

➤ **Summary of 60-Day Notice: Electric Car Sharing for Underserved Communities Pilot**

The following 60-Day Notice summarizes Public Service Company of Colorado’s (“Public Service” or “the Company”) action to update stakeholders of the Company’s development of the Electric Car Sharing for Underserved Communities Pilot (“Car Share Pilot” or “Pilot”) within the Company’s 2021-2023 Transportation Electrification Plan (“TEP”). This 60-Day Notice is issued in compliance with Decision No. C21-0017 in Proceeding No. 20A-0204E.

A copy of this notice will be available on our website at:

[https://www.xcelenergy.com/company/rates\\_and\\_regulations/filings/transportation\\_electrification\\_plan](https://www.xcelenergy.com/company/rates_and_regulations/filings/transportation_electrification_plan)

Electric Car Sharing for Underserved Communities Pilot

In Decision No. C21-0017, the Colorado Public Utilities Commission (“Commission”) approved the Company’s proposed Partnerships, Research, and Innovation (“PRI”) portfolio. The objective of the PRI portfolio is to ease the process for customers to access electricity as a transportation fuel, minimize system costs, increase environmental benefits for charging, and help inform future Company TEPs. As a part of this portfolio, Public Service is proposing to direct a portion of the PRI budget to fund a car share pilot.

Through this 60-Day Notice, Public Service is providing a description of the car share pilot, the scoring considerations developed to review and evaluate submitted applications, and the metrics that Public Service will report on and provide to stakeholders through its semi-annual TEP reports. To inform this proposal, the Company hosted several individual and group stakeholder meetings to present draft pilot designs and gather input.

## ➤ **Electric Car Sharing for Underserved Communities Pilot**

### **A. Project Description, Goals, and Key Outcomes**

#### *Description*

The purpose of the Car Share Pilot is to study how to reduce the upfront and operational costs of electrifying and expanding the use of light-duty (“LD”) cars, trucks, and sports utility vehicles (“SUV”) for car sharing services that specifically support underserved communities.<sup>1</sup> The Pilot will provide rebates for the purchase and/or lease of between 25-35 electric vehicles (“EV”) to be charged throughout Public Service’s service area. It will also provide funding for necessary charging stations and EV supply infrastructure (“EVSI”) to enable this pilot. Funding for EVSI and income-qualified (“IQ”) or higher-emissions community (“HEC”) rebates for charging equipment will occur through other approved TEP programs where applicable. As the Commission approved for other TEP programs, rebates provided for car sharing vehicles and eligible charging stations through this project will be treated as regulatory assets and amortized.

The Car Share Pilot was developed based on ideas and feedback proposed by broader stakeholder groups and during collaboration sessions with them. It is intended to promote the widespread access to the benefits of electric transportation (“ET”), particularly for members of IQ and HECs and those without access to electric car share options and/or a personally owned or leased vehicle. The Pilot will help cover the upfront costs associated with the EVs, the charging equipment and infrastructure necessary to support their operation for at least the three-year TEP period. The EVs, charging equipment and infrastructure may be transferred to another entity and remain in place indefinitely following the initial pilot phase. Reporting on the Pilot’s progress will be provided during the TEP’s semi-annual reporting cycles in April and October of each year.

The project will be conducted in partnership with a local non-profit car sharing service, Colorado CarShare. Colorado CarShare is beginning to research and innovate on optimal approaches to electrify their existing car sharing services for underserved communities in the Denver metropolitan area. This project will help to accelerate that work, scale it, and expand operations into more regions across Colorado’s diverse geographic and demographic mix. The Pilot will focus on how to bring electrified car sharing to underserved areas, including those that are IQ and/or HECs. Car sharing services will help to expand community mobility options, providing users with route freedom, timing flexibility, personal privacy, and access to important health, wellness, and leisure amenities such as green spaces. Electrifying car sharing services, expanding where and how they operate, and enabling them to operate more reliably and cost effectively is intended to equitably expand access to the benefits of transportation electrification, a public policy goal codified in Senate Bill 19-077. This pilot’s efforts to reduce the costs and complexities of electrified car sharing services for these programs will help advance these policy goals and scale these important community solutions.

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<sup>1</sup> See the “Equity” section of this notice for a definition of underserved communities.

Importantly, car share users may save up to \$6,500 per year over individual automobile ownership. For example, on an annual basis, each round-trip Colorado CarShare vehicle in service replaces 9-13 personally owned vehicles and the associated parking pressures. Each vehicle reduces an estimated 150,000 vehicle miles travelled (“VMT”), averts over 8,000 gallons of gas from being used, and prevents over 73 tons of greenhouse gases (“GHG”) from entering the atmosphere.<sup>2</sup>

The program will cover up to 100 percent of eligible costs or \$40,000 per LD EV and up to \$3,000 per charging station, not to exceed actual procurement and installation costs. The number of vehicles for the program should not exceed a total of 35, with ideally no more than 10 vehicles supported by the pilot in any one community. This cap was determined based on anticipated upfront costs of reasonably priced electric and plug-in hybrid sedans, trucks, and SUVs. When accounting for the incremental cost of an EV, charging equipment, infrastructure upgrades, and lower operating costs, the Company believes that a \$40,000 rebate per vehicle will provide the funding necessary to make electrified car sharing accessible to new types of communities through the Pilot that may otherwise not have access to these kinds of clean personal mobility options. Discussions with fleet operators confirmed that this is an acceptable dollar value likely to drive Pilot participation.

Rebate levels and program design elements were initially determined in coordination with Colorado CarShare. Coordination and verification of rebate awards and eligibility has also taken place with organizations such as the Regional Air Quality Council (“RAQC”), and the Colorado Energy Office, (“CEO”). Ongoing coordination between the Company, the RAQC, and CEO will be crucial to ensure effective customer education, to ensure financial support for specific project costs does not overlap across organizations, and to promote the efficient and equitable distribution of funds to eligible projects.

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<sup>2</sup> <https://carshare.org/partners/properties/>

***Participant Roles and Responsibilities***

The following table gives an overview of the expected roles and responsibilities of program participants.

<b>Participant</b>	<b>Role</b>
Xcel Energy	Program administration, funding rebates for EVs, charging equipment, and EVSI. Make ready work.
Consultant	Community Needs Assessment report, and development of outreach materials. Support for evaluation methodologies.
Colorado CarShare	Car sharing service facilitation using existing people, technical, and software operations, payment and processing platform, branding, network, and partnerships
Charging Network Operators / Charging Equipment	Provide development of necessary charging infrastructure.
Host Communities	Submits application for placement of shared vehicles in underserved areas. Support for vehicle “dwell” / parking locations. Outreach to potential users and/or impacted program participants.

***Goals***

The Pilot has three main goals. The first relates to studying how to support the electrification of car sharing services at scale and reaching new communities who would typically be later adopters and/or later users of ET. This project will consider the types of EV offerings, optimal charging setup, dwelling locations, and the grid and supply infrastructure needed to support the vehicles in an economic manner for the communities being reached. Second, the Pilot aims to provide insights to inform possible future expansions of electrified car sharing within underserved communities. The work will study the optimal operational characteristics and community needs of electrified car sharing when operating in various communities, terrains, and geographic areas. This is intended to capture key insights about the performance of this LD class of EVs that has a potentially highly variable usage and charging patterns. The Pilot will report on learnings to develop a knowledge base that can be used to inform how to more cost effectively expand and scale the electrification of car sharing for underserved communities, so that scale can be achieved more rapidly, sustainably, and with declining costs over time. Third, the Pilot aims to bring the real-world benefits of EVs and the EV driving experience to more diverse communities. The goal is to ensure that these community members also benefit from the health, operational performance benefits, and cost savings of EVs.

In addition to these three primary objectives, the Pilot also serves the broader objectives of the TEP’s PRI portfolio. It will increase and broaden access to electricity as a transportation fuel by promoting EV charging within underserved communities. It will consider where and how to minimize grid impacts when electrifying car sharing across the designated community parking/charging spots, routes, and neighborhoods the electric car sharing vehicles operate within. This will contribute to the Company’s understanding of infrastructure planning needs for underserved areas. The Company will work to actively increase public outreach, awareness, and

understanding around and support for ET as a part of this pilot. Car sharing service drivers, riders, and the broader community will be targeted by outreach efforts.

**Outcomes**

The Car Share Pilot is intended to produce four key outcomes. First, it will produce a viable community needs assessment of communities in the Company’s service area to understand where best to place the electrified car sharing vehicles to achieve the highest benefits and impacts for the Pilot. Second, it will physically place the vehicles in locations for practical application and real-world field testing. Third, it will produce valuable insights about how best to approach the electrification of these vehicles and inform what considerations need to be made for electrifying car sharing across varying geographic areas and communities. Fourth, the Pilot will inform how best to conduct outreach with users of electric car share services, and organizations that may direct users to these services. It is anticipated that the Pilot will lead to increased awareness and community support for ET.

The Pilot will produce insights to inform future electrification and expansion of car sharing, focusing on a combination of multiple underserved communities, including those qualifying as IQ or HEC that are located in urban, rural, or mountainous geographies, so that more community participants can share in the direct benefits of transportation electrification and learn about how EVs can benefit communities and drivers. Lessons learned will include commonalities and differences across these geographic and demographic communities.

**B. Estimated Costs, Benefits, Value to Customers**

**Table 1: Xcel Energy Pilot Spend Assumptions**

<b>Cost Category</b>	<b>Average Estimate</b>
<b>Capital Costs (including Rebates)</b>	
25 – 35 EVs	\$1,200,000
25 – 35 Charging Ports	\$90,000
EVSI (if not covered through a complimentary TEP program)*	\$630,000
<b>O&amp;M Expenses</b>	
Community Needs Assessment	\$200,000
Outreach and Education	\$150,000
Labor	\$175,000
Asset O&M	\$50,000
<b>Estimated Total Project Cost</b>	<b>\$2,495,000</b>

\* Based on Guidehouse estimate of about \$21,000 per public L2 charging port.

Colorado CarShare will also be contributing financial, human, and system resources to support the administration of the project in addition to outreach and education to spread awareness.<sup>3</sup>

<sup>3</sup> See section “G. Partners” for more information on the contributions and work being done by Colorado CarShare

## ***Benefits***

Both in parallel with and beyond the stated outcomes above, the Pilot is intended to drive multiple benefits. First, it will expand car sharing services into underserved communities, and then branch out beyond serving traditional densely populated urban areas. It will electrify car sharing so that underserved communities can also directly benefit from the reduced costs, lower pollution, less noise, enhanced performance characteristics, and other benefits afforded by both EVs and the ability to easily access flexible transportation. Studies have also shown that car sharing services reinforce and drive the use of complimentary modes of transportation such as walking, biking, public transit, and micro mobility.<sup>4</sup> By filling a transportation need gap, and promoting alternate forms of mobility, expanded and electrified car sharing services will help build a more diverse transportation ecosystem for underserved populations. Additionally, mobility freedom has been proven to lead to economic freedom, and economic independence and well-being.<sup>5</sup>

While this PRI project proposes to provide a rebate to support a single and dedicated charging port for each electrified car share vehicle, Colorado Car Share has deployed dual-port charging stations for its vehicles in Colorado – one for the electrified car share vehicle and an adjacent charger and dwell spot for community EV charging. To the extent Colorado Car Share and community partners seek to continue that model in new deployments supported by this PRI project, there could be additional benefits from enhanced access to L2 charging for the surrounding community in underserved areas.

## **C. Equity & Commercial Viability**

This project is intended to bring EV benefits to underserved communities. It will leverage pre-existing and/or newly commercially available EVs, charging technologies, and other associated infrastructure equipment.

For purposes of the Pilot, underserved communities may:

- Meet the definition of a “disproportionately impacted community” as currently codified in Colorado state law.<sup>6</sup>
- Live in IQ communities and/or HECs as currently defined in the Company’s TEP programs
- Have insufficient access to transportation services or other affordable transportation options, including insufficient access to EV charging

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<sup>4</sup> Huwer, U. (2004). Public transport and car-sharing - benefits and effects of combined services. Transport Policy.

<sup>5</sup> The role of daily mobility in mental health inequalities: the interactive influence of activity space and neighborhood of residence on depression - PubMed (nih.gov), <https://pubmed.ncbi.nlm.nih.gov/21903318/>

<sup>6</sup> See Colorado HB21-1266. Section 3 of the Act defines "disproportionately impacted community" (DIC) as “a community that is in a census block group where the proportion of households that are low income, that identify as minority, or that are housing cost-burdened is greater than 40%; or any other community as identified or approved by a state agency, if the community: Has a history of environmental racism perpetuated through redlining, anti-Indigenous, anti-immigrant, anti-Hispanic, or anti-Black laws; or is one where multiple factors may act cumulatively to affect health and the environment and contribute to persistent disparities.”

#### **D. Education and Outreach**

The Company, in partnership with Colorado CareShare, and host communities will jointly provide resources to focus on educating multiple audiences about the goals and benefits of this pilot. Education efforts will be directed at the community at large and include outreach to underserved communities impacted by the equity benefits of this work and other interested stakeholders.

Additional outreach efforts could include posting program information on the Company's website, conducting digital and print campaigns, and producing case studies, technical white papers, videos, and other interactive media.

The Company will host in-person or virtual events to allow the community to see the technologies in demonstration and learn about their practical application. This may include events like "touch and see" and/or "ride and drives," question and answer sessions, ribbon cuttings, and tours, and the Pilot's partners will help to relay the key learnings and relevant details afforded by the work.

#### **E. Application, Process, and Scoring**

The Company will work with a local non-profit community car sharing organization, Colorado CarShare in various aspects of community recruitment and selection. The organization possesses relevant expertise in working with underserved communities within Colorado.

Interested communities will have the opportunity to apply through the Company's open application process, providing details on what communities and specific underserved locations may be best served by the Pilot's offerings. The communities would also be encouraged to support hosting of infrastructure on city/town/partner owned/controlled property at no cost and/or to provide other in-kind support.

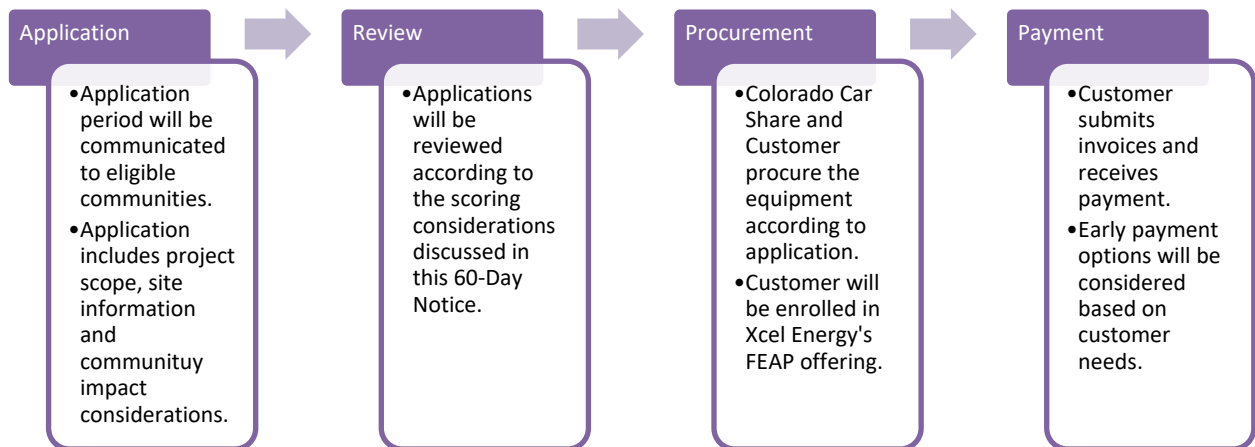
The communities, vehicle, and charger siting will be determined through a combined process. It will consider insights derived from the community needs assessment, insights from the Company's HEC identification methodology, cross-referencing with other resources including the equity map that CEO is developing, and will consider various communities' desire to participate, and partnership from those communities. Elements such as willingness to provide for parking/dwelling of the vehicles, resources for additive outreach, and other partnership actions will be considered.

#### ***Process and Scoring***

1. Communities will be asked to provide proposed siting / location information for the placement of the electrified car share service vehicles. Application assistance will be made available to customers through the Company's outreach efforts described in the section below.
2. Scoring may include a combination of the following:
  - a. Relevance to underserved community focus, based on income qualification, relevant location, and/or higher emissions impact

- b. Neighborhood density / established need relevant to the community needs assessment study and impacting underserved communities in urban, metropolitan, rural, and/or mountainous areas
  - c. Existing public mobility options available in the areas including access to other car sharing services
  - d. Proposed co-funding by the community and any other community partners, including siting/hosting costs. Communities and partners who propose to provide this combined support may receive preference
  - e. Availability of dwell space for vehicle charging
  - f. Amenities in or around the siting area that are best served by car sharing services
  - g. Accessibility and site compliance with legal requirements
  - h. Opportunities for siting combinations of sedans, trucks, SUVs that may demonstrate a range of EV classes to further inform the study
  - i. Potential for relevant grid studies in the area and distribution planning factors
3. Successful applicants will be notified of their rebate funding amount at which point they can proceed to work with the Company and Colorado CarShare according to their application.
  4. Upon rebate approval, the community's car sharing vehicles, administered through Colorado CarShare, will be enrolled in the Company's Fleet Electrification Advisory Program ("FEAP"). Through FEAP, the project will receive advisory services including telematics data and reports such as VMT, state of charge, charging analysis and recommendations, Total Cost of Ownership ("TCO"), and GHG reduction calculations.
  5. In addition, through FEAP, communities participating in the program will have quarterly project meetings with the Company's staff and Colorado CarShare to ensure that the project is meeting expectations once the community's expanded car sharing program is electrified and the vehicle(s) are in service.
  6. If requested by Public Service, Colorado CarShare and/or the community will collect customer satisfaction data and share it with Public Service, in a form agreed to by Colorado CarShare and Public Service.

**Figure 1: Rebate Approval Process**



Prior to launching the Pilot, the Company will release the application online, and host a webinar to allow potential applicants the opportunity to plan and develop the content needed for a



successful award. During the Company-led webinar, the Company will walk prospective participants through the process for applying and reviewing applications and will explain the Company's considerations for evaluating applications. The Company plans to record the webinar and make it available on its website.

Additionally, as part of the broader TEP implementation plan, the Company has created an Electric Vehicle Program Intake form for customers interested in EV programs, which is currently available on the Company's website. This intake form requests that customers provide the Company with contact information, project interests and what EV program the Customer has an interest in exploring. For intake forms that relate to the Pilot, the intake form as submitted by the customer will be reviewed by Company staff, the car sharing service operator (at the Company's discretion), and a member of the team supporting the program identified by the customer will contact the customer to begin working through project ideas. The Pilot will be one of the programs identified on the Electric Vehicle Program Intake form. The Electric Vehicle Program Intake form is designed to advance equitable opportunities regardless of customer resource availability by assigning a Company advisor early in the project.

#### **F. Reporting, Measurement, and Evaluation**

Reporting on the Pilot progress will be conducted through the semi-annual TEP reporting process. The Company will report on the following aspects of the Pilot, to the extent data is available and utilizing existing reporting tools/systems:

- Program costs
- Vehicle utilization rates including number of trips taken, and miles driven (to be provided by Colorado Car Share)
- Insights that help to compare and contrast the models deployed, such as differences in infrastructure and program design, varied operating metrics of the vehicles, and outreach required to support the varied communities
- Estimated consumption of electricity (kilowatt hours) resulting from the supported car sharing vehicle charging
- Estimated level of demand (kilowatts) resulting from vehicle charging at Company-owned charging stations
- Geographic distribution of the program's participants

#### **G. Partners**

As noted, pilot launch partners will include a non-profit, locally based car sharing service, Colorado Car Share, with the potential for other car sharing services, charging station providers, and charging station site hosts to participate in the Pilot. Community organizations will be invited to participate in supporting the creation and dissemination of outreach materials and associated efforts. Participating communities will be engaged as active partners in the study, design, and facilitation of a successful program and will be expected to provide resources to support these actions.

Colorado Car Share has been identified as the launch partner for this work for several reasons:

1. Colorado CarShare is a 501(c)(3) local and non-profit organization, with a clear mission to support Colorado communities and the environment with a goal of having a fully electrified fleet of vehicles. Their staff is local, knows the region, and is available to their members 24/7.
2. Both the expansion of and electrification of car sharing to underserved communities in Colorado aligns with Colorado CarShare's current mission. It has a commitment to helping those who are underserved, to the environment, and to social equity, which is a central goal of the TEP and the PRI portfolio.
3. Colorado CarShare has existing resources in program branding and a technical platform (web portal, mobile-site for car reservations, etc.) that can allow resources to be directed to expanding car sharing into new communities rather than building or replicating these tools. Furthermore, having a program partner across multiple communities can help create for a more cohesive and expanded experience for underserved car users throughout the state.
4. Colorado CarShare is offering financial, human, and systems resources in support of this proposed PRI project through subscription credits for income-qualified customers, waived application fees, as well as other education, outreach, and service support. Given the existing budget range for this project, Colorado CarShare estimates that it will be able to contribute up to \$100,000 in support and/or in-kind services for program implementation.

## H. Stakeholder Involvement

During the development of the methodology and the identification of proposed Electric Car Sharing for Underserved Communities Pilot, the Company engaged numerous stakeholders to gather feedback and refine its approach. The table below summarizes stakeholder involvement:

**Table 2: Stakeholder Engagement**

<b>Stakeholder Group</b>	<b>Meeting Date</b>
Environmental Justice Coalition <sup>7</sup> , Energy Outreach Colorado, Natural Resources Defense Council, Southwest Energy Efficiency Project, and Western Resource Advocates	8/12/2021
Transportation Electrification Plan Stakeholder Group <sup>8</sup>	9/29/2021
Environmental Justice Coalition, Energy Outreach Colorado, Natural Resources Defense Council, Southwest Energy Efficiency Project, and Western Resource Advocates	10/12/2021
Commission Staff	10/14/2021
Colorado Energy Office, Colorado Department of Transportation, and the Regional Air Quality Council	11/3/2021

Stakeholders provided valuable input on:

- Advocating for the development of this expanded and electrified type of car sharing program
- Stated their support for bringing car sharing services into underserved and IQ communities including urban, metropolitan, rural, and mountainous communities
- Noted the need for not only electrifying car sharing service vehicles, but also making this project about assessing how to lower overall upfront and operational costs of these kinds of services including charging
- Encouraging partnership with a non-profit car sharing service that has some foundation in place for this type of work already

<sup>7</sup> The Environmental Justice Coalition includes representatives from the Colorado Latino Forum, GreenLatinos, GRID Alternatives, and Vote Solar.

<sup>8</sup> The TEP Stakeholder Group includes dozens of organizations spanning Colorado state government agencies, Colorado municipalities, environmental advocates, energy efficiency and electrification groups, other utilities, EV charging hardware and software providers, automobile manufacturers and dealerships, community groups, and many others. Nearly 100 people participated in the TEP Stakeholder Group meeting on September 29, 2021.

Posting Date: November 5, 2021

- Agreement that this is an equity focused project, in the spirit and intent of what some portion of the PRI portfolio of the Company's TEP is intended to achieve