location accessibility for EV owners or fleets and can be deployed quickly. Mobile charging also mitigates range anxiety as it can provide electricity to EVs too far away from permanent charging stations. Mobile charging can be a solution to EV owners with these above concerns during extreme weather evacuation and address residents' concerns from the community meeting and engagement survey. Mobile charging can charge City fleet vehicles that have limited access to permanent charging infrastructure or as a temporary stopgap solution while the City deploys permanent charging stations for its fleet. Mobile charging can also be used for personal EVs at events with venues without permanent EV charging infrastructure.

Case Study: Companies such as Spark Charge provide innovative mobile charging solutions such as the Roadie Portable which is a modular and portable charger that can plug into vehicles on roadside and eliminates requirements for electrical upgrades and installation for fixed EV charging of vehicles. Similarly, AAA provides roadside and mobile EV charging for members in select markets.

Battery Storage and Solar Paired with EVSE

Description: A battery energy storage system (BESS) connected to the local utility grid can draw energy from it at a continuous, moderate rate[59]. When paired with an EV charging station, typically Level 3, the stored battery can charge an EV at a more rapid rate than the grid typically can. This function allows reliable and faster charging especially in areas with limited power grid capacity or high peak demands. Solar panels can also be installed onsite at EV charging stations to store clean power into the battery.

Resiliency Benefits: An important application for battery storage paired with EVSE is to provide backup power for a personal EV while evacuating or during grid outages. Other applications include BESS paired with existing backup power at critical City facilities to charge EVs in the case of grid outages. The addition of onsite solar panels also makes this energy clean.

Case Study: Electrify America (EA) installed BESS at over 100 stations in California using Tesla Powerpacks as part of a deal from 2019[60]. In 2022, EA integrated a 1 MW BESS for its charging

[58] Propane Education & Research Council. "Full Speed Ahead: Propane-Powered EV Charging Solutions" https://propane.com/2024/07/25/full-speed-ahead-propane-powered-ev-charging-solutions/ (Accessed April 8, 2025).
[59] Joint Office of Energy and transportation. Battery Energy Storage for Electric Vehicle Charging Stations. https://driveelectric.gov/files/battery-buffered-help-sheet.pdf (Accessed April 8, 2025).
[60] Electrek. "Electrify America's first megawatt-level battery storage-backed charging station reduces stress on the grid" October 19, 2022. https://electrek.co/2022/10/19/electrify-america-megawatt-level-battery-storage-charging-station/ (Accessed April 8, 2025).

station with 12 fast chargers in Baker, California. This location includes a 66 kW solar canopy to store energy into the BESS. This application has helped to reduce stress on the local grid.

3.4.5. Charging Resilience Recommendations

As the City's moves forward to increase EV adoption and expand EV charging infrastructure, it must do so resiliently in the face of emergency events largely stemming from frequent and unpredictable flooding and tropical storm evacuations. The technical solutions above vary in types of energy asset, system, and interaction with the grid, but all the solutions above can support resiliency through the form of backup or "on-the-go" power. The use case and implementation method of different types of EV charging will help inform which resilient technical solution is optimal. For example, City and non-City fleet EVs may benefit from mobile charging if permanent chargers aren't deployed in time for arrival of the vehicle. City government facilities that house EVs critical to City operations may benefit from EV chargers connected to backup power systems to charge the EVs during grid outages. When residents with EVs are evacuating the City, it will be beneficial for them to charge their vehicles at stations with a form of backup power, such as BESS. Additionally, when residents are at home during grid outages, it will be beneficial if their EV can provide bidirectional charging to power their home.

One specific opportunity for deploying a resilient EV charging solution is at the Agriculture Street Landfill. In 1994, New Orleans' Agriculture Street Landfill was designated as a Superfund site by the EPA. This site is in the Desire neighborhood,[61] After remediation work and demolition of the site, the City is proposing redevelopment of the site which would include a community solar farm with potentially up to 11 MW of solar PV energy. With such a large generating capacity, the site has the unique potential to host a battery energy storage system (BESS) for storage of solar energy paired with EV charging stations, aligning with the resilient solution described in *Section 3.4.8: Battery Storage Paired with EVSE and Solar Integrated Charging*. As described in the section, this solution can provide backup power for City fleet EVs and other municipal vehicles in the case of a power outage.

4. Electrification Policy Recommendations

Current low EV adoption rates signal that the City needs to both take steps to increase consumer EV demand and adopt a more aggressive policy stance to achieve longer-term climate and emissions reduction goals. New policies or amendments to existing policies are key to addressing public input around financial incentives to purchase/charge EVs and to supporting the projected EV fleet penetration, recommended charging footprint, and electrification of non-City fleet vehicles as described in *Section 3.1: Charging Infrastructure Needs and Section 3.2: Non-City Fleet*

[61] Office of Resilience & Sustainability. Agriculture Street Landfill Solar Park. https://nola.gov/next/resilience-sustainability/energy/agriculture-street-landfill-solar-park/ (Accessed April 8, 2025).

Vehicles. A robust research and stakeholder engagement process identified five sustainable transportation policies and programs that can accelerate transportation emissions reduction and align with the diverse needs of residents, businesses, and service providers in the city.

Due to the City's comparatively small geography and flat terrain, many stakeholders prioritized transitioning some trips away from internal combustion engine vehicles and toward electric-bicycles (e-bikes) and neighborhood electric vehicles (NEV).[62] Additionally, *Section 2.1: Engagement Activities Outcomes and Insights* suggests more efforts should be made to improve education and awareness around the benefits of vehicle electrification and the opportunities to transition to electric transportation already enabled by City polices, Entergy rebates, and federal tax incentives. For these reasons, the City should initially concentrate efforts on maximizing impact from e-bike expansions and expanding education and awareness programming. Actions that require longer timelines to realize measurable emissions reductions should be developed concurrently.

Based on the results of the policy research as well as the outcomes from community engagement and assessment of needs and opportunities, the City should prioritize development and implementation of the following policies and programs to support broader efforts to electrify transportation options and equitably decarbonize transportation-related emissions.

4.1. Policy Recommendations

The five policy recommendations below can work in tandem to increase EV adoption, reduce transportation-related emissions, and improve equity outcomes for lower-income residents.

4.1.1. Policy Recommendation #1:

Spark consumer EV demand by developing and implementing an electric transportation education and awareness program that aligns with ongoing investments in decarbonizing and electrifying the transportation sector.

Utilization of EVs and EV charging stations in the City will not substantially increase through public policy alone. Demand for more of these vehicles and the infrastructure to support them is also necessary. This demand can be spurred by increased and sustained education and outreach around the benefits of EVs. An electric transportation education and awareness program should include:

- Information and training around the various incentives available for EVs (new and used), EV charging stations, e-bikes, etc. as well as how to apply for and obtain those incentives.

[62] Neighborhood electric vehicles are described in detail in *Section 4.1.1: Policy Recommendation #1*

    - Consider implementing an online tool (e.g. Access Clean California) that can help residents navigate the variety of financial incentives and community programming available to them for various sustainable transportation solutions.
- Information on the financial, health, and environmental benefits of EV adoption.
    - Consider installing air quality monitors (e.g. Ribbit Network) in areas with concentrated investment in clean transportation solutions to validate the improvements in air quality and integrate into broader education and outreach efforts.
- Information on perceived safety issues associated with EVs and e-bikes. For example:
    - EVs – stakeholder concerns around reduced ability to charge and recharge when needing to evacuate to evade major storms; personal safety concerns using public charging stations when dwell times are longer.
    - E-bikes: stakeholder hesitation to use e-bikes without access to protected bike lanes; availability of safe and secure e-bike parking and storage.
- Information on what qualifies as a NEV and permitted uses of NEVs in the City.
    - The State of Louisiana defines a NEV as "a four-wheeled, electric-powered, on-road or nonroad vehicle that has a top attainable speed in one mile of more than twenty miles per hour and not more than twenty-five miles per hour on a paved level surface."[63]
    - NEVs are permitted on roads with a speed limit of 35 mph or less. They may cross roads with higher speed limits at intersections or permitted crossing points.
    - NEVs must include requisite safety features, including headlamps, turn signals, bright lights, reflectors, and seat belts.

For education and awareness activities that are interactive, the City should consider leveraging these activities as one mechanism of a broader strategy to collect feedback from the community about what is working what could be improved with respect to efforts to transition to electric transportation.

4.1.2. Policy Recommendation #2:

Increase efforts to expand e-bike adoption and utilization.

E-bikes have the potential to transform how residents move about the City. As mentioned in *Section 2.1.1: Survey Insights and Recommendations*, respondents expressed willingness to use e-bikes for some trips, provided that infrastructure like safe and protected bike lanes are in place. Additionally, expanding e-bike adoption, utilization, and infrastructure can occur at a faster pace

[63] Prohibits all-electric vehicles from comprising more than three percent of state vehicle fleet, 2024. https://legis.la.gov/legis/ViewDocument.aspx?d=1346927#:~:text=Provides%20that%20for%20the%20purposes%20of%20proposed,on%20a%20paved%20level%20surface.%20Further%20defines

compared to EVs, especially given the recent award of the Climate Pollution Reduction Grant (CPRG) funding for Blue Bike expansion and personal e-bike purchases (reference *Section 5.1: Knowledge Sharing).* Recommended policy details for expanding e-bike adoption and utilization include:

- Expand ***protected*** bike lanes. Residents considering mode-shifting are reluctant to do so because of safety concerns.
- Align expansion of e-mobility infrastructure (*as well as curbside EV charging*) with street improvement/repaving projects.
- Prioritize deployment of e-mobility solutions and infrastructure in communities with poor air quality and in locations connected to public transit. Include secure bike parking and access to charging outlets for e-bikes.
- Align rollout of e-bike rebate program with installation of secure e-bike parking with charging (*e.g. Bikeep*) and prioritize installations in low-income neighborhoods and mobility and public transit hubs[64]. Such parking docks appear to comply with Section 154-1421 (Parking of Bicycles) of the New Orleans Code of Ordinances. Such parking docks do require grid power. The added expenses can be offset by incorporating an advertising business model into the setup (e.g. hardware wraps, signage).
- Take steps to transition to e-cargo bikes for local and last mile freight deliveries[65]. Consider financial incentives to stimulate purchases and non-financial incentives to stimulate adoption/utilization (*e.g. designated parking and loading/unloading zones, streamlined permitting, etc.*). Important steps to take to initiate and facilitate this transition can include:
    - Convene relevant stakeholders (e.g. e-commerce platforms, delivery and logistics companies, e-cargo bike manufacturers, etc.) as part of broader education/awareness campaign in Policy Recommendation #1.
    - Collect feedback on characteristics those stakeholders would want to see to compel such a transition (e.g. more protected bike lanes, wider bike lanes to accommodate bulkier e-cargo bikes, designated loading/unloading zones, easy access to recharging or battery swapping, etc.).
    - Structure a controlled pilot test in an area where good bicycle transit conditions already exist and collect data around established cost and performance metrics (e.g. impacts to delivery times, impacts to operating costs (fuel, labor).
    - Use outcomes from the pilot to apply lessons learned to make strategic and confident investments to improve/expand infrastructure conducive to e-cargo bike delivery.

[64] Bay Area Rapid Transit. Bikes on BART. https://www.bart.gov/guide/bikes (Accessed April 8, 2025).
[65] C40 Knowledge. "How to enable e-cargo bike delivery on the path to zero emission freight" June 2023. https://www.c40knowledgehub.org/s/article/How-to-enable-e-cargo-bike-delivery-on-the-path-to-zero-emission-freight?language=en_US#:~:text=Shift%20city%20deliveries%20to%20e,supplies%20between%20sites%2C%20for%20example. (Accessed April 8, 2025).

    - Connect with local workforce development organizations to capitalize on new job creation opportunities enabled by broader e-cargo bike delivery uptake.
- Stipulate that city procurement of e-bike racks for public use include a grid-powered socket compatible with all e-bike chargers. Consider prioritizing procurement of EV charging stations intended for general public use that also include access to an on-site adapter to enable e-bike charging from the EV charging station. Update the New Orleans Code of Ordinances, Division 4A (Electric Vehicle Chargers), Section 146-569 (Approved Equipment) to include information on approved adapters for e-bike charging use.

4.1.3. Policy Recommendation #3:

Strengthen EV charging station incentives by layering in additional incentives (financial and non-financial) the City is positioned to do. Prioritize EV chargers that are specifically designed for on-street/curbside parking.

Stakeholder groups agreed that incentives are an effective way to increase the supply of EV charging stations in the City. Entergy New Orleans currently offers a prescriptive rebate for residential EV chargers (*Level 2*) and a custom rebate for business EV chargers (*Level 2 or DCFC*). Despite these incentives, incentive application volumes are low (between 100 and 150 annually for residential, between 10 and 20 annually for commercial).[66] Additionally, the sparsity of off-street parking in specific residential neighborhoods (e.g. Marigny, Bywater, Treme) complicates efforts to provide adequate supplies of EV charging stations to meet future demand. Targeted incentives for specific use cases can improve affordability and compel more businesses and residents to install EV chargers. Recommended policy details for strengthening EV charging station incentives include:

- Explore layering in additional incentives to compel more businesses and residents to install chargers (*e.g. unmetered parking, property tax reduction, etc.*). Consider updating the conditions under which the City would reduce restrictive zoning requirements (*e.g. parking minimums, building height)* for developers in exchange for implementing sustainable transportation solutions that go beyond current code and zoning minimums.
    - For example, the City of Charlotte's Unified Development Ordinance lists several qualifying actions (Table 16-1) that earn points that developers can apply toward the magnitude of building height relief they receive.
    - Such an approach could be used to steer developers toward solutions that the City may find challenging to consistently fund (e.g. e-bike racks, e-mobility hubs, protected bike lanes).
- Emphasize expansion of curbside EV charging throughout the City and consider procuring EV charging station solutions designed for that specific application (*e.g. ItsElectric*) to

[66] Numbers are per email communication from Entergy on October 10, 2024.

overcome the lack of off-street parking in certain residential neighborhoods. Design considerations for curbside charging are included below. Additional information[67,68] and case studies are also referenced in the footnotes.

- Power Source
  - Existing utility poles and streetlights can provide low-power charging options. Best for use in overnight curbside charging in residential neighborhoods.
  - Existing buildings with reasonable proximity to the curb can provide sufficient power for Level II charging.
- Limit application of curbside charging to avoid conflicting uses of curb space (e.g. bike lanes, loading zones).
- Maintain ADA compliance and ensure accessibility.
- Maintain accessibility for public works and emergency vehicles.
- Cord management strategies (e.g. detachable cords) to eliminate the potential safety and damage concerns cords can pose.
- Parking signage and enforcement to ensure utilization is maximized.

- Prioritize EV charging stations that include charging ports for e-bikes.
- Prioritize EV dedicated parking spots both on and off-street (coordinated with public feedback from *Section 2.1: Engagement Activities Outcomes and Insights*).
- Integrate EV charging stations into Community Lighthouses, which are specific community institutions throughout the City that serve as resiliency hubs for residents during power outages and natural disasters. Eventually the goal is for all New Orleans residents to live within one mile of a Community Lighthouse. Potential on-site solar energy can be used to fuel EVs with clean electricity during normal periods and potentially serve as a small source of revenue for the community institutions. And once bi-directional charging and vehicle-to-load applications are more mature, EVs could also be used to supplement emergency power needs during power outages and major storm events. Additionally, Community Lighthouses can house RTA electric buses and electric school buses to provide resilient power, creating an opportunity for partnership between the City and RTA.
- Engage New Orleans City Council from the lens of regulatory oversight over Entergy New Orleans. Advocate for them to broaden and strengthen incentive options and align incentives with specific use cases and features. (*e.g. incentives increase when installed in low-income neighborhood, include e-bike charging port, paired with solar, etc.*).

[67] Joint Office of Energy and Transportation. February 2024. Community Charging: Emerging Multifamily, Curbside, and Multimodal Practices. https://driveelectric.gov/files/community-emobility-charging.pdf (Accessed April 8, 2025).
[68] Joint Office of Energy and Transportation. February 2024. Curbside EV Charging Strategies. https://driveelectric.gov/files/u/webinar/40/presentation_upload/Curbside%20Charging%20Slides.pdf?2207aae258 (Accessed April 8, 2025).

- Develop ongoing community-informed EV charging station siting guidance. The City is already incorporating community feedback to identify locations to place new EV charging stations. Considerations for ensuring community perspectives continue to shape where additional EV charging stations are sited include:
    - Be mindful of safety concerns EV drivers may have, particularly when they need to remain stationary for extended periods to charge. Ensure the proposed EV charging stations are in well-lit places and incorporate additional safety features as appropriate.
    - Work with community leaders in low-income neighborhoods to install EV chargers at or near minority-owned businesses to increase foot traffic for those businesses.
    - Partner with other communities within a geographical distance aligned with EV mileage ranges to develop charging hubs that can safely and reliably provide EV charging to evacuees during major storms.
    - Coordinate with short-distance delivery providers to identify EV charging station locations that align with their driving patterns.
    - Create concentrated banks of DCFCs on City owned land.

4.1.4. Policy Recommendation #4:

Explore ways to increase the supply of affordable EVs in the City.

Affordability was regularly cited as a challenge slowing EV adoption in the City. However, supply of used EVs is expected to increase exponentially due to EVs coming off leases.[69] Used EVs are less expensive than new ones. Moreover, NEVs, which are affordable, low-speed vehicles used specifically for local trips, are increasingly being allowed by cities across the U.S. Recommended policy details for increasing the supply of affordable EVs include:

- Partner with used online used car retailers (*e.g. Carvana*) to explore solutions for increasing the supply of used EVs in the City. Incorporate outcomes of this partnership in education and awareness campaigns to demonstrate how residents and businesses can purchase used EVs confidently from such online retailers.
    - This approach would be a novel solution the City of New Orleans can pioneer to increase the supply of affordable used EVs available for purchase by residents and businesses.
    - Some local entities like El Paso Electric have integrated an e-commerce platform for EVs into their website. This tool helps users identify the best EVs for them based on their budget and driving patterns. New Orleans can build off of this foundation

[69] J.D. Power. "Used-Vehicle Market About to Get Complicated as Returning EV Lease Volumes on Track to Spike in 2026" November 7, 2024. https://www.jdpower.com/business/resources/e-vision-intelligence-report-october-2024 (Accessed April 8, 2025).

by connecting the consumer to online car retailers with matching used EV inventory.

- Modify the City of New Orleans Code of Ordinances to specify when "low-speed vehicles" (define in Division I (Generally), Section 162-996 (Definitions)) can be used on City roads. Currently, the City Code does not include any regulations on low-speed vehicles, so Louisiana R.S. 32:300.1 is the current standard. The current understanding is that New Orleans' policy is consistent with state policy which allows NEV use under certain requirements:
    - They must only be used on roads with speed limits of 35 mph or less.
    - They must be operated by a licensed driver.
    - They must register the NEV with the Louisiana Office of Motor Vehicles.
    - The driver must have liability insurance.
    - The driver must obey speed limit and street signs.
    - The NEV must have safety equipment as specified in federal regulations (e.g. seat belts, turn signals, etc.)
- Incorporate information about NEV use in ongoing education and awareness activities.
- Consider implementing a program like Gest Carts that provides free NEV rides to passengers in designated areas where costs are paid by sponsorships. Such a program would likely require updates to Section 162 (Vehicles for Hire) in the New Orleans Code of Ordinances, including but not limited to Article XIII (Courtesy Vehicles).
- Align non-financial incentives with NEV use as well (*e.g. unmetered parking, designated parking spaces, usage of City-owned EV charging stations, etc.*)

4.1.5. Policy Recommendation #5:

Co-locate electrified mobility options with bus transit stations to enable improved connectivity among various transportation options and improve walking/biking options.

Effective sustainable transportation policy balances transitioning to EVs and reducing single occupancy vehicle (SOV) usage. This policy recommendation focuses on reducing SOV usage by connecting public transit to electric micromobility transportation options, creating the opportunity for the City to collaborate with RTA[70]. Recommended policy details for enabling increased access to high frequency transit and improved connectivity include the following:

- Co-locate e-bike hubs, bike share stations, charging hubs, and protected bike lanes to high-use transit stops and transit stops in low-income neighborhoods. The City can collaborate with the RTA to incorporate aspects of this action with RTA's Better Bus Stops project which aims to improve bus stop shelters, signage, pedestrian crossings, and more.

[70] Increased public transit service availability (*around the clock, full day, rush hour*) can improve utilization of electrified mobility options and ensure residents can reliably meet their local transportation needs sustainably.

- Position such e-mobility hubs within easy walking distance (~100-200 meters) of bus stops.
- Provide clearly marked, dedicated parking spaces for each e-mobility option.
- Ensure payment systems that are unified and integrated to allow users to easily switch between different modes of transportation.
- Provide adequate safety features such as adequate lighting, emergency call buttons, and security cameras. Additionally, enhance pedestrian walkways and crosswalks in the immediate vicinity of these e-mobility hubs.
- Install weather protection measures (e.g. canopy). EV charging stations powered by solar canopies can provide this dual purpose.

4.1.6. Current Policies to Influence Non-City Fleets

In addition to the policies above, the City can utilize a number of existing policies, regulations, and initiatives to specifically influence non-City fleets to increase EV adoption:

- **City of New Orleans Code of Ordinances, Chapter 162: Vehicles for Hire[71]:** This chapter describes the regulatory and enforcement power of the Department of Public Works and the Ground Transport Bureau over all for-hire vehicles that provide passenger transportation services within the City, including taxis, limousines, tour buses and vans, ride-hailing/transportation network companies (e.g., Uber, Lyft), electric scooter rentals, and school buses. The Code already provides a definition of alternative fuel vehicles as "vehicles powered by natural gas, electricity, hydrogen, bio-diesel, or propane."[72] Currently, registrants must indicate the vehicle model and year but going forward this could be augmented to require fuel type, allowing the City to better track EVs and other alternative fuel vehicles operating in its jurisdiction. And although state law precludes municipalities from requiring data collection from transportation network companies (TNCs), the City could initiate conversations about accessing high-level fuel type data as part of larger sustainability efforts. Lastly, while New Orleans does not currently have any shared electric scooter fleets, the current ordinance about scooter storage (Sec. 154-1751: "Stores the electric scooters inside the physical office location at all times the electric scooters are not rented.") may need to be modified to accommodate charging.
- **EV Parking Requirements and Incentives in the Comprehensive Zoning Ordinance:** Under the City's existing zoning code (Article 22 Section 22.4.A) new developments or existing properties applying for intensified use are required to install electric vehicle charging stations. Large public facilities must install 10% or 1 space (whichever is greater)

[71] https://library.municode.com/la/new_orleans/codes/code_of_ordinances?nodeId=PTIICO_CH162VEHI

[72] Sec. 162-1. - Definitions.
https://library.municode.com/la/new_orleans/codes/code_of_ordinances?nodeId=PTIICO_CH162VEHI

with Level 2 or Level 3 EV charging stations and must also have 10% or 1 space EV charging ready. Facilities like community or cultural centers, or medical clinics are typically only required to have 10%/1 space EV ready and are not required to install any chargers. Article 22, Section 22.18 defines Level 2, Level; 3 and EV Ready. The City gives a 10% reduction of the off-street parking space requirement when 10% or more of required off-street vehicle parking spaces provide installation of Level 2 EV charging, and a 20% reduction for Level 3 chargers (Section 22.5.F). Relevant non-City fleets can take advantage of these incentives as appropriate (e.g., constructing new buildings, adding on to existing structures).

While the City has some foundations in place for these policies to grow, these policies will require new governance structures and responsibilities for the City's departments to support non-City fleet electrification. Early priorities should include forming partnerships to help support fleet electrification (e.g., with non-City fleets, training institutions, community organizations, EV equipment operators), and then shaping any new regulations and policies as appropriate. ORS will likely take the early lead, but other departments and divisions will need to become involved in a city-wide effort (further addressed in *Section 5.2: Roadmap Recommendations*). An EV Fleet Working Group could help oversee these early efforts.

5. Partnering Opportunities & Roadmap Recommendations

5.1. Knowledge Sharing

In the last few years, ORS has initiated several ambitious electrification projects while pursuing and receiving grant funding to finance projects. Recent projects of note include the City's Fleet Transition, in partnership with the Equipment and Maintenance Division (EMD), which aims to phase out the City's ICE vehicles and purchase only alternative fuel vehicles, and the Electric Vehicle Charging Pilot Program in partnership with Entergy New Orleans mentioned *in Section 3.1.2: Next Steps for Charging Infrastructure*. The Charging Pilot Program has led to the installation and operation of 30 EV chargers at 25 sites, to be used for free. Recent federal grant commitments for the City and other public entities include the EPA's Climate Pollution Reduction Grant (CPRG), FTA's Bus Low- and No- Emission Grant, and the FHWA's Charging and Fueling Infrastructure (CFI) Grant, with further details in the table below. ***It is important to note that recent and ongoing changes in federal policy may change the course, timeline, or amount of the following grant funds eventually disbursed to the City.*** The White House's Executive Order, Unleashing American Energy, paused the disbursement of funds appropriated through the Inflation Reduction Act and Infrastructure Investment and Jobs Act. All of the awards listed were disbursed through these two acts. The Department of Transportation is currently reviewing CFI funds to determine if they will be disbursed or not.

Table 5: City's Grant Awards

Awarding Agency	Grant Name	Amount Distributed	Award Summary
U.S. Environmental Protection Agency (EPA)	Climate Pollution Reduction Grant Program (CPRG)	$49.9 M[73]	The award will help fund the following initiatives related to electric transportation: • Bike share expansion • E-bike rebate program • Protected bikeways
Federal Transit Administration (FTA)	Bus and Low- and No-Emission Grant	$71 M[74]	This grant will help the RTA purchase 20 battery electric buses, 8 chargers, fund a microgrid to support charging resiliency after major storm events, and design and implement a workforce training program.
Federal Highway Administration (FHWA)	Charging and Fueling Infrastructure (CFI) Grant Program	$9.3 M[75]	The award will help fund approximately 118 publicly available EV chargers across the city, with 66% of these installations located in disadvantaged communities.

[73] Office of the Mayor. "City of New Orleans Announces $49.9 Million EPA Award for Climate Pollution Reduction" July 22, 2024. https://nola.gov/next/mayors-office/news/articles/july-2024/2024-07-22-epa-climate-pollution-reduction-grant/ (Accessed April 8, 2025).
[74] Regional Transit Authority. "New Orleans RTA receives $71.4 million grant from President Biden's infrastructure law to help provide energy-efficient buses" June 27, 2023. https://www.norta.com/news-list/new-orleans-rta-receives-$71-4-million-grant-from-president-biden%E2%80%99s-infrastructure-law-to-help-prov (April 8, 2025).
[75] City of New Orleans. "City of New Orleans Awarded $9.3 Million to Expand Electric Vehicle Charging Infrastructure" January 10, 2025. https://content.govdelivery.com/accounts/LANOLA/bulletins/3cbce0f (Accessed April 8, 2025).

Awarding Agency	Grant Name	Amount Distributed	Award Summary
EPA	Clean School Bus (CSB) Program	$23 M[76]	This award will help fund 70+ electric school buses to New Orleans region transportation companies

These funds and the recommendations from this Roadmap represent immediate and tangible opportunities for the City to accomplish innovative electrification projects that lead to a healthier and more sustainable quality of life for residents. However, given the novelty of scaling EV charging stations and electrification technology, there are common challenges that many organizations can face when accomplishing their EV related goals such as barriers to cost, operational challenges, supply chain and construction delays, strategic community and workforce engagement, and ensuring that economic benefits flow to the community in an equitable way.

As the City begins implementing the recommendations from this Roadmap, which are aggregated in *Section 5.2: Roadmap Recommendations*, and is in the process of disbursing the above grant funds, the City should collaborate and mutually share knowledge with partners that can provide technical assistance, stakeholder input, share progress and solutions for electrification projects despite roadblocks, and/or incorporate the City's objectives into their own programs. In reciprocation, the City can share best practices as it transitions its own fleet, disburses grant funding by connecting non-City fleet owners to EV related training, working with non-City fleet owners to share EV charging costs, and working with private fleet owners on creating regulations, permitting and zoning to support EV uptake. The tables below summarize several key organizations in the higher education, non-profit, and public sectors that the City should partner with as it pursues recommendations from this roadmap and distributes potential grant funding such as the CFI and CPRG's e-bike rebates.

[76] NOLA.com. https://www.nola.com/news/education/epa-grants-new-orleans-school-buses-electric/

Table 6: Potential Higher Education Partners

Potential Higher Education Partners	Opportunities to Collaborate
DILLARD UNIVERSITY	Dillard University has similar goals regarding fleet conversion, specifically to convert 25% of the university fleet to low or zero-emission vehicles by 2030. There is an opportunity to share challenges, progress made, and solution strategies given the City's current Fleet Transition project.
XAVIER UNIVERSITY of LOUISIANA	Xavier University is in the process of installing EV Charging stations on campus. There are opportunities to share lessons learned from the University's experience and process in siting the chargers and other considerations.
Delgado COMMUNITY COLLEGE	Delgado Community College offers several electrician and technical automotive degree programs. There are opportunities for the City to collaborate with DCC to incorporate EV and EV charger operations and maintenance into the institution's program to build the future electric transportation workforce local to the City.

Table 7: Potential Non-Profit Partners

Potential Non-Profit Partners	Opportunities to Collaborate
Southeast Louisiana Clean Fuel Partnership	The Southeast Louisiana Clean Fuel Partnership (SLCFP) works with vehicle fleets, fuel providers, community leaders, and other stakeholders to identify community-driven choices that save energy and promote the use of alternative fuels and advanced vehicle technologies in transportation. With SLCF, there are opportunities to receive technical assistance and knowledge regarding lessons learned from similar projects from this organization.
GREATER NEW ORLEANS INC REGIONAL ECONOMIC DEVELOPMENT	Greater New Orleans (GNO) Inc. is an economic development organization serving Southeast Louisiana, focused on creating a thriving economy for the region. GNO Inc. is a key partner to engage regarding the economic development strategy laid out in this roadmap and attracting electrification related businesses and jobs to the City.
thrive NEW ORLEANS	Thrive New Orleans is focused on economic development in New Orleans through an equitable manner and offers trainings to develop skilled workforces and provides the Green Business Academy Program for minorities. This organization will be key to engage and consult regarding the next steps for economic development strategy.
ALLIANCE FOR AFFORDABLE ENERGY	The Alliance for Affordable Energy (AEE) focuses on consumer advocacy for utility customers in Louisiana. AEE will be a key organization to engage with when collaborating with Entergy to pass EV charging friendly incentives.

Table 8: Potential Public and Business Partners

Potential Public and Business Partners	Opportunities to Collaborate
PORT NOLA THE PORT OF NEW ORLEANS	The Port of New Orleans is a significant transport hub of economic and logistics activity in the City with many automobile operations. The Port is currently pursuing and adopting a few electrification incentives and has expressed interest in collaborating with the City to pursue financing for EVs and EV chargers.
RTA	The New Orleans Regional Transit Authority (RTA) provides public transit services in the City. As RTA utilizes the grant funding from the FHWA to purchase and operate battery electric buses and build a microgrid, there are opportunities to knowledge share on electrification challenges and solutions with the City.
entergy	Entergy NOLA is the City-owned utility for New Orleans. As ORS, Entergy, and other stakeholders plan implementation with the CFI grant, there is a key opportunity to apply lessons learned from Electric Vehicle Charging Pilot Program. The City should also collaborate with Entergy to pass EV charging friendly incentives, as detailed in the State and Municipal Law and Policy section.

5.2. Roadmap Recommendations

Section 3: Assessment of Needs and Opportunities and *Section 4: Electrification Policy Review* result in a myriad of recommendations for the City to pursue to help achieve their goal of 40% light-duty and passenger vehicles by 2035. These recommendations have been organized by policies (regulatory changes), programs (new initiatives), and projects (infrastructure buildouts) in the tables below, laid out in order of short-term actions (next 18 months) and medium to long-term strategies (next 2-5 years). When selecting recommendations for the initial phase of implementation, the City should conduct a total cost and risk analysis assessment for each recommendation to support City budgetary planning and allocation, along with inform preferred ownership and other funding pathways to ensure success while mitigating risk for the City. These assessments will be key for implementation strategy and prioritization. Additionally, with the first phase of recommendations implemented, the City should engage with early adopters of specific EV technologies who have lessons learned and insights to provide on these technologies such as e-bikes, NEVs, etc. Engaging with early adopters will also help to refine the City's success metrics for these recommendations. Many recommendations will require cross-collaborative partnerships with different City departments either leading or partnering based on each department's jurisdiction of responsibilities. Each recommendation has been assigned to lead agencies in the City. Implementing this Roadmap and its recommendations will require dedicated personnel in the Office of Resilience and Sustainability (ORS), Equipment Management Division (EMD), and Department of Property Management.

Table 9: Short term actions in the next 18 months

Recommendation	Details	Lead Agencies	Success metric(s)
Charging Infrastructure Program	As EV market penetration grows, the City should evaluate vehicle registration data annually or bi-annually against the interim projections required to achieve the City's goal of 40% passenger and light-duty EV adoption by 2035.	Louisiana Office of Motor Vehicles	% of EVs out of total vehicles registered in the City
Non-City Fleet Vehicles Program	City of New Orleans should work with the State of Louisiana and local non-city fleets to share fleet data specific to vehicle type (EV, ICE, etc.).	Louisiana Office of Motor Vehicles Department of Public Works Ground Transportation Bureau (GTB)	Positive engagement with non-city fleets regarding increased EV adoption
Non-City Fleet Vehicles Program	The City should work with non-City fleets to get data on their utilization of publicly available chargers to identify needs for additional charging infrastructure.	Equipment and Maintenance Division (EMD) Department of Public Works	2025 baselined data for non-City fleet EV penetration and charger utilization metrics
Non-City Fleet Vehicles Policies	Encourage non-City fleets to purchase more EVs and reduce concerns around lack of infrastructure by: • Designating spaces for EV-only parking that allow non-City fleet vehicles (e.g., taxis, TNCs) and ensuring adequate enforcement. • Creating a curbside management plan in areas where ride hailing and micromobility are used often to enable flexible use of curb space as needs	Department of Public Works, Parking Division	Non-City fleet EV registration % against total fleet data and yearly growth trending against 2025 as a baseline

Recommendation	Details	Lead Agencies	Success metric(s)
	change throughout the day and week (e.g., managing a curbside space to be for deliveries during the day and taxi or TNC passenger drop-offs at night). • Allowing non-City fleet vehicles like taxis and TNCs to use City's EV chargers during low-demand times (weekend, nights). • Facilitating installation of EV charging on streetlights that can be used by non-City fleets. • Integrating EV charger wayfinding signage into City traffic signs. • Ensuring a sufficient number of accessible EV chargers and charging parking spaces.		
Non-City Fleet Vehicles Program	The City should engage other public agencies (i.e. transit, sewer and water, hospitals) to exchange best practices about EV fleet transitions, coordinate procurement requirements, RFP templates, pursue bulk purchases, and partner on grant funding applications. The Climate Action Plan for a Resilient New Orleans calls for City cooperation with RTA on EV bus conversion efforts, encouraging cross-agency collaboration.	ORS	Data collection & publishable best practices documentation showing thought leadership
Non-City Fleet Vehicles Program	To promote and encourage increased EV adoption for City government contracted fleets (e.g., waste management), the City should: • Engage with private fleets about proposed contracting terms and specifications about EVs • Be an early adopter in awarding extra points for contractors with EVs in bids • Support any new initiatives (e.g., bonus points in bids/proposals) for	Bureau of Purchasing, and individual City departments with relevant contracts (e.g., Dept. of Public Works)	Government contracted fleet EV registration % against total fleet data and yearly growth trending against 2025 as a baseline

Recommendation	Details	Lead Agencies	Success metric(s)
	EVs in contracted fleets by ensuring existing procurement policy supports EVs and EV charging infrastructure, and update if needed. • Engage with private sector about proposed contracting terms and specifications; one potential avenue includes use of request for information process. • Work with other public sector partners like RTA, the Orleans Parish School Board, and the Sewerage and Water Board to align procurement requirements and pursue bulk purchasing opportunities via regional coordination. • Discourage individual City departments from making customization requests from vendors as this slows procurement and increases costs. The City can use its contracting and RFP process as a mechanism to implement the above.		
Non-City Fleet Vehicles Policies and Programs	To promote and encourage increased EV adoption for two wheeled EVs (e.g., rental bikes, scooters), the City should: • Encourage Blue Bikes and other alternative transportation modes as a key step in diversifying travel options and reducing emissions • Modify city ordinance to allow charging of bikes and scooters at stations/docks while not in use[77]	Ground Transportation Bureau (GTB)	Yearly or more public surveys collecting 2-wheeled transit preference, tracking purchases, utilization, and satisfaction. Use a 2025 survey as baseline.

[77] While New Orleans does not currently have any shared electric scooter fleets, the current ordinance about scooter storage (Sec. 154-1751: "Stores the electric scooters inside the physical office location at all times the electric scooters are not rented.") may need to be modified to accommodate charging.

Recommendation	Details	Lead Agencies	Success metric(s)
	• Promote "low emissions fleets" • Collaborate with micromobility operators and property owners to develop charging sites • Consider battery swapping for e-bikes and e-scooters[78]		
Economic and Workforce Development Program	Partner with OWD to create a hiring program for EV charging infrastructure construction and deployment projects that attracts temporary local labor with potential for long-term employment	OWD	Track number of full-time hires as % of total participants in pilot charger deployment projects
Economic and Workforce Development Policy	Streamline the current curbside EV charger siting permitting process from requiring 3 to 1 permit to encourage charge point operator and developers to site near commercial corridors and small business hubs	Department of Safety and Permits OED	Successful implementation of new process with public survey
Economic and Workforce Development Program	Create an EV focused outreach committee to: • promote current EV workforce training opportunities to local electricians and interested groups/individuals • work with NOCC, Delgado, professional associations, and groups that support underrepresented businesses to further enhance existing training programs and potentially create new ones	OWD ORS	Track growth of # businesses/individuals reached through committee using initial 2025 launch as baseline
Resilience Project	Work with emergency response departments across the City to ensure the siting of a portion of curbside chargers on streets less prone to flooding risks. Also, ensure these chargers are not sited on streets or areas that are usually barricaded due to high water and flooding and should be sited on high-ground areas	NOPD NOFD NOHSEP EMS	Publicly available map of planned EV chargers sited in slow to flood areas paired with survey tracking public feedback

[78] Battery swapping enables e-bike users to change out batteries at a designated battery cabinet (as opposed to periodic collection vehicles to charge them at a single location) ; See the New York City case study in *Section 3.2.2: Fleet Transition Case Studies*

Recommendation	Details	Lead Agencies	Success metric(s)
Resilience Project	When siting chargers in areas prone to flooding, the City should explore ways to harden the equipment such as high-quality silicon sealing around cable entries, mounting chargers on a pedestal above typical flood levels, and a weatherproof enclosure box	ORS	Publicly available map of EV chargers deployed by City with weather hardening equipment
Policy to spur EV demand	Develop, implement, and sustain an electric transportation education and awareness program that provides detailed instructions for obtaining financial incentives and highlights the variety of benefits realized from transitioning to electric transportation.[79]	ORS	Public survey results for program go-live and after one year or less to track awareness

Table 10: Medium to long term strategies in the next 2 to 5 years

Recommendation	Details	Lead Agencies	Success Metric(s)
Charging Infrastructure Program	Based on the actual level of adoption, the City should re-assess total EV registrations against the current supply of chargers to ensure the City's infrastructure investment is keeping pace with adoption.	Louisiana Office of Motor Vehicles	Tracked and trended ratio of EV chargers to registered EVs in the New Orleans Parish
Charging Infrastructure Project	The City should utilize the Level 2 and DCFC charging heat maps to plan and track priority locations for future EV charger deployment and to track against any planning development.	ORS	Map of EV chargers installed or planned using the prioritization heat map
Non-City Fleet Vehicles Programs	The City should encourage privately-owned, City-regulated fleets such as taxis and private buses to increase their EVs by: • Considering EV battery safety inspection	GTB ORS	City-regulated fleet EV registration % against total fleet data and yearly growth trending

[79] The Greenlining Institute. Increasing EV Awareness. https://greenlining.org/electric-vehicles-toolkit/increasing-ev-awareness/ (Accessed April 8, 2025).

Recommendation	Details	Lead Agencies	Success Metric(s)
	• Allowing use of City fleet EV chargers once built • Considering an EV taxi pilot program (see New York City[80]) • Pursuing charging station sponsorship or co-hosting/sharing • Partnering on EV related training activities • Creating an EV Fleet Working Group with city and non-city stakeholders • Promoting low-emission vehicles		against 2025 as a baseline
Non-City Fleet Vehicles Programs	To promote increased EV adoption for privately-owned non-City contractor fleets (rental cars, freight services, parcel delivery, food delivery, messenger services), the City should: • Explore urban freight delivery electrification pilots • Consider an e-cargo bike lending library for small businesses • Ensure fleets are part of city and regional climate, freight and transportation plans • Create a system to better permit or track goods delivery within City (see San Francisco and Seattle case studies in *Section 3.2.2*) • Create a low emissions zone with a focus on delivery and other private fleet vehicles • Consider a battery swapping pilot	GTB Dept. of Public Works, Traffic Division ORS	Privately-owned, non-City contractor fleet EV registration % against total fleet data and yearly growth trending against 2025 as a baseline
Economic and Workforce	Utilize and market the Industrial Tax Exemption Program (ITEP) and Quality Jobs Program and collaborate with the State to	OED OWD	Trend industry growth in area directly attributed to City's

[80] NYC Mayor's Office of Climate and Environmental Justice. https://climate.cityofnewyork.us/subtopics/electric-vehicles/

Recommendation	Details	Lead Agencies	Success Metric(s)
Development Project	attract EV and battery manufacturers to the Greater New Orleans region		promotion of ITEP and Quality Jobs Program
Economic and Workforce Development Project	Utilize and market the Quality Jobs Program and Enterprise Zone Program to incentive developers to locate an office in and/or deploy EV charging infrastructure throughout New Orleans to increase economic activity and employment opportunities, specifically for economically disadvantaged groups	OED OWD	Trend industry growth in area directly attributed to City's promotion of Quality Jobs and Enterprise Zone Programs
Economic and Workforce Development Program	Consider partnering with auto-manufacturers to develop grant programs or investments for EV workforce training	OWD	Trend outreach and interest in the program to document public wins
Resilience Project	Site future EV chargers on designated evacuation routes and pair chargers with resilient backup power solutions such as on-site solar paired with BESS	ORS	Public survey to track usage and perception of ongoing map of resilient (flood resistant) chargers
Resilience Project	Deploy BESS paired with EV charging stations at the proposed solar farm project at Agriculture Street Landfill	ORS	Establish real project and publish details with resilience metrics highlighted
Resilience Program	To encourage compliance with the City Council's ordinance on transitioning fleet vehicles, the City should conduct a fleet conversion study focused on NOPD vehicles and recommend simple use cases for NOPD vehicles to go electric.	NOPD EMD ORS	Fleet conversion study focusing on special nature of emergency vehicle feasibility and application
Resilience Projects	When assessing resilience at critical City facilities that house EVs, the City should	NOPD NOHSEP	Mandate that ongoing and future fleet

Recommendation	Details	Lead Agencies	Success Metric(s)
	determine the EVs' operational continuity requirements, likelihood of flooding in that specific location, the demand for backup off-grid power, and level of protection required for any EV charging infrastructure to adjust operations as needed for existing backup power systems to connect to EV charging infrastructure and elevate and waterproof chargers	NOFD EMS ORS	charging infrastructure projects are coupled with resilience infrastructure for critical facilities
Policy to increase supply of EVs and reduce vehicle miles traveled in SOVs	Increase efforts to expand e-bike adoption and utilization such as[81]: • Expand ***protected*** bike lanes • Align expansion of e-mobility infrastructure (*as well as curbside EV charging*) with street improvement/repaving projects. • Prioritize deployment of e-mobility solutions and infrastructure in communities with poor air quality and in locations connected to public transit. Include secure bike parking and access to charging outlets for e-bikes. • Align rollout of e-bike rebate program with installation of secure e-bike parking with charging (*e.g. Bikeep*) and prioritize installations in low-income neighborhoods and mobility and public transit hubs	Department of Public Works, Traffic Division	Public survey to track # of e-Bikes purchased in New Orleans using 2025 as a baseline. Track Blue Bikes utilization using 2025 as a baseline.

[81] City of Denver. E-Bike Rebates. https://www.denvergov.org/Government/Agencies-Departments-Offices/Agencies-Departments-Offices-Directory/Climate-Action-Sustainability-and-Resiliency/Cutting-Denvers-Carbon-Pollution/Sustainable-Transportation/Electric-Bike-Rebates (Accessed April 8, 2025).

Recommendation	Details	Lead Agencies	Success Metric(s)
	• Take steps to transition to e-cargo bikes for local and last mile freight deliveries		
Policy to increase the supply of EV charging stations	Strengthen EV charging station incentives by layering in additional incentives (financial and non-financial) the City is positioned to enable. Prioritize EV chargers that are specifically designed for curbside parking.[82,83]	ORS Entergy	Track Entergy New Orleans new service applications related to EV chargers
Policy to increase the supply of EVs	Explore creative ways to increase the supply of used EVs for purchase in the City to mitigate against the reluctance of dealerships to increase EV inventory. Promote use of neighborhood electric vehicles (NEV) for local trips as an alternative to SOV use.[84]	ORS	EV vehicle registration % of total against 2025 as a baseline
Policy to reduce vehicle miles traveled in SOVs through electrification	Co-locate electrified mobility options with bus transit stations to enable improved connectivity among various transportation options and improve walking/biking options.[85]	ORS RTA	Periodic public surveys on public transit usage

[82] City of Santa Monica. How to Get an EV Parking Permit for City Lots with EV Chargers. https://www.santamonica.gov/process-explainers/how-to-get-an-ev-parking-permit-for-city-lots-with-ev-chargers (Accessed April 8, 2025).
[83] City of San Francisco. June 13, 2024. Curbside EV Charging Pilot Program Guidelines. https://www.sf.gov/sites/default/files/2024-06/Curbside%20EV%20Charging%20Pilot%20Program%20Guidelines.pdf (Accessed April 8, 2025).
[84] City of Lincoln. March 2023. Neighborhood Electric Vehicle (NEV) and Golf Cart Master Plan Update. https://www.lincolnca.gov/en/living-here/NEV-Golf-Cart-Page/NEVGolfCartMasterPlan-Mar2023.pdf (Accessed April 8, 2025).
[85] City of Cleveland. Transportation Demand Management Program Standards. https://planning.clevelandohio.gov/TDM/TDM_Program_Standards.pdf (Accessed April 8, 2025).

6. Implementation & Funding Opportunities

6.1. Public-Private Partnerships

Funding opportunities to implement projects outside of allocated city budget are most likely to come from public funding, like federal and state grants or public-private partnerships (P3s). P3s are strong avenues to accelerate vehicle electrification efforts and overcome funding challenges. By collaborating with private sector entities such as energy companies (e.g. Entergy New Orleans), automobile manufacturers, and even technology companies like Charge Points Operators (CPOs), the city can implement and finance EV charging infrastructure. These partnerships could involve shared investment in charging stations throughout the city, with private partners potentially owning and operating the infrastructure while the city provides land and streamlined permitting processes to incentivize interest. Additionally, P3s could facilitate alternative financing and ownership models, seen in *Section 6.1.1: Infrastructure Ownership Models* below, which would reduce upfront costs for the city. Private partners might also contribute expertise in smart grid technology and energy management, ensuring the EV charging network integrates seamlessly with the City's power infrastructure. The table below illustrates the City's role, benefits, and considerations of different infrastructure ownership models, including P3s. By aligning public goals with private sector capabilities and resources, New Orleans could create a sustainable and financially viable approach to vehicle electrification, ultimately improving air quality, reducing carbon emissions, and positioning itself as a leader in urban sustainability.

6.1.1. Infrastructure Ownership Models

The City should consider three primary ownership models when deploying EV charging infrastructure: capital purchase, public-private partnerships (P3), and as-a-service models. Understanding these options is crucial for organizations and municipalities looking to invest in EV charging infrastructure. Opportunities for collaboration or even ownership in the private sector can be considered as interest grows based on the recommendations in this roadmap to explore new policies, programs, and projects, and given the concerns over the availability of grants to support public funds.

Table 11: Infrastructure Ownership Models

Ownership Type	Ownership Role	Benefits	Key Considerations
Own, operate, and maintain	• City purchases infrastructure using capital funds and is responsible for operating and maintaining infrastructure	↑ **Minimal contracted maintenance costs** ↑ **Ability to generate revenue** via vehicle to grid technology ↑ Lower life-cycle cost	• Is City able to perform operations and maintenance on new infrastructure?
Public Private Partnership ("P3")	• Combines public sector dollars with private investment and operational knowledge in mix of infrastructure ownership, operation, and maintenance between City and counterparty • City negotiates monthly fee commensurate with the funding provided in the partnership.	↑ **City can explore use of federal, state, and/or local grants or incentives** to contribute to project funding ↑ **Relies on private partner to assume risk and responsibility** for installing and maintaining EV charging stations ↑ Potential for shared **revenue from grid** services.	• Important to explore City's operational and maintenance capabilities • Ensure proper risk transfer to counterparty • What is the term of the agreement? Does City want an option to purchase?
Third-party own, operate, maintain (e.g,., as-a-service)	• Third party finances, deploys, owns, operates, and maintains the charging infrastructure, including grant administration • City pays monthly fee for all-inclusive charging/energy-as-a-service	↑ **Transfers risk and cost** of planning, construction, ownership, maintenance, repair, and upgrades to a third party ↑ **Preserves capital** for other projects	• Contract governance critical to effective management • Proper risk transfer • Contract structure that allows operational flexibility and technology upgrades

The capital purchase model involves the direct acquisition of EV charging infrastructure by the City. This approach would give the City total control over the construction and operations of the assets, allowing for customization to meet specific needs. It also provides the potential for long-term cost savings, as the owner avoids ongoing service fees. This model is the lowest lifecycle cost of the three models but requires significant upfront investment and places the burden of operation, maintenance, upgrades, and technology obsolescence on the owner.

P3s offer a middle ground between full ownership and outsourcing. In this model, the City would collaborate with private companies to share the costs, risks, and rewards of EV infrastructure development. P3s can leverage private sector expertise and capital while allowing public entities to maintain some control and ensure public interests are met. This approach can accelerate deployment and reduce financial strain on public budgets. However, P3s require careful negotiation and management to ensure balanced risk allocation and alignment of goals between partners.

The as-a-service model, also known as charging as a service (CaaS) for EV specific infrastructure, has been steadily gaining popularity in the EV space due to its flexibility and reduced upfront costs. In this model, a service provider owns, installs, and maintains the charging infrastructure while users or a client pays for usage, or even a subscription model with a structured availability payment. This approach minimizes capital expenditure and technical risks for the City, as the service provider handles operations and maintenance against specified performance goals. This model supports the utilization of City-owned real-estate for the benefit of public charging while mitigating cost and operational risk with a 3rd party. It also offers scalability, allowing organizations

to adjust their EV infrastructure capacity as needs change. However, this model generally results in a larger total lifecycle cost and requires careful planning for performance and risk mitigation to ensure the City will receive the best services for the increased lifecycle cost.

Choosing the right ownership model depends on various factors, including available capital, risk tolerance, desired level of control, and long-term EV adoption plans. Grants, credit, and incentive-based funds can help support capital investments from the City but the shrinking opportunity for these funds and the risks and costs associated with operations and maintenance need to be assessed with every project to understand the best ownership model. The city must carefully evaluate their specific needs, resources, and goals to determine which model aligns best with their overall strategy for EV infrastructure deployment.

6.2. Public Funding & Coordination Opportunities

Another funding opportunity, albeit uncertain under the current federal administration, is the CFI grant awarded to the City for the deployment of 118 new EV chargers. If eventually disbursed, these funds may be available for both Level 2 and DCFC technologies with many different locations across the city being reviewed for installation. The grant application, although not guaranteed to be funded, can be used nonetheless as a great north star for initial EV infrastructure planning. The application already includes prioritized locations for chargers and even if the funding is not disbursed, the City should still take advantage of the already performed analysis. This uncertainty can also be used as an opportunity to re-evaluate the analysis and sites prioritized in the grant application to coordinate immediate next steps with the projects, policies, and programs recommended in this roadmap. This is an opportunity to align resilience strategies and technologies with the locations and charger technologies recommended and incorporate strategies to ensure the public's feedback and goals are incorporated into the next steps with charger deployment. Next steps should also coordinate with other ongoing non-city owned electrification projects to share best practices and coordinate on any design and resilience opportunity overlap. Some opportunities active in the short term are the $71M Bus and Low- and No-Emission Grant awarded to RTA, $23M EPA CSB Grant awarded to local transportation companies, $49M CPRG grant awarded to the City, and the Agriculture Street Landfill Redevelopment Project. This coordination even among non-city owned projects will be key to accelerating electrification and the city's Climate Action Plan.

Next steps and implementation from this Roadmap will require continued community engagement, sustained collaboration, innovative solutions, and strategic investments to drive electric transportation adoption and improve quality of life for all New Orleanians. By addressing the community's priorities, the City of New Orleans can lead the charge in creating a cleaner, more

inclusive transportation future while reaching its goal of reducing carbon emissions by 50% by 2035 and 40% of passenger and light-duty vehicles being electric by 2035.

Appendix A: Public Engagement and Community Outreach Summary

An online survey was established to develop a baseline of insight into resident opinions and feedback regarding the broad landscape of electrified transportation options – as drivers/owners, riders/passengers, and to inform the future development of a wider communication campaign. In addition to location-specific insight related to siting EV infrastructure, survey content also solicited feedback to inform strategic planning related to economic and workforce development. The survey was available in three languages: English, Spanish, and Vietnamese. It was made available to the public from October 31 – November 27, 2024. Detailed data analysis from the 23-question survey is available in the attached Appendix A.

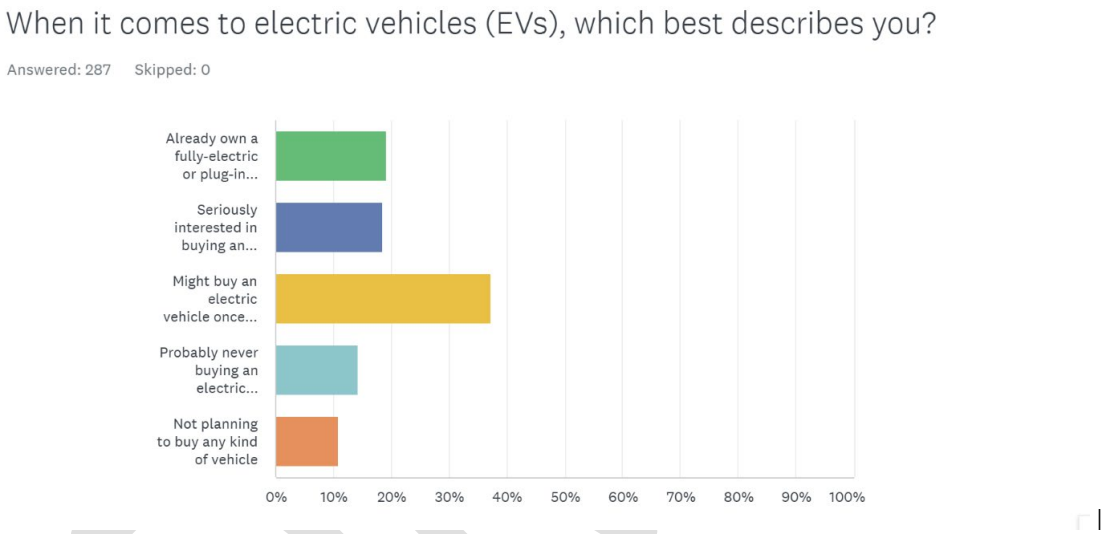

Figure 6: Electric Transportation Roadmap Survey; Question 9

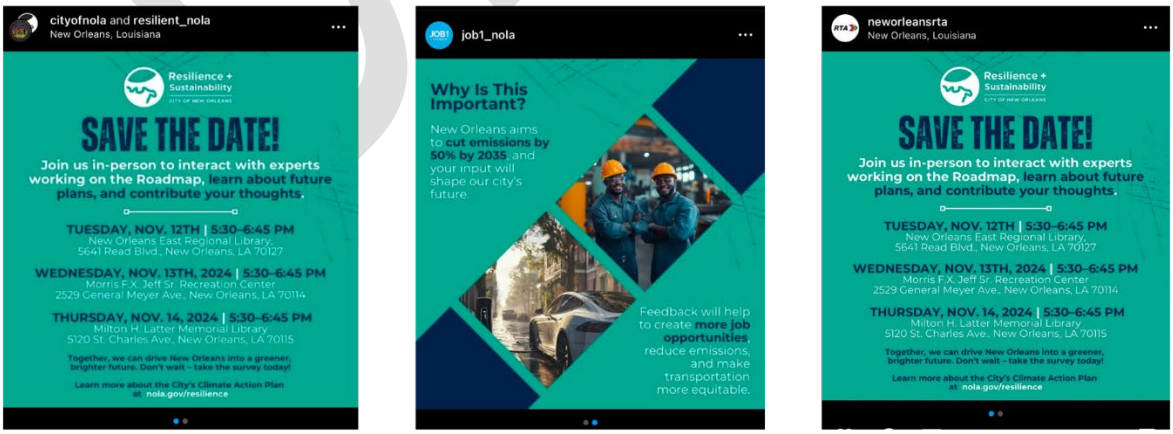

Figure 7: Social media posts announcing the Electric Transportation Roadmap initiative and community engagement opportunities

Community meetings were set to engage residents in-person and gather additional insight. Bright Moments ensured that each meeting was held in a different city council district, providing opportunities for all neighborhoods to be represented, with a particular focus on often-overlooked areas such as New Orleans East and the Westbank.

Attendees were given the opportunity to delve deeper into the project's purpose and share their thoughts on EV infrastructure. Three meetings were held November 12-14 in New Orleans East, Algiers, and Uptown to represent all the City's districts.

The meetings followed an "open house" format to encourage residents to participate in a more interactive and relaxed setting rather than a lecture-style presentation. This approach ensured that all opinions and feedback were not only captured but respected, fostering a genuine sense of community feedback.

The community meetings' open house format had two informational stations and four stations focused on capturing structured and live feedback. The four feedback stations were:

1. Charging Infrastructure Location Heat Map Station: Collected resident feedback on preferred locations for EV chargers across the city. Using a map of Orleans Parish, attendees placed pushpins to specify the exact sites where they would like EV charging stations installed.

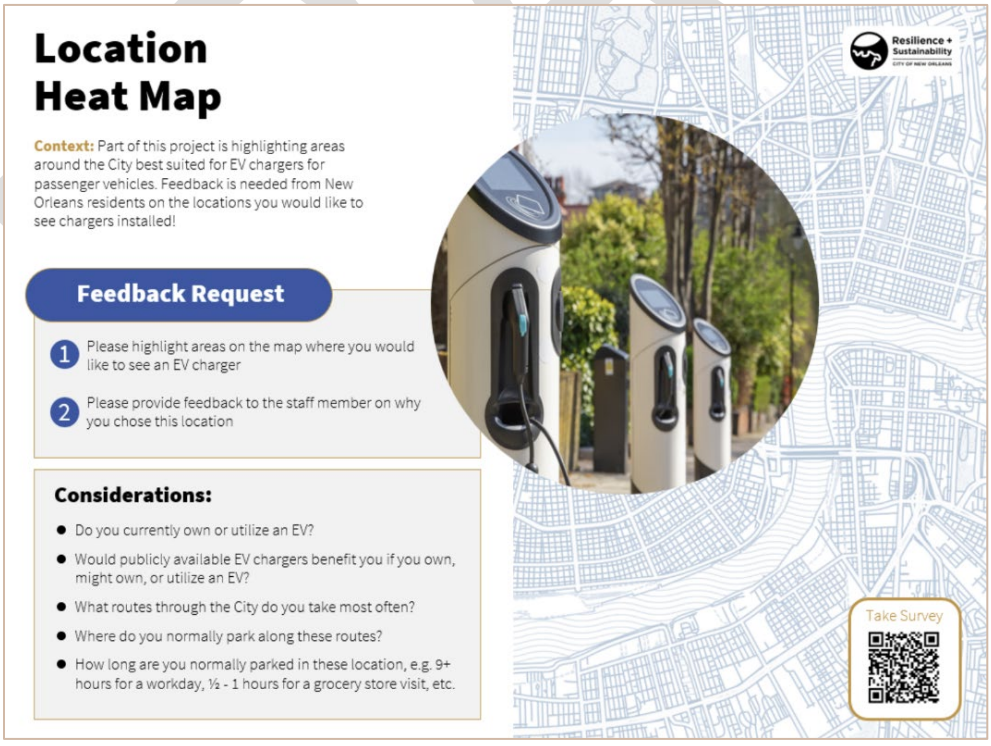

Figure 8: Location Heat Map Station

2. EV Challenges and Opportunities Station: Residents interacted with feedback boards to share their perspectives on electric vehicles. The boards were divided into three sections: challenges of EV adoption, benefits of EVs, and recommendations for increasing access to EV charging. Participants used pins to indicate their priorities, providing the City with actionable insights into public sentiment.

Figure 9: EV Challenges and Opportunities Station

3. What Are We Missing? Station: Residents were asked to respond to five open-ended questions regarding gaps and opportunities in electric transportation, as written in the figure below. Attendees shared thoughts verbally with a project representative, who then recorded their input.

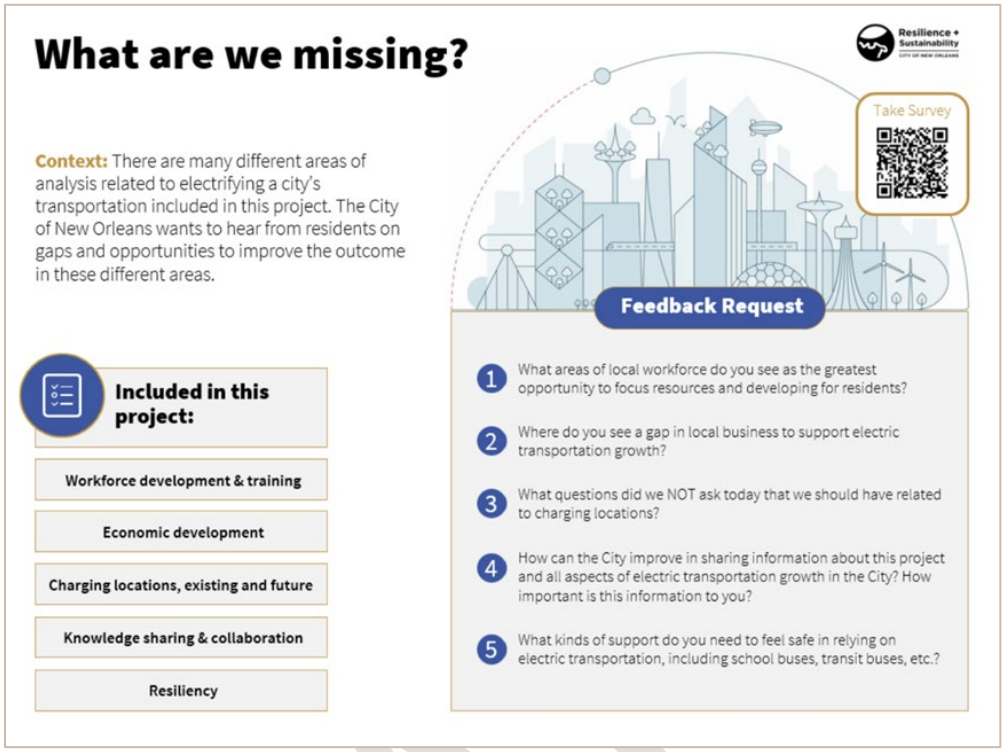

Figure 10: What are we missing? Station

4. Beyond Personal EVs Station: Asked attendees to answer 3 open-ended questions when thinking about challenges and concerns regarding other forms of electric transportation.

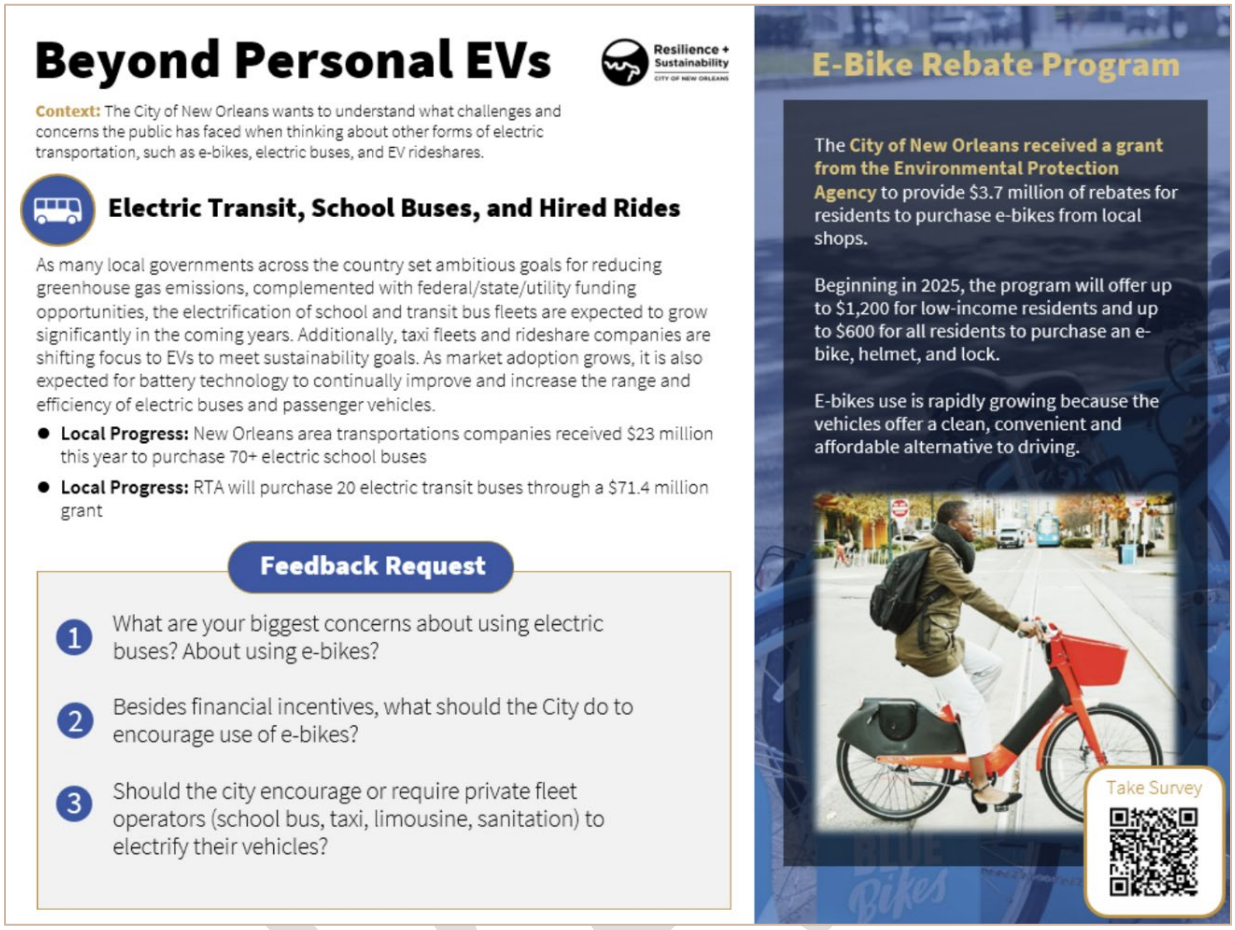

Figure 11: Beyond Personal EVs Station

Detailed Feedback from Public Engagement Survey

See All Survey Results for Spanish Speaking Respondents

See All Survey Results for English Speaking Respondents

Key Challenges

While many residents recognize the environmental and cost-saving benefits of EVs, two major concerns dominate the conversation:

1. Charging Accessibility: 81% of respondents indicated that the unavailability or unreliability of charging stations at key destinations such as workplaces, schools, and shopping areas. This gap hinders the practicality of EV ownership for many. Specific resident comments were:
    a. *"Fast chargers (level 3) or better the 125kw charger are more beneficial to the public than level 2 chargers. Time is a precious commodity and waiting for hours to charge in public is not sustainable for public use. Charging for 30-40 minutes is annoying but doable. Having multiple chargers will also be needed to avoid 'waiting in line'"*
    b. *"People who both live here and visit here need to know they won't run out of charge while in the City. EV stations need to be installed in as many places as possible so it is as common as a gas station (but in more strategic locations)."*
    c. *"NOLA needs more fast chargers. People that come into town for, say, meetings or seminars should be able to charge quickly to return home. At current there are no CCS fast chargers on the east Bank in Orleans Parish."*
    d. *"I would love for my next vehicle to be an EV, but I have no way to charge it at home (no garage, no driveway, I live on the second floor). Having accessible charging stations, ideally in places I already go, is key to whether I choose an EV."*
    e. *"Provide access to everyone. Don't just throw out a proposal and limit it to just a few!!! Let the whole city prosper if you want this to work."*
    f. *"Ensure equitable distribution in underserved neighborhoods."*
2. Grid Reliability: 48.59% of respondents express doubts about the reliability of New Orleans' electric grid to support consistent EV charging. This concern highlights the city's broader infrastructure challenges.

These barriers represent the most significant hurdles to widespread EV adoption in the city and require urgent attention.

Opportunities for Action

Residents were also clear about the steps the City of New Orleans can take to address these challenges and increase access to EV charging:

1. Expand Charging Station Access: 58% of respondents want the city to increase the quantity of EV charging locations and ensure accessible payment options, avoiding barriers like membership requirements or mandatory app downloads.
2. Offer Better Financial Incentives: 39% of respondents emphasized the need for improved financial incentives, particularly for low-income residents, for both new and used EVs. These incentives should be applied at the point of sale to maximize impact. Specific comments were:
    a. *"Implement financial incentives like subsidies for low-income residents."*
    b. *"It would also be helpful to incentivize auto dealers to offer easy and clear maintenance on ebikes and EVs."*
    c. *"Build out charging infrastructure across the city and provide incentives for low income buyers."*
3. Invest in Grid Resilience: Building a more reliable and robust electric grid is essential to instilling confidence in EV ownership and use. Enhancing grid capacity and stability can simultaneously support broader electrification goals.

Momentum for Change

Residents are increasingly primed for a shift toward EV adoption. 55 respondents stated they already own an EV, 54 respondents stated they are seriously considering purchasing one, and 110 stated they might buy an EV once issues like cost and infrastructure are resolved. Notably, 37% of respondents indicated they might consider purchasing an EV once the problems are worked out and prices become more affordable. This growing interest provides a solid foundation for driving the transition to electric mobility.

Top Survey Results

Key Demographics

- Age: The majority of English-speaking respondents are in the 35–44 age group, while Spanish-speaking respondents predominantly fall in the 45–64 range.
- Gender: Both groups have a higher proportion of female respondents, with a notably larger female representation among Spanish speakers.
- Race/Ethnicity: Respondents are predominantly White

- Income: English-speaking respondents report higher income levels, with over 53% earning more than $100,000. In contrast, Spanish-speaking respondents predominantly earn less than $30,000.

Key Findings

Transportation Habits

- Modes of Transportation:
  - Car usage: Majority of respondents (61.97%) drive daily.
  - Walking and public transport: Significant, with occasional use noted for bikes and rideshare.

Interest in EVs

- Current EV Ownership: 19.16% already own an EV or plug-in hybrid.
- Future Intent:
  - 18.47% seriously considering purchasing an EV within two years.
  - 37.28% might buy when cost and technology barriers improve.
  - 34.09% are unlikely or not planning to buy any vehicle.

EV Charging Behavior

- Charging Locations:
  - Predominantly at home (84.91% of EV owners).
  - 28.30% charge at work or use public facilities like Entergy's free stations.
- Charging Times:
  - Most respondents (47.17%) charge vehicles overnight (midnight to 6 a.m.).

Barriers to EV Adoption

- Top Concerns:
  - Cost of purchase (41.20% rated as very important).
  - Lack of reliable charging stations (59.04%).
  - Insufficient range for daily travel (33.73%).

Interest in Electric Bikes

- Willingness to Use:
  - 46.36% would consider eBikes for some trips, while 6.90% for all trips.

- Barriers:
    - Cost of purchase and maintenance cited as significant challenges.

Infrastructure Priorities

- Preferred Locations for Charging Stations:
    - At home (78.14%), workplaces (67.35%), and shopping/dining hubs (56.50%).
- Neighborhoods: While all areas listed had demand, there was a slightly higher demand for Mid-City, Lakeview, and Central Business District.

Insights and Recommendations

1. Expand Public Charging Infrastructure:
    a. Focus on Level 3 fast chargers in high-traffic and residential areas.
    b. Ensure equitable distribution in underserved neighborhoods.
2. Address Barriers to Adoption:
    a. Implement financial incentives like subsidies for low-income residents.
    b. Enhance public education on EV cost savings and environmental benefits.
        i. *"Enhance public education on EV cost savings and environmental benefits."*
        ii. *"Transition to EVs must combine culturally focused education + local financial incentives + expanded citywide locations charging station."*
        iii. *"Financial incentives, explained in clear language, to encourage / assist working people to buy an EV. Tax rebates, low or no interest loans, etc."*
        iv. *"Would it be possible to provide a property tax abatement for installation of EV charging equipment? Make it available to all property owners so that EV charging can be available to renters. It could even be a larger abatement if the charger is available to the public (for a fee). It would increase availability but also provide an additional income stream for property owners."*
3. Promote EV and eBike Usage:
    a. Support safer bike lanes to encourage eBike adoption.
        i. *"Please make more bike lanes / SAFER bike lanes that have a real physical barrier between the bikes/scooters and the cars and not just a painted line or a symbol on the ground. We have sooo much potential, it breaks my heart we don't have these things"*
        ii. *"I would focus on EV bikes and scooters. More EV cars won't help with congestion, and a lot of New Orleanians can't afford cars"*

iii. *"70 ebikes can be made with one EV car. We need a connected protected bike lane system to encourage ebike adoption. Denver has a great ebike rebate program but the lack of connected bike lanes is holding back mass adoption."*

b. Collaborate with employers to increase workplace charging access.

i. *"Take advantage of public/private partnerships by incentivizing the influx of traffic if a business had a fast electric charging station."*

4. Resiliency in Hurricane Scenarios:

a. Develop strategies for evacuation routes with reliable charging stations.

i. *"Develop strategies for evacuation routes with reliable charging stations."*

ii. *"Concern in Nola about power grid and need to evacuate - I'm not sure I'd be comfortable with a fully electric vehicle in the event of a major disaster and a need to evacuate."*

iii. *"Because of frequent hurricanes in this area, evacuating in an EV would not get me far. EVs would have to increase their distance or we will all be stuck on the side of the road waiting to charge during contraflow."*

iv. *"My biggest concern about having an EV in New Orleans is what would happen during a hurricane evacuation. If you are stuck in traffic, how could you charge your battery? Are there adequate charging stations in Mississippi, Alabama, other states which we would have to drive through? Also, what happens when the power goes out in New Orleans for several days after the storm and you can't evacuate because your battery is dead? These are the main reasons why I would consider a hybrid rather than full EV."*

b. Improve the city's electric grid to sustain increased EV usage.

i. *"Improve the city's electric grid to sustain increased EV usage."*

ii. *"Completely impractical in hurricane/flood prone area with fragile grid."*

iii. *"The city's poor infrastructure, which especially concerning power, is a greater disincentive to* purchasing *an EV than anything inherent in EVs themselves."*

iv. *"Fix the power grid so we don't experience so many outages. Spend the money putting the lines underground."*

Key Findings for Spanish Speaking Residents

Transportation Habits:

1. Car Usage: 69.23% of Spanish-speaking respondents reported daily car usage, higher than the overall average of 61.97%.
2. Walking: Notable preference for walking (38.46%) occasionally or daily.

Interest in EVs:

1. Current EV Ownership: None of the Spanish-speaking respondents reported owning an EV or plug-in hybrid.
2. Future Intent: 69.23% stated they were unlikely to purchase any type of vehicle soon.

Barriers to EV Adoption:

1. Cost remains the primary concern, with 50% rating EV purchase costs as very important.
2. Other concerns included:
    a. Difficulty maintaining EVs (33.33% rated it somewhat important).
    b. Limited access to reliable charging stations at destinations (50%).

EV Benefits:

1. "Never paying for gas" and "Good for the environment" were highly rated as very important by 66.67% and 80%, respectively.

Charging Preferences:

2. Preferred Locations: 100% indicated fast charging stations along highway corridors as very helpful, highlighting the importance of accessibility during long trips.

Electric Bikes:

1. Nearly half (46.15%) would consider using eBikes for some trips. This aligns with overall survey trends.

Specific Recommendations for Spanish-Speaking Communities:

Tailored Outreach: Provide educational materials in Spanish to increase awareness of EV benefits and available financial incentives.
Focus on Infrastructure: Prioritize fast-charging stations and affordable eBikes in communities with high car dependency.
Community Engagement: Host bilingual workshops or information sessions to address concerns about costs, maintenance, and accessibility.

Additional Data to Consider

Neighborhood Representation

High-Representation Zip Codes:

- **70119** stands out in both the English and Spanish surveys
- **70115** also features prominently

Housing

Single-Family Homes:

- English-speaking respondents are predominantly homeowners (80.51%).
- Spanish-speaking respondents are more likely to rent (80.00%).

Townhouses/Condominiums:

- English-speaking respondents are evenly split between renting (44.68%) and owning (46.81%).
- Spanish-speaking respondents lean towards renting (60.00%).

Apartment Complexes:

- English-speaking respondents are mostly renters (50.00%), but a notable share lives with someone (28.57%).
- Spanish-speaking respondents are mostly renters (60.00%).

Conclusion

The findings of this survey report underscore both the potential and the challenges of transitioning to electric transportation in New Orleans. Addressing key barriers to EV adoption—charging accessibility and grid reliability—while implementing resident-recommended solutions will build public confidence and accelerate progress. Through strategic investments, public education, and equitable infrastructure development, the city can ensure a sustainable transportation future for all.

Detailed Feedback from Community Outreach Meetings

Location Heat Map Station

Figure 12: Actual heat maps with resident feedback. See list below with pushpin locations.

Residents identified the following high priority intersections and neighborhoods for chargers:

WESTBANK

- Cutoff
- Tall Timbers Neighborhood
- Newton St. & Elmira Ave.
- Holy Cross Neighborhood
- Patterson Dr. & Kabel Dr.
- Newton St. & Sumner St.
- Lakewood Country Club – General DeGaulle & Kabel

UPTOWN

- Palmer & Claiborne/Turchin Stadium/Wilson Field vicinity
- Tchoupitoulas St. and Jefferson Ave./Winn Dixie shopping center
- Walmart on Tchoupitoulas St.

MIDCITY

- Canal St. medical corridor
- Home Depot

NEW ORLEANS EAST

Crowder Boulevard and Morrison Road.
Michoud and Poche Court West

Additional locations highlighted include 1) Hollygrove – Forshey Street., 2) East/Gentilly - Lakeshore/Lakevista, 3) 7th Ward & St. Roch - Elysian Fields/I-10 interchange + North Roman/St. Anthony intersection, and 4) Superdome.

Next Steps

These identified locations provide a clear roadmap for the City in prioritizing siting of future EV infrastructure investments. By focusing on these high-priority areas, the City can strategically allocate resources to address both demand hotspots and equity gaps, ensuring widespread access to EV charging across neighborhoods.

EV Challenges and Opportunities Station

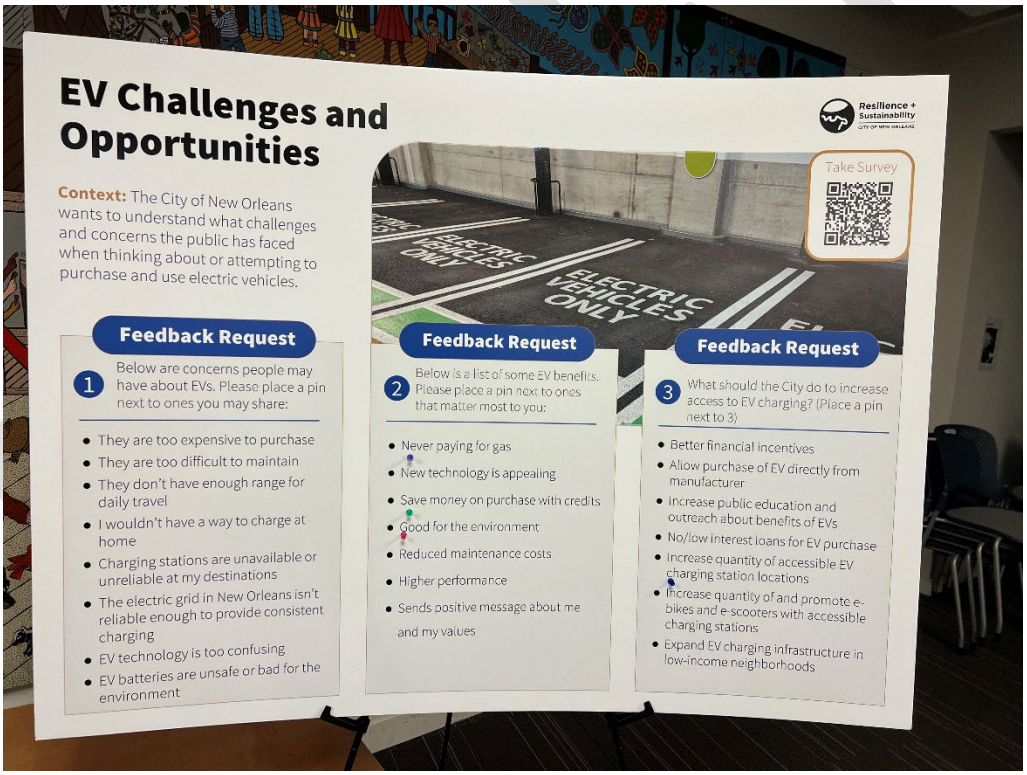

Figure 13: Station 4 - EV Challenges and Opportunities from New Orleans East Community Meeting on 11/12/2024 with resident responses.

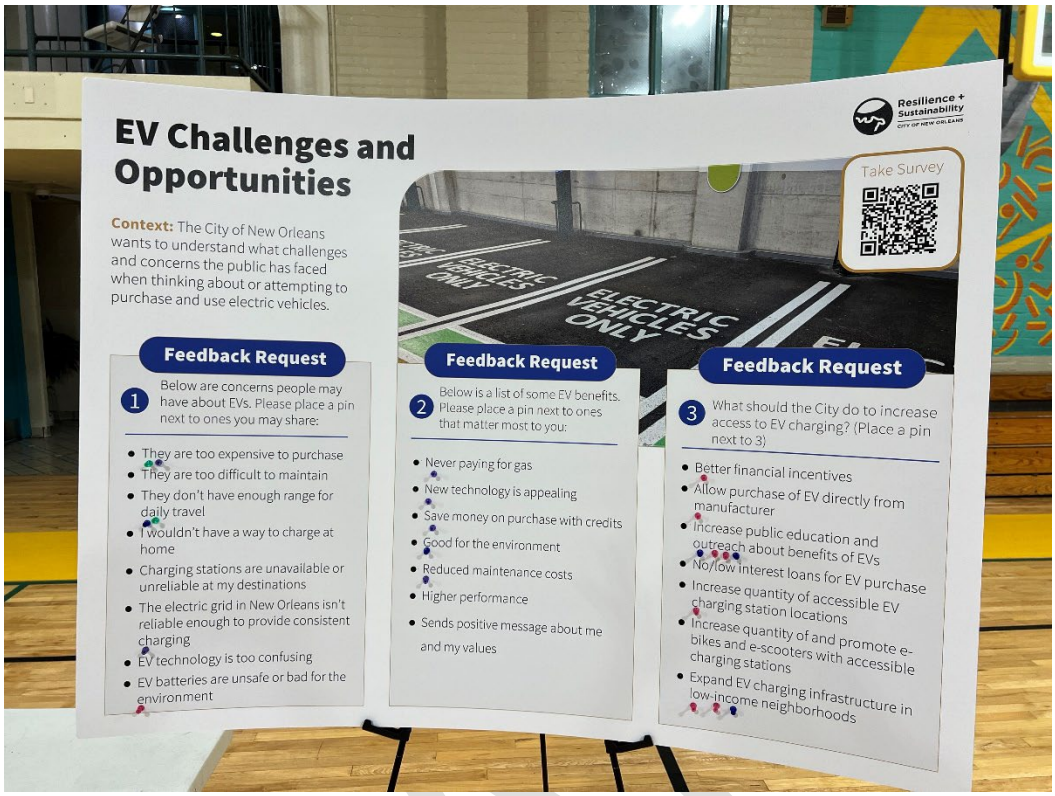

Figure 14: Station 4 - EV Challenges and Opportunities from Westbank Community Meeting on 11/13/2024 with resident responses.

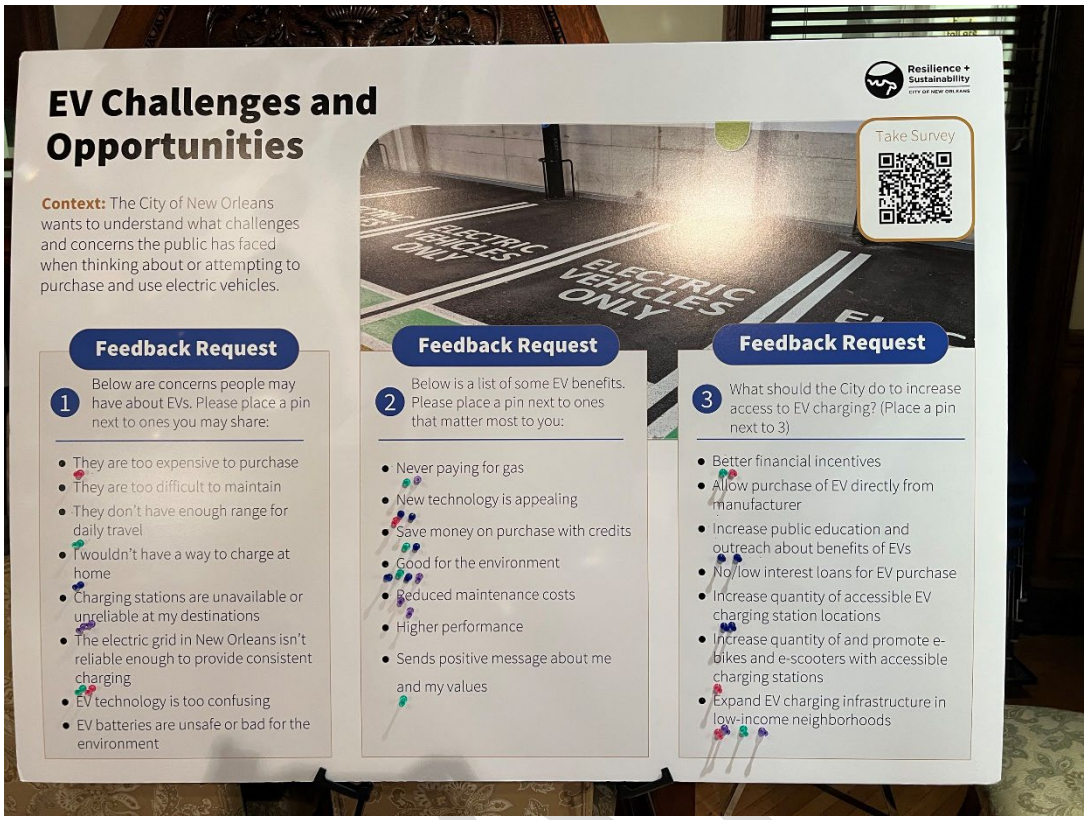

Figure 15: Station 4 - EV Challenges and Opportunities from Uptown Community Meeting on 11/14/2024 with resident responses.

Key findings included a focus on the high cost of EVs, with participants emphasizing the need for better financial incentives. Other top concerns involved charging station availability and grid reliability, which many residents cited as barriers to adoption. Highlighted benefits included long-term cost savings and environmental advantages, demonstrating public awareness of EV potential.

Benefits

Top 3 Benefits meeting attendees highlighted include: 1) Good for the environment 2) New technology is appealing, and 3) Never paying for gas.

Residents mentioned these additional benefits:

- Having a VPP paired with EV charging to compensate EV users / save them money when charging
- [EVs] improve air quality locally
- Greater EV adoption and initiatives can put the city on a spotlight
- [EVs are a] great option for low mileage/day drivers

Concerns

Top 3 Concerns meeting attendees highlighted include: 1) They are too expensive to purchase, 2) They don't have enough range for daily travel, and 3) The electric grid in New Orleans isn't reliable enough to provide consistent charging.

Residents mentioned these additional concerns:

- More general understanding / general training [and educational] programs on how EV tech works, what does battery look like
- Safety concerns while waiting [for an EV] to charge
- [EVs are] 2X the weight of ICE vehicles; potential impacts on city roads [from heavier vehicles]
- Concern of lack of chargers in towns that residents are evacuating to
- Required electrical upgrades to charge at home
- Concern of diminished car quality on city's roads that require improvement

More Access

Top 3 ways to increase access to charging include: 1) Expand EV charging infrastructure in low-income neighborhoods, 2) Increase public education and outreach about benefits of EVs, and 3) Increase quantity of accessible EV charging stations

Residents mentioned these additional ways to increase access:

- Incentivize of reduce EV charging rates ($/kwh)
- Not enough awareness on EV cost, not as expensive as people think
- Dedicated EV parking spots [with enforcement to ensure] that non-EV users won't take [these spots]
- More fast chargers for out-of-town people, especially tourists
- Remove permitting fees for installing at-home chargers
- Service to come to you to fast charge
- Site chargers at grocery stores and gas stations off the highway

Next Steps

The robust public engagement has extensively informed the City's future electric transportation priorities in this roadmap. As a result of the survey and community meeting feedback, the City will incorporate these considerations into the following future electric transportation initiatives.

Address Charging Concerns:

- Increase the availability of fast chargers, especially in areas prioritized from resident feedback and for residents evacuating during emergencies.

- Remove permitting fees for installing home chargers and explore mobile fast-charging services.

Improve Awareness and Training:

- Conduct general educational programs on EV technology and battery use.
- Emphasize the cost savings of EV ownership to counter misconceptions about affordability.

Promote Equity and Safety:

- Dedicate EV-only parking spots to prevent misuse.
- Enhance safety at charging stations by ensuring well-lit areas.
- Site EV charging infrastructure in underserved neighborhoods

What Are We Missing? Station

At this station, types of workforce locations that attendees noted with the greatest opportunity to focus developing resources and opportunities for residents include New Orleans Career Center, Delgado Community College, The Urban League, New Orleans Apprenticeship Administrators, Southeastern Louisiana Building and Construction Trades Louisiana, Community Lighthouse and automotive dealerships. Attendees also shared these specific opportunities:

- Trade schools to offer [repair and technician training] grants to minority populations
- [Train] high voltage technicians to work on charging stations
- [Create or promote] certification for electrical vehicle repair

Supportive organizations to fill gaps in electric transportation growth mentioned include religious and faith community institutions, schools, neighborhood associations, non-profit organizations, shopping malls, surface parking lots like those owned by Premium Parking, casinos, grocery stores, hospitals, universities, hotels, and the Superdome.

Attendees also provided feedback not discussed in other stations including consideration of asthma and other illnesses impacted by air quality, the fire hazards associated with EVs, and community misuse – (i.e. residents not understanding how to use the charging stations).

The following are responses to, *What kinds of support do you need to feel safe in relying on electric transportation, including school buses, transit buses, etc.?* The responses revealed a mix of ideas and questions from attendees:

- [Promote] resiliency by incentivizing consumer conservation of energy

- Consolidation of vehicles to travel; vehicle sharing
- Better identification of public vs. private charging stations and clearer directions on how to use them
- What will the support system [look like] for repairs [specifically in the event of breakdowns?
- Breakdown in emergency situations
- Financial support of assistance for owners
- Microgrid programs, etc.; Battery power
- Solar integration
- Servicing of vehicles: in person dealerships or providers; remote; local providers to service
- Hardware challenges on the vehicle; life expectancy (accuracy of what is promoted)
- Portable battery chargers in the event a charger is not ready
- Safety factor with lighting considerations where chargers are located
- Rain gardens [at charging stations] to catch the overflow of water during bad weather situations
- How does water impact the equipment?
  More efficient public transportation
  Additional locations that are closer together to be able to charge
- Priority Transportation Pass Package to minimize congestion

Next Steps

The feedback gathered from residents at the What's Missing station highlighted gaps in the current framework for engaging the community on electric transportation. By identifying these unasked questions, the City can ensure that future engagement efforts provide residents with opportunities to voice concerns and address topics of personal and collective importance. The following recommendations aim to incorporate these insights into a more inclusive and comprehensive strategy moving forward.

Strategic Location of Chargers: Install chargers at key community hubs such as religious institutions, schools, grocery stores, shopping malls, and high-traffic areas like surface parking lots and the Superdome.

Community and Workforce Engagement: Partner with organizations such as neighborhood associations, Delgado, and the Urban League to support EV initiatives through workforce training, apprenticeships, and public education.

Address Usability and Safety: Simplify navigation with clearer instructions for public and private charging stations and improve safety with better lighting and maintenance support.

Beyond Personal EVs Station

When asked their biggest concerns about using electric buses and e-bikes, community meeting attendees shared the following:

- Need safe/secure bike storage, including a garage
- Bike lane coverage
- More protected bikeways; policing – protected
- Downtown Transit Center & uptown provide bike policy
- Infrastructure for safe[r] bicycling, especially uptown around k-12 schools
- Additional bike parking at retail [stores]
- Prevent [vehicle] parking in bike lanes
- Better warning [signage] of off ramps / on ramps on Broad overpass
- Improve safety on S. Claiborne Ave. at Napoleon Ave. /Louisiana Ave.
- Improve safety on Magazine St.
- Provide [transit] passes to low-income people
- Need RTA buses to have more rack capacity; 2 [is] not enough

When asked how the City can encourage use of e-bikes, aside from financial incentives, community meeting attendees shared the following perspectives:

- Incentivize rebates for students to adopt e-bikes
- Using e-bikes as a [replacement for a] car; solution to high cost of [car] ownership
- General education and awareness campaigns; let people know other cities do this
- Promote electronic tricycles. especially for older residents
- Combine chargers with light fixtures, parking meters
- Partner with retailers and restaurants [to promote accessible e-bike parking and storage]

When asked if the City should encourage or require private fleet operators (school bus, taxi, limousine, sanitation) to electrify their vehicles, community meeting attendees shared the following perspectives:

- Yes, especially school buses
- E-buses can solve neighborhood noise pollution
- Also include delivery vehicles: ferries
- Include 15 passenger vans
- City vehicles - meter readers, etc.
- Needs DCFC chargers; locate at airport for taxis

- Encourage, but [do] not require [electrification] for private[ly] owned fleets via bigger rebates
- Consider making fares lower on electric RTA buses
- Yes, incentivize [electrification] with [promoting] lower maintenance and fuel costs
- Don't impose [electrification] requirements on small businesses
- Target Mardi Gras floats [for electrification]

Next Steps

This station highlighted the growing interest in e-bike adoption and the potential for electrifying fleet vehicles. Participants emphasized the need for improved infrastructure, such as protected bike lanes and accessible charging options, to support these transitions. Expanding these efforts will ensure greater equity in access and align with broader sustainability goals.

- E-Bikes: Expand protected bike lanes, incentivize adoption for low-income residents, and promote e-trikes for older adults.
- Fleet Electrification: Encourage electrification of school buses, taxis, and delivery fleets through incentives.

Infrastructure for E-Bikes:

- Expand protected bike lanes and add secure bike parking, especially near schools and retail areas.
- Develop infrastructure combining chargers with light fixtures and parking meters.

Promote Adoption through Incentives:

- Provide rebates for students and low-income residents to adopt e-bikes.
- Offer education campaigns on e-bike and e-trike benefits for diverse demographics, including older adults.

Electric Fleet Recommendations:

- Encourage electrification of fleets such as school buses, taxis, and city vehicles with incentives rather than strict requirements.
- Address the need for more DC fast chargers at strategic locations like airports for taxis.

Appendix B: Geographic Data Analysis & EV Charger Suitability Heat Maps

A number of factors go into site selection for EV charging: the existing charging network; EV travel patterns; transportation factors such as roadway classification, traffic, parking, and designated alternative fuel corridors; compatibility with current and future land uses; locations of underserved or overburdened communities; electrical grid capacity and availability of supporting utility infrastructure; and protection of sensitive land uses such as floodplains, wetlands, and cultural/historic resources.

At a conceptual level, the selection of an ideal site for EV charging is driven by three factors:

- Demand: Chargers should be highly utilized to achieve a return on public or private investment.
- Suitability: To the extent possible, chargers should be built at sites with existing supportive electric utility and transportation infrastructure.
- Equity: Historically underserved and overburdened communities should be prioritized in the site selection process.

To consider each of these factors and recommend ideal sites for charging infrastructure, a geographic information system (GIS) tool was employed. This analysis applied Stantec's ZEVDecide™ modeling tool, which integrates GIS layers describing each of the factors above to optimize site selection for future charging infrastructure. ZEVDecide™ utilizes a land suitability model framework in which each layer is assigned a weight and then combined into a heat map (Figure 16: Illustration of the ZEVDecide Land Suitability Model Framework).

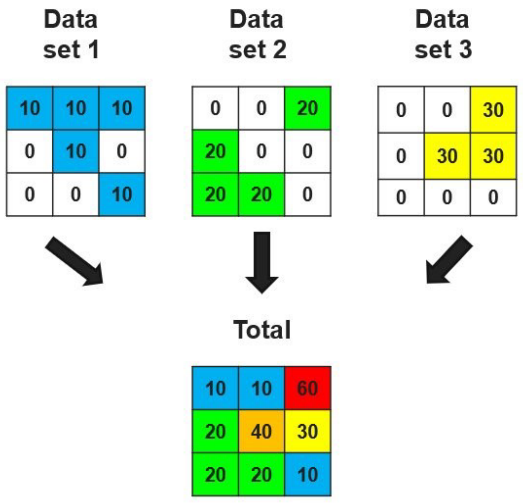

Figure 16: Illustration of the ZEVDecide Land Suitability Model Framework

The remainder of this section describes the GIS layer data used in the ZEVDecide™ analysis.

Existing Charging Network

The analysis first reviewed existing public EV charging infrastructure to help indicate where charging demand is currently being served and where there may be gaps in the network for future charging infrastructure to fulfill (Figure : Existing Charging Network**).** These existing charger locations were obtained from the Alternative Fuels Data Center (AFDC) on Energy.gov. This dataset also includes planned chargers, but there are currently no planned chargers within the study area according to the AFDC.

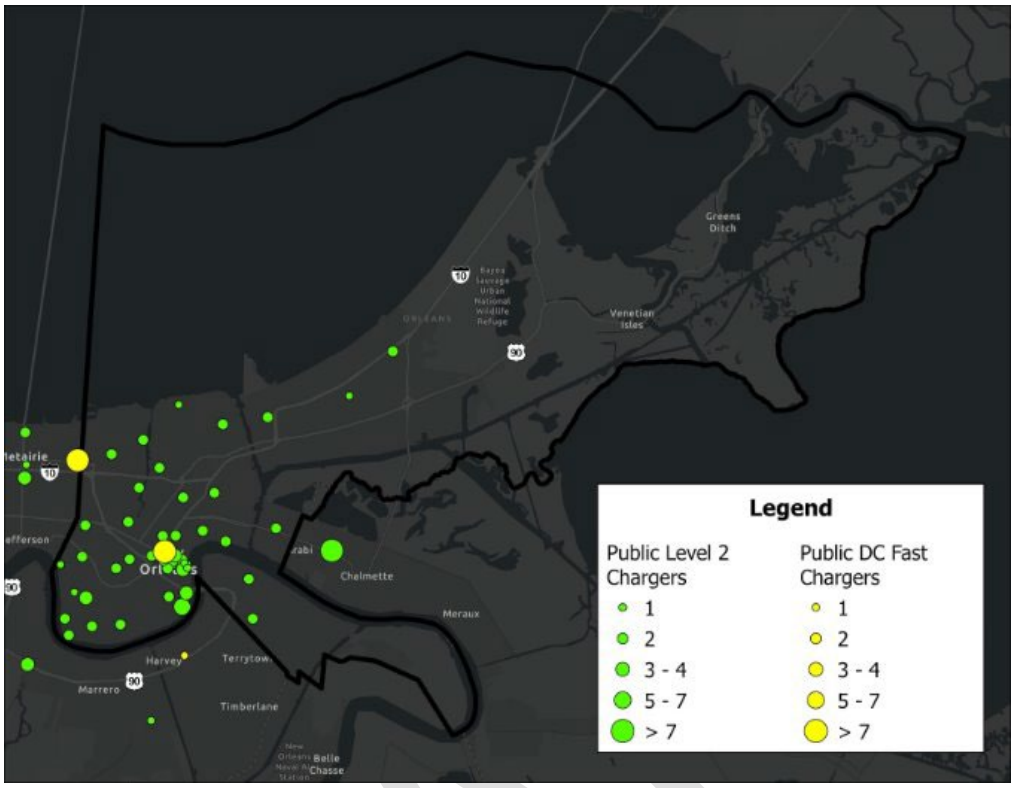

Figure 17: Existing Charging Network

EV Travel Patterns

Looking at current EV usage helps identify areas of potentially high charging demand. This analysis used traffic data from Replica, was filtered for private EVs only. Replica is a paid-service data provider that offers a range of nation-wide traffic data including traffic volumes, origin-destination data, and trip characteristics. Figure 3: EV Travel Patterns illustrates that private EV use is currently concentrated in the City core, as well as on I-10 in and out of the City.

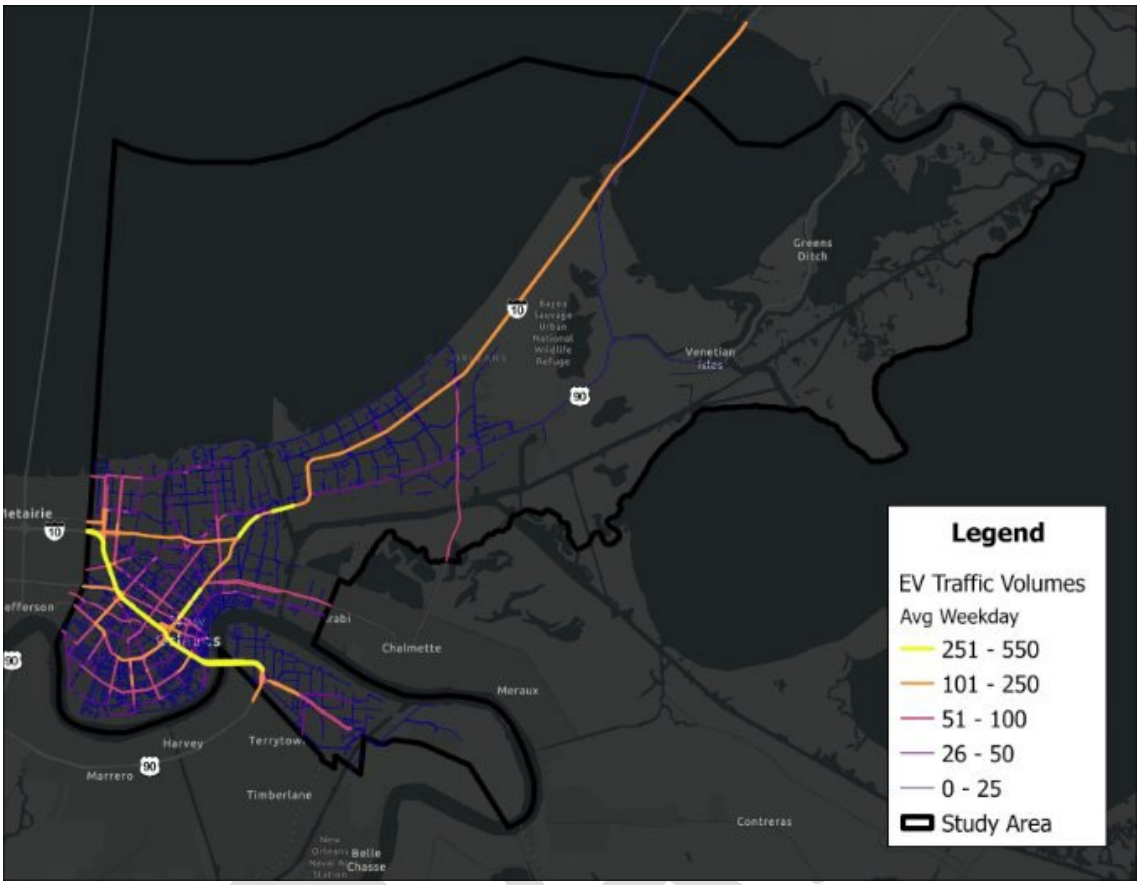

Figure 18: EV Travel Patterns

Alternative Fuel Corridor Network

The analysis then looked at alternative fuel corridors in the New Orleans area. The Federal Highway Administration designates these corridors to support the installation of EV charging infrastructure at strategic locations along major highways, making them eligible for federal funding and ensuring drivers of EV charging infrastructure availability, and therefore should be prioritized in EV charging planning Figure 4: Alternative Fuel Corridors shows the current designated Corridors in the New Orleans area. All AFCs in the study area are limited access facilities (e.g., interstates) are removed from the analysis since they do not provide direct access to the land uses. Instead, only areas where the AFCs connect to the local network are used.

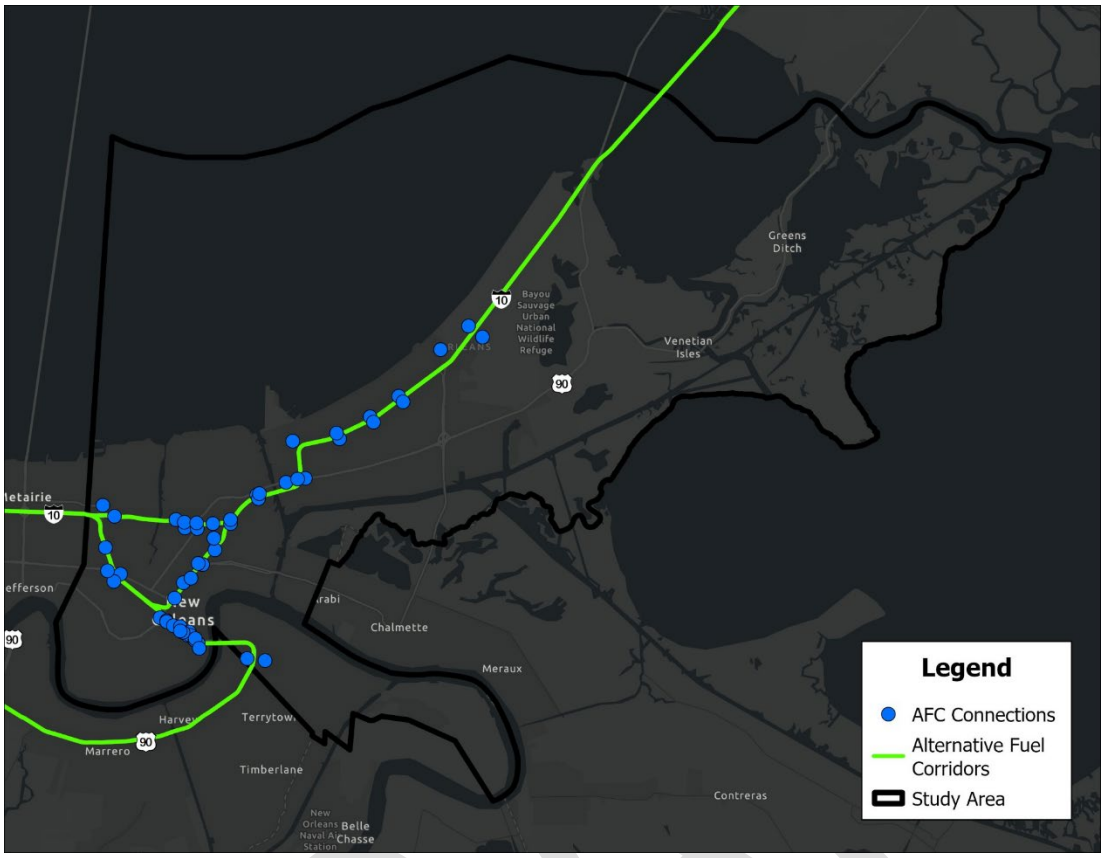

Figure 19: Alternative Fuel Corridors

Future Land Use

The analysis also takes into consideration future land use to help identify potential EV charging demand in terms of where people will need charging most, and land suitability in terms of where public charging should be built (Figure 5: Future Land Use). The Future Land Use data was acquired from the City of New Orleans Open Data website (data.nola.gov).

Based on discussions with the City, this analysis incorporates the following land use types:

- Residential
- Commercial
- Business
- Industrial
- Parks
- Cemeteries
- Institutional
- Downtown
- Mixed-use

- Planned future development
- Residential rural areas

These land uses are generally suitable for EV charging infrastructure as they are either publicly accessible and/or locations where people may park for a relatively long period of time. Each land use type will be weighted for likelihood and preference later in the analysis.

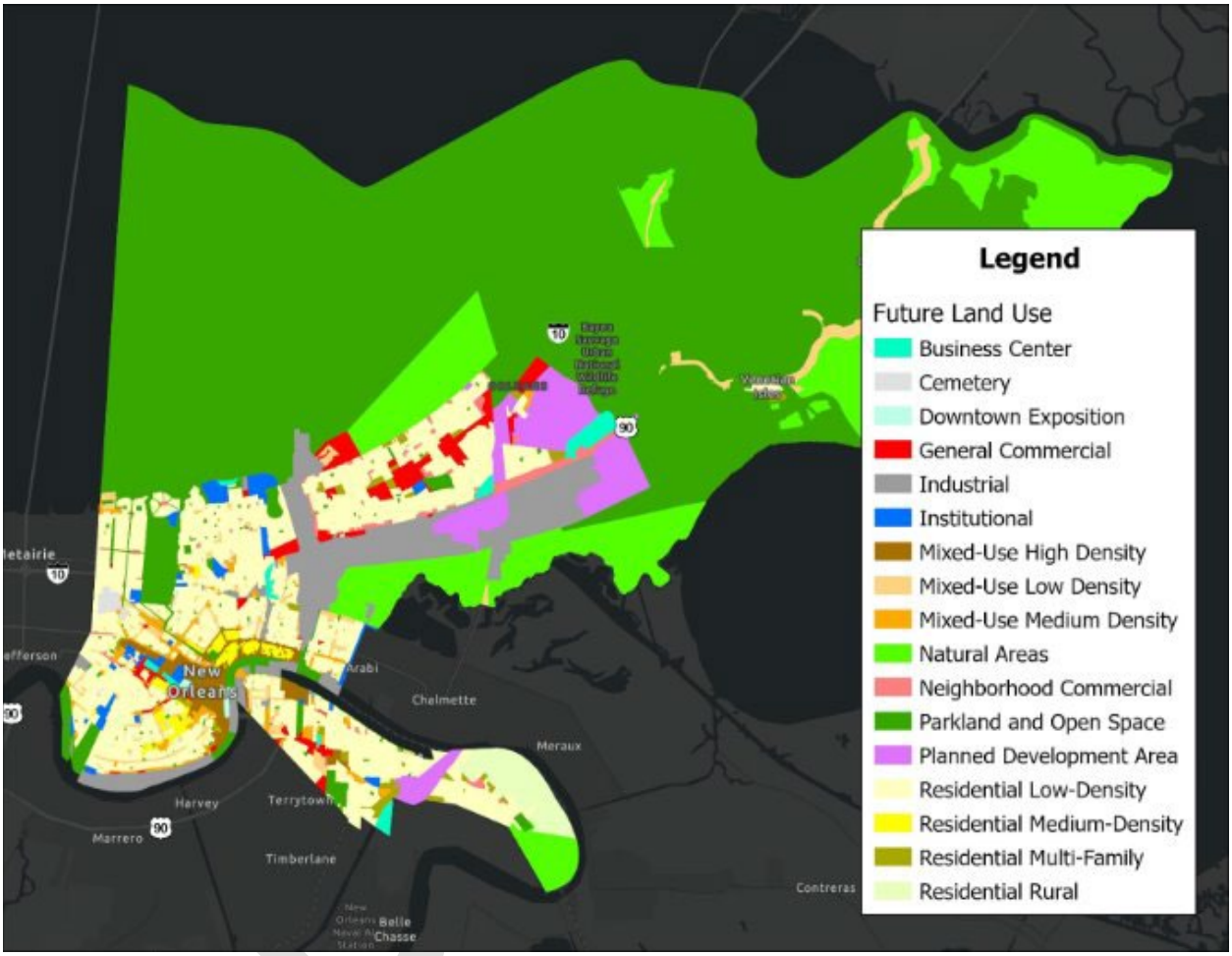

Figure 20: Future Land Use

Equitable Communities Index

The U.S. DOT Equitable Transportation Communities Index summarizes transportation, social, environmental, climate, and health burdens. A higher score indicates a higher level of burden. Figure 6: Equitable Communities Index shows the results for New Orleans. When deciding where to locate EV chargers, these higher burdened communities should be taken into account as priority areas that might typically be underinvested. Supportive initiatives like EV rebates and EV car sharing programs should also be considered for these communities.

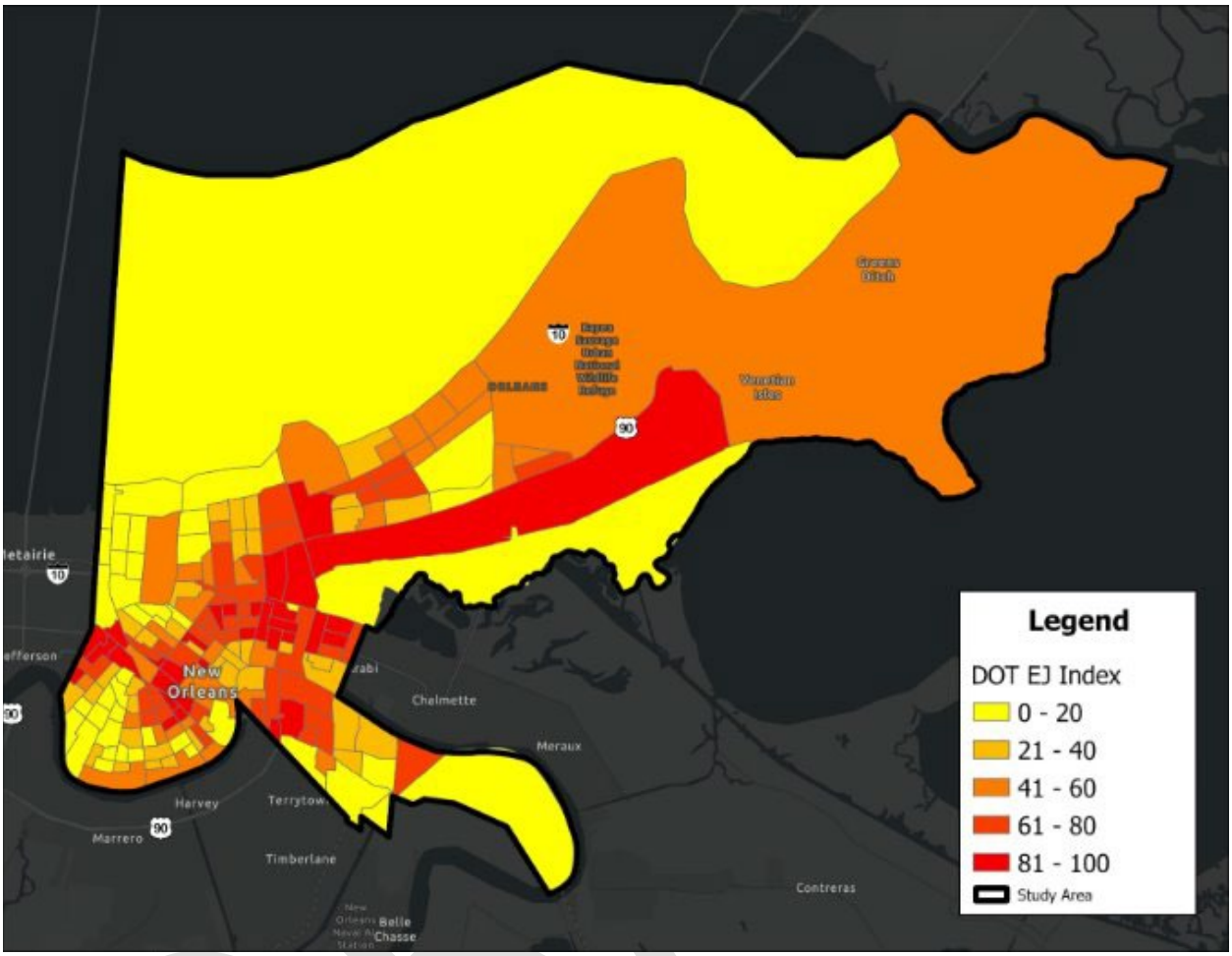

Figure 21: Equitable Communities Index

Utility Network

Proximity to high voltage power lines and substations may reduce installation costs for DC fast charging infrastructure and sites with multiple collocated Level 2 chargers. Identifying these locations can help the City prioritize initial EV charger siting that has lower upfront costs (Figure 7: Utility Network). Main power line data was acquired from OpenStreetMap.

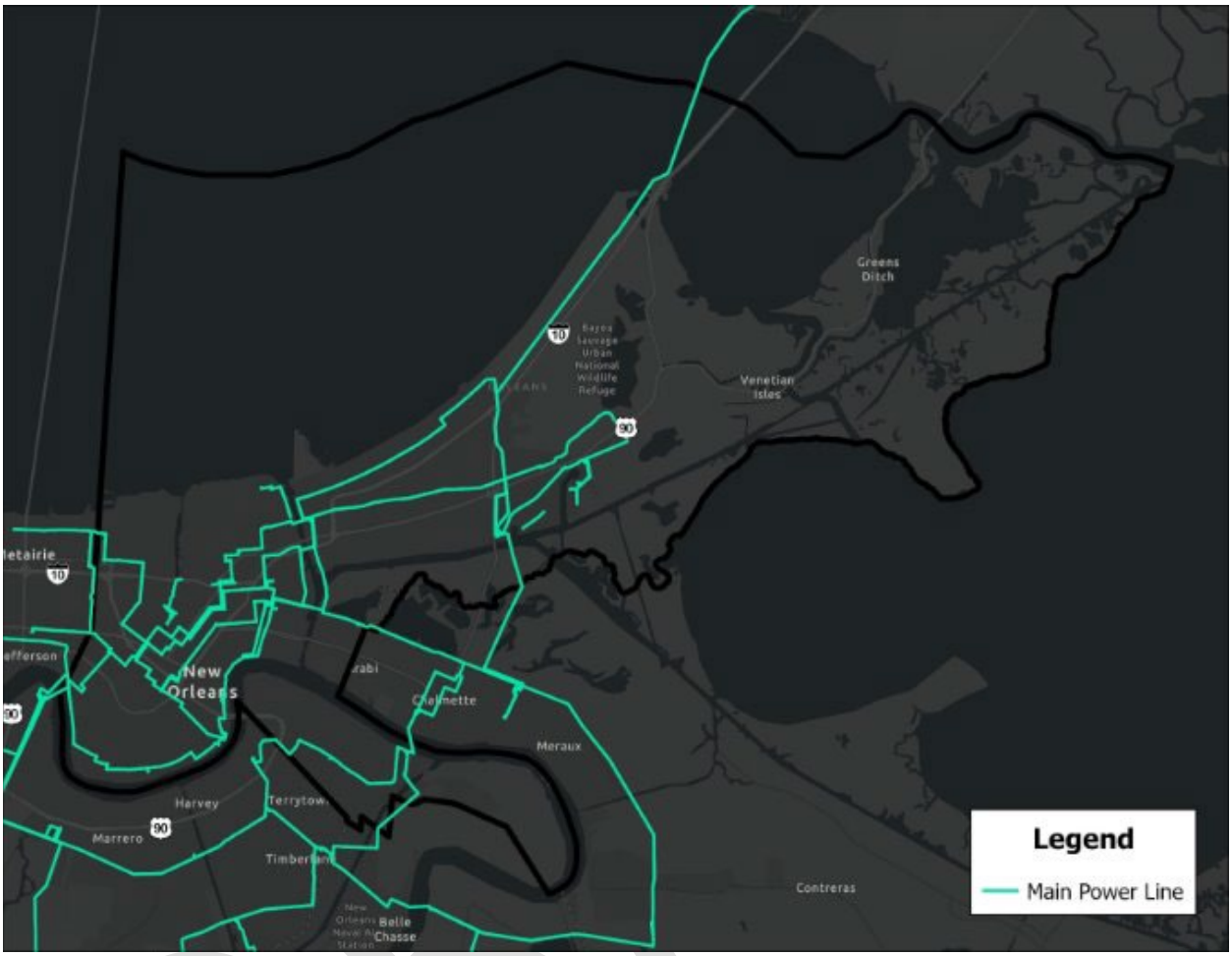

Figure 22: Utility Network

Hazards and Constraints

Land uses such as natural areas and water bodies that are not suitable locations for public charging are therefore removed from consideration. This dataset is specifically comprised of:

- Waterbodies and wetlands from the National Wetlands Inventory (NWI);
- Natural Areas land use designation from the City of New Orleans Future Land Use;
- Fish and Wildlife Service Boundaries; and
- Marshes, Nature Preservation, and Woodlands from the City of New Orleans Greenspace layer.

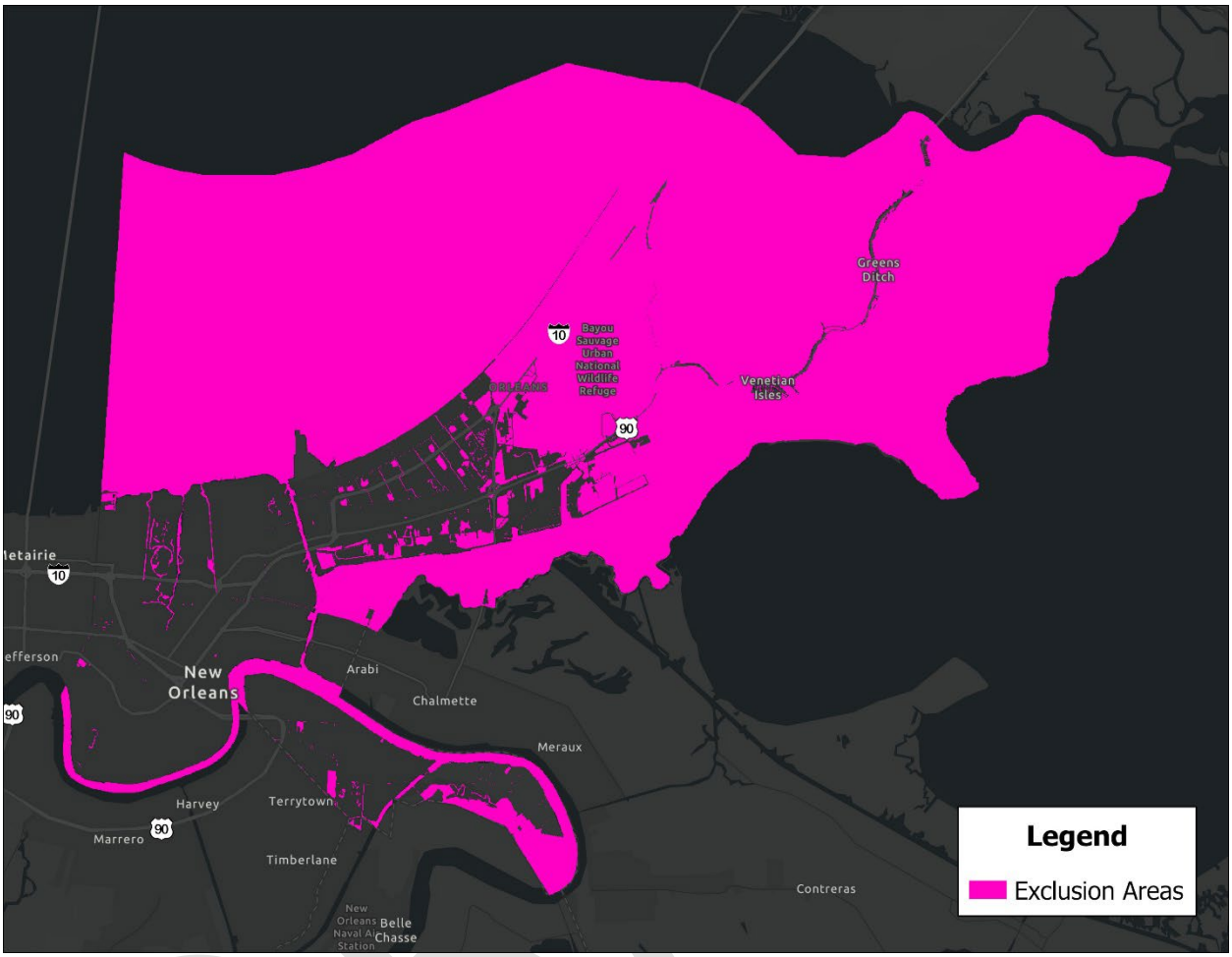

Figure 23: Exclusion Areas

Appendix C: Electric Transportation Policy Memo

To: City of New Orleans Office of Resilience and Sustainability

From: JLL Electric Transportation Roadmap Project Team

Subject: Transportation Electrification Policy Memo

Objective

The City of New Orleans ("the City") has set ambitious goals of electrifying 40% of passenger and light-duty vehicles by 2035. While the City has policies and programs in place that promote decarbonization of the transportation sector, it is not on track to achieve its sustainable transportation goals. Moreover, State of Louisiana ("the State") transportation policies are creating additional headwinds the City must overcome to meet its goals. This policy memo summarizes the City's current transportation policy ecosystem, identifies policy gaps and areas to expand policy reach, and highlights potential policy solutions and best practices used in other markets. The memo is a tool to support a collaborative process with City staff and stakeholder engagement groups to identify specific policy solutions to incorporate into the City's Electric Transportation Roadmap.

Assessment of Current City Policy Landscape

The City has created a solid foundation of policy and code that have contributed to sustainable transportation improvements and emissions reduction, evidenced by its rank of 43 out of 100 for transportation policies in the 2024 American Council for an Energy Efficiency Economy (ACEEE) City Clean Energy Scorecard. The City was also one of only two cities out of 100 included in the scorecard that was singled out as a most improved city. Among the reasons listed for this sizeable improvement include updated zoning to require EV charging stations in new residential and commercial developments as well as establishing a 10-year plan to replace their fossil-fuel powered fleet vehicles.

A full list of applicable local policies, codes, and initiatives is included in Table 1 below.

TABLE 1: LOCAL TRANSPORTATION POLICIES AND INITIATIVES

Local Policy/Initiative	Description
2022 Climate Action Plan	Transportation goals include (a) 50% non-auto trips by 2030, (b) grow bike share fleet to 2000 by 2025, (c) electrifying 40% of passenger and light-duty vehicles by 2035.
Moving New Orleans - Transportation Action Plan	Four themes are (a) safety, (b) efficiency, (c) equity, and (d) connectivity
New Orleans RTA Strategic Mobility Plan	Roadmap for improving public transportation focused on improved comfort/convenience, improved/simplified service, new mobility options, better info and communication, stronger partnerships, and better accessibility.

New Orleans Comprehensive Zoning Ordinance	Several relevant sections. Article 28, section 5 deals with density bonuses and affordable housing. Article 28, section 7 deals with parking reductions. Both contribute to enabling mode shifting.
Complete Streets Policy and Program	All City departments in the planning, design, construction, operation and maintenance of all Projects adjacent to or within the public right-of-way, shall take a comprehensive and integrated approach within the context of the City's Complete Streets Program that considers and balances the needs of all users.
Regional Planning Commission 2022 Freight Mobility Plan	Plan has 13 objectives, only one of which is focused on reducing environmental impacts of freight activities. Some mentions of emissions reduction and workforce opportunities.
Proposed Annual Operating Budget	Annual opportunity to draw connections to other departments and budget line items with connectivity to sustainable transportation objectives.
Permitted Right of Way Charging	City permits EV owners to install electric vehicle supply equipment (EVSE) next to curb between their home and street.

To sustain the momentum created by these actions, this policy foundation must be fortified with additional policy solutions to achieve the scale of decarbonization needed for the City to achieve its transportation emissions reduction goals. To achieve its aspirational net zero carbon emissions goals, the City must leverage its authority to drive sustainable transportation policy solutions as well as utilize partnerships and incentives, particularly with entities that have the authority in specific areas of sustainable transportation.

Entergy New Orleans (ENO) is one such partner. Several active dockets governing ENO are currently with New Orleans City Council for consideration. Aspects of these dockets will contribute to an improved transportation policy landscape and chip away at some of the policy gaps identified through this work. Table 2 below summarizes those dockets and their respective focus.

TABLE 2: ACTIVE ENO DOCKETS WITH CITY COUNCIL

Docket Number	Docket Name	Status	Relevance
UD-22-03	Application of Entergy New Orleans, LLC for a battery storage demand response pilot program.	Phase 1 complete. Phase 2 under consideration to expand size and scope of pilot to more/different customer classes.	Potential to use Phase 2 to include Vehicle to Grid (V2G) applications.
UD-18-07	Application of Entergy New Orleans, LLC for a change in electric and gas rates.	ENO proposed Public Charging for Electric Vehicles Rate Schedule (ENO initial charging rate of $0.00 per kWh and an "idle fee" rate of $0.30 per minute to be applied after expiration of a thirty (30) minute grace period).	Potential to stimulate broader EV adoption and more efficient EVSE utilization.
UD-18-01	An inquiry into establishing a smart cities initiative for the City of New Orleans.	Council considering proposal from their advisory board that lists a 4-part recommendation for streamlining and expediting EVSE permitting process.	Expedite and stimulate EVSE installs due to simplified permitting process.
UD-18-02	EV charging and related regulatory issues.	Combined with docket UD-18-01 (smart cities initiative).	Refer to UD-18-01.

The State also has a mix of policies and initiatives that, taken together, provide conflicting signals on their commitment to supporting electric vehicle adoption. While the State has not introduced any restrictions on the resale of electricity by electric vehicle charging station suppliers, the State has not released requests for proposals to unlock their allocation of $73 million through the National Electric Vehicle Infrastructure (NEVI) program.

Table 3 lists the various state-level policies and initiatives impacting sustainable transportation goals. The City should contemplate the impact State level policies and initiatives could have on the success of the City's sustainable transportation goals.

TABLE 3: LOUISIANA TRANSPORTATION POLICIES AND INITIATIVES

LA State Policy/Initiative	Description	Enabling or Disabling
LA House Bill 1030, Act 578	Annual fee for EVs ($110) and hybrids ($60) for road usage.	Disabling
Preserving Vehicle Purchase Choice Act (status-introduced)	Prohibition on laws that restrict purchase of motor vehicles based on energy source.	Disabling
Louisiana Public Service Commission Docket R-36131	Identifies that any entity providing EV charging services is not defined as a public utility and is not subject to restrictions on the resale of electricity.	Enabling
LA HB 201 (status-pending senate finance)	State vehicle procurement contracts cannot cause state fleet EV quantities to exceed 3%.	Disabling
National Electric Vehicle Infrastructure Funding	$73M IIJA funds for EV infrastructure administered by LA DOTD and distributed through competitive grants.	Enabling
LA State Plan for EV Infrastructure Deployment	5-year plan with specific goals for each year.	Enabling
LA House Bill 60	Authorizes the Louisiana Commission of Weights and Measures to regulate EV charging Stations.	Enabling
RS 39:364	Purchases/leases of state fleet vehicles must be capable of using alternative fuels.	Disabling
Louisiana State Freight Mobility Plan	Table 10-3 lists policy recommendations and highlights those that address environmental stewardship, but emissions impact are minimal.	Neutral
LA Public Service Commission Rule Update on Private EVSE Infrastructure	Allows for private businesses to set up their own EVSE infrastructure.	Enabling

Policy Options

There is a myriad of policy options available to the City that can potentially support their sustainable transportation goals. The tables below categorize sustainable transportation policy leading practices organized around electrification and reductions in single occupancy vehicle (SOV) use. More specifically, the categories are organized as follows:

- Policies that increase the supply of EVs – Table 4

- Policies that increase the supply of EVSE – Table 5
- Policies that increase the utilization of EVs and EVSE – Table 6
- Policies that reduce SOV vehicle miles traveled (VMT) through electrification – Table 7

TABLE 4: POLICIES INCREASING SUPPLY OF EVs

Policy Category	Policy Description	Example City
Zoning Codes	Expand right-of-way charging to support high-mileage EVs.	Portland, OR
	Enact right-to-charge ordinances for multifamily housing.	State of Florida
Accessibility	Implement EV car share program with low income and disadvantaged communities (LIDAC) incentives.	Sacramento, CA
EV Purchase Incentives	Establish incentives for purchase of new/used EVs. Ensure they are transferable, refundable, and available at point of sale/purchase. Set eligibility tiers or limits based on income or vehicle price. Enable and/or support standardization and streamlining of incentive program applications. Create unique incentives for public/private fleet conversion.	State of Delaware
	Enact direct sales legislation to enable direct sales of EVs from manufacturer to consumer.	State of Wyoming
	Create zero and low interest loan program for consumer EV purchase. Explore development of a publicly backed financing entity to provide innovative financing mechanisms (green bank).	Seattle, WA
Electric Utility Partnership	Pilot projects to electrify more challenging EV classes (e.g. school buses, fire trucks, garbage trucks, etc.) in partnership with Entergy NOLA.	White Plains, NY
Electrification Mandate	Pass City Council resolution to electrify transit buses.	Chicago, IL

TABLE 5: POLICIES INCREASING SUPPLY OF EVSE

Policy Category	Policy Description	Example City
EVSE Purchase Incentives	Increase incentive/rebate for installation of EVSE	Austin Energy (TX)
	Create a pooled procurement program to buy EVSE in bulk.	Boston, MA
	Enable Entergy NOLA to offer on-bill financing for customers to procure EVSE.	Multiple Examples
Building Codes	Identify changes needed in comprehensive zoning ordinance (CZO) to remove barriers to EVSE. Require property owners/developers to install EVSE/infrastructure in new construction/major renovation building codes.	Atlanta, GA St. Louis, MO
Electric Utility Partnership	Require Entergy NOLA to fund installation/operation of more EVSE across the City. Consider co-locating LED streetlights and power poles with EV charging stations as one option to increase EVSE.	Seattle, WA
Freight	Electrify truck parking at ports.	State of Washington

TABLE 6: POLICIES INCREASING UTILIZATION OF EV/EVSE

Policy Category	Policy Description	Example City

Building Codes	Develop community informed EVSE siting guidance**.**	State of Washington
Traffic Priority	Allow EVs to use HOV lanes. Allow EV ride hailing vehicles to use bus-only lanes.	State of Arizona
	Establish a fee for drayage trucks to enter port. Exempt zero emission vehicles**.**	Port of Los Angeles
	Establish port priority access for EVs**.**	Freight
Freight	Replicate SoCal's Warehouse Actions and Investments to Reduce Emissions (WAIRE) program	Southern California

TABLE 7: POLICIES REDUCING SOV VMT THROUGH ELECTRIFICATION

Policy Subcategory	Policy Name	Example City
Zoning	Sustain and/or increase quantity of affordable housing near transit facilities**.**	Atlanta, GA
Mode Shift	Create specific mode shift targets to other forms of carbon free transportation beyond SOV reduction target**.**	Minneapolis, MN
	Create incentives for e-bikes/e-scooters to stimulate mode-shift and improve equity. Prioritize deployment of e-mobility solutions and infrastructure in communities with poor air quality. Include secure bike parking and access to charging outlets for e-bikes.	Inventory of e-bike incentive programs
	Strengthen complete streets policy to enable better connectivity and safety. Ensure placement of e-mobility options are connected to public transit.	Austin, TX
	Develop e-mobility programs coupled with case management, consumer education. Incentivize micromobility companies to invest in an extensive campaign on benefits/usage of e-scooters and e-bikes.	NYC Better Bike Share
	Enable increased access to high frequency transit, improved connectivity among various transportation options, and improve walking/biking options. Increase public transit services for LIDAC communities (around the clock, full day, rush hour)**.**	Cleveland, OH
	Establish equitable low-emission zones in high-traffic areas and in LIDAC neighborhoods. Create timelines and processes to transition these zones to zero emission zones.	London, UK Low Emission Zone Resource

This curated list of policy options will next be further refined by engaging City staff, Steering Committee, and Working Group members. They will help evaluate the efficacy of these polices across various metrics including, emissions reduction impact, equity, economic development potential, job creation potential, and financial incentive availability.

We also discovered some additional sustainable transportation policy best practices not directly related to vehicle electrification yet useful in reducing transportation sector emissions. Those policies are included in Appendix III of this report:

- Policies that reduce SOV VMT independent of electrification – Table 9
- Other sustainable transportation policies – Table 10

Available Financial Incentives

The City's ability to achieve its time-bound sustainable transportation goals is limited in part by the funding needed to implement policies, programs, and projects. Funding opportunities will be fully addressed in the Implementation Roadmap; however, the table below lists potential funding sources the City may pursue or leverage to support regional transportation electrification. These funding opportunities can be used to filter the potential policy solutions to those with strongest financial incentives.

The ability to achieve these ambitious goals is facilitated by the sizeable amount of federal financial assistance currently available. Each policy initiative contemplated and pursued should explore the range of financial incentives available to make sure progress is not limited by the City's annual budget. Table 8 lists some potential funding sources to consider

TABLE 8 POTENTIAL FUNDING SOURCES FOR SUSTAINABLE TRANSPORTATION INITIATIVES

Funding Opportunities	Details
IRS - Alternative Fuel Infrastructure Tax Credit	IRS Details
CFI – Charging and Fueling Infrastructure Grant Program	CFI Overview
Federal Highway Administration – Congestion Mitigation and AQ Improvement	Many types of projects are eligible under the CMAQ program including electric vehicles and charging stations, diesel engine replacements and retrofits, transit improvements, bicycle and pedestrian facilities, shared micromobility projects including shared scooter systems, and more.
FHA – Surface Transportation Block Grant Program	Flexible funding that may be used by States and localities for projects to preserve and improve the conditions and performance on any Federal-aid highway, bridge and tunnel projects on any public road, pedestrian and bicycle infrastructure, and transit capital projects, including intercity bus terminals.
DOE – Clean Cities and Communities	Efforts to implement alternative fuels, advanced vehicle technologies, and fuel-saving strategies.
VW Settlement Funds	Funding applications currently closed in Louisiana.
IIJA - NEVI Funding	EV-Infrastructure (la.gov)
IIJA – Clean School Bus Program	Clean School Bus Program | US EPA
IRA – Clean Heavy Duty Vehicles Grant Program	The EPA is offering funding to eligible recipients to replace existing non-zero-emission Class 6 and 7 heavy-duty vehicles with eligible Class 6 and 7 zero-emission vehicles. To support zero-emission vehicle adoption and deployment, funding may also be used for: zero-emission vehicle refueling infrastructure; workforce development and training; and project implementation costs.

* *Refer to the World Resources Institute FFOLD Database to identify federal funding opportunity details*

Conclusions and Recommendations

Over the coming weeks, this list of policy options will be evaluated, filtered, and modified to identify the

handful of policy solutions to include in the Electric Transportation Roadmap. Specifically, this process will include:

- Collaborating with City staff to develop evaluation criteria for policy prioritization (e.g. equity, cost emissions impact, economic development potential, job creation potential, etc.).
- Engaging Steering Committee and Working Group members to evaluate these policy options based on the established evaluation criteria.
- Soliciting input from the public through community engagement activities.
- Achieving consensus on the package of policy actions to advance.

Several themes emerged from our sustainable transportation policy research that will be important characteristics to center in the Electric Transportation Roadmap. The bulleted list below encapsulates some of the top line themes of policy action the City should take to propel its sustainable transportation progress forward:

- Balance efforts to electrify different forms of transportation with efforts to encourage reduction in single occupancy vehicle (SOV) usage.
- Center policy solutions that benefit low income and disadvantaged (LIDAC) communities.
- Provide transportation choices that (a) adequately meet residents' needs, (b) are safe and affordable, and (c) are emission free.
- Prioritize efforts that address the highest emitting sectors of the City's transportation ecosystem: ports, industrial fleets, and private industry vehicle fleets.
- Incorporate adequate education and outreach to compel residents from across the City to embrace this transition.
- Update the City's CZO to:
    - Facilitate/incentivize mixed-use, compact, multi-family development
    - Incorporate parking maximums/reduce parking minimums and require minimum EVSE quota
    - Update building codes to accommodate EVSE in new construction/renovation
- Stimulate increases in mode shifting by improving transit service/frequency for LIDAC neighborhoods and incorporate incentives for various e-mobility modes.
- Incentivize EV purchases and EVSE installations to stimulate faster EV adoption – Target minority owned brick-and-mortar locations. Use City of New Orleans lobbyists to advocate for reinstating state rebates for EV purchases.

Stakeholders should also consider the potential decarbonization impact attributable to the various policy solutions. The Rocky Mountain Institute's Smarter MODES Calculator can help quantify the emissions, health, and cost savings benefits of VMT reduction strategies that expand transportation options and complement vehicle electrification.

Given the room for growth the City has for strengthening its sustainable transportation policies and the anticipated costs of achieving transportation emission goals, awareness of funding opportunities and other financial incentives will be important for prioritizing action. As stakeholders review this policy memo and begin to reach consensus on which policies to advance, linking funding opportunities with policy solutions under consideration can help inform prioritization and sequencing.

The City is in a great position to make transformative progress on its sustainable transportation goals by leveraging existing accomplishments, advancing work already in progress, and taking advantage of generational federal funding resources. By taking both a top-down approach (vehicle electrification) and bottom-up approach (reduced SOV demand), the City can create a durable Electric Transportation

Roadmap that can achieve the decarbonization trajectory needed to achieve longer-term emission reduction goals. By prioritizing equitable outcomes in vehicle electrification and reduced SOV usage solutions, the City will ensure all residents benefit proportionately from these sizeable investments.

Policy Review Methodology

ACEEE publishes an annual City Clean Energy Scorecard based on a range of survey questions distributed to the largest U.S. cities. ACEEE uses this scorecard to evaluate cities in their efforts to equitably decarbonize across a holistic set of topic areas.

Our policy review began with a review of the ACEEE 2024 City Clean Energy Scorecard and the City's responses to those survey questions. This scorecard organizes content in a way that is simple to follow and enables identification of policy gaps in a structured way. The scorecard organizes transportation policies and practices around six categories:

- Sustainable Transportation Plans
- Location Efficiency
- Mode Shift
- Public Transit
- Efficient Vehicles
- Freight System Efficiency

We then evaluated the City's responses to the ACEEE survey questions as well as local and state transportation policies and programs, State transportation policy, and active dockets with ENO. We identified transportation policy topic areas where the City can make improvements and mapped those areas of improvement to the detailed ACEEE scoring criteria to create a perimeter around the range of policy topics the City could consider for its Electric Transportation Roadmap.

Whereas the ACEEE survey primarily served as a tool to assess current state of sustainable transportation, we utilized several additional resources to develop a more complete library of sustainable transportation policy solutions for City stakeholders to consider.

One source of information was interviews with representatives from sustainable transportation policy advocacy organizations. This included the Natural Resource Defense Council, Forth, and Rocky Mountain Institute. These interviews helped identify sustainable transportation policy best practices that could inform selection of the highest priority policy solutions to include in the Electric Transportation Roadmap.

Through these interviews we discovered a joint report by the Sierra Club, Plug In America, FORTH, and the Electrification Coalition called AchiEVe: Model Policies to Accelerate EV Adoption. It includes numerous policy recommendations that are germane to the City's sustainable transportation efforts. This report also provided numerous useful examples of municipalities that have already implemented such policies. We also discovered a report by EV Hybrid Noire entitled 'Advancing Transportation Electrification in Diverse Communities: A Public Policy Toolkit for Policymakers 2.0. This resource provided additional policy solutions that center equity in the transition to zero emission transportation.

A final source of information was progressive transportation policies from European cities. This research was intended to identify innovative policy solutions that have contributed to their faster adoption rates of EVs.

As we constructed this library of potential sustainable transportation policy solutions, we also referenced select municipalities that have successfully implemented similar policy solutions. Those existing policies from other cities are intended to serve as a reference point to which the City can base its own policy language on.

References:

- 2024 ACEEE City Clean Energy Scorecard
- DOE Joint Office of Energy and Transportation - Public EV Charging Infrastructure Playbook
- Sierra Club, Plug In America, FORTH, Electrification Coalition - AchiEVe: Model Policies to Accelerate Electric Vehicle Adoption
- EV Hybrid Noire - Advancing Transportation Electrification in Diverse Communities: Public Policy Toolkit
- Washington State Transportation Electrification Strategy
- World Resources Institute - Federal Funding Opportunities and Resources for Decarbonization Funding Database

Policy Gap Analysis

ACEEE Policy Category	Policy Topic	ACEEE Specifics	CNO Scoring
Sustainable Transportation Plan	Active and Current Sustainable Transportation Plan	**a.** plan has been updated w/in past 5 years and includes equity considerations (2 pts) **b.** plan has been updated w/in past 5 years but no equity considerations (1 pt) **c.** plan exists but hasn't been updated w/in past 5 years (0.5 pts)	1 out of 9
	Approved VMT and/or GHG Targets	VMT and/or GHG targets for transportation emissions approved by Council (2 pts)	
	VMT and/or GHG Target Stringency	**a.** target requires annual reduction of 4% or more more annually (2 pts) **b.** target requires annual reduction of 1.5% or more annually (1 pt)	
	Progress toward VMT and/or GHG Targets	**a.** on track to achieve VMT/GHG goal by target year (3 pts) **b.** not on track for goal but projected to be w/in 25% of goal (1.5 pts)	
Location Efficiency	Zoning Codes that Promote Location Efficiency	**a.** zoning changes allowing ≥ 3 residential units in all residential districts OR mixed use development in all zones of a single use (4 pts) **b.** zoning changes allowing ≥ 3 residential units in more districts (3 pts) **c.** ADUs allowed city-wide OR increase # of districts allowing mixed use development OR ≥ 1 TOD overlay (2 pts) **d.** zoning changes allowing more accessory dwelling units (ADU) (1 pt)	2 out of 17
	Reduction/Elimination of Parking Minimums	**a.** parking maximums for all new residential development OR no minimum parking requirements for all new residential development (4 pts) **b.** ≥ 1 zone w/ parking max of 0.5 or less spaces per housing unit AND ≥ 1 zone w/ no parking minimum for residential (3 pts) **c.** ≥ 1 zone w/ parking max of 0.5 or less per housing unit OR ≥ 1 zone w/ no minimum parking requirement (2 pts) **d.** ≥ 1 neighborhood w/ max of 1 space per unit. (1 pt)	

	Mixed-use, Compact Development Incentives and Disclosure	**a.** Incentives for location-efficient development OR information disclosure policies (1 pt for each incentive, up to 4) **b.** Incentives for development in downtown areas only (0.5 pt for each incentive, up to 2)	
	Transit-oriented Affordable Housing	**a.** Policy either requiring or preserving affordable housing development around transit facilities (5 pts) **b.** Policy incentivizing affordable housing development around transit facilities (2.5 pts)	
Mode Shift	Modal Share Targets and Associated Progress	**a.** Modal share target for all modes of transportation (SOV, public transit, biking, walking) (2 pts) **b.** Modal share target for some modes of transportation OR all modes of transportation but applied to just commuting (1 pt) **c.** Quantitative progress toward modal share target (3 pts)	3 out of 14
	Bike System Efficiency and Connectivity	**a.** PeopleForBikes score ≥ 41 (4 pts) **b.** PeopleForBikes score 32-40 (2 pts)	
	Subsidized Access to Efficient Transportation Options	Rebates and incentives to disadvantaged residents for efficient transportation options (1pt for each incentive, up to 5) - applies to public transit, shared bikes/scooters, personal bikes/scooters, ride sharing, car sharing	
	Congestion Pricing (BONUS)	**a.** congestion pricing mechanism that mitigates LIDAC impact an d funds low-carbon transit (2 bonus pts) **b.** congestion pricing mechanisms that doesn't consider LIDAC (1 bonus pt)	
Public Transit	Transit Funding	**a.** Annual avg transit funding per capita ≥ $500 (4 pts) **b.** Annual avg transit funding per capita $300-$499 (3 pts) **c.** Annual avg transit funding per capita $100-$299 (2 pts) **d.** Annual avg transit funding per capita $50-$99 (1 pt)	4 out of 13
	Access to Transit Service	**a.** CNT AllTransit performance score ≥ 9 (4 pts) **b.** CNT AllTransit performance score 8-8.9 (3 pts) **c.** CNT AllTransit performace score 7-7.9 (2 pts) **d.** CNT AllTransit performance score 5-	

		6.9 pts (1 pt)	
	Low-Income Access to High-Quality Transit	**a.** ≥ 90% of LIDAC households have access to high-quality transit (5 pts) **b.** 80%-89% have access (4 pts) **c.** 70-79% have access (3 pts) **d.** 60-69% have access (2 pts) **e.** 50-59% have access (1 pt)	
Efficient Vehicles	EV Purchase Incentives	**a.** City or utility has incentive for (a) purchase of new high-efficiency vehicle and (b) purchase of used high-efficiency vehicle (or separate LIDAC incentive) (2 pts) **b.** City or utility has incentive for either (a) purchase of new high-efficiency vehicle OR (b) purchase of used high-efficiency vehicle	3 out of 11
	EVSE Incentives	**a.** City/utility incentives for EVSE installation AND separate/additional incentive for MF/LIDAC (2 pts) **b.** City/utility incentives for EVSE installation, but non specific (1 pt)	
	EVSE Requirements	EVSE requirements for new construction (2 pts)	
	EV Charging Ports Per Capita	**a.** ≥ 90 ports per 100,000 people (3 pts) **b.** 50-89 ports per 100,000 people (1.5 pts)	
	Electric School Bus Goals	**a.** City or school district goal to increase EV school buses in service AND criteria to prioritize LIDAC (1 pt) **b.** Goal to increase EV school buses W/O LIDAC prioritization criteria (0.5 pts)	
	Electric Transit Bus Goals	**a.** City or school district goal to increase EV transit buses in service AND criteria to prioritize LIDAC (1 pt) **b.** Goal to increase EV transit buses W/O LIDAC prioritization criteria (0.5 pts)	
	Equitable EV Charging	Special consideration to LIDAC when siting EVSE (2 pts)	
Freight System Efficiency	Sustainable Freight Plans	**a.** Stand-alone sustainable freight plan OR multimodal freight plan w/ multiple efficiency strategies (3 pts) **b.** No official freight plan but active pursuit of freight efficiency strategies (0.5 pts for each strategy, up to 1.5)	0 out of 6

	Open Data Portals	**a.** City/port hosts data portal w/ ≥ 2 real-time or same-day data types (3 pts) **b.** City/port hosts data portal w/ 1 type of real-time or same-day data type (1.5 pts)	

Other Policy Solutions

The City, Steering Committee & Working Group members may also consider policy solutions that do not directly related to electrifying transportation, but still offer some transportation emissions reduction benefit.

TABLE 9: POLICIES REDUCING SOV VMT INDEPENDENT OF ELECTRIFICATION

Policy Subcategory	Policy Name	Example City
Sustainable Transportation Plan	Create equity-centered sustainable transportation plan with quantitative targets and codified policy solutions.	Boston, MA
	Establish VMT or transportation GHG reduction target and associated year indexed to a specific baseline year. Include quantitative YOY reduction targets and performance monitoring methodology.	Austin, TX Charleston, SC Kansas City, MO
Location Efficiency, Zoning Codes	Expand current mixed-use zoning to enable multi-unit residential development in more/all districts. Establish financial and/or non-financial incentives to encourage mixed-use and compact development.	Raleigh, NC Charlotte, NC
	Enact parking maximums citywide, evaluation elimination of parking minimums beyond Central Business District.	Atlanta, GA
Congestion Pricing	Implement variable/time of day tolls for area toll roads.	Various US Examples
Freight	Create data portal for Freight stakeholders that uses data types identified through stakeholder engagement.	Los Angeles

TABLE 10: OTHER SUSTAINBLE TRANSPORTATION POLICIES

Policy Subcategory	Policy Name	Example City
Workforce Training	Fund partnerships between NOLA, ENO, and schools/colleges to develop curriculum that creates e-mobility workforce pipelines. Prioritize training and certification requirements for EV/EVSE maintenance. Ensure LIDAC populations are prioritized for upward mobility.	State of Washington
Non-financial incentives	Fund community air quality monitors and allow community-level data to be incorporated into allocation decisions and EJ frameworks.	Ribbit Network
Resilience	Establish ongoing maintenance agreements for publicly funded EVSE.	State of Washington
	Develop emergency response action plan for prioritization of EVSE during energy supply disruption.	State of Washington
	Create training grant program for first responders addressing EV battery fires.	State of Washington