CHARGING & FUELING INFRASTRUCTURE ATHENS, OH

This case story is one in a series designed to highlight and bring to life stories of impactful infrastructure projects around the country funded by or eligible under programs within the Infrastructure Investment and Jobs Act (IIJA) or Inflation Reduction Act (IRA). The story you are reading focuses on the Charging and Fueling Infrastructure (CFI) grant, a discretionary program established by the IIJA, to strategically deploy publicly accessible electric vehicle charging infrastructure and other alternative fueling infrastructure.

The Local Infrastructure Hub is highlighting the CFI grant recently awarded for the Southeast to Southwest Ohio Responsive Interregional Deployment of Electrification Solutions (RIDES) Community Project. This project, focused on electric vehicle (EV) charging infrastructure, was kickstarted by the City of Athens building on their participation in a Local Infrastructure Hub Bootcamp. After the bootcamp, the city brought in the Sustainable Ohio Public Energy Council (SOPEC), an organization that has since become the lead applicant, helping to bring together the coalition of 29 partners.

Click **HERE** to visit the Transformative Projects page at the Local Infrastructure Hub to see other case stories and resources.

Publication Date: February 13, 2024

Case stories produced for the Local infrastructure Hub through a partnership with Accelerator for America and research support from Drexel University Nowak Metro Finance Lab.

PROJECT AT A GLANCE

Leadership: Mayor Steve Patterson, Athens, OH
Andrew Chiki, Deputy Service-Safety Director at City of Athens, OH
Luke Sulfridge, Executive Director at SOPEC
Dana Vingris, Director of Grants and Development at SOPEC

Location: Southern Ohio
Timeline: Grant awarded January 2024; implementation is ongoing
Focus: Climate, Economic Mobility

PROJECT DESCRIPTION IN BRIEF

The Southeast to Southwest Ohio Responsive Interregional Deployment of Electrification Solutions (RIDES) Project is led by the Sustainable Ohio Public Energy Council (SOPEC), a regional council of governments that provides public energy services to member communities across Ohio. The project, recently awarded a CFI grant, will provide for investment in electric vehicle (EV) charging infrastructure along a route from Athens to Dayton, benefiting current and future EV users across 16 communities.

Across the project's 16 communities, EV charging stations will be placed in a total of 40 census tracts, including 33 designated as disadvantaged communities. In sum, 94% of the charging stations will impact disadvantaged communities and populations. The funded stations will add 224 level 2 charging ports and 38 Direct Current Fast Charging (DCFC) ports across the region. Refer to page 7 for a diagram with additional information on EV charging levels.

While the project is community-oriented, it will support charging access along three federally designated alternative fuel corridors and will provide EV charging infrastructure to support at least three municipal fleet transitions.

FUNDING SOURCES

Charging and Fueling Infrastructure Grant Program Community Award of $12.5M, as well as local contributions for the non-federal share via communities, EV charging vendors, and local utilities.

PROJECT PARTNERS

City of Athens, City of Dayton, Five Rivers Metroparks, Ohio University, Outdoor Recreation Council of Appalachia, Athens County Public Libraries, Perry County Public Libraries, Athens County Office of Job and Family Services, Meigs County Public Libraries, Athens County, Village of Racine, Village of Rio Grande, City of Belpre, Village of Trimble, Village of Shawnee, Village of Amesville, Village of Somerset, Village of New Straitsville, Village of Jacksonville, Gailia-Jackson-Vinton-Joint Vocational School District, University of Rio Grande, Athens City School District, Village of Piketon, Village of New Concord, Village of Gallipolis, Village of Glouster, Electrification Coalition, and Drive Electric Dayton.

ADDITIONAL DETAILS

The City of Athens participated in a Local Infrastructure Hub bootcamp for the CFI program. After doing so, they took their vision and the resources from the Hub to SOPEC, who agreed to lead the development of the grant application, and in doing so hired a dedicated grant writer and engaged in broader recruitment of partners across the region.

NATIONALLY DESIGNATED ALTERNATIVE FUELS CORRIDORS

The Federal Highway Administration (FHWA) designates a national network of EV charging and hydrogen, propane, and national gas fueling infrastructure along national highway system corridors. These are referred to as national Alternative Fuel Corridors (AFCs). In addition to the National Electric Vehicle Infrastructure (NEVI) formula program, the CFI program uses these designations to determine eligibility for the corridor projects, but not community projects like the one being led by SOPEC.

INVESTING IN SUSTAINABLE TRANSPORTATION

The Biden-Harris Administration has high ambitions for nation-wide electric vehicle (EV) adoption and accessibility, making both a priority. The administration has made their goals clear, as laid out in various remarks and executive orders, including building a national network of 500,000 publicly accessible EV chargers and aiming for EVs to make up at least 50% of new car sales by 2030. To realize this, there are several programs across the IIJA/BIL and IRA focused on EV charging infrastructure deployment, including Low or No Emissions, Elective Pay credits, the National Electric Vehicle Infrastructure (NEVI) formula program, and the Charging and Fueling Infrastructure (CFI) grant program, as well as some eligible uses of Climate Pollution Reduction Grants (CPRG) and the Greenhouse Gas Reduction Fund (GGRF). The BIL alone invests $7.5B in EV charging and $10B in clean transportation.

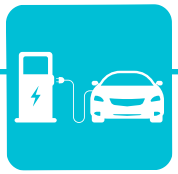
> **"A carbon-free, sustainable, and resilient transportation system would have co-benefits for human health, environmental justice, the natural environment, and economic development."**
>
> **——The Fifth National Climate Assessment, published in 2023**

However, these funding sources are not comprehensive. For example, eligibility for the NEVI formula program is limited to charging stations within 1 mile of designated alternative fuel corridors. As a result, a large part of Southern Ohio, which is away from designated corridors, is receiving little, if any, NEVI funding. Additionally, Mayor Patterson and the Athens team recognized that NEVI compliance would require chargers to be within a mile of interchanges for designated routes, limiting their ability to ensure that EV charging infrastructure is available throughout rural communities. The resulting lack of EV charging infrastructure in southern Ohio, and the mismatch between NEVI's requirements and regional objectives, led local leaders to pursue the CFI program, which aligns better with their communities' needs.

WHAT THE PROJECT SEEKS TO ADDRESS

ACCESSIBILITY

Closing the distance gap between charging stations, and lack of infrastructure in many communities.



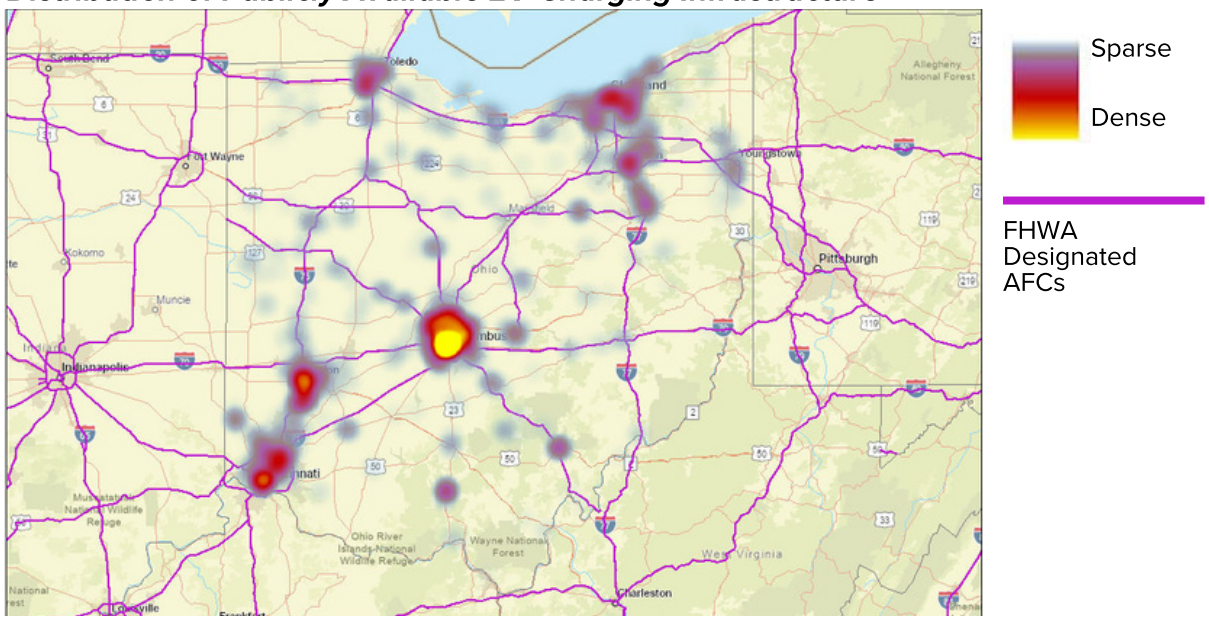
FLEET

Building the infrastructure to support fleet electrification for cities and community service organizations.

EQUITY

Providing chargers to multi-unit dwellings, low-income areas, and at popular community locations.

Distribution of Publicly Available EV Charging Infrastructure



BUILDING THE COALITION

Mayor Patterson tapped Andrew Chiki, Deputy Service-Safety Director for the City of Athens, to look for resources to support the city's green investment objectives, which quickly led him to the Local Infrastructure Hub's CFI bootcamp. Both Chiki and Mayor Patterson felt participation in the LIH bootcamp was critical to their successful grant application. "Without going through the [Hub] process we would not have even attempted to go for the [CFI] grant," Chiki said, "It would have just been another [opportunity] we looked at and thought 'well, that seems unattainable.'"

LOCAL INFRASTRUCTURE HUB BOOTCAMPS

The Grant Application Bootcamps offered by the Hub, and run through the National League of Cities (NLC), provide an expert suite of supports to small and mid-sized municipalities (populations <150K) to develop strong, competitive grant applications through pro-bono technical training and grant writing programs. In addition to live learning sessions, participants receive access to templates, example submissions, and other support.

Learn more about the Bootcamps HERE.

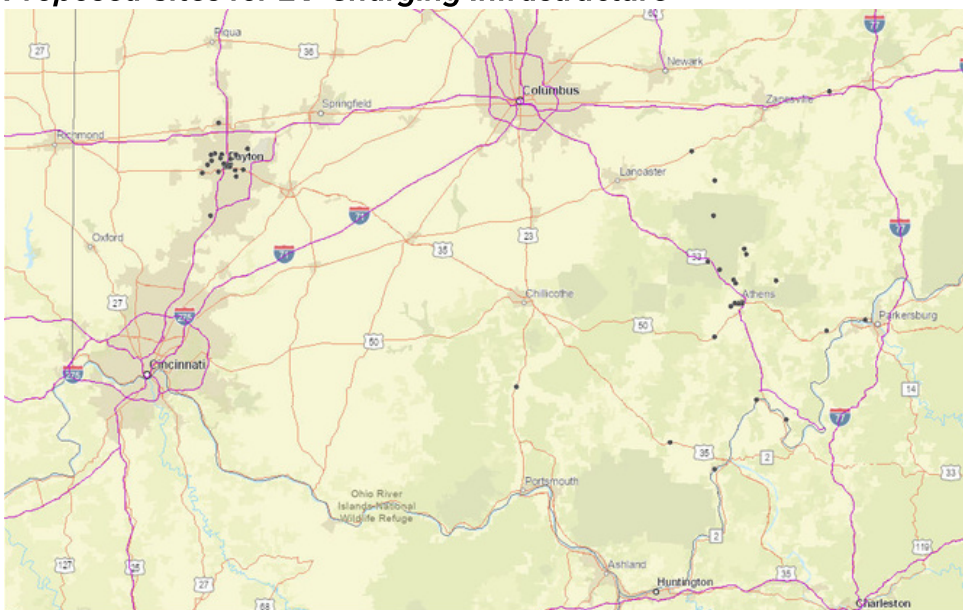
Athens' central location in Southeast Ohio and population of 23,849 per the latest Census, including about 20,000 residential undergraduates at Ohio University, has made the city a regional anchor for the smaller, more rural towns and communities surrounding it. Given the city's role, Mayor Patterson has consistently strived to identify opportunities for Athens and their surrounding communities to collaborate on projects with regional benefits. When the CFI Notice of Funding Opportunity (NOFO) was released early in 2023, Chiki began to develop a concept for the grant application – a roughly $1M project, focused on Athens and Athens County. However, as Chiki would learn through his participation in the LIH Bootcamp, USDOT was seeking projects that would spread impacts throughout a region and they, as the city, would likely be competing with larger municipalities striving to meet that goal. So, Chiki and Mayor Patterson began outreach beyond the city and county.

BUILDING THE COALITION (CONTINUED)

First, Chiki met with Hocking-Athens-Perry Community Action (HAPCAP), one of 50 community action agencies in Ohio and a part of the Corporation for Ohio Appalachian Development (nb. Ohio has 32 counties within the Appalachian Regional Commission). HAPCAP's work focuses on alleviating the effects of poverty in their communities through innovative programs and creating opportunities, this includes a Home Energy Assistance Program and the Regional Food Center. Chiki was able to work with HAPCAP to engage many of the smaller villages and townships and bring them into the coalition. Chiki also brought in in Sunday Creek Horizons, a frequent partner in economic development projects with a focus in the Appalachian area of Southern Ohio, who thought they could do something bigger - and so, two more partners were brought in that would be critical to the project's success: Buckeye Hills Regional Council and Sustainable Ohio Public Energy Council (SOPEC). .

> **"We determined that the best way to be successful would be to create a coalition of other communities and regional partners. This started by talking directly with partners in Athens County and quickly grew to Southeast Ohio, and eventually reached as far as Dayton"**
>
> **— Mayor Steve Patterson**

Proposed Sites for EV Charging Infrastructure



Buckeye Hills Regional Council is a network of local governments that functions as the area's Regional Transportation Planning Organization (RTPO; comparable to metropolitan planning organizations), serving an eight county area in Southeast Ohio, home to almost 250,000 residents, covering about 3,700 square miles, 121 townships, 5 cities, 53 villages, and 22 Census-designated places. The biggest employment sectors include manufacturing, retail trade, and healthcare. The region also has 8,900 miles of total roads, 147 miles of Ohio River frontage, and six transit agencies. The Regional Council was greatly interested in this project, as it aligned with their Long-Range Transportation plan goals of strengthening the region's economic vitality, advancing mobility and accessibility, and maintaining the region's transportation system.

BUILDING THE COALITION (CONTINUED)

SOPEC is a regional Community Choice Aggregator (CCA) and, as Mayor Patterson and Chiki noted, would come to play a leading role in the project. SOPEC, not only expressed a great interest in the project, but was also willing to take the lead in convening all potential project partners and development of the grant application. Additionally, due to SOPEC's reach across Southern Ohio, they were able to engage community partners beyond the Southeast - most notably, Dayton.

With these key regional groups and other municipalities on board, Chiki was able to focus on involving local entities and community partners, such as the school district, Ohio University, and other anchor institution partners. In the end, what started as a proposal for a $1M project with impacts limited to the Athens area quickly became a regional effort, requesting $12.5M to build out EV charging infrastructure throughout southern Ohio.

TELLING A STORY OF IMPACT

With the grant application coalition in place, an important next step was to refine the project narrative to align with the program's broader goals. For example, Athens and Dayton both play a critical role in Southern Ohio as healthcare hubs for their respective surrounding communities. As Chiki noted, for residents in communities surrounding Athens, they may need to come into the city for medical care and, subsequently, be referred to advanced care facilities or specialists in Dayton. As it stands, the lack of charging infrastructure between these two points makes it difficult for EV users to make the 135 mile drive without having to take an indirect route through Columbus.

On a regional scale, the impacts of this project are tremendous in promoting equitable access to EV charging infrastructure and creating potential for long-term economic growth for communities throughout rural Southern Ohio. As Chastity Schmelzenbach, Executive Director for Buckeye Hills Regional Council, and Nicholas Tepe, Director for the Athens County Public Library, note in their support letters - the presence of a charging station improves "visibility in the community, brings visitors into the community, and all for a relatively small investment." Tepe noted the opportunity here, in this grant, to spread those benefits beyond the Athens community, and increase the visibility of communities in rural Ohio. Furthermore, by increasing charging infrastructure throughout these rural communities, the region also opens up greater opportunities for EV drivers to access and take advantage of the popular outdoor and recreational amenities between Athens and Dayton.

EV CHARGING LEVELS

	Level 1	Level 2	Direct Current Fast Charging (DCFC)
Typical Location	Home	Home, Workplace, Public	Public
Time to Full Charge from Empty	40-50 hours	4-10 hours	20-60 minutes
Range per Hour of Charging	2-5 miles	10-20 miles	180-240 miles

TELLING A STORY OF IMPACT (CONTINUED)

ANDREW CHIKI, CITY OF ATHENS

"[Having a charging station] means that more of those little communities are now literally on a map where they didn't exist to somebody that was looking for charging. So when people are creating their routes they see these communities"

"The reality is that disadvantaged communities will have greater access [to EV charging stations] and realize economic benefits including the lowering of greenhouse gasses"

DOW SAUNDERS, CITY MANAGER FOR CITY OF GALLIPOLIS

CHASTITY SCHMELZENBACH, BUCKEYE HILLS REGIONAL COUNCIL

"Together these projects will help support the growth and development of the region by providing equity, safety, and environmental impact that would otherwise not be afforded to the communities of southeast Ohio"

FAST FACTS ON IMPACT

- 16 communities engaged
- 97% of project benefits falling in Justice40 communities
- Adding 262 charging ports, 38 of which are fast charging, across 51 charging stations
- Supporting charging access along three federal designated alternative fuel corridors
- Stations in four multi-modal and recreational locations
- Supporting several municipal fleet transitions, including in Dayton and Athens

BRINGING IT BACK TO ATHENS

Per the grant application, Ohio University will be the site of several charging stations, promoting EV access to the Heritage College of Osteopathic Medicine Community Clinic. The Clinic provides no-cost healthcare to medically underserved individuals and supports the broader objective of strengthening the Dayton-Athens healthcare corridor. The grant application also included proposed chargers at the American Job Center network hosted by OhioMeansJobs which will support the EV fleet transitions for workforce and social service needs.

In Athens, their CFI funding will support the installation of chargers at several community buildings, including schools and the Athens Armory, a historically significant building that is vital to an ongoing economic development project. The Armory, an anchor of Athen's retail corridor, will be fully renovated to include co-working spaces, a performance venue, and conference rooms that can be utilized for a variety of public and private events. As Chiki noted, the Armory is a $4.5M project "pieced together $500K at a time" – a portion of the CFI grant will be a crucial part of the capital stack for this project, alongside other funding sources. The installation of EV charging stations at this location is adding value to the Armory project and is expected to spur further interest in investing at the site.

All told, by expanding the project's scope and collaborating with regional partners, Athens will be receiving between $1-1.5M in federal grant funding for their EV charging network build out.

PROJECT FUNDING

The total cost for the project is estimated at $17.4M, of which $12.5M is coming from the CFI program, and a planned $5.8M non-federal cost share. Several options for how the non-federal share will be sourced are under consideration, including community, vendor, and SOPEC contributions.

SOPEC and the city came to this budget projection using estimates provided by grant and public utility partners, as well as sample quotes and invoices from similar charging stations, past EV infrastructure project reports containing similar technical specifications, and Department of Energy resources. Those considering applying for the CFI grant should closely review the latest NOFO to identify what is required for budget estimates.

WHAT'S NEXT?

Throughout the grant application process, the bulk of SOPEC and Chiki's focus was on stakeholder and partner engagement as they sought to ensure an equitable and well-distributed proposal. As the project moves into its grant agreement and implementation phases, the project team will shift focus to robust community engagement. Chiki's first effort in Athens will be the city's Requests for Proposals (RFPs) for installation and maintenance of the grant chargers. The city is planning to engage with EV owners and electric car clubs, which serve as a hub for networking between EV owners and advocates. Members of the clubs support policy and action to promote EV tax credits, access to public charging, and regional transportation upgrades. The city is also engaging with Ohio University around their ongoing initiatives, like demonstration days hosted by the university where people can test drive EVs. In these engagements, project leaders are seeking feedback on what people are looking for in EV charging stations: what co-located amenities are of interest, what is most convenient relative to routes, and what the technical interests are (i.e., level 2 vs. DCFC; brand preferences).

SOPEC has brought in a project manager for the Council's responsibilities in administering the grant and for partner coordination as the project progresses. Once the grant agreement is finalized, they are planning to develop, what will likely be, an RFQ and RFP process to identify the best vendor(s) for developing, installing, and maintaining the charging stations. Vendor considerations unique to the project include their ability to manage maintenance of the charging stations, as well as work with local training programs to support regional workforce development efforts.

Beyond developing and executing a solicitation process, the execution of this grant involves several key planning considerations – the two most prominent being site selection and identifying/building grid capacity for new charging stations. Site selection entails considering co-located amenities (such as rest stops and coffee shops), proximity to routes, and land acquisition/space availability. Additionally, city and regional leaders are working with local utilities to evaluate grid capacity to identify electric load needs for charging stations, and plan requisite investments.

CONCLUSION

This project is more than just funding the installation of charging stations in Southern Ohio; it is a dynamic force that will catalyze EV adoption and travel throughout the region, literally putting communities and their local economies on the map. Initiated by Mayor Patterson and Andrew Chiki from Athens, and now led by SOPEC, this project strategically weaves together a network of communities and collaborators around a collective investment to leverage transportation trends. This is not just a boon for EV travel in the region, it is a boost for all of Southern Ohio.

The CFI Community award to this project is not the end of the journey, it's just the beginning of a collective, regional effort towards a sustainable and equitable future.

A NOTE ON THE MAPS INCLUDED WITHIN

The maps used for this case story were produced by the Nowak Metro Finance Lab using publicly available data on federally designated alternative fuel corridors and publicly accessible charging stations. Identified sites to be funded by the CFI grant are preliminary and based on their inclusion in SOPEC's grant application; they are not meant to represent final site determinations as formal site assessments for their viability for a charging station have not yet been conducted.

Accelerator for America would like to thank Drexel University Nowak Metro Finance Lab for their partnership in production of this case story for the Local Infrastructure Hub.

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