



RECOMMENDATIONS FROM THE COALITION OF SUSTAINABLE COMMUNITIES NEW MEXICO FOR PNM'S TRANSPORTATION ELECTRIFICATION FILING

June 1, 2020

Our country's current transportation systems often leave low-income households without adequate access to public transportation or affordable access to vehicle ownership. A recent survey by NM's Mid-Region Metropolitan Planning Organization (MRMPO) found that only 1 in 4 respondents felt the current transportation system met their needs¹. A survey by the Santa Fe Metropolitan Planning Organization found respondents wanted to prioritize funding expenditures on transit and bicycle and pedestrian pathways². While the electrification of the transportation system is a viable pathway towards reducing greenhouse gases and other use emissions, it must be complemented by measures that reduce reliance on vehicle ownership, mitigating congestion and inequality.

New Mexico residents are dependent on private car ownership and have the third highest miles driven per capita of any state. 80% of NM's workers commute alone by private vehicle, and only 1% use public transit³. 76% of households earn under \$46,000 annually, making car fueling, insurance, and maintenance a financial burden.

If we are to truly work towards the development of a more clean and equitable transportation system, we must be careful to balance the goal of electrifying all vehicles with increasing the efficiency of our transportation systems, increasing access to electric vehicles, and reducing demand for individual vehicles. An efficient transportation system is one that maximizes access to goods and services, for all people. In an urban context, this means increasing access to effective public transit, supporting multi-modal transit options, and supporting work and live environments that reduce dependency on individual car ownership.

Recommendations for Current Filing Draft

Subsidies that benefit public transportation

The current draft filing points out that electrifying public transportation can provide health benefits from reducing air pollution, which often has a disproportionate burden on lower income communities. The filing specifies that chargers for mass transit must be used for EVs within 1 mile of LMI communities, as well as defining the EJScreen mapping tool.

¹ [Connections 2040 Metropolitan Transportation Plan Final Draft March 2020](#), pg 2-23

² [Santa Fe Metropolitan Transportation Plan 2020 -2045 Draft](#), Ch2 pg 9

³ American Community Survey, 2018 estimates.



Recommendation: Make the requirements on rebate applications more explicit by stipulating that electric charging infrastructure will be used to support mass transit vehicles (public buses and school buses) on routes that serve low income neighborhoods with populations that fall above the 80th percentile, as shown in the EPA's EJScreen mapping tool.

PNM's current budget allocates 18% of the budget (\$1.5 Million) for (4) 450 kW en-route charging stations (at \$350k each) and fifteen (15) depot charging. It can be argued that the proportion of funds going to benefit public transit is disproportionately small, compared to the number of people that would benefit from increased access to transit.

Recommendations:

1. If there is a higher than expected demand and transit rebates are quickly allocated, PNM should consider reallocating funds from residential charger rebates or asking the PRC for additional funding.
2. Follow the lead of Duke Energy, and provide funds for the purchase of electric school buses.

PNM's current filing proposed two new time of day (TOD) rates for residential and commercial EV charging. The commercial EV charging TOD rate eliminates any demand charge and adds a super-off peak rate between 8 AM and 5 PM. However, daytime may not be the most convenient time for charging transit, since this is when they will be in use.

Recommendation:

Add a night-time super-off peak rate for depot charging for transit.

Rebates for individual residential chargers

The draft filing allocates \$1.5 million in the budget for 3,000 residential home charger rebates of \$500 each, expected to meet 50% of residential EV users. Put another way, 3,000 of PNM's 468,000 residential customers (0.6%) will receive 18% of the budget allocation, paid for by all ratepayers, and likely benefitting wealthier households⁴. The earlier versions of the draft filing allocated only 2/3 of this amount (\$1.0 million) for home chargers. If a portion of the rebates are restricted for those purchasing a used electric vehicle, it would increase the probability that the rebates are going to less wealthy households, and signify that the rebate would be a greater portion of the overall vehicle/charger cost, and more likely to influence a purchase/no purchase decision.

⁴ "Early adopters are generally wealthier, more educated, more comfortable with technology, and have a stronger environmental attitude ... (than) the rest of society" (The U.S. Department of Energy's Vehicle Technologies Office, 2018). Indeed, other societal status variables—such as educational attainment, living in a detached home, and high household income (over \$100,000)—have been associated with EV purchases in California (Lane, Sherman, Sperl, Krause, & Graham, 2014). Source: [Farkas et al 2018](#).



Recommendations:

1. Stipulate that 1,000 (one-third) of the rebates for single household chargers go to those purchasing used electric vehicles.
2. Increase the number of rebates reserved for LIHEAP households, if there is sufficient demand.
3. Make the subsidies accessible, offering point-of-sale rebates for chargers.
4. Consider offering on-bill financing for the purchase of EV chargers.

Public chargers for Multi-Unit Dwellings

The filing allocates 1% of the budget, \$100,000, for installation of 20 chargers at apartments. In Albuquerque, for example, 42% of dwelling units are rentals, and 30% of dwelling units are multi-unit dwellings (74,000 units). A [2015 report](#) in CA found that Property improvement upgrades, renovations, and capital maintenance expenditures take first precedence in apartment owner budgets, and they will not typically invest in EV charging projects without clearly defined market demand and cost estimates by property managers. While slightly outdated, this report highlights the importance of charger subsidies for this market. In the current filing draft, there are no specifications on the type of apartments that would qualify for installations. Since middle- and upper-income households are currently the primary purchasers of electric vehicles, it is likely that demand for chargers will be from apartment complexes serving these economic classes. Not having chargers at complexes serving lower income households presents a barrier to households that may consider purchasing electric vehicles as prices come down.

The filing should place criteria for the rebates, mandating that only apartment complexes serving at least 15% lower income households can receive the rebates. This creates the potential for apartments to receive the rebates that may have some existing demand (from the wealthier households in the complex), but also ensures that chargers are available for the poorer households as electric vehicles become more affordable.

Recommendations:

1. Place a verifiable requirement that a portion (50-75%) of rebate recipients serve at least 15% lower income households. This can be verified through a city's housing authority, which will have a list of subsidized apartment complexes.
2. Increase budget allocation to serve double or triple the number of apartment complexes (each receiving 2 chargers).
3. Consider increasing budget allocation or asking PRC for more funds if these funds are quickly utilized.



Reach out to low-income stakeholders

It can admittedly be difficult to engage low-income serving organizations around topics such as transportation electrification. Many organizations have limited staff capacity and much greater near-term priorities for their constituencies. However, if the transition to an electrified transportation sector is going to create tangible benefits for the most vulnerable populations, the time to bring their voices to the table is now, while policies and markets still have room for adjustment and correction. California's Greenlining Institute has put together a simple [guidebook](#) specifying key steps needed to help insure that policies empower, rather than exclude or hurt, the most vulnerable communities. Some of these best-practices are being implemented by California's largest utility, PG&E, which recently had a program approved that focuses on reducing EV access barriers to low income households, called [Empower Electric Vehicle Charger Incentive and Education Program](#).

Recommendations:

1. Ensure that low-income serving organizations are involved in the stakeholder calls during filing preparation – this should include:
 - a. advocacy groups such as: [Together for Brothers](#), [Earth Care](#), [Chainbreakers Collective](#), [Tewa Women United](#)
 - b. transit authorities and affordable housing authorities.
2. Partner with local community-based organizations for the electric vehicle education components of this program, as well as program evaluation.

Program Measurement and Evaluation

The current filing provides funding for potential studies and saturation studies to assess program needs, as well as evaluating key performance indicators (KPIs) to assess program impacts. The areas of impact in the current draft relate to EV adoption rates, load shifting, and GHG emission reductions. The stated KPIs (kWh consumed at charging stations) for measuring impact on GHG emission reductions will be misleading since they do not demonstrate that the consumption comes from additional adoption of EVs due to the program. A vehicle charged at a new charging station or at a new owner installed Level 2 home charger doesn't imply that they wouldn't have otherwise been driving and charging an EV.

There should also be KPIs that measure impacts/benefits for LMI households.

Recommendations:

1. A map (aggregated by census block group) should be made available on PNM's website showing where the residential chargers, workplace chargers, and multi-family home rebates are being utilized, overlaid on the EPA's EJScreen maps.
2. Remove any KPIs related to GHG emission mitigation unless additionality can be shown in a rigorous manner.
3. Involve grass roots/advocacy groups in evaluation of future program needs regarding LMI households.



Model innovation

With current electric vehicle purchase prices substantially more expensive than equivalent gasoline vehicles, it is unlikely that lower income households will benefit from the bulk of the allocated funds (which are primarily dedicated to charging infrastructure). There are some options that make purchase of electric vehicles more accessible, such as federal tax rebates, purchase of older models, and purchase of used vehicles. There is also precedent of utilities providing rebates for vehicle purchase⁵. For example, Atlantic City Electric has partnered with Nissan to offer a \$3,000 rebate for purchase of an EV. Atlantic City Electric has also included \$2 million in their transportation filing for innovation grants to customers.

Recommendations:

1. Partner with manufacturers (e.g., Nissan or Chevy) to offer rebates on purchase of new vehicles for LMI households, and include rebates for purchase of used EVs in the filing.
2. Include \$250,000 for innovation grants that will increase access to EVs to LMI communities.
3. Don't follow what most IOUs are doing, but instead work with LMI organizations and communities to show leadership and develop new ideas and programs that can truly make a difference in their access to clean, affordable transportation.

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<https://www.atlanticcityelectric.com/News/Pages/Press%20Releases/AtlanticCityElectricExpandsIncentivesforElectricVehicleShoppers.aspx>

<https://norwichpublicutilities.com/residential/electric-vehicle-charging-rebate-program/>

<http://grotonutilities.com/electric-vehicle-rebate-program/>

<https://vppsa.com/electric-vehicle-rebate/>

<http://www.eweb.org/residential-customers/going-green/electric-vehicles/ev-incentives>