Alliance for Transportation Electrification

# Untangling the Wires: Easing the Cost and Complexity of Collecting EV Charging Data

July 2026

*Steering EV Policy in the States*

## Contents



### Author

Elizabeth Turnbull, Director of Policy and Regulatory Affairs

### About ATE

The Alliance for Transportation Electrification (ATE) is North America's largest 501(c)(6) EV trade association representing over fifty member companies and organizations dedicated to expanding safe, dependable, affordable, and accessible electric transportation infrastructure and programs. ATE focuses on EV policies and programs at the state and local levels and is active in over 25 states.

### Attributions

This paper is a product of the Policy-Regulatory Committee of ATE, which is chaired by Julia Gold of National Grid and Chris Budzynski of Exelon. This committee covers a broad range of policy and regulatory issues related to EV program design, rate design, interconnection, and other key issues facing the EV ecosystem at the state and local levels.

Co-Chairs:

- Chris Budzynski, Exelon Corporation
- Julia Gold, National Grid

### Participants

ATE is grateful to the following companies (including both ATE members and non-members) that participated in the EVSE data collection knowledge-sharing cohort. This acknowledgement does not constitute endorsement by these organizations of the characterizations or conclusions contained herein.

| | | |
|---|---|---|
| Atlas Public Policy | National Grid | Seattle City Light |
| Commonwealth Edison Company | Pacific Gas and Electric Company | SWTCH |
| Consolidated Edison | Portland General Electric | Walker-Miller Energy Services |
| EVgo | Public Service Electric and Gas | Xcel Energy |
| Hawaiian Electric | Puget Sound Energy | |

## Introduction

Through rebates or other mechanisms, many utilities incentivize the installation of commercial electric vehicle supply equipment (EVSE) at customer properties, with the EVSE owned and operated by the site host or by a charge point operator (CPO). Typically, the utility plans to collect data about the operation of the EVSE—for example, charging session data, charger uptime, or charger utilization—to inform program evaluation or for other purposes. Often, access to this data is a condition of receiving the incentive. Depending on the jurisdiction and the program design and approval process, data requirements may be set by the utility, the regulator, or through a stakeholder process.

But collection of this data has proved difficult. Across the country, utilities report challenges with collecting, collating, analyzing and reporting EVSE data. There are real costs involved—in terms of contracting, software platforms, process development, data transfer between parties, and even customer experience—many of which were unanticipated or underestimated. These costs are often in the form of utility personnel time, which adds to program administration costs and impacts customer rates. Meanwhile, the benefits of the data—the insights it can provide for program evaluation, future program design, and load forecasting, for example—are not universally captured.

These challenges are not theoretical; they are evolving in real time in programs and regulatory dockets around the country. In some jurisdictions, significant effort is put into data collection and reporting, without clear objectives. In others, data sets have so many gaps that utilities aren't able to glean meaningful insights. Some utilities report that data submission requirements are so burdensome that some potential EV charging customers decline to participate in the program altogether.

Fortunately, best practices are emerging, including:

- Developing clarity around the purpose of data collection and its costs and benefits;
- Program design elements that can facilitate easier data collection;
- Sufficient program budget to support robust data collection;
- The use of existing frameworks and data specifications; and
- Internal utility processes to ensure that ongoing data collection is streamlined.

In 2026, ATE undertook an effort to explore these challenges and best practices, along with a cohort of utilities, program implementers, and electric vehicle service providers (EVSPs) who provide the software services for networked chargers.[1] The findings and recommendations discussed herein derive from these discussions.

[1] In some jurisdictions, these parties are referred to as network service providers or NSPs.

**Focus on Commercial EVSE**

The focus of this inquiry is charging data collection for *non-utility-owned commercial EVSE* that are installed by a utility's commercial customer as part of a utility program. Residential EVSE were not considered, as residential charging data raises separate issues with respect to collection methods, objectives, contracting parties, data value, and cybersecurity.

## Data Typology

Utilities identified several different types of EVSE data that they collect for analysis, the pros and cons of collecting such data, and the metrics and insights that can be derived from each type. Table 1 shows a non-exhaustive example typology of EV charging program data; most utilities collect more data than this, but not all utilities collect all types of data.

*Table 1: Example Typology of EV Charging Program Data*

| Data Type | Who Provides | Example Data Fields | Example Metrics |
|---|---|---|---|
| Site and EVSE Characteristics | Commercial Customer or Site Developer | Site Address<br>EVSE ID<br>EVSE Owner<br>EVSP<br>Installation Date<br>Program Enrollment(s)<br>Site Type (e.g., fleet, public, multifamily) | Count of EVSE Enrolled in Program<br>Count of EVSE in Priority Communities[2]<br>Count of EVSE by Site Type<br>Count of EVSE by Network Provider<br>EVSE Installed by Date |
| Advanced Metering Infrastructure (AMI) | Utility | Site kWh Dispensed<br>Site Max kW<br>Site-Level Interval Data | Load Curves by Site Type<br>Feeder-Level Loading |
| Charging Session | EVSP | Plug-In Time<br>Charging Start Time<br>Charging End Time<br>Plug-Out Time<br>Session kWh<br>Session Max kW<br>Payment Method<br>Error Codes | EVSE Utilization<br>Average Session Duration by Site Type<br>Average Idle Time by Site Type |
| Uptime | EVSP | Uptime Reporting Start<br>Uptime Reporting End<br>Total Outage Time<br>Uptime Percentage<br>Event-Level Outage Type | Uptime Percentage by EVSE<br>Uptime Percentage by Network Provider<br>Uptime Percentage by Site Type |

[2] These communities may go by different names in different jurisdictions—e.g., disadvantaged, equity, underserved, low-income, etc. They are typically identified by geographic area, so this metric can be extrapolated from the site address.

### *Site and EVSE Characteristics*

Nearly all utilities reported collecting data on the characteristics of the site and the specific EVSE installed through their programs. These straightforward data fields can be submitted around the time that EVSE are energized, by the customer or the developer, and can be used to assess high-level program insights. Some utilities store this information in their own asset management databases, enabling them to analyze EV charging sites mapped to specific feeders or substations, but this approach isn't common.

**Who is the Customer?**

In commercial EV charging programs, the utility's "customer" can refer to either a site host who owns and operates the EVSE as an amenity to their primary business, or a CPO who owns and operates EVSE as part of their business model. It is important to distinguish between these customer types, as CPOs may also be the hardware manufacturer and/or EVSP, and given their size and sophistication are much better equipped to participate in utility data collection than site host customers.

### *Advanced Metering Infrastructure (AMI) Data*

Many utilities reported collecting and analyzing AMI data from known EV charging sites—including, in some cases, sites that were installed outside of a utility program (though this requires site-level tags to identify the site as EV charging). Where AMI is deployed, utilities already have protocols in place regarding the access, collection, storage, and cybersecurity of AMI data. AMI provides interval data that, when combined with site and EVSE data, can help utilities analyze charging load curves for a variety of site types. It can also be used to validate charging session data. AMI data can also be collected for EV charging sites even if the EVSE are non-networked. To forecast EV charging load for planning purposes, AMI data may be sufficient; however, it lacks the granularity and insights of charging session and uptime data. Further, this type of data is most useful if EV charging is separately metered from other site load—an arrangement which can be more costly to install, and which not all customers prefer. While some software providers offer to disaggregate EV charging load from other loads, utilities in the cohort had mixed levels of confidence in the accuracy of this approach.

### *Charging Session Data*

Some utilities collect data from each individual charging session at EVSE enrolled in their programs. This data can show how often individual EVSE are used, as well as give insight into charging session duration, energy dispensed (kWh), peak load (kW), and idle time (when vehicles are plugged in but not charging). Access to charging session data is an advantage of networked chargers, though the EVSE owner is typically responsible for paying the EVSP a monthly network fee to access such data and other network features.

EVSPs usually provide this type of data to the EVSE owner in the form of an online portal with exportable files, and many have worked with utilities to provide this data directly to the utility (with customer authorization). However, because the EVSE are owned by the utility's customer, the utility must put in place contractual mechanisms to access charging session data and enforce its collection. And because a new set of data is generated each time a vehicle is plugged in—across all EVSE enrolled in a program—charging session data can quickly become costly to collect, store, and analyze. For example, one EVSP reported that they record millions of charging sessions annually across their network.

### *Uptime Data*

As EVSE reliability has gained prominence as an issue, some regulators, utilities and stakeholders have begun to track EVSE uptime as a metric to help establish whether EVSE are reliable, available, and effectively maintained by their owners. EVSE uptime is a measure of EVSE reliability that establishes the percentage of time that the EVSE is successfully operating and either charging, or able to charge, a vehicle. Some utilities collect this data to track reliability across the program or across individual networks, while government funders tend to use it to enforce uptime obligations. Some utilities also collect qualitative data about the reason for EVSE downtime.

## Data Availability and Access

In discussion with utilities, EVSPs and program implementers, it became clear that EV program design has a significant impact on both the availability of various types of data and on the utility's ability to access such data.

Program design begins with establishing which metrics are to be tracked, and what data is required. Once metrics and data requirements are established, subsequent program design decisions influence whether data is generated in the first place, and the utility's right to access—and therefore, ability to collect—necessary data. Not each of these program design elements are essential for every program; however, for data collection to be successful, programs must be logically constructed with the right program design elements to ensure that the data the utility, its stakeholders and its regulators expect will be available and accessible to the utility.

Table 2 shows how program design can influence data availability and access.

*Table 2: Program Design Elements Influencing Access to Types of Data*

| Program Design Element / Data Type | Application or Registration Portal | Separate Metering | Networked EVSE | Qualified Product List | Data Sharing Agreement | Site Host Data Authorization |
|---|---|---|---|---|---|---|
| **Site & EVSE Char.** | X | | | | | |
| **AMI** | | X | | | | |
| **Charging Session** | | | X | X | X | X |
| **Uptime** | | | X | X | X | X |

The program design elements that are most influential on data availability and access include:

### *Application or Registration Portal*

Most utilities in the cohort offer a customer-facing application or registration portal that captures key site and EVSE data as customers enroll in, or move through, the program.

### *Separate Metering*

Some utilities offer programs that require EVSE to be separately metered from other site load. This is often a more costly site design (either for the program or for the customer) and occasionally discourages participation, but it can enable AMI data collection or may be important for other program design reasons (e.g., a program requirement that EV charging sites be on an EV-specific tariffed rate).

### *Networked EVSE*

Most utilities in the cohort require EVSE to be networked to qualify for incentives and require the EVSE owner to keep the EVSE networked (e.g., pay network fees to the EVSP) for a specific program duration. This ensures that charging session data will be available. Typically, network fees are not covered by utility incentives, so this requirement does raise customers' costs of installing and maintaining EVSE. However, there are non-data benefits to networked chargers—including real-time monitoring, payment processing, remote diagnostics, and driver access control—that many commercial customers value.

### *Qualified Product List*

Most utilities in the cohort use a qualification process for EVSE hardware and/or EVSP network services and require customers to install qualified products and use qualified network services to be eligible for incentives. The downside of this approach is that it can limit customer choice to the EVSE and EVSPs that the utility has vetted and/or with which it has contracted. But a qualification process, and placement of the EVSP on a qualified

product list (QPL), creates the opportunity to establish a formal relationship between the utility and participating EVSPs, without which data collection is challenging. Many utilities cited the publicly available Vetted Product List from the Electric Power Research Institute (EPRI)[3] for hardware and software, which can be tailored to the utility's specifications. EPRI's list is extensive for both Level 2 and DC fast charging hardware, as well as for software. Additionally, EVCAN offers a publicly available and growing QPL for network services.[4] Such publicly available lists are useful but are challenging to keep updated due to the rapidly evolving number of companies entering and exiting the market.

### *Data Sharing Agreements*

Most utilities in the cohort require EVSPs to sign a data sharing agreement as a condition of being placed on the QPL. These agreements outline what data the EVSP must submit to the utility, how often, for how long, and by what mechanism. A data submission template is typically included, with details on how each data field is to be calculated and formatted. If an EVSP does not follow its obligations under the data sharing agreement, the utility may remove them from the QPL. EVSPs expressed an interest in seeing data sharing agreements and data submission templates prior to submitting materials to qualify on the QPL, to know what will be expected of them if they become qualified.

### *Site Host Data Authorization*

As a condition of program enrollment, many utilities in the cohort require site host customers to authorize the EVSP to provide charging data directly to the utility. An alternative approach requires the site host to commit to sending charging session data to the utility on a regular basis. However, this approach is burdensome for the site host and the utility and poses risks to data quality.

Utilities reported significant challenges collecting charging session and uptime data if their program design lacked four key program design elements: a qualified product list; a requirement for networked EVSE; data sharing agreements; and site host authorization.

Figure 1 shows the contractual relationships can operate between the utility, the customer, and the EVSP for successful data collection.

[3] EPRI's Vetted Product List: https://www.epri.com/vpl
[4] EVCAN's Qualified Product List: https://www.evcan.org/access-the-qpl/

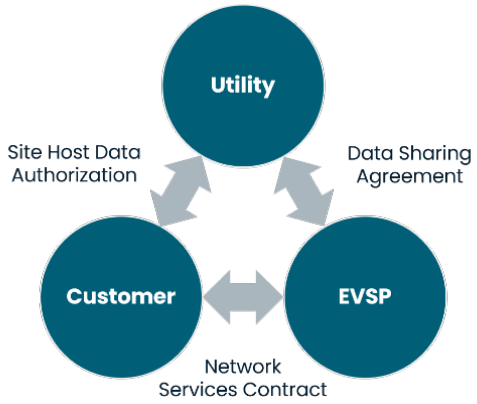


*Figure 1: Contractual Relationships to Enable Data Collection*

## Data Transfer

While site-level, EVSE, and AMI data are relatively straightforward for utilities to collect, utilities and EVSPs reported a range of approaches to transferring charging session and uptime data from the EVSP to the utility. These approaches fall on a spectrum ranging from manual approaches (with less upfront set-up but more ongoing effort) to more automated approaches (with more upfront investment but fewer ongoing costs), illustrated in Figure 2. Utilities with more comprehensive and advanced approaches to data collection reported using a single, uniform mechanism for collecting data, which frequently involves a more significant upfront investment but a less labor-intensive ongoing process. Other utilities reported using multiple approaches to data collection, adding complexity.

Importantly, program scale has an impact on the overall cost of data collection, and on whether a more manual or more automated process makes the most sense. For small-scale pilots, manual approaches may be a straightforward, low-cost solution. But within larger programs that are operating at scale, manual efforts quickly become overwhelming and costly for utility program staff. The frequency of data collection (monthly, quarterly, annually, etc.) and the duration (3 years, 5 years, 10 years) also impact the level of effort, and the costs and benefits of manual vs. automated approaches.

*Figure 2: Spectrum of Data Transfer Approaches*

| Site Host Outreach | Self-Serve | Email | SFTP | Web Portal | API |
|---|---|---|---|---|---|
| Manual - More Ongoing Effort | | | | | Automated - More Initial Effort |

### *Site Host Outreach*

A handful of utilities reported doing direct outreach to site host customers to obtain data that the site host accesses from the EVSE. Typically, these programs do not have QPLs and data sharing agreements—making it nearly impossible to enforce data submission directly from the EVSP—and some programs have EVSE networked by as many as 50 EVSPs. Even in programs with QPLs, qualitative data points (such as EVSE downtime reasons) may need to be collected from the site host, as EVSPs do not typically track these. Utilities engaged in direct site host outreach report a complex, labor-intensive, and frequently ineffective process that adds tension to the customer relationship and struggles to meet the utility's expectations for data reliability.

### *Self-Serve*

Some EVSPs reported establishing a self-serve process for a utility to collect data directly from the EVSP portal. In this approach, the EVSP creates an account for the utility to access data from all the EVSE in its network that are registered in the program. From the EVSP's perspective, this arrangement is ideal; however, it requires utility personnel to collect raw data from various portals—often in different data formats—and manually adjust and aggregate it in the required format. Utilities report that this part of the process is burdensome and consumes considerable staff time.

### *Email*

Some utilities reported accepting spreadsheet files from EVSPs or site hosts over email on a periodic basis. Other utilities raised concerns about this approach, including information security risks; audit trail; files sent to inactive email accounts or caught in spam filters; and version control.

### *Secure File Transfer Protocol (SFTP)*

SFTP is a secure, encrypted network protocol used to transfer files between systems, authenticated by passwords on both sides. Some utilities and EVSPs reported using SFTP servers to exchange data, with the utility sending a request for data from specific program-enrolled EVSE, and the EVSP responding with charging session data. Some utilities and EVSPs reported using data scripts to move data between their data platforms and the SFTP server. For example, one utility uses data scripts to ingest data from the SFTP server directly to their data lake, eliminating manual processing costs and reducing risks of errors.

Even SFTP can present challenges, depending on information security policies. One EVSP reported that one utility has a policy to change SFTP passwords frequently, necessitating communication between the EVSP and the utility each time data is exchanged.

### *Web Portal*

No utilities reported using web portals for EVSPs to securely upload data, but EVSPs reported using such portals for reporting to government agencies. For example, the Joint Office of Energy and Transportation created the Electric Vehicle Charging Analytics and Reporting Tool (EV-ChART) to facilitate data submittals for NEVI sites,[5] and the California Energy Commission (CEC) offers a data submission portal for grant-funded ZEV infrastructure data reporting.[6] In cohort discussions, some EVSPs praised web portals for their ease and for the automatic confirmation that data has been received. Meanwhile, some utilities expressed an interest in web portals but suspected they would be cost-prohibitive.

### *Application Programming Interface (API)*

Some utilities reported using an API to collect data from EVSPs, though they noted that this was only offered by some of the better-capitalized EVSPs. The utilities using this approach shared that the upfront effort to establish the API was significant, but that the transfer of data is more reliable than other approaches.

## Data Use

Utilities reported a variety of uses for the data that they collect through EVSE deployment programs.

### *Compliance Reporting*

Most utilities in the cohort are required, as a condition of program authorization, to report regularly on program metrics and outcomes in public filings to their Commission. While most utilities are familiar with this type of reporting for a variety of customer-facing programs, some reported that compliance reporting is the *only* reason they collect this data, and many expressed doubt that compliance reports are comprehensively reviewed or used by Commissions and/or stakeholders. EVSPs, likewise, expressed an understanding of why the utilities are collecting the data, but are uncertain that the data are being meaningfully used to inform future decision-making.

---

[5] Joint Office of Energy and Transportation's Electric Vehicle Charging Analytics and Reporting Tool: https://driveelectric.gov/evchart

[6] California Energy Commission's Grant Funded ZEV Infrastructure Data Reporting: https://www.energy.ca.gov/programs-and-topics/programs/clean-transportation-program/zev-infrastructure-data-reporting/grant

### *Program Evaluation*

Many utilities in the cohort have a third-party program evaluation as part of their program design. Third-party program evaluation offers a more comprehensive assessment of the program than does compliance reporting. This robust assessment includes quantitative and qualitative insights that can be validated with data, often with actionable recommendations to strengthen program outcomes or inform future program design. Some utilities report regularly using Power BI or other platforms to internally visualize data and access detailed analytics, even outside of formal program evaluation milestones.

### *Clean Fuels Credits*

Utilities in jurisdictions that have a clean or low-carbon fuels standard (LCFS) (e.g., Washington, Oregon, California) occasionally reported using charging session data and other energy throughput metrics to support their process for claiming credits under such programs. Since commercial clean fuels credits are typically claimed by the EVSE owner and the scope of this inquiry included only non-utility owned EVSE, this data use case was infrequent. But the use case is meaningful, as utilities collecting data for this purpose need to align their data typology and collection cadence with the requirements of the agency (typically, the state environmental agency) that manages the LCFS program.

### *Load Forecasting*

Some utilities reported using the load shapes from their EV program data to inform load forecasting within their resource and/or distribution system planning. Utilities engaging in this practice reported using charging session data, AMI data, or both to support such planning. However, for other utilities, the representatives we spoke to were not aware of whether their resource and distribution system planning teams were accessing and using EV program data in this way.

## Challenges

Utilities and EVSPs reported various challenges with the process of data collection for their EV programs. Robust, complete data collection remained elusive for many utilities, for a variety of reasons described below.

*Ambiguity of Purpose*

Many utilities confessed ambiguity as to the fundamental goals of EVSE data collection. Several cohort participants expressed the view that program data requirements were developed under the presumption that data collection is easy and that the data will be useful someday, even if its specific purpose is not identified in program applications, objectives, or approvals by Commissions. There were concerns that more data is collected than is necessary to run an efficient EV program.

> *"We shouldn't assume that all data is useful and we need it all, at any cost."*
> *- Utility Cohort Participant*

Utilities and EVSPs also raised concerns that data was being used to reach improper conclusions about the value of a program. One frequently raised example, across several jurisdictions, was the use of utilization data to assess the value of specific EVSE. Many utilities and EVSPs expressed that they view EV charging as a network of access points that support a variety of EV drivers at different times and places, and the utilization of any individual EVSE within that network does not reflect its full value as part of the network.

*Complexity of Data Collection*

Several utilities confessed that the process of data collection surprised them in its complexities. In some cases, utilities committed to collecting certain data before they worked out policies or processes for doing so, and they underestimated the resources that would be needed. Utilities learned the hard way that they needed to develop data dictionaries for data providers, contracts with customers and/or EVSPs that grant them access to the data, and secure operational processes for collecting the data. Utilities also reported that data collected in different ways ends up stored in different locations internally—such as a data lake; spreadsheet files; a meter data management system (MDMS); or virtual power plant (VPP) software—making it challenging to collate and analyze.

The complexity of data collection also changes over time, in the years following EVSE installation. Properties may change hands, malfunctioning charging hardware may be replaced, or EVSPs may exit the market and necessitate a change in software vendors. Each of these situations creates a need for new agreements and contracting—potentially well after the program has been closed to new participants and utility program staff have moved on to different roles—and may result in data inconsistencies or gaps.

EVSPs, meanwhile, grapple with this same complexity from the other side. For example, one EVSP reported they are regularly submitting data to over 100 individual utility and government agency EV charging programs, each with multiple (sometimes dozens) of charging sites and EVSE installed; each with their own data requirements, reporting cadences and submission processes; and, often, each with their own data specifications.

### *Use of Resources*

Data collection carries real costs, including utility and EVSP staff time, data management resources, and ongoing coordination with customers and EVSPs. Across multiple jurisdictions and programs, utilities and EVSPs reported dozens of employees dedicated part- or full-time to the process of collecting and submitting data. For example, the EVSP involved in over 100 programs reported that before data is submitted to the funding entity, their program and data teams work together extensively to audit and validate the data to ensure that it is accurate, complete, formatted correctly, and timely. For EVSPs as well as utilities, the frequency and duration of data collection have a significant impact on resource needs—one utility referred to these as the "trailing costs" of a program that has otherwise ended.

> *"Manual reporting is a real bear."*
> *- EVSP Cohort Participant*

Utilities in the cohort, meanwhile, frequently use consultants to collect data due to a lack of in-house personnel, but note that in some cases this contractual work has been under-resourced (or more costly than anticipated) and ineffective. Utilities that conduct their own data collection reported a challenging process to assemble an internal cross-functional team of program managers, information technology, business analytics, cybersecurity, regulatory affairs, and data science team members to support the process. They offered cautionary advice that pulling together such a team is complex, costly and time-consuming.

Data storage and retention also require resources. One utility, which is in the process of moving toward a single reporting platform for all EV programs, reported that the volume of data they are expected to collect outstrips the number of rows available in commonly used spreadsheet software. Another utility noted that program managers encountered significant computer performance issues—such as lags, freezes and crashes—due to the volume of data they were expected to process, requiring new software and training.

### *Customer Experience*

Several utilities, especially those doing direct outreach to site host customers to regularly ask them to report their data, expressed concern about the detrimental impact on customer experience. Operating and maintaining EVSE is frequently more complex and costly than site hosts initially anticipate and is often done through a service level agreement with the EVSP. Utilities expressed reluctance to add to these burdens by requiring site hosts—who may not have the skills or resources to accurately export or assemble data—to submit such data to the utility under the threat of incentive clawbacks or future program exclusion.

## Best Practices

Following cohort discussions, ATE assembled the following list of best practices for utilities, EVSPs, stakeholders and regulators to consider as they work to facilitate a useful, cost-effective, and sustainable EVSE data collection structure.

### *Align on the Purpose of Data Collection*

As a foundational issue, utilities and regulators should define—ideally through a stakeholder process—what data should be collected, and how it will support program objectives, program evaluation, regulatory reporting, and/or business decision-making. This process will support alignment among parties about the value of data collection, as well as help guide program design and budgeting. Knowing how data will be used also informs which data is necessary.

### *Build Strong Program Design*

Utilities and regulators should comprehensively consider how program design impacts data availability, access, transfer, and storage. Absent key program design elements, certain data types are challenging to collect at scale. And once the program is designed and launched, it can be difficult to change the program design during implementation to facilitate improved data collection.

### *Budget for Data Collection and Analysis*

As discussed above, data collection and analysis carry costs, and these costs are frequently borne by ratepayers. Each utility and regulator must assess the costs and the benefits of collecting certain data and make their own determination of what the data is worth. Program budgets must be sufficient to cover the staff and systems that are required for robust and reliable data collection, storage, analysis, and reporting. Budgeting should also consider reporting frequency (from EVSPs to the utility, and from the utility to the Commission) and duration, as these influence the size and timing of such costs.

### *Rely on Existing Data Reporting Frameworks*

In determining data specifications, utilities and their regulators should look to established standards for definitions and data field formatting. For example, both the Joint Office of Energy and Transportation's EVChART tool and the CEC's portal offer publicly available data dictionaries that many EVSPs are already familiar with. Additionally, Atlas Public Policy offers a publicly available EV Charging Use Data Specification that defines a common format for utility and government use.[7]

### *Establish Data Collection Process Early*

Setting up reliable data collection is resource-intensive and technical in the initial phases. Processes should be mapped out before programs launch to ensure continuity and comparability of data. Utilities and regulators may want to consider a range of data transfer approaches, acknowledging the tradeoffs of information versus the resources required to collect and analyze it. Utilities should work internally to establish cross-functional teams to support the data collection process and engage actively with EVSPs. Meanwhile, EVSPs should treat data submission as a function, and identify reliable points of contact with whom utilities can work.

## Conclusion

EV charging and utility EV programs are evolving but remain in early stages. The programs that are collecting data today were authorized when the market was quite new, when the industry lacked a clear sense of how data collection might functionally work. The challenges discussed herein speak to the many good-faith assumptions that were made—about what data was worth, how universally available it was, how it could be collected, and how straightforward that collection would be—some of which may have been erroneous.

As utilities move into their next phase of EV programs and integrate lessons learned, there is an opportunity to approach EVSE data collection with a new lens and refine what's being collected and how it is informing program evaluation and load forecasting. Utilities and Commissions should sharpen the focus of data collection on specific and desired outcomes, and and strive to incorporate best practices such as effective program design, a sufficient budget, universal frameworks, and streamlined processes. A more deliberate structure for data collection will streamline EV program operations within the utility, strengthen the customer experience, and deliver valuable data that can be used to enhance grid planning and management, ultimately benefiting all ratepayers.

---

[7] Atlas Public Policy, EV Charging Use Data Specification, available at https://github.com/AtlasPublicPolicy/charging-use-spec/