# American Mayors and Businesses:

## Building Partnerships for a Low-Carbon Future

**Volume IV**

## ALLIANCE FOR A SUSTAINABLE FUTURE

**a joint effort by The U.S. Conference of Mayors and the Center for Climate and Energy Solutions (C2ES)**

**April 2021**

THE UNITED STATES CONFERENCE OF MAYORS

C2ES

# THE UNITED STATES CONFERENCE OF MAYORS


**Greg Fischer**
Mayor of Louisville
President

**Nan Whaley**
Mayor of Dayton
Vice President

**Francis X. Suarez**
Mayor of Miami
Second Vice President

**Erin Mendenhall**
Mayor of Salt Lake City
Chair, Alliance for a Sustainable Future

**Tom Cochran**
CEO and Executive Director
The U.S. Conference of Mayors

**Bob Perciasepe**
President
The Center for Climate and Energy Solutions


About The U.S. Conference of Mayors: The U.S. Conference of Mayors is the official nonpartisan organization of cities with populations of 30,000 or more. There are more than 1,400 such cities in the country today, and each city is represented in the Conference by its chief elected official, the mayor.

About C2ES: The Center for Climate and Energy Solutions (C2ES) is an independent, nonpartisan, nonprofit organization working to forge practical solutions to climate change. Our mission is to advance strong policy and action to reduce greenhouse gas emissions, promote clean energy, and strengthen resilience to climate impacts.
Learn more at www.c2es.org.


ACKNOWLEDGEMENTS

The Alliance for a Sustainable Future would like to thank the cities of Asheville, St. Louis, St. Petersburg, and West Sacramento for their contributions to this report. We also would like to thank Duke Energy, ComEd, and AECOM for providing resources to publish this report. Please note that none of the views of the report necessarily reflect the views of these organizations and that The U.S. Conference of Mayors and C2ES are solely responsible for the content of this report. Additionally, each case is unique and has been tailored to meet the needs of that community, so although the projects are meant to be replicable, outcomes are never guaranteed. We would like to sincerely thank Bob Perciasepe, Amy Bailey, Judy Sheahan, Kassidy Klein, and Sonya Bengali for their contributions to this report.


*Cover Picture: St. Petersburg, FL*

# American Mayors and Businesses:

## Building Partnerships for a Low-Carbon Future

**Volume IV**

## ALLIANCE FOR A SUSTAINABLE FUTURE

**a joint effort by The U.S. Conference of Mayors and the Center for Climate and Energy Solutions (C2ES)**

**April 2021**

# TABLE OF CONTENTS

# FOREWORD

With a combined punch of a global pandemic and economic recession, the past year brought unprecedented challenges to cities and businesses across the United States. Cities have struggled to provide their residents with the basic resources and services they need, while businesses have had to adapt to new environments as social distancing and working from home became the norm.

And these challenges came on top of increasing climate change impacts. This past year alone, we witnessed a record-breaking number of hurricanes, worsening wildfires in California, and extreme cold weather, where freezing temperatures brought much of the state of Texas to a dangerous and deadly halt.

Yet, despite these challenges, partnerships between cities and the private sector to address the impact of climate change not only continued, but grew.

Before the pandemic, cities were making significant progress enacting local policies to promote sustainable development and lower carbon emissions, and the private sector was developing new technology to place climate change at the forefront of business models. Over the past year, policies were developed to increase energy efficiency, promote a new green economy, and advocate for a more sustainable future.

And a recent sustainability survey by the Alliance for a Sustainable Future shows that the partnership between the public and private sector has never been stronger than right now, as cities work even harder to make the connections within their communities that are necessary to building climate solutions.

The Alliance, a partnership between The U.S. Conference of Mayors and the Center for Climate and Energy Solutions, has collected case studies from around the nation to highlight partnerships that advance climate solutions. One of the goals of the Alliance is to inform mayors, local officials, and business leaders of innovative new strategies that could present an opportunity for their own communities to reach their climate goals.

From the West Sacramento On-Demand rideshare service to St. Louis' solar workforce program, the case studies in this document highlight how cooperation among cities and the private sector can lead to promising, cost-effective programs that support our goals in reducing the impact of climate change.

The Alliance has and will continue to promote such programs. We invite you to join us as we stride toward a more sustainable future.

Greg Fischer
Mayor of Louisville
President, The U.S. Conference of Mayors

Erin Mendenhall
Mayor of Salt Lake City
Chair, The Alliance for a Sutainable Future

Tom Cochran
CEO and Executive Director
The U.S. Conference of Mayors

Bob Perciasepe
President
The Center for Climate and Energy Solutions

# THE BLUE HORIZONS PROJECT: A CLEANER ENERGY FUTURE FOR ASHEVILLE RESIDENTS

## Asheville, NC

### Overview

Electric utilities are key partners in local efforts to reduce carbon emissions. Through their management of energy efficiency programs, fuel mix decisions, and infrastructure investments, utilities are uniquely positioned to help advance regional climate goals. This case study follows up on the previous case study presented in 2017 on Duke Energy's collaboration with stakeholders in the Asheville, NC region. It outlines how the collaboration evolved and the positive results that were achieved.

The Blue Horizons Project, a collaboration between the City of Asheville, Buncombe County, and Duke Energy, demonstrates the power of community voice in planning for the region's energy future. The Blue Horizons Project's success in promoting demand-side management and energy efficiency to defer investment in a new natural gas combustion turbine "peaker" plant is rooted in community engagement, collaboration, and trust. City and county-elected leaders and residents have a strong passion for environmental protection and creating a healthier living environment for their neighbors and families. Additionally, one of the pillars of the regional economy is its natural beauty. This collective voice propelled Duke Energy, the city, and county to find technical alternatives to the construction of a new natural gas "peaker" plant proposed for the 2023 timeframes.

Five years later, through community collaboration, the region's coal-fired power plant has been retired and replaced with an efficient natural gas combined-cycle power plant and the need for a new combustion turbine "peaker" plant has been pushed outside of the company's 20-year planning horizon.

## Keys to Success

**Community Voice:** City and county residents called for a cleaner, more affordable, and smarter energy future for their neighbors and families. Their calls for change motivated the city, county, and Duke Energy to join forces and give residents a chance to accomplish the energy future they wanted.

**Shared Vision:** The three entities identified and focused on common goals and a clear vision. A shared vision is key to connect groups with different backgrounds to accomplish a common goal that is beneficial for all parties.

**Diverse Collaboration:** Including a variety of collaborators is beneficial for utility-community partnerships. Utilities, government entities, and grassroots organizations each bring knowledge and resources to the table and play important roles. Through collaboration with local government and organizations, Duke Energy was able to take a holistic approach to create solutions geared towards all community wants that helped them grow as a business.

**Partnership Evolution:** The utility-city partnership shifted responsibility from the Energy Innovation Taskforce (EITF) to its product, the Blue Horizons Project, to meet evolving community needs. They partnered with research institutes and marketing groups and hired staff to fill gaps, improve, and take next steps.

**Leveraging Existing Assets:** The Blue Horizons Project achieved the necessary load reduction without creating new energy programs. Increased participation driven by community engagement was the ultimate driver for delaying the "peaker" plant construction.

## Local Market Conditions

In 2015, the region's only baseload energy source was the Asheville coal-fired power plant, located just south of Asheville in Arden, North Carolina. After years of public advocacy[1] on May 18, 2015, Duke Energy announced the planned closure of Asheville's coal-fired power plant and a plan to replace the generation with a large natural gas power plant and 45-miles of new high-voltage lines. This replacement plan led to a large-scale grassroots movement, the Carolina Lands Coalition, organized by the advocacy organization, Mountain True. Through this movement, residents across the region pushed for a different plan based on greener energy sources and eliminating the impacts of a new transmission line.

Duke Energy listened and retracted the proposed plan in favor of codeveloping a new solution with the community. The Blue Horizons Project was born out of this collaboration. The resulting replacement plan, the Western Carolinas Modernization Project announced on Nov. 4, 2015, included commitments to:

- Retire Asheville's coal-fired power plant.
- Build a smaller, two-unit, natural gas plant.
- Build at least 15 megawatts of solar generation, and at least five megawatts of battery storage.
- Build a combustion turbine "peaker" plant in the 2023 timeframe.
- Work with the community to increase access to energy efficiency and demand-side management programs and resources to homes and businesses.

When the Western Carolinas Modernization Project was launched, Duke Energy committed to building two new 280 MW natural gas units and a 190 MW peaking unit in the early 2020s. While more attractive than the initial replacement plan, the community pushed for the delay of the "peaker" plant, requesting a chance to meet demand with cleaner energy sources, including load reduction.

To address this community concern, the city, county, and Duke Energy co-convened to form the Energy Innovation Task Force (EITF) in 2016 with the goal of delaying "peaker" plant construction beyond 2023 and creating a cleaner, more affordable, and smarter energy future for city and county residents. The Blue Horizons Project is a product of one of EITF's many accomplishments that will propel the city and county into their desired energy future through continued collaboration and community support.

The Blue Horizons Project represents the evolving partnership between the city, county, and Duke Energy. This city-utility partnership grew out an effort by the three entities to break down silos and collaborate to create the updated replacement plan for closing Asheville's coal-fired plant.

## Implementation & Partnership Development

### Building A Foundation

Community voice is at the heart of this city-utility partnership. Following Duke Energy's announcement of the Western Carolinas Modernization Project, community members submitted more than 10,000 comments in opposition to the company's initial plan to build a large natural gas-fired power plant and 45-miles of transmission line in the region. Understanding the importance of community involvement in their decision-making processes, the utility retracted the proposal and committed to make decisions with greater local engagement. From this, the City of Asheville signed a Joint Resolution with Buncombe County and Duke Energy to establish the EITF to co-design energy solutions that are better aligned with the community wants and technically sound. The three entities were able to align on a shared vision, largely

[1] The Sierra Club launched a Coal Ash Campaign in 2012, and they identified Duke Energy's Asheville Plant as a plant that needs to close. The Sierra Club partnered with Mountain True, a Western North Carolina environmental grassroots organization, to organize and advocate locally. Mountain True sued Duke Energy for coal ash in 2012. In 2014, the Dan River Coal Ash Spill was the flashpoint that sent the coal ash issue to legislature and resulted in the Coal Ash Management Act.

because key leaders from each shared a common goal and interest: to create a cleaner and stronger region for their residents and customers.

The EITF was responsible for research, prioritization, recognition, and implementation of recommendations for energy efficiency, demand-side management, and renewable energy opportunities. The task force attended Rocky Mountain Institute's (RMI) Electricity Innovation Lab (eLab) Accelerator in April 2016 to organize and plan their steps forward. At this four-day working meeting, representatives from the task force determined their main objectives and initiated discussion toward cost-effective, innovative energy solutions to accomplish their goals. EITF's two objectives were:

1. Avoid or significantly delay the construction of the 190MW "peaker" unit at the Asheville power plant site in 2023.
2. Create a cleaner, more affordable and smarter energy future through community engagement and collaboration that is beneficial to the community, customers, and Duke Energy.

The EITF functioned in a collaborative manner that leveraged diverse backgrounds and skillsets. Interested community members were able to join city, county, and utility leaders in the EITF. Together, they used their community and technical expertise to form four specialized working groups:

1. *Baseline and peak reduction working group:* This group identified the annual peak reduction target required to delay/avoid construction of the "peaker" unit.
2. *Programs working group:* This group focused on increasing participation in existing Duke Energy programs and proposing new and/or enhanced program offerings for the company to consider. The group also conducted a similar review and analysis of the portfolio of programs currently offered by Buncombe County and the City of Asheville that relate to weatherization, heating/cooling bill assistance and energy efficiency.
3. *Technology working group:* This group focused on identifying cost-effective technologies that can have the greatest impact on reducing/minimizing peak demand.
4. *Community engagement working group:* This group worked with the Shelton Group to help customers understand their role in achieving community energy goals.

During the beginning stages of the partnership, the working groups collectively met once a month to discuss progress, challenges, and plans to move forward. The Task Force was instrumental in laying the foundation for the partnership and making several early accomplishments towards community energy goals. The launch of the Blue Horizons Project was one of these accomplishments.

The community engagement working group enlisted the Shelton Group, a marketing and communications firm that specializes in energy and sustainability marketing, to create a community focused campaign that became the Blue Horizons Project. Since the campaign's launch in 2017, the Task Force transitioned most responsibilities over to the Blue Horizons Project's full-time project manager. During the transition, the Task Force met on a once-a-month or on an as-needed basis. Today, the EITF technology working group is the only remaining active working group and the Blue Horizons Project took on all other EITF responsibilities.

## Key Collaborators and Stakeholders

Continued community engagement is fundamental to the success of the EITF and the Blue Horizons Project. Traditionally, many utilities focus on solving problems with only a technical approach: building more generation, transmission and/or distribution infrastructure. Through their city-utility partnership, Duke Energy embraced community involvement, which resulted in innovative, technically sound solutions that are in line with community interests. Embracing a more holistic approach to decision making, Duke Energy built community trust, saw financial benefits through returns on energy efficiency savings, and gained tremendous experience in understanding grid benefits for battery storage.

Collaboration with businesses, community organizations, and academic institutions strengthened the Blue Horizons Project's relationship with the community. Key EITF members are listed below:

The City of Asheville
Buncombe County
Duke Energy
Asheville Area Chamber of Commerce
Explore Asheville
Biltmore Farms
New Belgium Brewing
Sundance Power Systems
Mission Hospital
Self-Help Federal Credit Union
Green Built Alliance
Community Action Opportunities
Green Opportunities
Sierra Club

The EITF served as the backbone for the success of the Blue Horizons Project; however, key partnerships with RMI and the Shelton Group were also imperative to the project's success. EITF's strategic partnerships with these organizations provided critical technical analysis and support for building community trust. EITF enlisted RMI for their technical expertise and analytical support. RMI is a nonprofit research institute that engages businesses, communities, institutions, and other groups to adopt market-based solutions cost-effectively and advance energy efficiency and renewable energy.

RMI researchers analyzed the city and county's energy usage data, and they found that Duke Energy's existing energy efficiency and demand-side management programs were underused within the city and county. Given their findings, RMI suggested data-driven solutions to change customer energy usage behavior and increase program participation. This was a key component for the partnership's success. With RMI's findings and solutions, the city and county were able to leverage existing assets and increase program participation, decrease energy demand, and ultimately delay the construction of the "peaker" plant.

RMI also provided project management services such as process development and meeting facilitation. As a third party, RMI was able to present project goals, plans, and data to community members in a way that was external from the local government or utility. This allowed community members to trust the information presented.

Likewise, the Shelton Group created an external, outward-facing gateway to the three entities' work that community members could trust. Shelton put all communities at the forefront of the campaign cultivation process by engaging the community and led branding, public outreach, communication, and marketing efforts. They collaborated with local organizations, experts, and other key stakeholders by hosting focus groups and listening sessions to tailor the campaign to the community. These focus groups were conducted with access for all in mind. One of the EITF partners, Green Opportunities, in the Livingston Heights neighborhood at the renovated Edington Center, allowed these focus groups to occur during their weekly community gatherings. The Blue Horizons Project drove program participation and maintained a strong community presence through their website and community events. The campaign website keeps community members engaged and informed by providing an easy to access location where residents can find project information, resources, news, and events. Duke Energy's energy efficiency programs for homes and businesses and energy savings tips are also on the website.

By listening to the community, building public support, and providing easy access to resources, the Blue Horizons Project maintained community trust and drove energy efficiency program participation.

### Community Engagement

The Blue Horizons Project, through the EITF, strategically partnered with local organizations that represent the community as a whole. Particularly, the three entities collaborated with organizations that represent vulnerable communities to ensure that all interests are protected and advanced. Equity and inclusion are two main focuses for the EITF and Blue Horizons Project. Partnerships with local organizations in city-utility projects are imperative to connect and build trust with low-income and diverse communities.

To better serve low-income communities in Asheville, the Blue Horizons Project has integrated programs like the Energy Savers Network which provides energy efficiency and weatherization services at no cost to the homeowner. The Blue Horizons Project also launched the Blue Horizons Energy Upgrade Program in 2019 with funding from the Southeast Sustainability Directors Network. This project focuses on equity and access for low-income households and households on home heating assistance programs. The program aims to weatherize and repair homes in Buncombe County.

The EITF also included members that represent vulnerable communities including Community Action Opportunities, Green Opportunities, and Self-Help Credit Union. Community Action Opportunities is an organization that collaborates with low-income citizens, elected public officials, and private agencies to alleviate poverty. Green Opportunities is a community organization that aims to train and support people from marginalized communities for green, sustainable career opportunities. Self-Help Credit Union is a community development financial institution that focuses on expanding opportunities to underserved communities. These members were critical in ensuring equitable representation in decision making.

## Cost and Financing

The EITF and Blue Horizons Project were funded through various sources listed in the table below:

| **Funding Source** | Duke Energy | The Community Foundation of Western Carolina | The Southeast Sustainability Directors Network | Small grants |
|---|---|---|---|---|
| **Contribution** | $850,000+ | $25,000 | $200,000 ($100,000 for two consecutive years) | Various amounts |
| **Purpose** | • EITF 's contract with RMI<br>• Initial marketing and communication consultation from the Shelton Group<br>• EnergyWise Home door-to-door canvassing<br>• Regular program dollars<br>• Investments in batteries and solar | Additional marketing and communication consultation from the Shelton Group | EITF's low-income weatherization project efforts | Various purposes |

## Driving Policies

The work of the EITF and Blue Horizons was made possible by political and policy support at the local, regional and company level. Collectively, the city and county's political support helped provide capacity and support, form a collective vision, formalize innovative partnerships, drive commitment, and set ambitious targets.

| | | | | | |
|---|---|---|---|---|---|
| The City of Asheville approved a Clean Energy Framework, in partnership with Duke Energy, in October of 2015 | The City of Asheville adopted a Joint Resolution establishing the EITF to research, prioritize, recognize, and implement recommendations for energy efficiency, demand-side management, and renewable energy opportunities in 2016. | The Mayor of the City of Asheville signed onto the Paris Climate Agreement and the Mayors for 100% Clean Energy in 2016 | The City and County have fully funded Sustainability Offices with Sustainability Officers and the City has an Equity and Inclusion Manager | The City and County adopted 100% renewable energy goals in October 2018. | Duke Energy announced its goal for net-zero carbon emissions from electricity generation by 2050, including at least a 50 percent carbon reduction by 2030 in Nov. 2019. |

## Outcomes

The Blue Horizons Project engaged the community and made existing Duke Energy programs more visible and accessible to city and county customers. Through these efforts, they boosted energy efficiency program participation, decreased demand, and successfully delayed "peaker" plant construction past Duke's planning horizon. Key accomplishments are listed below:

- In 2018 alone, 2,567 residential customers enrolled in Duke Energy's EnergyWise program, more than double the 2018 and 2019 1,000 total customer enrollment goal.
- In 2018, 895 commercial and industrial customers enrolled in the EnergyWise Business program, eight times as many enrollments than expected.
- Duke Energy provided 150 free weatherization upgrades and 9 whole-home retrofits for low-income households.
- In total, 700 homes and 92 businesses reduced energy consumption as a result of the Blue Horizons Project.
- Construction of the new 560 MW combined-cycle natural gas plant was completed in early 2020, and the coal plant built in 1964 was retired. The natural gas units support the region's growing population and robust economy.

## Lessons Learned

**Focus on common interests, not stakeholder positions:** Utilities and cities with a history of disagreements can focus on common interests, goals, and visions to put differing positions aside and focus on moving forward for the community they serve. Trust, honesty, courage, commitment, and patience are essential tools to overcome differences.

**Engage, listen and understand community perspectives:** Utilities tend to solve problems with existing utility systems and transmission and distribution infrastructure, but a long-term sustainable solution is about the marriage of technical

soundness and community desire. Utilities can take a holistic approach by engaging the community to address community needs first, increase participation, and receive a greater return on energy efficiency investment.

**Engage third party support / facilitators:** Third parties can provide expertise based on a project's needs. In this case, RMI provided technical expertise and analysis to advance partnership goals and the Shelton Group created the Blue Horizon's Project campaign to enlist public support and drive energy efficiency program participation. Third parties can bring a sense of credibility and trust.

**Take the time and find ways to build community trust:** Duke Energy and the local governments overcame community distrust and resentment. RMI and the Shelton Group efforts were key in gaining community trust. They were able to present unbiased data and create an external brand that was separate from the utility, city, and county.

**Make existing programs visible and accessible for all customers:** All community members need to participate in energy efficiency and demand-side management programs to successfully decrease demand. Often, existing programs are not running at capacity. Efforts can be made to make existing programs more visible and accessible to customers before investing in new programs. Find ways to meet customers where they are, not where you want them to be.

## What's Next

Duke Energy, the City of Asheville, and Buncombe County will continue to collaborate and build on their success to create a cleaner, more affordable, and smarter energy future for the community. Now that the Blue Horizons Project is focused on advancing the EITF's original initiative, leaders officially ended the EITF and recast the work as the Blue Horizons Project Community Council.  This group will continue to advance community goals in reaching 100% renewables through collaboration and innovation.

One thing is clear, the EITF and Blue Horizons Project's experience and community presence will be valuable resources for the city and county to leverage in accomplishing their 100% renewable energy goals. The Blue Horizons Project will continue to uplift community voice to co-create the clean energy future the region envisions.

## Additional Resources

To learn more about the EITF, visit: https://www.ashevillenc.gov/department/sustainability/energy-innovation-task-force/

To learn more about the Blue Horizons Project, visit: https://bluehorizonsproject.com/

To view the draft report, *Moving to 100 Percent: Renewable Energy Transition Pathways Analysis for Buncombe County and the City of Asheville,* visit: https://www.buncombecounty.org/common/sustainability-office/documents/renewable-energy-draft-report.pdf

To read the first installment of this case study and the early work of the Blue Horizons Project, visit: https://www.c2es.org/site/assets/uploads/2017/09/american-mayors-businesses-building-partnerships-low-carbon-future.pdf

# A BUILDING ENERGY PERFORMANCE STANDARD IN ST. LOUIS

## St. Louis, MO

### Mayor Lyda Krewson

## Overview

The City of St. Louis became the first city in the Midwest and the fourth in the nation to adopt a Building Energy Performance Standard (BEPS) when Mayor Lyda Krewson signed it into law in May 2020. This ambitious local law is aimed at significantly reducing the energy use of municipal, commercial, institutional, and residential buildings 50,000 square feet and larger. The city will set and publish performance targets for each property type based on local benchmarking data and will update these standards after each compliance cycle to encourage a long-term steady reduction in energy usage.

The bill created the Office of Building Performance within the Building Division, a Building Energy Improvement Board (BEIB), and proposed a High Performance Building Hub. Although it is too soon to see energy reductions resulting from the law, its establishment is a remarkable example of local leadership and private sector engagement.

## Local Market Conditions

Through the city's Climate Protection Initiative, Mayor Krewson has set ambitious climate goals and objectives, including achieving carbon neutrality by 2050. Buildings account for nearly 80 percent of GHG emissions in the city, which makes the BEPS law an important step in achieving the climate mitigation targets. The BEPS relies heavily on the success and data collected through the 2017 benchmarking ordinance that requires buildings 50,000 square feet and larger to report annual energy and water consumption. The BEPS requirements will complement the city's Property Assessed Clean Energy (PACE) Financing program, known as Set the PACE St. Louis, which offers financing for energy efficiency and renewable energy improvements.

## Design & Implementation

### Policy Design Process

The BEPS was designed through a diverse stakeholder engagement process led by the Building Division and received strong support from the Missouri Gateway chapter of the U.S. Green Building Council (USGBC) and the Institute for Market Transformation (IMT) through the city's Bloomberg Philanthropies American Cities Climate Challenge (ACCC) award.

Other integral stakeholders included energy service companies, property management groups, local utilities, universities, trade associations, building owners, city agencies, the Mayor's office, and members of the St. Louis Board of Aldermen. Many of these groups were a part of the stakeholder engagement process for the 2017 energy benchmarking ordinance, which laid the foundation for the BEPS ordinance. The Building Division spent the calendar year of 2019 engaging these stakeholder groups in bi-monthly meetings to draft the policy. In April 2020, the St. Louis Board of Aldermen voted unanimously in favor of the BEPS.

### BEPS Design: A Closer Look

A unique feature of the St. Louis BEPS is the creation of the Building Energy Improvement Board (BEIP), a 9-member board that will ensure transparency and community input. The board has a key role in implementing the BEPS, notably the power to set the city's building standards. Other responsibilities include reviewing alternative compliance plans and recommending extensions. Overall, the BEIP holds significant authority to work with building owners and establish a framework for the Office of Building Performance to enforce.

The bill also established the Office of Building Performance within the Building Division, composed of one to four employees to oversee the enforcement, implementation, and compliance of benchmarking and BEPS. The Building Division will publish the building energy standards for each property type by May 4th, 2021, and most properties will have until May 2025 to comply. Qualified affordable housing and houses of worship have an additional two years to comply, until May 2027. Local benchmarking data acquired from 2017-2019 will inform the standards and targets will be set to impact the highest energy users. Where there is not enough local benchmarking data for a specific building type, the city will use the national median provided by ENERGY STAR. The energy building standards will be updated within a year of the conclusion of the first compliance cycle (by 2026) to ensure that reductions continue to occur.

The law is flexible in that it requires that properties meet the set standard but does not set out how this must be done, giving property owners the ability to decide the appropriate investments. Knowing that certain properties will be lagging and that some building owners will need assistance in reaching the performance standard, building owners are allowed to submit Alternative Compliance Plans. If property owners fail to comply and their Alternative Compliance Plan gets rejected by the Board, financial penalties will occur for each day that the building owner is not in compliance, a new offense each day. Penalties will stop when owners submit a proposed Alternative Compliance Plan to the Board that is accepted.

Each of the four cities currently implementing a BEPS has a different chief performance metric. For example, St. Louis' property buildings standards will be measured through Energy Use Intensity (EUI), normalized for weather and operating characteristics, whereas Washington, D.C., uses ENERGY STAR scores to measure building energy standards instead.

## Putting Policy Into Action

Setting up the BEIB was a foundational step in the BEPS implementation. The Building Commissioner and Building Division called for board applications in the summer of 2020 and recommended nine applicants representing the local building industry, utilities, and building owners. Mayor Krewson then formally appointed the members. Once appointed, members of the Board worked on policy review, set the rules of procedure, and started the process of analyzing the local benchmarking data to help inform the set standards.

The city and its stakeholders aim to ensure there are adequate resources to support the success of the BEPS. For instance, the local chapter of the USGBC secured funding from the Energy Foundation to draft a business plan to sustain a High Performance Building Hub for three years, with staffing to be underway later this year. The Hub will play a crucial role in helping building owners comply with the BEPS and benchmarking policies, and will provide one-on-one guidance to building owners and connect them with options such as "Set The PACE St. Louis," a city program that helps property owners access financing for building energy improvements. Although it will not be run by the city government, the city will work closely with the High Performance Building Hub.

## Implementation Tools

St. Louis' BEPS ordinance will affect over 1,100 buildings and thousands of building owners. Due to the ordinance's extensive impact, the city planned for a wide range of tools to help implement this new law, such as the new **Office of Building Performance.** Other tools will be crucial in the successful management, oversight, and enforcement of the ordinance. Key implementation tools are as follows:

- Property owners will use **Energy Star 2020 Portfolio Manager,** a free online tool to track energy usage and benchmark their buildings.
- The **Building Energy Improvement Board** is made up of local representatives from utilities, building owners, affordable housing and the Building Division. The Building Energy Improvement Board will set and update new standards, review the Alternative Plan process, and give guidance and manage the implementation of the ordinance.

- The **High Performance Building Hub** will be available for building owners to access resources regarding reaching building energy efficiency.
- In December 2020 Renew Missouri published a report titled **Sources of Financial Assistance for Compliance with the City of St. Louis' Building Energy Performance Standard.** The report provides analysis and summary of a wide range of local, state, and federal resources that are available to building owners to aid them in compliance with the BEPS ordinance.

## Key Collaborators and Stakeholders

A diverse stakeholder group has been central to the adoption of the BEPS. Local, statewide, and national stakeholders have played a role in every step of the process, from passing the policy to implementing the law. Many of these stakeholders were a part of the same coalition that supported the City Office of Sustainability's effort to develop a building energy benchmarking ordinance in 2017. Stakeholders involved include private sector entities, trade associations, local utilities, property management companies, building owners, product manufacturers, and universities. In addition to these players, the city has benefited from strong philanthropic support. As a Bloomberg Philanthropies ACCC recipient, St. Louis received valuable technical support and partner resources to advance its ambitious climate action goals, such as technical support from the Institute for Market Transformation (IMT) to design the BEPS policy.

Key players included:

City of St. Louis
USGBC - Missouri Gateway Chapter
American Cities Climate Challenge
Sierra Club
Missouri Coalition
RENEW Missouri
Building Owners and Managers Association
City Energy Project
Washington University
Institute for Market Transformation
International Brotherhood Electrical Workers
Spire Missouri
Ameren Missouri
Ashley Energy
St. Louis Development Corporation
National Housing Trust

### Efforts to Include Disadvantaged Populations

The city has made efforts to ensure that the BEPS policy is helping to create a more sustainable and equitable society for St. Louis residents. First, the standard offers a longer compliance deadline to disadvantaged property types, such as qualified affordable housing and houses of worship.

In addition, as the Building Division prepares to publish the standards, they are meeting with affordable housing organizations such as RENEW Missouri and the National Housing Trust to review them. Staff has learned from counterparts in Washington, D.C., that the new policy may be a cause of concern for some residents in these communities. Communication and cooperation with these organizations will allow for more transparency between the city and those in vulnerable communities who the policy will affect.

Furthermore, the High Performance Building Hub is expected to centralize available resources so that property owners - including residents in disadvantaged communities - can readily access them.

## Timeline

- February 2017: City of St. Louis Building Energy Awareness Ordinance (benchmarking policy) signed into law.
- 2019: Stakeholder engagement around a building energy performance policy
- January 2020: Draft policy with assistance with IMT and Washington University
- January 2020: two week comment-period on policy for stakeholders
- April 2020: Policy passed unanimously.
- Summer 2020: Stakeholders are notified of the creation of the new Office of Building Performance, candidates submit applications, and new board members are officially appointed.
- Fall 2020: First informal board meetings begin and include policy review and setting rules of procedure for the board.
- September 2020 - May 2021: Board meetings continue and analysis of local benchmarking data to inform standards.
- May 4, 2021: City must publish standards to the public. First compliance cycle for BEPS begins.
- May 2025: BEPS compliance deadline for most buildings. Data analysis for the 2nd compliance cycle begins.
- May 2027: Qualified affordable housing and houses of worship deadline for 1st BEPS cycle.

## Costs and Financing

Through its American Cities Climate Challenge (ACCC) award, the City of St. Louis received significant technical support and capacity to help develop the BEPS ordinance. The city also secured funding from the Energy Foundation through ACCC to support its local USGBC partner and to hire a consultant team to develop a business plan for a new High Performance Building Hub, designed to support the city's BEPS program.

## Relevant Policies

**The Climate Action and Adaptation Plan for the City of St. Louis Sustainability Plan** outlines numerous climate mitigation strategies, including ones relating to building energy performance. Additionally, Mayor Krewson has set ambitious climate goals and objectives, including achieving carbon neutrality by 2050. The City's Office of Sustainability coordinates the city's Climate Protection Initiative, a multi-faceted decarbonization approach, much of which was supported by the Bloomberg Philanthropies American Cities Climate Challenge from 2019 to mid 2021.

**City of St. Louis Building Energy Awareness Ordinance -** The energy tracking policy, effective since 2017, mandates that private and commercial building owners of property 50,000 square feet or higher report their annual building's energy usage. Data acquired from this local benchmarking policy will be used to inform set standards published in May 2021 for the BEPS policy.

**2018 International Building Code -** The City of St. Louis adopted the 2018 International Energy Conservation Code which set baseline energy standards for new commercial and residential buildings. The 2018 code, which is updated every three years, targets a wide range of energy use in new construction of buildings.

## Outcomes

The St. Louis BEPS ordinance is the first of its kind in the Midwest, putting the city on the map as a regional and national leader in building energy efficiency and clean energy policies. Although results around building energy use will likely not be available until after the first compliance cycle, the city can be proud of the results achieved thus far. These include:

- Unanimous passage, reflecting success of strong stakeholder engagement process.
- Development of a new city board and new office under the Building Division to ensure the law is a success.
- Plans to create a High Performance Energy Hub to provide energy efficiency resources to St. Louis building owners.

## Lessons Learned and Replication in Other Cities

Four jurisdictions in the nation have adopted a BEPS policy. These include Washington, D.C., New York City, St. Louis, and the state of Washington. St. Louis observed and learned from the policy process in Washington, D.C., in particular, and made adjustments to its ordinance as needed. Essential components for cities wishing to pursue a similar approach should consider the following:

- **Allow time to hire staff and identify board members:** The St. Louis BEPS led to the creation of a new office within the Building Division, a new city board, and plans to build a High Performance Building Hub. Factoring in hiring time, and time to identify board members will serve to limit gaps in the implementation process.
- **Follow a process that will work for your city:** St. Louis elected to pass the framework of the ordinance first and work on rulemaking and establishing standards afterwards. However, other cities may choose to attach proposed standards to the bill before it goes through the legislative process. Stakeholders may respond differently depending on which route a city chooses.

- **Use trustworthy data:** It is critical to ensure those involved are comfortable with the standards and data used. Cities can leverage existing local benchmarking policies and their data to inform the standards and data collection, and establish a transparent verification process to ensure accurate data.
- **Ensure tools to support implementation:** Implementing building energy standards will require cities to deploy diverse sets of tools to inform and support enforcement. In St. Louis, tools such as the High Performance Energy Hub will inform residents of resources available to improve building energy efficiency and the Building Energy Improvement Board will help officials set standards, offer guidance, and enforce the policy. Cities should be prepared to develop and implement these and other tools.

## Additional Resources

St. Louis Building Energy Performance Standard website: https://scorecard.stlbenchmarking.com/Building-Energy-Performance-Standards/#what-is-the-building-energy-performance-standard

Exploring Building Performance Standards, Institute for Market Transformation: https://www.imt.org/how-we-drive-demand/building-policies-and-programs/exploring-building-performance-standards/

St. Louis Energy Benchmarking website: www.stlbenchmarking.com

Sources of Financial Assistance for Compliance with the City of St. Louis' Building Energy Performance Standard: https://renewmo.org/your-resources/st-louis-building-energy-performance-standard/

Contact Name: Frank Oswald, City of St. Louis Building Commissioner

Email: OswaldF@stlouis-mo.gov

Contact Name: Rajiv Ravulapati, City of St. Louis Building Division

Email: ravulapatir@stlouis-mo.gov

# ST. LOUIS SOLAR WORKFORCE DEVELOPMENT PILOT

## St. Louis, MO

### Mayor Lyda Krewson

*"This is an innovative way for us to make strides with the city's ambitious climate protection goals while advancing diversity and equity in the workforce at the same time. We're fortunate to have strong community partners willing to join us in taking a leadership role in this endeavor. I trust this pilot will deliver a tangible, comprehensive set of essential skills needed by city residents to participate in growing a green economy." - Mayor Lyda Krewson*

## Overview

In late 2020, amid a global pandemic and economic downturn, the City of St. Louis launched its Solar Workforce Development pilot program to help local residents participate in the burgeoning green economy. A small cohort of city residents participated in the training program, which drew on existing strengths in the local solar training and workforce development landscape, and aimed to address gaps in coordination between existing programs and resources. The pilot was designed to serve the unemployed/underemployed City of St. Louis residents, and particular emphasis was placed on ensuring diversity, equity and inclusion. Pilot participants benefited from a two-pronged training strategy that coupled universal job readiness skills with an introduction to solar PV energy. The program resulted in trained participants applying to union apprenticeships, receiving paid solar internships, and even permanent jobs at local solar installation companies. A second pilot will be offered in the spring of 2021, with modifications that build on successes and lessons learned from the first pilot.

## Local Market Conditions

Solar energy is a fast-growing sector in the State of Missouri, and the City of St. Louis has identified the clean energy economy as an opportunity for the city's residents. Through support from the American Cities Climate Challenge award from Bloomberg Philanthropies, the city's Office of Sustainability held an exploratory Solar Workforce Development Stakeholder Convening in November 2019 to identify regional assets and resources, needs, and priorities to address gaps. Through outreach, the city learned that many of the region's solar companies, unions and utility representatives were supportive of hiring additional minorities and women, and identified certain needs before that could happen. The preliminary research and analysis resulted in the design of a compressed pilot effort to promote solar workforce development among City of St. Louis residents.

St. Louis is home to a strong union community, including the International Brotherhood of Electrical Workers (IBEW) Local-1, considered one of the strongest local chapters in the country. With a number of training programs and a strong focus on investing in members, IBEW-1 was a natural partner for a workforce development pilot. Although not all local solar industry providers are unionized, some job seekers are attracted to the possibility of an IBEW apprenticeship. To offer maximum opportunity, the program established two different workforce pathways: union apprenticeship and solar industry internship opportunities. In the first pilot, the internships were provided by participating solar companies interested in recruiting employees from underserved communities to diversify their workforces.

## Design & Implementation

The Solar Workforce Development pilot was overseen by the city's Sustainability Director, who is housed in the city's Planning & Urban Design Agency, and in conjunction with the St. Louis Agency on Training & Employment (SLATE) and the Mayor's Office. The city received technical and financial support for the effort as part of its American Cities Climate Challenge (ACCC) award from Bloomberg Philanthropies.

Local partners included Employment Connection, the International Brotherhood of Electrical Workers (IBEW) Local 1/ National Electrical Contractors Association (NECA), Building Union Diversity (BUD), the solar panel providers Azimuth Energy and StraightUp Solar, Renew Missouri, and the University of Missouri-St. Louis (UMSL). Additional community stakeholders – such as Washington University in St. Louis and the electric utility, Ameren Missouri – also played a role in shaping the pilot.

The pilot described here took place in a classroom setting over the course of 10 weekdays. Several of the pilot modules described below were restructured or eliminated due to COVID-19 safety considerations. Even with these challenging constraints, the abbreviated, two-week pilot participant experience included the following:

- Initial career assessment during the application process
- Building soft skills for general job readiness, including resume building and mock interviews
- Receiving classroom-based introduction to solar photovoltaic energy
- Exposure to field work/simulated on the job experiences for solar installers
- OSHA-10 training certification
- Assistance with union apprenticeship and/or paid internship placement for pilot graduates, including employer meetings with interested students and application support
- Support services addressing participant barriers to employment, such as assistance with transportation

The training pilot design ensured that graduating participants left with an introduction to the solar installation industry and potential employers, but also with valuable soft skills that apply to many different trades such as construction. A career specialist from Employment Connection attended the training alongside the participants, building a rapport that aided their ability to help graduates in their ongoing career development and job searches.

## Key Partners

The St. Louis Solar Workforce Development Pilot was a multi-stakeholder effort. Most of the following entities signed a Memorandum of Understanding that outlined anticipated roles and referenced a tentative workplan. Key partners included:

- The ACCC partners provided valuable technical input as the pilot was being conceptualized.
- The Energy Foundation provided critical funding for local contractor support and to build capacity at Employment Connection, a local nonprofit with expertise in workforce development.
- Employment Connection provided essential project coordination and soft skills training.

*Photo credit: Catherine Werner*

- The IBEW-Local 1 provided a state-of-the-art training facility and delivered solar photovoltaic instruction.
- StraightUp Solar & Azimuth Energy provided virtual exposure: "a day in the life of a solar installer." StraightUp Solar also provided paid internships to three pilot graduates for on-the-job training, and ultimately hired one.
- St. Louis Agency on Training & Employment (SLATE) and Building Union Diversity (BUD) arranged for an OSHA specialist to deliver OSHA-10 training and certification.
- University of Missouri-St. Louis (UMSL) led the effort to evaluate program participants during the pilot effort.

### Efforts to Include Disadvantaged Populations

The program was designed to appeal to disadvantaged, low income and minority communities. Each of the program hosts and providers committed at the outset to furthering diversity, equity and inclusion. Solar providers like StraightUp Solar saw the effort as an opportunity to diversify its workforce and recruit for solar jobs in underserved communities.

Efforts were made to communicate the opportunity to these communities, and to specifically address barriers to participation. For example, the pilot graduates were compensated for their training time, meals and supplies were provided, fees waived, and transportation offered.

The first pilot of ten graduates reflected the successful approach, with six participants identifying as being of color, and two women participants. The three graduates who received paid internship offers are people of color.

An important aspect of the program is the partnership with Employment Connection, which has been in constant contact with the program's graduates to help direct them towards employment. Of the post-pilot participant survey responses, the highest rating was in the job readiness and soft skills that Employment Connections provided.

## Timeline

- Summer 2019: City of St. Louis sought pilot funding
- Fall 2019: researched case studies for best practices; surveyed and held stakeholder convening
- Winter 2019-20: prepared a recommendation report and sought implementation funding
- Spring 2020: designed pilot project workplan and reworked in light of the COVID-19 pandemic
- Summer 2020: lined up partners for pilot project and signed MOU
- Fall 2020: conducted outreach for pilot participants, developed survey tools
- Winter 2020-21: held first pilot cohort and job placement efforts; preparing to hold a second cohort
- Spring 2021: will attempt to expand and formalize the effort into a permanent program

## Costs and Financing

Program Design: 2019 - 2020

- Initial technical support provided to the city through the ACCC award.
- The Energy Foundation provided $7,000 for a local contractor to coordinate the stakeholder convening, and $8,000 for Employment Connection to create a pilot work plan and MOU.

Implementation of First Pilot: December 2020

- The Energy Foundation provided $15,000 for Employment Connection to coordinate the pilot. The funds were also used to cover meals and OSHA instruction fees.

- Solar companies provided virtual solar industry exposure; StraightUp Solar also covered costs for the paid internships it offered.

Second Pilot: 2021

- Ameren Missouri pledged $10,000 to Employment Connection to hold a second pilot cohort, and Energy Foundation has pledged $15,000 to Employment Connection in support of solar workforce development.

## Relevant Policies

The city's **Climate Protection Initiative** has ambitious climate goals and objectives, including achieving carbon neutrality by 2050. Renewable energy is a key strategy, but most large-scale renewable energy projects are located far from the city. As a result, it has been challenging for some to understand how a commitment to renewable energy – including solar energy – is beneficial to the city's residents.

At the end of 2019, the city unanimously passed a **Solar Readiness Ordinance** that required future residential, multi-family, and commercial construction to be equipped with solar infrastructure. The City of St. Louis is the first in the Midwest and only the second in the nation to sign new legislation that mandates that new buildings be "solar-ready." The bill not only fits with the city's goals towards climate change but also aims at creating a more equitable and green society where every city resident can benefit from the economic and environmental benefits of solar power.

Furthermore, the City of St. Louis has a **strong commitment to Diversity, Equity & Inclusion.** Many policies and programs prioritize equity and minority/women businesses. Hosting a solar workforce development program helps communicate the local benefits of solar energy through the dual lenses of economic development and equity.

## Outcomes

There was significant community interest in and support for the City of St. Louis Solar Workforce Development effort. The pilot effort has energized the conversation about prioritizing diversity, equity and inclusion in the regional green economy. It has also resulted in tangible successes:

- MOU signed among 8 stakeholders in the solar and workforce development fields, several of which were collaborating for the first time.
- Workplan developed and refined to accommodate COVID-19 considerations.
- Fourteen participants attended soft skills sessions.
- Ten participants graduated from solar training pilot with OSHA-10 certification.
- Five participants applied for union apprentice program.
- Five participants were interviewed and 3 participants were offered and accepted paid solar installation internships.
- One participant was offered and accepted a permanent position at StraightUp Solar.

## Lessons Learned

Future cycles of the training program will build on these successes and incorporate modifications. While the city originally intended to conduct one pilot before standing up a permanent program, the challenges presented by the COVID-19 pandemic required structural changes that will likely not be permanent. The city is pursuing a second pilot with its partners to further inform the design of the permanent program. For example, fewer constraints related to COVID-19 could allow a second pilot to provide deeper instruction and hands-on training in the field.

The city and its project partners gained important lessons and uncovered additional possibilities in the process. For example, the conception and delivery of the pilot was conducted on a shoestring budget, highlighting the potential benefits

of additional capacity and resources. Additional funding and program duration could enable a deeper collaboration with community colleges and incorporation of professional certifications such as North American Board of Certified Energy Practitioners (NABCEP) certification. Further, supporting a pipeline of local solar projects can create the demand for skilled local installers. Local and state policies that create incentives for solar installations can play a key role in the success of workforce development training programs.

## Key Components for Replication

The city spent about a year learning about existing programs and best practices. Although a national scan of programs uncovered no one example that fit the city's needs exactly, the St. Louis partners were inspired by the role of the IBEW in Illinois and their solar workforce development program. Program partners also recommended the model of the Illinois Solar For All training program for its success linking graduates to jobs.

In addition to a strategic group of like-minded partners, essential components for replication include a strong commitment to equity, adequate coordination capacity, sufficient financial resources, patience, and adaptability.

Cities wishing to pursue a similar approach should consider:

- **Securing partners in both the "supply" and "demand" aspects of workforce development** in order to design a program that is likely to result in job placement. Part of this process includes understanding the solar business, including training requirements for solar installers and the human resources requirements to accept interns, to ensure that employers see value in participation.
- **Collecting baseline and impact data** through pre- and post-training surveys and metrics. The UMSL developed three rounds of paper/digital surveys to help evaluate the pilot. The surveys collected information about participant preferences and areas for program improvement. In addition, the city had established several goals and relevant metrics such as number of people reached, placed in internships or jobs, etc.
- **Identifying funding to reduce barriers to participation** by low-income community members.
- **Ensuring graduates earn marketable skills and certifications.** In addition, taking a broad approach to the training program can make participants more marketable applicants. For example, participants in the pilot reported that they found great value in the soft skills training.

Private sector partners should consider:

- **Being clear about the needs and expectations for new hires,** so that the program can be designed to address existing gaps and participants have accurate expectations of the program.

*Photo credit: Catherine Werner*

- **Offering paid mentoring, hands-on instruction or other short-term internship opportunities** that would boost marketability of participants if offering permanent jobs is a constraint.

## Additional Resources

Press Release: "St. Louis: Recruitment underway for new green workforce pilot program," November 6th, 2020
https://www.stlouis-mo.gov/government/departments/mayor/news/green-jobs-workforce-recruitmant-to-start.cfm

Solar Workforce Development Paid Training Recruitment Flyer
https://www.stlouis-mo.gov/government/departments/planning/sustainability/documents/green-jobs-2020-employment-connection.cfm

Contact Name: Catherine Werner, Sustainability Director

Email: WernerC@stlouis-mo.gov


*Solar Workforce Development Paid Training Recruitment Flyer*

# ST. PETERSBURG'S CLEAN ENERGY FUTURE: SPOTLIGHT ON TRANSPORTATION

## St. Petersburg, FL

### Mayor Rick Kriseman

## Overview

Led by Mayor Rick Kriseman, the City of St. Petersburg has committed to address the environmental, economic, and social challenges that face St. Petersburg. In 2019 the City Council unanimously adopted the city's first Integrated Sustainability Action Plan (ISAP). The ISAP provides a blueprint on how the city will lead the way in addressing climate change and in advancing sustainability, resiliency, racial justice, and economic development. The comprehensive plan expands on current resiliency efforts throughout the city as well as highlights the need for new initiatives and programs. To combat these challenges and reach these goals, the city has developed the Clean Energy Roadmap that consists of 5 focus areas. This case study will outline St. Petersburg's Clean Energy Roadmap with a focus on Pathway 5: Enhance/Electrify Transportation that includes a discussion of a Complete Streets Policy, an expansion of public and active transportation, and a partnership with Duke Energy Florida (DEF) to improve electric vehicle (EV) infrastructure, and support EV adoption in the region.

## Local Conditions: A Clean Energy Roadmap Sets a Foundation for Success

The Clean Energy Roadmap, a critical part of the city's Integrated Sustainability Action Plan (ISAP), provides a "roadmap" on how the city will achieve its goal of 100 percent clean energy by 2035, aligning with a national trend of local governments who are committing to cleaner energy and reducing their greenhouse gas emissions. The policy was developed after St. Pete was the first Florida city to commit to transition to 100 percent clean energy by the year 2035. The roadmap includes 5 pathways that define the actions needed to achieve these goals. Throughout these pathways, the City of St. Petersburg emphasizes several principles such as equity and a just transition to a local clean energy economy, economic feasibility, energy affordability, job creation, smart city development, and resilience/reliability.

The five pathways include:

**Pathway 1:** Advance Energy Efficiency in Existing Buildings

**Pathway 2:** Build Infrastructure that is Efficient and Renewables-Ready

**Pathway 3:** Create and Procure Renewable Energy

**Pathway 4:** Develop a Smart, Reliable, and Resilient Energy System

**Pathway 5:** Enhance and Electrify Transportation

The city heavily relies upon the use of fossil fuels to power its buildings, infrastructure, and transportation. Almost half of its greenhouse gas emissions come from the transportation sector. Therefore, the Clean Energy Roadmap directly targets this sector through Pathway 5, Enhance and Electrify Transportation, and identifies specific programs and projects to be undertaken, projected budgets, and estimated timeframes for initiatives such as Complete Streets, the Municipal Green Fleet Policy, and EV infrastructure.

# Implementation: Enhancing and Electrifying Transportation

## Committing to a Complete Streets Policy

Pinellas County is ranked as one of the most dangerous counties in the nation for both pedestrians and bicyclists. Mayor Kriseman, in 2015, adopted the Complete Streets Policy with City Council support that includes guidelines and calls for, among other actions, the development of an implementation plan to ensure that roadways meet the goals of safety, equity, public health, quality of life, and economic development. The Complete Streets Implementation Plan (adopted in May 2019) aims to create and enhance strategic connections within the grid, provide a network of routes and facilities for all modes of transportation, and make the streets of St. Petersburg safer for all citizens of varying age and physical and economic backgrounds. A Complete Streets committee was created to lead the charge in implementing the projects, developments, and goals put forth by the policy. Some of the tasks of the committee include project guidance, incorporating public feedback, design criteria, and analysis of projects goals and objectives. The committee is made up of 20 members and is led by the Transportation & Parking Management Department staff. Members are composed of city staff from various departments, community organizations, and citizen representatives.

One of the core elements of the policy is an emphasis that pedestrian, public transit, and biking infrastructure be at the forefront in the planning and design process of both existing and future transportation expansions and projects. This way, the Complete Streets Policy is helping to ensure that residents of St. Petersburg have access to safe and accessible modes of diverse transportation. Expanding and ensuring that these multiple modes of transportation are available to city residents will help the city decrease greenhouse gas emissions and move the city closer to reaching their goal of 100 percent renewable energy by 2035. Existing and future projects that include Complete Streets approaches include, but are not limited to, developing the infrastructure of low-stress bicycle routes, enhancing pedestrian and trail crossings, expanding the Coast Bike Share program with e-bikes, building bicycle parking infrastructure, and developing future Bus Rapid Transit (BRT) lines including the SunRunner BRT adjacent to Central Avenue.

## Promoting Active Transportation (Non-Motorized):

The fifth pathway identifies active transportation, such as biking or walking, as another avenue in which the City of St. Petersburg can increase non-motorized transportation and save on energy costs. The City of St. Petersburg is fortunate to benefit from a grid-like street network, flat terrain, and year-round warm weather. Coupled with a strong city-culture for biking and walking, the city has a long and continued history of advocating for safer and healthier transportation alternatives to increase energy savings and make transportation accessible for all types of residents.

In 2003 the city adopted the CityTrails Bicycle and Pedestrian Master Plan that focused on improving bicycle and pedestrian infrastructure throughout the city. Since the adoption of this plan, the city has made progress in creating new, safer bicycling and pedestrian infrastructure, and expanding a city-wide trail network. The city has vastly improved its trail system with over 50 miles of connected infrastructure throughout the city. The decision to invest in the trail network was a costly one, with construction of trails being one of the most expensive non-motorized forms of transportation. As of 2019, there are 72.0 miles of bicycle infrastructure on the streets, and a total of 122.3 miles of bikeways when combining the on-street and trail pathways (paved and unpaved). The Coast Bike Share program, in a partnership with CycleHop, has been successful with city residents, and recently added 100 battery-assist powered bicycles to its fleet of now 400 bicycles. Further, the city also recently launched a scooter share program with over 700 all-electric motorized scooters now available as another non gas-powered mobility option for short trips in the greater downtown core and adjacent business districts. It's proven to be a popular transportation choice with over 50,000 rides in just the first two months of service.

The city's investments in active transportation options reflect its dedication to sustainability and providing a healthier lifestyle, and they are gaining attention for it. In 2017 the League of American Bicyclists recognized the city as a Silver-Level Bicycle Friendly Community, an improvement from the city's previous Bronze rating that had been held since 2006, and the highest ranking for any major city in Florida. PlacesForBikes recognized the city as the Highest Rated City for Bicyclists in the state of Florida and Bicycling Magazine named St. Petersburg as one of the Top 50 Best Bicycling Cities in 2018.

## Enhancing Public Transportation

The City of St. Petersburg has identified a variety of opportunities to expand, improve, and build upon public transportation in ways that can reduce Vehicle Miles Traveled (VMT), save on energy costs, and incentivize commuters to use public transportation over personal vehicles. The Clean Energy Roadmap identifies the expansion of the bus network, the St. Petersburg Trolley Downtown Looper, the Florida High Speed Rail Line, and the Cross Bay Ferry as opportunities for potential improvement.

The fifth pathway establishes the expansion of the city's bus network as a major opportunity to reduce greenhouse gas emissions and promote cleaner energy. The city's first bus rapid transit (BRT) system, the Pinellas Suncoast Transit Authority's SunRunner, is projected to launch in 2022. The SunRunner will be an innovative, modern, and accessible transportation mode that will use specialized infrastructure such as hybrid-electric buses within semi-dedicated BRT lanes and transit signal priority to transport residents quickly and comfortably throughout the city and to major regional attractions. The BRT buses will arrive every 15 minutes during the day, every thirty minutes during the evening, and provide free wifi, on-board bike storage, and fast and accessible boarding. The project will help lower greenhouse gas emissions by cutting the demand for fuel, reducing traffic throughout the city, and offering city residents an alluring alternative to using motorized vehicles. The BRT line is also expected to promote tourism, support local businesses, and encourage community connectivity. The project has received many letters of support including but not limited to Forward Pinellas, Pinellas County, AARP, University of South Florida - St. Petersburg, and the Tampa Bay Regional Planning Council. Mayor Kriseman has stated that the BRT line will be a "tremendous boost to our economy, industry, and quality of life, while also serving as a vision of what preferred transit service could be throughout our community."

The fifth pathway identifies other opportunities to improve public transportation options. There is the potential to connect the city to the Florida Brightline high speed rail system, which currently includes Miami, Fort Lauderdale, and West Palm Beach. If Tampa were to join the Brightline system, St. Petersburg could expand stops into Tampa and connect to the

regional network. Furthermore, the pathway calls for the city's Downtown Looper, which is free and runs seven days a week, to find ways to increase ridership and make the system more attractive to city residents. Finally, the fifth pathway recommends the relaunch of the St. Petersburg Cross Bay Ferry, a water transit service, with additional days/times of operation and year-round service.

## EV Charging Infrastructure Strategies and Investments

The state of Florida has the third highest number of registered electric vehicles in the nation (61,948 as of September 2020). The Tampa Bay area has the second-most EVs in the state right now, and Pinellas county, home to St. Petersburg, has registered over 3,300 electric vehicles. In support of this transition to electrified transportation, the City of St. Petersburg is expanding EV infrastructure and installing more charging stations throughout the city. The Clean Energy Roadmap calls for supporting EV readiness building codes for new commercial and residential buildings, promoting PV development, continuing the success of the Duke Park and Plug Program, and advancing EV education and incentives.

The City of St. Pete's objective and role with respect to EV charging includes leveraging city property, procurement, grant opportunities, regulations, and communication platforms to be prepared for and encourage EV adoption. The city envisions this work to ultimately create an environment that encourages the private sector to carry on the major investments in EV charging infrastructure. Local policies and incentives that can help establish more EV's in St. Petersburg include, but are not limited to, supporting EV readiness ordinances, implementing parking priority for EV drivers, and providing incentives, ordinances, and guideline assistance for businesses to install EV charging stations.

### *Spotlight on the Duke Energy Park and Plug Program*

In December 2018, St. Petersburg announced a partnership with Duke Energy's state-wide pilot program to bring smarter, cleaner transportation to the city. The Duke Park and Plug pilot program encourages clean transportation in the state of Florida through the installation of over 500 EV charging stations in high-traffic areas with broad public access. Duke Energy planned to have 10 percent of sites be in income-qualified communities and public areas, so that the opportunity to have cleaner transportation could be available for citizens from diverse economic backgrounds.

Duke Energy partnered with NovaCHARGE LLC, a leading national EV charging solutions provider headquartered in Florida, to supply the equipment, install the charging stations and provide service for the Park & Plug pilot program. Host sites selected through the application process worked directly with NovaCHARGE LLC for the equipment installation. Installations occurred throughout 2019 and early 2020. To date, 34 chargers have been installed, including three public DC Fast Chargers, 27 public Level-2 chargers, and four city workplace/fleet Level-2 chargers. The pilot program ends December 2022 when the city may take ownership of the EV chargers, but it is under review by DEF and the Florida Public Service Commission where it may be determined that DEF maintain ownership and continue to evolve their role in electric vehicle supply equipment (EVSE) infrastructure.

### *EVSE Infrastructure: Siting Analysis including Equity*

The city developed an EVSE Siting Analysis to help to create an environment that will attract private investment and federal infrastructure dollars, help plan for resilience related to evacuation and backup power opportunities, and consider equity, affordability and access.

The analysis is designed to support St. Petersburg's efforts to accelerate electric vehicle (EV) adoption, and specifically to guide its efforts with respect to supporting expansion of access to public EV charging in the city, particularly by leveraging city property. This analysis seeks to accomplish the following three objectives:

1. Support short-term opportunities to expand EV charging infrastructure, as well as longer-term strategies to further expand charging infrastructure access.

2. Identify the estimated number, type, and priority locations of EV charging ports needed over the next 5 years to support EV market transformation in St. Pete.

3. Develop a siting framework for EV charging deployment in St. Pete that balances an emphasis on increasing utilization, as well as centering equity. It also includes a review of emerging best practices on public EV charging from other cities, and recommendations for St. Petersburg.

An analysis of land use, employment density, higher traffic corridors, share of multi-family units, renters and lower access to transit are a few of the factors considered for equitable access and highest utilization and resilience. From this analysis, a list of initial priority sites was generated. The city continues to coordinate with businesses and DEF to review power, space, internet and other needs to implement policies and improve infrastructure and readiness.

### *EV Readiness Ordinance*

In 2019, the City of St. Petersburg included EV Readiness in an ordinance update for parking garages. Citywide, new multi-family and commercial parking garages are required to have a percentage of their parking spaces either EV Capable or EV Ready or both.

About nine Florida cities already have EV Readiness policies and ordinances with more actively reviewing policies. It is important to consider EV Readiness policies in part because costs to make parking EV Ready during construction are typically low – an estimated 0.13 percent - 0.17 percent, compared to 75 percent higher post-construction (Source Plug-In Electric Vehicle Infrastructure Cost-Effectiveness Report for San Francisco).

In 2021 and as part of St. Pete 2050 planning, the city is currently working with stakeholders to expand the EV Readiness Ordinance to all new commercial, multi-family, and single-family.

### Municipal Fleet Improvements

The St. Petersburg municipal fleet consists of more than 3,300 vehicles, including police cruisers, ambulances, mini-ambulances, electric/gas hybrid SUVs, and specialty vehicles and equipment. As of 2019, the municipal fleet is valued at $76.7 million, and vehicles are generally replaced after eight years and when they reach between 80,000 and 100,000 miles. The Clean Energy Roadmap's fifth pathway includes optimization and electrification of the city's fleet. The city has recently installed more comprehensive telematics to improve fleet management, maintenance, tracking and technology use in order to reduce VMT, idling and fuel and equipment contributions to cost, pollution, and GHG emissions.

The fleet will continue to add to the numerous vehicles that are electric/gas hybrids by replacing the fleet with alternative fuel and electric vehicles. The city will also focus on implementing more ways to have electric vehicle charging stations with renewable energy, such as through solar PV installations.

## Key Partners

This case study highlights many of the innovative and remarkable transportation programs that will make St. Petersburg more sustainable and resilient for generations to come. These programs could not have been implemented without the help of crucial partners from the private sector as well as from the local, state, and federal level. Although the following list is not an exhaustive one, key partners include:

City of St. Petersburg

Scooter companies Razor and Veo

Pinellas Suncoast Transit Authority (PSTA)

NovaCHARGE LLC

Duke Energy Florida

The Mayor's Bicycle and Pedestrian Advisory Committee

Southern Alliance for Clean Energy (SACE)

Complete Streets Committee

Coast Bike Share

The Sierra Club

Bloomberg Philanthropies

Florida Department of Transportation

The Federal Transit Administration

Pinellas County

EV Noire

Forward Pinellas

## Timeline

### 2015

- Mayor Kriseman creates the Office of Sustainability & Resiliency and signs Executive Order 2015-07 for Sustainability & Resiliency initiatives
- City adopts Complete Streets Policy #020400 on November 2nd which is then supported by City Council Resolution 2015-540

### 2016

- St Petersburg becomes a 3-STAR Community, reflecting the nation's leading framework and certification program for evaluating community-wide sustainability, encompassing economic, environmental, and social performance measures.
- The Coast Bike Share program is launched in St. Petersburg.
- The Cross Bay Ferry pilot program is launched between St. Petersburg and Tampa.

### 2017

- St. Petersburg recognized as Silver-Level Bicycle Friendly Community

### 2018

- Integrated Sustainability Action Plan development and public engagement.
- Duke Energy Park & Plug Pilot Program - Site Host Agreement is signed and City Council approves participation in the program.

### 2019

- St. Petersburg wins American Cities Climate Challenge and is accepted into a two-year acceleration program with access to cutting-edge support and resources to meet – or beat – its goal to reduce the city's greenhouse gas (GHG) emissions 20 percent by December 2020.
- The city's first-ever Integrated Sustainability Action Plan was unanimously approved by City Council on April 18th.
- Complete Streets Implementation Plan adopted.
- St. Petersburg is the highest rated city for bicyclists in Florida by PlacesForBikes and recognized in 2019 Best Workplaces for Commuters
- Bus Rapid Transit Design Phase Begins
- St. Petersburg progresses to a 4-STAR Community, showing improvement in every goal area. St. Petersburg also becomes a LEED Certified City.

### 2020

- St. Petersburg ranks third in the nation for number of bicycle friendly businesses by League of American Bicyclists
- Bus Rapid Transit system awarded federal funding; construction begins
- Scooter share launched with two operators.

### 2021

- Coast Bike Share expanded with 100 e-bikes.

## Costs and Financing

The strategies listed under the fifth and final pathway involve the city's municipal fleet, infrastructure and financial incentives for electric vehicles, expansion of public and non-mobilized transportation, and the Complete Streets Policy. In reviewing these strategies, this case study highlights specific projects and programs, such as the Duke Park and Plug Program, the city's Coast Bike Share program, and the developing bus rapid transit system. These programs are projects that have been implemented in the past or are currently underway in the city. Summary of costs and financing for these notable projects are discussed below.

The SunRunner, St. Petersburg's first bus rapid transit system is an almost $44-million-dollar project. According to the transit system's website, $10.5 million was funded from the Florida Department of Transportation, $7.6 million from the Pinellas Suncoast Transit Authority (PSTA), and $4 million from the City of St. Petersburg. The remaining $21.8 million was provided by the Federal Transit Administration (FTA) through the Capital Investment Grant program. According to the Pinellas Suncoast Transit Authority (PSTA), the project is the first federally-funded major transit project in the Tampa Bay

metropolitan area. Once completed, the SunRunner will generate revenue through ticket sales (regular priced tickets and reduced-price tickets will be sold for $2.25 and $1.10, respectively). The service will offer specialty tickets as well, including weekly and monthly passes.

The City of St. Petersburg did not have any upfront costs as a partner in the Duke Energy Park and Plug program besides staff resources and time to conduct evaluations of potential sites. All of the equipment, software, and the networking was provided by Duke Energy. Duke Energy Florida estimated the following costs for investment, including installation. Level-2 chargers would cost $10,000 each and DC Fast chargers would cost $40,000 per charger. The City of St. Petersburg has installed 34 chargers through the Duke Park and Plug program, including three public DC Fast Chargers, 27 public Level-2 chargers, and four city workplace/fleet Level-2 chargers.

The city invested $1.5 million into the bike-share program for the three-year term. Funding for the program came from various sources including downtown parking fees and even as part of the settlement money from the British Petroleum oil spill.

## Relevant Policies

- Executive Order 2017-01 *https://www.stpete.org/sustainability/index.php*
- Clean Energy Road Map and Integrated Sustainability Action Plan - Highlights Report https://www.stpete.org/sustainability/integrated_sustainability_action_plan.php
- St. Petersburg was the first city in Florida to sign on to the "100 Percent Clean Energy Commitment" with Sierra Club's Ready for 100: https://content.sierraclub.org/press-releases/2016/11/saint-petersburg-becomes-first-florida-city-and-20th-us-city-commit-100-clean
- St. Petersburg signed the "We Are Still In" pledge alongside mayors from 280+ cities and 2,000+ business and investors to demonstrate support of the Paris Agreement after the United States announced its plans to withdraw

## Outcomes

As the transportation sector contributes more than 40 percent of the city's greenhouse gas emissions, the City of St. Petersburg has taken a comprehensive approach to reach its climate and sustainability goals. By investing in broad city plans, such as the Complete Streets Program and the Clean Energy Roadmap, the city has a blueprint for which all other projects and programs can follow to ensure a healthy, safe, and sustainable future. The roadmap includes a projection that between 2016-2025 and 2025-2035 a 13 percent and then 30 percent reduction in transportation emissions, respectively, will be achieved. Many of the city's programs have already shown impressive results, and while not all projects have yet to be measured, below are some highlights.

**Coast Bike Share Program:** Through 2019 the Coast Bike Share Program has completed over 115,000 trips and more than 240,000 miles of riding in St. Petersburg. The program's success with city residents has led to the city's decision to not only extend the program but also expand it. The program has added additional locations throughout the city by establishing virtual hubs where locations can be set up as drop-off points for the bicycles and added 100 electric bicycles to the fleet.

**Bicycle Awards for St. Pete:** In 2017 the League of American Bicyclists recognized the city as a Silver-Level Bicycle Friendly Community, an improvement from the city's previous Bronze rating that had been held since 2006, and the highest ranking for any major city in Florida. PlacesForBikes recognized the city as the Highest Rated City for Bicyclists in Florida and Bicycling Magazine named St. Petersburg as one of the Top 50 Best Bicycling Cities in 2018.

**Bus Rapid Transit:** The SunRunner is currently in the construction phase, with a launch expected in 2022. Hybrid-electric vehicles have been purchased, and designs for stations including artistic shelters have been completed.

**Duke Energy Park and Plug/EV Readiness:** At present, 34 chargers have been installed, including three public DC Fast Chargers, 27 public Level-2 chargers, and four city workplace/fleet Level-2 chargers.

## Additional Resources

Office of Sustainability and Resiliency: https://www.stpete.org/sustainability/

Complete Streets Implementation Plan https://www.stpete.org/transportation/complete_streets.php

Contact Name: Sharon Wright, Director, Office of Sustainability & Resiliency

Email: Sharon.Wright@stpete.org

# WEST SACRAMENTO ON-DEMAND: RIDESHARE

## West Sacramento, CA

### Mayor Martha Guerrero and Former Mayor Christopher Cabaldon

## Overview

In 2018, the City of West Sacramento deployed an innovative and highly successful On-Demand rideshare service ("West Sacramento On-Demand") in partnership with Via Transportation Inc. (Via), offering community members an affordable, accessible, and sustainable mobility option for trips within the city. The impetus for the program arose in 2016 when former Mayor Christopher Cabaldon and the City Council identified the development of a "Public Transportation Strategy" as a top priority on the City's Annual Strategic Plan Policy Agenda. The Council was eager to explore solutions to make transit more attractive to residents, support senior mobility needs, and help the city address climate change by reducing vehicle miles traveled (VMT) and greenhouse gas (GHG) emissions.

Through their partnership with Via, the world's preeminent provider of digital infrastructure for public mobility systems, the city became the first in the nation to deploy a rideshare program with this particular partnership model, and the first in California to use its Transportation Development Act (TDA) funds to support operation of a locally operated on-demand rideshare, or microtransit, program. The service launched in May 2018, with seven (7-passenger) Mercedes Benz Metris vans and quickly expanded to 11, three of which are wheelchair accessible. By leveraging the best aspects of technology-enabled ride-hailing, such as on-demand service and dynamic routing, while preserving key aspects of a public transit system, such as flat-fares and shared rides, the hybrid approach to the West Sacramento On-Demand service has supported a wide range of residents. Teenagers (13+) use the service to commute to school, senior citizens run errands and visit friends, and individuals with disabilities have an accessible mode of transportation. The service is available on-demand using a Smartphone App or booking by phone, and offers a single flat rate fare for shared rides anywhere within the city border. By allowing ridesharing with other passengers, the program also helps address the city's environmental goals. The city also plans to add electric vehicles to the fleet in the future.

## Design and Implementation

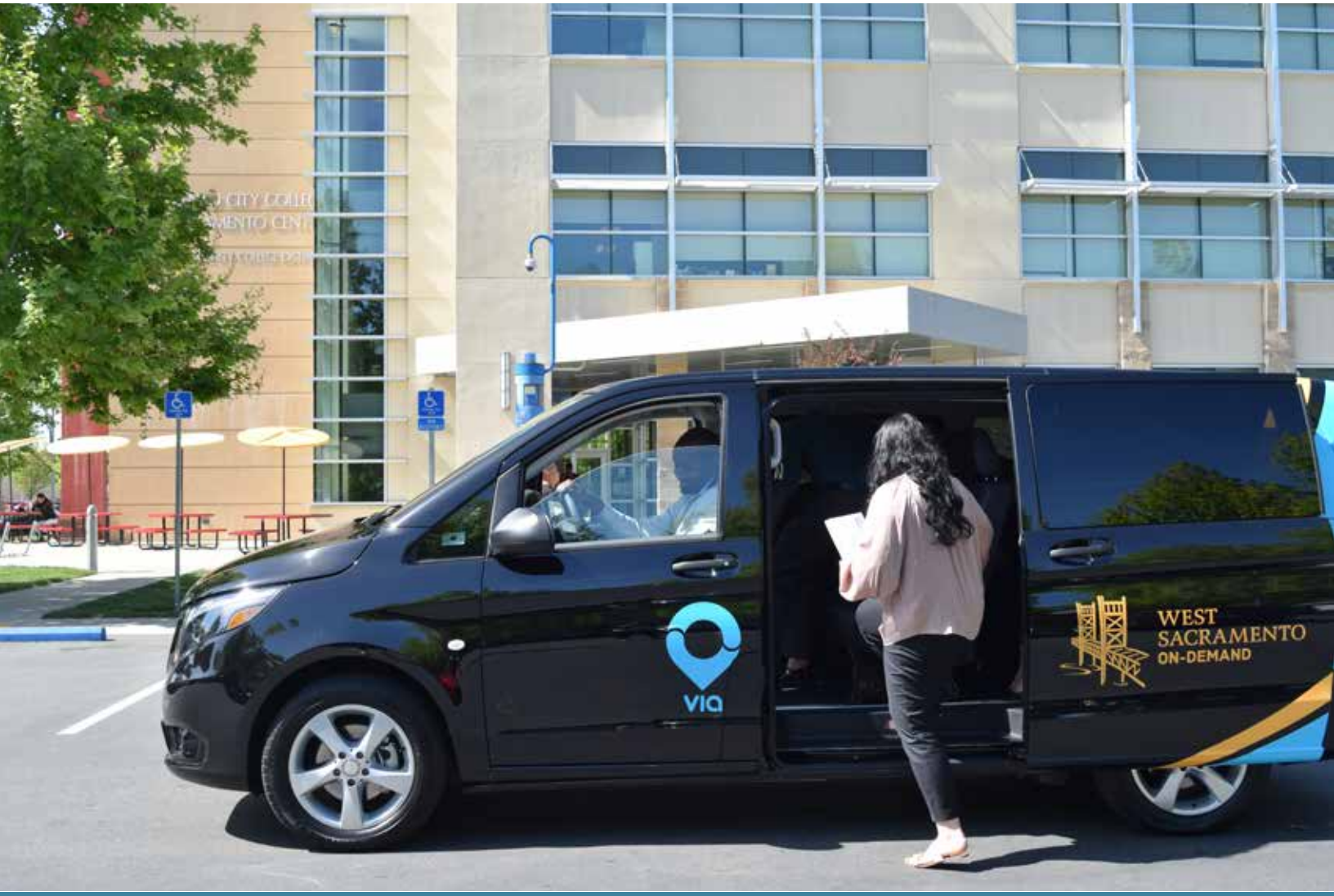
In 2016, Mayor Christopher Cabaldon and the West Sacramento City Council directed staff to explore innovative public transportation public transit models, alongside the development of a diverse, multi-model mobility network, enabling car-free living by providing sustainable alternatives. In the years prior, transit ridership had declined while costs had risen, especially in low-density suburbs- a trend experienced by many municipalities across the country. Undermined by auto-centric land uses, the bus simply hadn't been able to compete with the expediency of other modes. The city's fixed route transit presented a number of problems such as long travel times, small catchment areas, and a lack of complementary transit options to help riders complete the first and last mile to their destinations. These issues resulted in low ridership and prompted residents to seek other modes of transportation such as their own vehicles. Over the years, mounting community feedback demanded more convenient transit options.

Concurrently, residents in the city's dense, transit-oriented Riverfront remained reluctant to give up personal cars due to a lack of transit alternatives, resulting in parking demand challenges. As an Age-Friendly City, the City Council was particularly concerned about impacts of limited mobility on a growing senior population, such as social isolation and poor access to healthy foods.

The goals of the city's rideshare program were aimed at solving multiple challenges, but were strongly focused on two - increasing mobility for those who had lacked high-quality or reliable transit access and enhancing the rider experience for those who were already transit dependent. Mayor Cabaldon was adamant that the program be city-wide from day one, emphasizing an equitable approach that enhances mobility for all, rather than focusing on certain neighborhoods or routes in the city.

In April 2017, the City Council granted authorization for the release of a Request for Proposals (RFP) for a "Flexible Transportation Service." The city took an innovative RFP approach by using a "Request for Solutions" framing, which stated the goals of the pilot, the challenges to be addressed, and the general parameters for proposers to work within. By issuing a competitive solicitation structured as a "Request for Solutions," the city avoided over-prescription that can often constrain innovation. This approach allowed firms to submit different types of proposals, some being fully turn-key and others only proposing certain component pieces of a program. Similarly, this approach avoided the city predetermining the best solution, and allowed a range of service providers to propose varying types of transportation solutions. The city received ten (10) proposals in response to the RFP, with proposers ranging from traditional transit operators to ridesharing companies to Transportation Network Companies (TNCs) such as Uber and Lyft.

Based on the city's selection criteria, Via Transportation Inc. was unanimously awarded a one-year contract to pilot a city-wide ridesharing service using a fleet of Mercedes Benz Metris vans, made available to drivers by an independent third-party vehicle partner. By partnering with Via, the city benefited from the rideshare company's expertise in on-demand technology that dynamically routes drivers and matches drivers in real time, driver recruitment, and day-to day operations management. Throughout the procurement process and in the language of the contract, the city retained authority over key policy and operational considerations and local marketing efforts. City staff took the lead in conducting "Learn to Ride" events for community members, managed partnerships with local businesses and employers, and authorized fare rates and promotional discounts.



**Accessing West Sacramento On-Demand:** Passengers book rides using the free smartphone app or by calling to book over the phone. Current hours of operation include 365 days a year, Monday through Friday 6am to 11pm, Saturday 9am to 11pm, and Sunday 8am to 8pm. All rides are shared, using Via's proprietary technology to match riders along similar routes to ensure convenient ride times. Up to six people can ride in a West Sacramento On-Demand van (although during the COVID-19 pandemic, the level of sharing is limited) and passengers under the age of 13 must be accompanied by an adult, while those ages 13-18 may ride alone. Customers, on average, wait 10-15 minutes and no longer than 30 minutes. Vehicles meet riders at "Virtual Stops," at times asking riders to walk up to 500 feet to meet the Via van, however door-to-door service is available for riders with disabilities or mobility limitations. West Sacramento On-Demand is a cashless service and customers pay with either a debit/credit card that is connected to their account or using a prepaid credit gift card from any local retailer.

The city is eager to integrate electric vehicles into the On-Demand rideshare fleet to support the shared goals of the joint Mayor's Commission on Climate Change which seeks to achieve 100% electrification of municipal vehicles by 2040 in both West Sacramento and Sacramento. While there are plans to integrate EVs in the future, operational challenges such commercial availability of rideshare optimized vehicles, functionality, and charging infrastructure will take time to establish in advance of EV deployment.

## Key Collaborators and Stakeholders

Many different collaborators ranging from government officials to academic institutions have contributed to the success and implementation of this program.

- **Mayor's Office –** Mayoral leadership over two administrations (Former Mayor Christopher Cabaldon and former council member/recently elected Mayor Martha Guerrero) have played critical roles in the West Sacramento On-Demand program.
- **City of West Sacramento –** With substantial support from the City Manager's Office, the Transportation and Mobility division staff led all aspects of project development, from conception through deployment.
- **Via Transportation, Inc –** As the world's preeminent provider of digital infrastructure for public mobility systems, West Sacramento selected Via as the company to partner with on this ambitious public rideshare project. Via provides essential strategic and physical resources to the project.
- **Sacramento Area Council of Governments (SACOG) -** Through an "Innovative Transportation Demand Management" grant program administered by the Sacramento region's metropolitan planning agency (MPO), SACOG, the city received $150,000 in grant funds to kick-start the on-demand rideshare program during it's pilot phase and received valuable input from SACOG staff.
- **AARP - As an Age-Friendly City,** West Sacramento received feedback and grant funding from AARP through the Community Challenge program, which enabled staff to recruit older adults from the community to receive rideshare scholarships (free rides) and additional on-boarding support to ensure Seniors had all the assistance they wanted in account set-up and felt comfortable trying the new service.
- **Community Based Organizations (CBOs) -** Significant feedback and guidance was received, alongside marketing support, from local organizations such as the Broderick/Bryte Community Action Network, Chamber of Commerce, and Yolo County Transportation District. This input helped shape the service to ensure it met resident needs.

## Timeline

- 2016 - City Council identified the Public Transportation Strategy (PTS) as a Top Priority on the annual Strategic Plan Policy Agenda; directs staff to develop an innovative public transportation service.
- April 2017 - Staff introduced the Pilot Flexible Transportation Service (the Pilot) as a component of the city's broader Mobility Action Plan (MAP), considering multiple service concepts. City Council authorized staff to release a Request for Proposals to qualified firms.
- August 2017 - City Council approved the selection criteria and staff's recommended shortlist of five (5) proposals (out of ten total received) in response to RFP.
- Fall 2017 - The Evaluation Panel conducted interviews and presentations with the firms on the shortlist. Staff recommends Via Transportation, Inc.
- January 2018 - City Council approves award of contract to Via Transportation, Inc. to assist with the planning, marketing, launch, operation, maintenance and performance evaluation of a citywide on-demand rideshare service.
- May 2018 - West Sacramento On-Demand launch date
- Winter 2018 - User Performance Survey is conducted
- February 2019- West Sacramento publishes "A Summary of 6-Month User Survey Findings" https://www.cityofwestsacramento.org/government/departments/capital-projects-and-transportation/on-demand-rideshare-via
- May 2019 - City Council approved a new contract to continue the rideshare program through June 30, 2020. The new contract included significant fleet and service hour expansions, supported by a $2.02M allocation from the city's Transportation Development Act (TDA) Fund.
- June 2020 - City Council approved the continuation of the West Sacramento On-Demand rideshare program through June 30, 2022.

## Costs and Financing

The initial cost of the West Sacramento On-Demand program in its pilot year was $720,000. However, after ridership exceeded expectations requiring an increase in service hours, $90,000 of fare revenue was reinvested in response to the unanticipated demand, increasing the total contract amount to $810,000. The city's contract with Via requires that all fare revenues collected in a fiscal year be held in trust and reinvested into the following year of operations, unless otherwise agreed upon. Funding for this project came from the city's TDA fund and from the Sacramento Area Council of Governments (SACOG) Transportation Demand Management (TDM) Innovation Grant. TDA funds are California State funds allocated on an annual basis to transit agencies and local jurisdictions.

For the 2019/2020 fiscal year, the rideshare program budget increased to $2.020 million to support additional fleet vehicles, driver hours, and customer use. Not accounting for impacts of the pandemic, the total estimated expenses for the 2020/2021 fiscal year was $2.032 million. Since the rideshare program offers a flexible supply to meet actual demand, the actual costs of the FY 2020/2021 operations fell closer to $1.5M in response to plummeting ridership during the pandemic. This key feature of the Via rideshare product demonstrates how fleet flexibility can avoid unnecessary costs by providing only as much service as is merited by current ridership.

| | Source of Funding | Total Contract Allocation |
|---|---|---|
| **Pilot Phase**<br><br>**Fiscal Year 2018-2019** | TDA Funding<br>SACOG TDM Innovation Grant<br>Fare Revenue | $810,000 |
| **Fiscal Year 2019-2020** | TDA Funding<br>Fare Revenue | $2,020,000 |
| **Fiscal Year 2020-2021** | TDA Funding<br>Fare Revenue<br>Unspent FY 19/20 Program Budget Rollover | $2,032,000 |

Labor is the primary cost of the program. Hourly Driver Partner pay can vary due to incentives, such as being certified to drive wheelchair accessible vehicles. Additional program costs include staff time, marketing insurance, and vehicles. Insurance is one of the more complex aspects of the program and can be best described as a web of individually-covered entities to ensure that all partners are adequately covered. Via has auto liability insurance to cover Driver Partners while transporting riders, the vehicle leasing insures vehicles, Driver Partners must be individually insured, and the city has standard insurance. Via drivers do not have to own their vehicle to drive on the Via platform; instead a vehicle is leased to them on an hourly basis by a third party, creating an accessible employment opportunity for individuals who may not be able to afford or access a personal vehicle.

The service generates revenue through user fares. Regular one-way fares currently cost $3.50 each. Seniors aged 62 and older and individuals with eligible disabilities receive a 50% discount off of the regular fare price and ViaPass price. Frequent riders can purchase a ViaPass, which offers a $15 weekly pass allowing up to 4 rides a day, every day of the week (during normal operating hours). Furthermore, each additional passenger rides for $1 when passengers are added to a trip.

## Relevant Policies

- Launching in 2018, the Mayors of Sacramento and West Sacramento created the joint **Mayors' Commission on Climate Change** to develop recommendations and goals to achieve Carbon Zero by 2045. The report can be found here: https://www.lgc.org/climatecommission/
- The city's **Climate Action Plan (CAP)** includes project status updates, a summary of the CAP, and an outline of the plan's goals: https://www.cityofwestsacramento.org/government/departments/community-development/planning-division/climate-action-plan

## Outcomes

In February 2019, the city published the Via User Survey Findings, compiling the responses of over 520 respondents to document the performance of the West Sacramento On-Demand program's first six months, and including findings on transportation behavior shifts and how the use of the service varied across demographics such as age, gender, or income. The survey found:

### An Early Impact:

- 8% of the city's population had created individual accounts
- 60,000 rides taken through the city

## Who:

- The most frequent users of the West Sacramento On-Demand program were people under the age of 21 followed by residents over age 60
- Users were slightly more likely to come from household income levels of $15,000 to $35,000 a year
- Users were slightly more likely to be women

## Why:

- Young adults and senior citizens primarily used the service for daily activities and errands
- High school students used the service mostly for transportation to school and after school activities
- Middle-aged and higher income riders were relying on the service as a TNC substitute for recreational trips to local bars and restaurants more than other demographic groups
- A small percentage of the respondents use the service as a backup plan for their normal transportation

## West Sacramento On-Demand Offered Riders a Better Option:

- A majority of respondents reported saving on monthly transportation costs, with the exception of teenagers who spent more money due to latent demand for transportation options that allow youth to ride alone, which was met by the city's rideshare service

- People were not only driving alone less but also considering using West Sacramento On-Demand as their primary mode of transportation instead of a vehicle, leading to preventative vehicle acquisition. Most users who reported this were seniors who may use their car for errands and medical appointments, but were reluctant to give up their vehicle without the presence of a reliable and convenient alternative
- Respondents reported feeling safer (66%), more independent (59%), and at ease with easier access to medical care and healthier food (41%)
- Half of the respondents said they were using this service in place of a trip on Uber/Lyft and 34% said they were using it instead of driving alone or catching a ride from a friend or family member

While these performance metrics are a useful guide to measuring success towards intended goals, the West Sacramento On-Demand program also supports other city goals. For example, while the service is promoting ridesharing and decreasing GHG emissions, individuals who reported that they would not have taken the trip at all (i.e., seniors, youth, individuals with disabilities) prior to the availability of the city's rideshare program now have an affordable and reliable option, unlocking latent transportation demand and increasing equitable access to opportunities and daily needs. It is important to note that the comprehensive goals for this program extend beyond just environmental and include increasing the quality of life of those using the service. To help ensure this, a performance survey has allowed staff to examine and identify potential challenges. For example, many seniors prefer to book rides over the phone because they either do not own or do not want to utilize the smartphone app. Because of this finding, staff held tailored "Learn to Ride" events to provide a more hands on and in-person resource for seniors, setting up accounts with attendees, applying senior discounts, explaining how the service works, and teaching new users how to book a ride using the App or by phone. Looking forward, additional surveys and user observations will be conducted to inform ongoing performance monitoring and enhancements.

## Lessons Learned

- **Making Adjustments:** One of the most important takeaways from this pilot is that an on-demand rideshare program will only be successful if it is tailored to meet the needs of riders. What worked for West Sacramento may not work for other cities, and local leaders and officials should be prepared to make adjustments. Successful efforts will identify and address the actual problems to be solved, allow private firms to bring their expertise to the table, and invite collaboration to achieve the best outcome.
- **Engagement and Transparency:** Getting the public excited about the service and listening to why some riders might be deterred is key to success. In other words, how this program is presented to the public is essential in its function. When collaborating with a private entity there is always risk, and it is important to remain open-minded.
- **Familiarization:** One of the most beneficial marketing strategies was utilizing vehicles with the city logo. By doing this, the vehicle and West Sacramento On-Demand brand is highly visible to residents as they observe the vans on the street and take note of the phone number and app on the back. Furthermore, senior citizens reported feeling safer getting into a vehicle they knew was backed by the city, versus getting into a stranger's car.
- **Relationship with Transit Authority:** It is beneficial to have a working relationship with the local transit authority. For West Sacramento, it was important to ensure that the rideshare program complemented and worked in concert with the fixed route network. For instance, the city and Yolobus partnered to offer vouchers to all Via riders transferring to a fixed route, providing the bus segment of the trip at no additional cost for trips connecting outside of the city boundary. Similarly, in partnership with the city, the Transit District identified high-cost, low-ridership routes that will be eliminated or reduced in the future, where the rideshare program will ensure a transit option remains available in hard to serve areas, such as low density suburbs or rural settings. A program like West Sacramento On-Demand can also work in a city that has no transit authority, as this is not a necessity.

**Coronavirus Pandemic Effects and Changes:** During the COVID-19 pandemic, the West Sacramento On-Demand rideshare service has not reduced hours of operation and continues to serve the community in all their critical transportation needs. Several measures have been put in place to ensure that both riders and drivers are safely protected and are following CDC regulated health guidelines. These measures include limiting three passengers per ride to ensure social distancing, equipping all vehicles with plexiglass partitions and a supply of disinfecting wipes, touch-less doors that allow you to enter and depart the vehicle without touching the door handles, and daily full-vehicle cleaning and disinfectant using EPA approved materials. Face masks are required for both passengers and drivers, and an in-app wellness check will remind riders and drivers to take the appropriate steps to stay safe and avoid riding if they are experiencing symptoms.

Impacts to the rideshare program included an initial 70% drop in ridership (now closer to 40%) and trips during the pandemic have been focused primarily on commercial centers such as grocery stores. Despite this decrease in ridership, the demographic that saw the smallest drop in ridership was seniors and those with disabilities. This statistic indicates the importance of the program for this population and their dependence on accessible mobility options, even during the pandemic crisis. Since partial reopening efforts began in June 2020, ridership has started to return to pre-pandemic numbers. Other impacts include a reduction in the number of vehicles on the road at any given time, planned driver hours were lower than expected and therefore not all of the budget was utilized.

## Key Components for Replication

Rideshare, or microtransit, solutions are not a one-size fits-all. In order to replicate a successful On-Demand Rideshare Program, it's essential for cities to accurately define the problem they are trying to address, engage with the community's needs, and have support from the Mayor and other Council members.

The most essential aspect of replicating this program is tailoring it to the needs of the community and its riders. While West Sacramento's approach focused on a city-wide public transit option, other cities might be more interested in increasing ridership in a certain neighborhood, increasing stops so there is less distance between the first and last mile, or focusing on a different demographic. For example, in Bronzeville, Chicago The DASH Mobility Pilot Program was in part designed to study the demand for a first-mile/last-mile mobility program in an effort to increase clean and accessible transportation throughout the city.

Engaging with the community through human centered design approach is also one of the most fundamental aspects of this program's implementation. Gaining the community's trust involves more than just digital and social media marketing. For instance, meeting with the community and holding events is a good way to hear what their most pressing transportation needs are or understand what might be keeping them from using the service. In monitoring performance of a rideshare program, public agencies should not focus solely on quantitative metrics such as ridership or passengers per service hour, but must also work to capture vital, qualitative data about impacts to residents quality of life, access to opportunities, and environmental impacts which are critical performance outcomes for any city to consider.

Finally, support from the highest levels of city leadership is critical to implementing a successful program. Mayor Cabaldon's adamance that the program be developed through a user-focused design while balancing social equity considerations enabled staff to identify a solution, and subsequent partnership, that responded to community needs. Similarly, the City Council created an environment where failure was acceptable, a vital ingredient to innovating and testing new ideas. This kind of environment allowed for staff to receive constructive feedback, terete and adjust service parameters with agility, and incorporate innovative ideas that may otherwise be viewed as "risky."

Since launching in 2018, the city has provided peer consultation with more than 150 transit agencies and local governments, offering guidance and lessons learned to others who are interested in their own efforts to explore microtransit solutions. Interested agencies may contact West Sacramento staff to inquire further about the On-Demand Rideshare program or visit the project webpage, below.

## Additional Resources

West Sacramento On-Demand rideshare program website: https://www.cityofwestsacramento.org/via

The City of West Sacramento has posted City Council and Commission reports relating to the rideshare program at the link posted below. Those interested can find copies of the program's contract between the city and Via, budget funding sources, City Council resolutions, and meeting summaries.
https://www.cityofwestsacramento.org/government/departments/capital-projects-and-transportation/on-demand-rideshare-via

Contact Name: Sarah Strand, Senior Transportation Planner

Phone: (916) 617-5310

Email: sarahs@cityofwestsacramento.org

THE UNITED STATES
CONFERENCE OF MAYORS

**Tom Cochran,** CEO and Executive Director

1620 Eye Street, NW
Washington, DC 20006
Tel: 202.293.7330

**Stay Connected**

**usmayors.org**
**@usmayors**