

ELECTRIC TAXI PILOT PROGRAM



Outline

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- Pilot program basics
- Who will drive the LEAFs?
- What do you get if you participate?
- What special rules apply to participants?
- How does charging work?
- What challenges might you face?
- What benefits can you expect?
- What will we learn from the pilot?

Pilot Program Basics

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- Nissan provides 6 Nissan LEAF all-electric vehicles for use as taxis free of charge
- Vehicles used as taxis for 12 months, then returned to Nissan
- Nissan provides charging equipment
 - ▣ 1 basic charger at the fleet or home of the operator
 - ▣ 2 to 3 quick-chargers in places where taxis operate
- Pilot Launch winter/spring 2013
- Goals:
 - ▣ Test the *concept* of electric vehicles for taxi use (*not* testing whether the LEAF should be approved)
 - ▣ Learn about the advantages and challenges of using electric vehicles as taxis
 - ▣ Help prepare the City and the industry for new technologies

Who Will Drive the LEAFs?

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- Existing taxi operators invited to apply
 - Owner-operators (must own a medallion)
 - Willing to provide feedback
 - Space to install charging infrastructure
 - For example, you have a garage or off-street space
 - Interest in/experience with new technology

What do you get if you participate?

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- 1-year vehicle lease provided by Nissan free of charge for term of the pilot
- Vehicle comes pre-equipped as a taxi
- Nissan will provide 1 “regular charger” at your fleet garage or home
- Nissan will provide access to 2 to 3 “quick chargers” in areas where taxis operate
- 1-year extension on the retirement age of your existing taxi vehicle (if it’s out of taxi use)

What special rules apply to participants?

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- No partition – security camera instead
- No vehicle may be double-shifted
- Excepted from refusal rules in certain cases
 - If it would put you at risk of running out of charge
- Must meet Nissan's insurance coverage requirement and adhere to their maintenance schedule
- Must provide feedback and keep records as needed, willing to speak publicly about the experience

How does charging work?

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□ **Owners-operators**

- When not driving: Charge at your home charger, which takes several hours (do this between shifts)
- When driving: Quick-charge at a public station, which takes about 25 minutes for a full charge
- Maximize driving time by scheduling breaks around quick-charging times & locations

What challenges might you face?

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- Vigilance about battery charge needed
 - ▣ Should plan ahead to stay powered-up
 - ▣ Plan with weather in mind
 - Running the heat takes extra energy
 - ▣ Balance cautiousness about maintaining charge with maximizing fare revenue
- Rest Breaks: might need to be near quick chargers
- Wear and tear on vehicle (not heavy-duty)

What benefits can you expect?

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- No gas fill-ups or oil changes needed
- Retirement extension on existing taxi vehicle
- Experience cutting-edge technology
- Share excitement with passengers

What Will We Learn from the Pilot?

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- Challenges of integrating EVs into taxi duty cycle
 - Battery charging times/patterns
 - Range
 - Durability
 - Costs of operation
 - Special challenges/advantages of EVs as taxis
- Passenger, driver and owner satisfaction
- Usefulness of various charging infrastructure types and locations

Questions About the Pilot?

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- *Additional questions:*

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