Memorandum

CITY OF DALLAS

DATE March 4, 2024

TO Honorable Chair Stewart and Members of the Parks, Trails, and the Environment Committee

SUBJECT **Office of Environmental Quality & Sustainability Solar Siting Study**

Background

In November 2022, OEQS issued a request for proposals (RFP) to seek professional assistance "to guide development of solar [photovoltaic (PV)] generating capacity on City-owned property" with the results of the study to "provide short-term and long-term cost analyses of economically feasible potential City-owned or privately-owned (under lease agreement) solar PV assets, emissions reductions associated with those assets, optimal locations for solar PV installations, project priorities and funding options for Council to consider." The RFP identified the following priorities for this Solar Siting Study:

- Help achieve Comprehensive Environmental and Climate Action Plan (CECAP) renewable energy targets and actions;
- Advance goals of the Racial Equity Plan (REP);
- Reduce energy poverty and support access to renewable energy for low- and moderate-income residents;
- Minimize negative impact to local natural resources; and
- Explore opportunities to support habitat, pollinators, and other environmental resource assets.

The study advances the CECAP Goal 2 commitment to generate and use renewable, reliable, and affordable energy. The Goal 2 targets include the installation of 739 MW and 3,695 MW of solar power within the City by 2030 and 2050, respectively. It also aligns with OEQS' Department Program Measures in the REP to "[p]rovide access to community solar opportunities for qualified households with the greatest need by December 2025" with the target to "[i]ncrease residential building efficiency through weatherization, access to clean energy through community solar programs, and reduce energy use in historically disadvantaged communities through other related programs."

In April 2023, OEQS contracted with a consultant team led by Ameresco Inc. to evaluate the City of Dallas property portfolio and identify ten priority sites for further analysis. For these ten priority sites, the consultant team was tasked with providing detailed technical and financial analysis as well as preliminary system designs that could be used as the basis for future soliciations for installation of proposed systems through a later procurement. The team was also tasked with evaluating the demographic profile of the communities adjacent to each site and any potential evironmental impacts of solar energy development at the priority sites.

Project Overview and Approach

The project team evaluated City properties for potential as building-serving sites and community-serving sites. Building-serving sites are properties with a City of Dallas facility or other energy-using infrastructure where a solar PV system can directly offset consumption of electricity from the grid and reduce utility costs. These sites are also referred to as "behind the meter." Community-serving sites are properties that could host a solar PV system that produces electricity that is delivered to the grid for use by residents and non-City entities. Community solar typically

uses a subscription model where multiple participants subscribe to a portion of the solar energy generated. Subscribers do not receive electricity directly from the community solar system and therefore do not need to be physically located near the system.

OEQS staff initially requested five building-serving and five community-serving sites, and sought to avoid recommendations to install solar carport canopies as an effort to reduce single occupent vehicle use. These directives were modified following the team's presentation to the Environmental Commission on October 11, 2023, based on feedback from Commissioners and technical advisors.

Ultimately, the project team recommended eight building-serving sites, one community-serving site (Dallas Sanitation Department's Southwest Transfer Station), and one site (Martin Luther King, Jr. Community Center) that could be used to offset building electricity use or for community solar, but not both due to technical constraints. The building-serving sites were selected based on economic and technical feasibility; department feedback that identified key constraints; and site visits and document reviews that revealed disqualifying conditions of certain sites.

For community-serving sites, the team identified sites with sufficient space with appropriate conditions to support a solar PV system large enough to potentially overcome economic challenges to community solar and attract interest from: potential community solar developers, who would install the system; and retail electricity providers, who would likely manage the subscription and billing process for a community solar program. The team conducted GIS spatial analysis to evaluate sites, which were then qualified or eliminated based on key environmental criteria and department feedback.

Community Engagement and Feedback

The project team provided two primary community engagement opportunities: an online survey and town hall meetings. An online community survey in English and Spanish was administered in Fall 2023. The three-part survey gauged Dallas residents' awareness and preferences related to:

- Building-serving solar energy development on City-owned properties;
- Community-serving solar energy development on City-owned properties; and
- Residential solar energy options.

The solar siting study project team received 148 valid responses (146 English, 2 Spanish). Responses were geographically dispersed and somewhat demographically diverse, though they likely overrepresent Dallas residents with existing interest and investment in solar. Nevertheless, the survey results provided valuable insights that helped inform the selection of the ten priority solar sites and could inform potential residential and community solar energy program design.

An in-person town hall was held at the West Dallas Multipurpose Center on February 15, 2024, and a virtual town hall was held via WebEx on February 21, 2024. There were approximately 20 attendees representing at least seven zip codes, including three people from two Priority Zip Codes, and three Environmental Commissioners at the town halls. The project team provided an overview of the purpose of the study and the recommended ten sites. The in-person event also included interactive opportunities to engage with community partners to learn more about ways that residents can take climate action and support solar energy.

Attendee feedback included:

- Enthusiasm for the recommended solar installation at the Martin Luther King, Jr. Community Center (MLK Center) in particular. The West Dallas Multipurpose Center was also recommended by attendees for the City to prioritize for early investment in solar energy.

- Support for solar parking canopies to help reduce temperatures at surface parking lots, especially at the MLK Center.
- Interest in educational opportunities, including hands-on solar panel installation learning opportunities for Dallas ISD Career and Technical Education students and onsite signage explaining how solar panels work.
- Curiosity about how the City is promoting solar energy for private property owners and City plans for installing electric vehicle charging stations and battery energy storage as complements to solar energy.
- Interest in the procurement process and timeline for installing solar systems at the recommended sites.

Priority Site Portfolio Overview

The project team identified 3.6 megawatts of solar potential across ten priority sites with the potential to generate 5.4 million killowatt hours of renewable electricity per year—that's enough to power 420 Texas homes for a year and avoid more than 69,000 metric tons of carbon dioxide-equivalent (CO_2e) greenhouse gas emissions by 2050. The nine building-serving solar installations would produce a combined $2.4 million net positive value over the standard 25-year durable life of solar PV. The portfolio has a 7.1% internal rate of return and would reach simple payback in year 14. The two potential community-serving sites have the potential to support 227 community solar subscriptions and would provide a valuable pilot opportunity for the City to develop a greater understanding of community solar potential and challenges in the Texas market, where community solar is not supported with an organized program and faces market, regulatory, and economic barriers to success. Site-by-site and portfolio technical and financial details are enclosed. A map of the ten priority solar sites with demographic and environmental context is available at bit.ly/CODSolarSiteMap.

The proposed preliminary designs and associated financial analysis is based on "as-is" site conditions observed by project team engineers or identified in feedback from Building Services Department (BSD) and departments controlling relevant properties including Parks and Recreation (PKR), Sanitation (SAN), Dallas Police Department (DPD), and Equipment and Fleet Management (EFM). The enclosed cost estimates and financial analysis should be considered preliminary and final determination of required upgrades would be determined at the time of final system design and permitting. The final solar siting study report will include a full and detailed list of inclusions, exclusions, and assumptions that informed the analysis.

The project team recommends aiming to develop the priority site portfolio through a single solicitation. Multiple procurements for indiviual sites will create delays and inefficiencies that will negatively impact the economic performance of the portfolio and delay associated emissions reductions.

Study Final Report

The project team will submit a comprehensive report detailing study approach, site-level analysis, and recommendations on community solar, funding, and procurement in March 2024.

Enclosed

- Priority site technical and financial overview
- Priority site map with REP priority zip codes
- Town hall presentation

If you have any questions please contact Carlos Evans, OEQS Director (214-670-1642), Paul White II, OEQS Assistant Director (214-671-8979), or Rosaerlinda Cisneros, OEQS Climate Coordinator (214-670-1196).

M. Elizabeth (Liz) Cedillo-Pereira, J.D.
Assistant City Manager, City of Dallas

c: T.C. Broadnax, City Manager
Tammy Palomino, City Attorney
Mark Swann, City Auditor
Bilierae Johnson, City Secretary
Preston Robinson, Administrative Judge
Kimberly Bizor Tolbert, Deputy City Manager
Jon Fortune, Deputy City Manager
Majed A. Al-Ghafry, Assistant City Manager
Dr. Robert Perez, Assistant City Manager
Jack Ireland, Chief Financial Officer
Genesis D. Gavino, Chief of Staff to the City Manager
Directors and Assistant Directors

Priority Site Technical and Financial Overview

System Details – Full Portfolio											
Priority Site	**Martin Luther King Jr. Community Center**	**Paul Laurence Dunbar Lancaster-Kiest Branch Library**	**Beckley-Saner Recreation Center**	**Walnut Hill Recreation Center**	**Nash-Davis Recreation Center**	**West Dallas Multipurpose Center**	**Samuell-Grand Recreation Center**	**Northeast Service Center**	**Quarter Master**	**Southwest Transfer Station (Oak Cliff / Westmoreland)**	**Portfolio Total**
Address	2922 Martin Luther King Jr Blvd	2008 E Kiest Blvd	114 W Hobson Ave	10011 Midway Rd	3712 N Hampton Rd	2828 Fish Trap	6200 E Grand Ave	8935 Adlora Ln	1600 Botham Jean Blvd.	4610 S Westmoreland Rd	
Zip code	75215	75216	75224	75229	75212	75212	75223	75238	75215	75237	
Department	Building Services	Library	Parks and Recreation	Parks and Recreation	Parks and Recreation	Building Services	Parks and Recreation	Equipment Management and Fleet	Dallas Police Department	Sanitation	
Proposed Use	Building Serving or Community Serving	Building Serving	Building Serving	Building Serving	Building Serving	Building Serving	Building Serving	Building Serving	Building Serving	Community Serving	
Mount Type	Rooftop, Carport	Ground Mount	Rooftop, Carport	Rooftop, Carport	Rooftop, Carport	Rooftop	Rooftop, Carport	Rooftop	Rooftop	Ground Mount	
System Size (kWdc)	1,088	265	253	220	187	169	167	165	148	961.4	3,623
System Size (kWac)	950	240	220	180	140	160	140	140	140	800	3,110
Annual Consumption - Pre Solar (kWh/year)	1,956,531	426,121	442,782	334,829	297,132	387,471	256,122	268,510	242,420	131,219	4,743,137

Priority Site	Martin Luther King Jr. Community Center	Paul Laurence Dunbar Lancaster-Kiest Branch Library	Beckley-Saner Recreation Center	Walnut Hill Recreation Center	Nash-Davis Recreation Center	West Dallas Multipurpose Center	Samuell-Grand Recreation Center	Northeast Service Center	Quarter Master	Southwest Transfer Station (Oak Cliff / Westmoreland)	Portfolio Total
PV Production (kWh, yr1)	1,602,630	417,926	375,448	331,140	272,475	253,190	241,838	247,409	215,928	1,456,699	5,414,683
Yield Efficiency (kWh/kWdc)	1,473.20	1,577.90	1,484.70	1,507.70	1,457.60	1,493.80	1,445.40	1,503.20	1,456.60	1,515.20	
Site Usage Offset (% of kWh)	82%	98%	85%	99%	92%	65%	94%	92%	89%	N/A	
Annual GHG Emissions Avoided (MTCO2e)	872	227	204	180	148	138	132	135	117	792	2,945
GHG Emissions Avoided by 2050 (MTCO2e)	20,534	5,355	4,811	4,243	3,491	3,244	3,099	3,170	2,767	18,664	69,378

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Financial Overview – Building Serving Sites										
	Martin Luther King Jr. Community Center	Paul Laurence Dunbar Lancaster-Kiest Branch Library	Beckley-Saner Recreation Center	Walnut Hill Recreation Center	Nash-Davis Recreation Center	West Dallas Multipurpose Center	Samuell-Grand Recreation Center	Northeast Service Center	Quarter Master	Portfolio Total
Turnkey Purchase Price	$4,317,584	$1,298,386	$1,239,255	$1,114,871	$1,012,373	$740,690	$961,953	$763,523	$709,719	$12,158,355
Year 1 Utility Bill Savings	152,777	46,382	32,405	30,326	28,565	24,233	21,809	27,733	24,480	388,712
Project Life Net Cash Flow	5,444,850	1,821,742	964,394	945,338	929,205	892,803	587,076	1,077,001	924,270	13,586,678
Net Present Value @ 5.00%	1,040,158	448,234	53,407	91,667	123,094	195,725	(22,329)	272,515	218,632	2,421,103
Simple Payback (Years)	Year 14	Year 13	Year 16	Year 16	Year 15	Year 13	Year 17	Year 12	Year 13	Year 14
Return on Investment	126.1%	140.3%	77.8%	84.8%	91.8%	120.5%	61.0%	141.1%	130.2%	111.7%
Internal Rate of Return	7.3%	8.5%	5.5%	5.9%	6.4%	7.9%	4.7%	8.7%	8.3%	7.1%
25 Yr Net Cash Flow at 4.3% financing	1,970,313	398,882	80,137	105,680	126,638	176,821	7,769	240,187	194,847	2,330,710

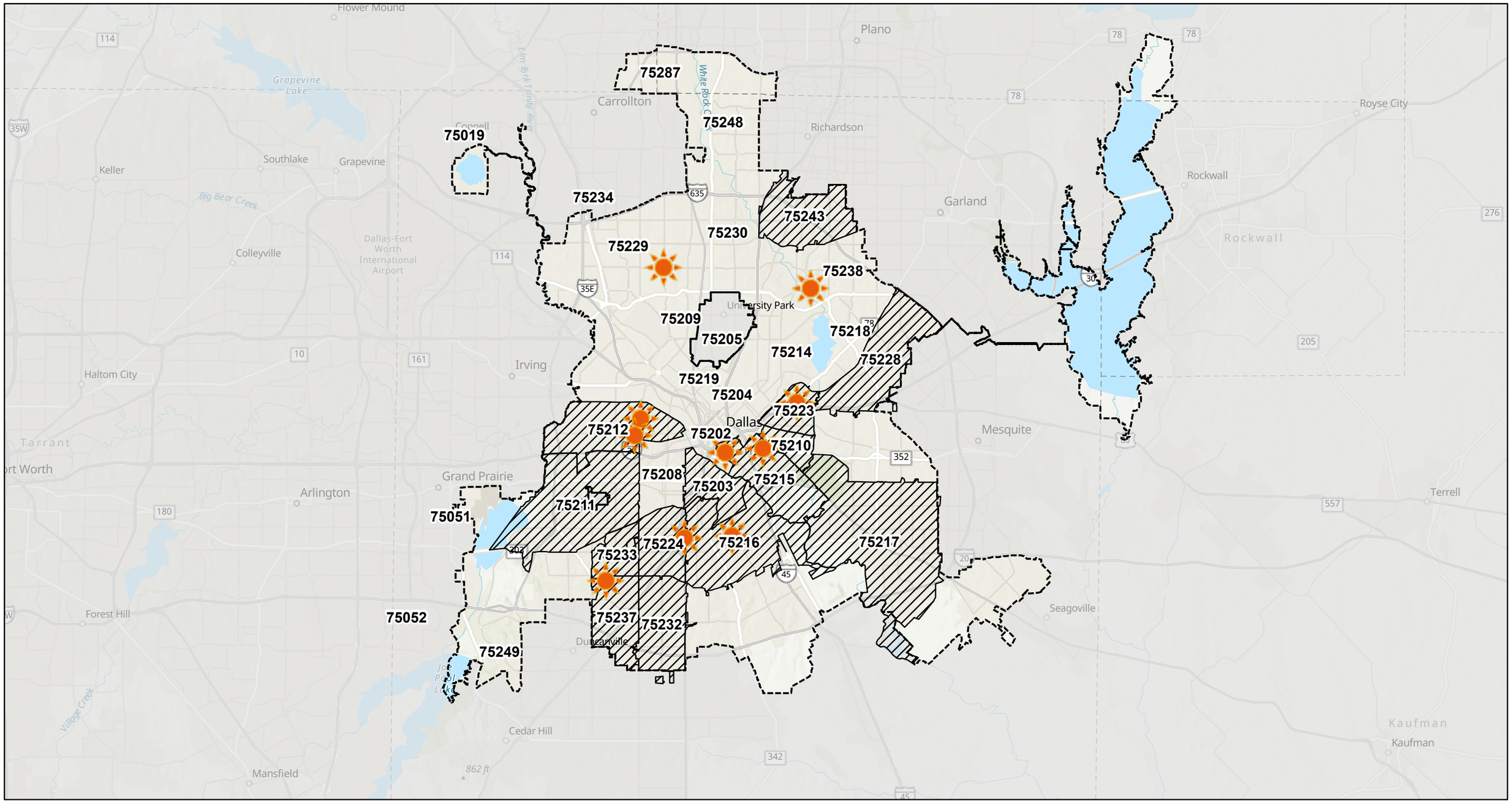
The proposed preliminary designs and associated financial analysis is based on “as-is” site conditions verified by project team engineers through site visits, provided building documentation, and feedback from Building Services Department (BSD) and departments controlling relevant properties including Parks and Recreation (PKR), Sanitation (SAN), Dallas Police Department (DPD), and Equipment and Fleet Management (EFM). **Although the consultant team quantified costs associated with standard installation conditions and known technical constraints, the provided cost estimates and financial analysis should be considered preliminary**. Project team engineers did not observe the need for specific upgrades to building electrical infrastructure or roof replacements however final determination of required upgrades would be determined at the time of final system design and permitting. **Turnkey purchase price does not include value of any incentives. Other financial metrics assume securing a 30% Investment Tax Credit using the elective pay process and Oncor rebates**. The final solar siting study report will include a full and detailed list of inclusions, exclusions, and assumptions that informed the analysis.

Community Serving Sites Overview

Community Serving Sites Overview		
Site Name	**Installation Price**	**# of Community Solar Subscriptions**
Martin Luther King Jr. Community Center	$4,620,273*	119
Southwest Transfer Station	$4,099,586	108

*Installation price for this site differs from building serving price due to increased costs associated with direct interconnection to Oncor distribution grid

Priority Solar Sites - City of Dallas Properties



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Priority Solar Site

Dallas City Limits

Priority ZIP Code

1:305,750

0 3.25 6.5 13 mi

0 5 10 20 km

Esri, NASA, NGA, USGS, Texas Parks & Wildlife, Esri, TomTom, Garmin, SafeGraph, FAO, METI/NASA, USGS, EPA, NPS, USFWS

City of Dallas

Solar Siting Study Town Hall

February 15, 2024

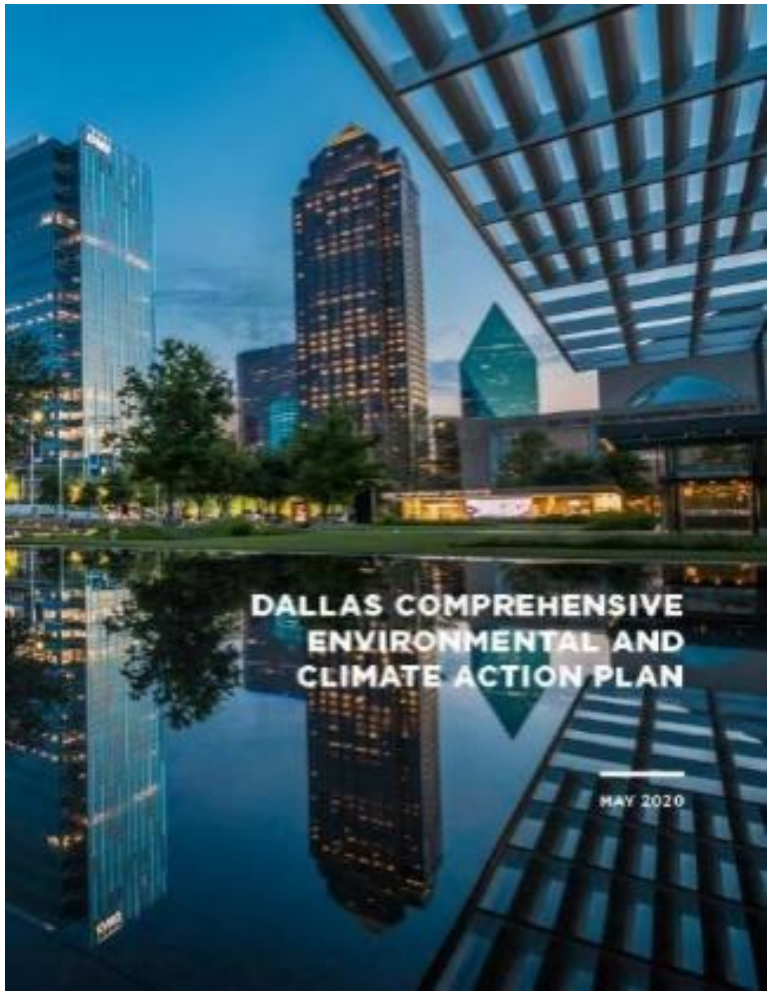
Office of Environmental
Quality & Sustainability
City of Dallas

Presentation Overview

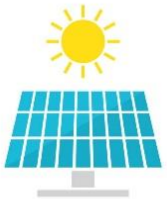
- Welcome & Introductions
- Warm Up: Solar Association
- Study Overview
- Priority Sites for Solar Energy
- Q&A
- Prioritization Poll
- Closing & Next Steps

Solar panels at Fretz Recreation Center

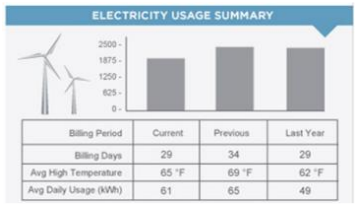
Why Solar For City Properties?



2030

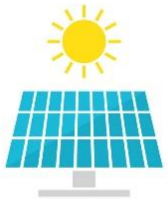


739 MW
of solar power installed

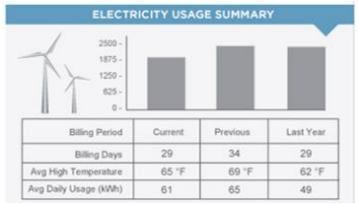


20% of residents + businesses
enrolled in a renewable electricity plan

2050



3,695 MW
of solar power installed



50% of residents + businesses
enrolled in a renewable electricity plan

Why Solar For City Properties?

SELECT ANY ACTION TO SKIP DIRECTLY TO THAT PAGE

02 | Dallas generates and uses renewable, reliable, and affordable energy.

Maintain a high degree of reliability during extreme weather events.

- Maintain a high degree of reliability in the electric delivery grid through cooperative actions between the City and Public Utility Companies.
- Evaluate the potential for the City to make investments in energy storage technologies for both resilience and renewable energy development purposes.
- Educate commercial power users about power savings associated with demand side management.

Encourage investment in, and greater use of, renewable energy.

- Continue partnership with Public Utility Companies on an intensive education program on renewable energy options.
- Invest in programs through local community colleges to train and establish a local workforce that is focused on renewable energy technologies.
- Build a regional strategic partnership to promote adoption of renewable energy.
- Establish and invest in renewable energy hubs through partnerships with private sector.
- **Extend City efforts to develop more renewable energy projects on City facilities.**
- Continue to implement Green Energy policy for City facilities.

Ensure affordable access to renewable electricity.

- Extend partnership with organizations like PACE and other Public Utility Companies to provide further incentives for renewable energy.
- Advocate for Renewable Energy Policies at the State and Federal levels.

Consultant Team Introductions

AMERESCO
Green • Clean • Sustainable

- Project lead, technical/financial analysis, system design

Biohabitats

- Environmental analysis + GIS

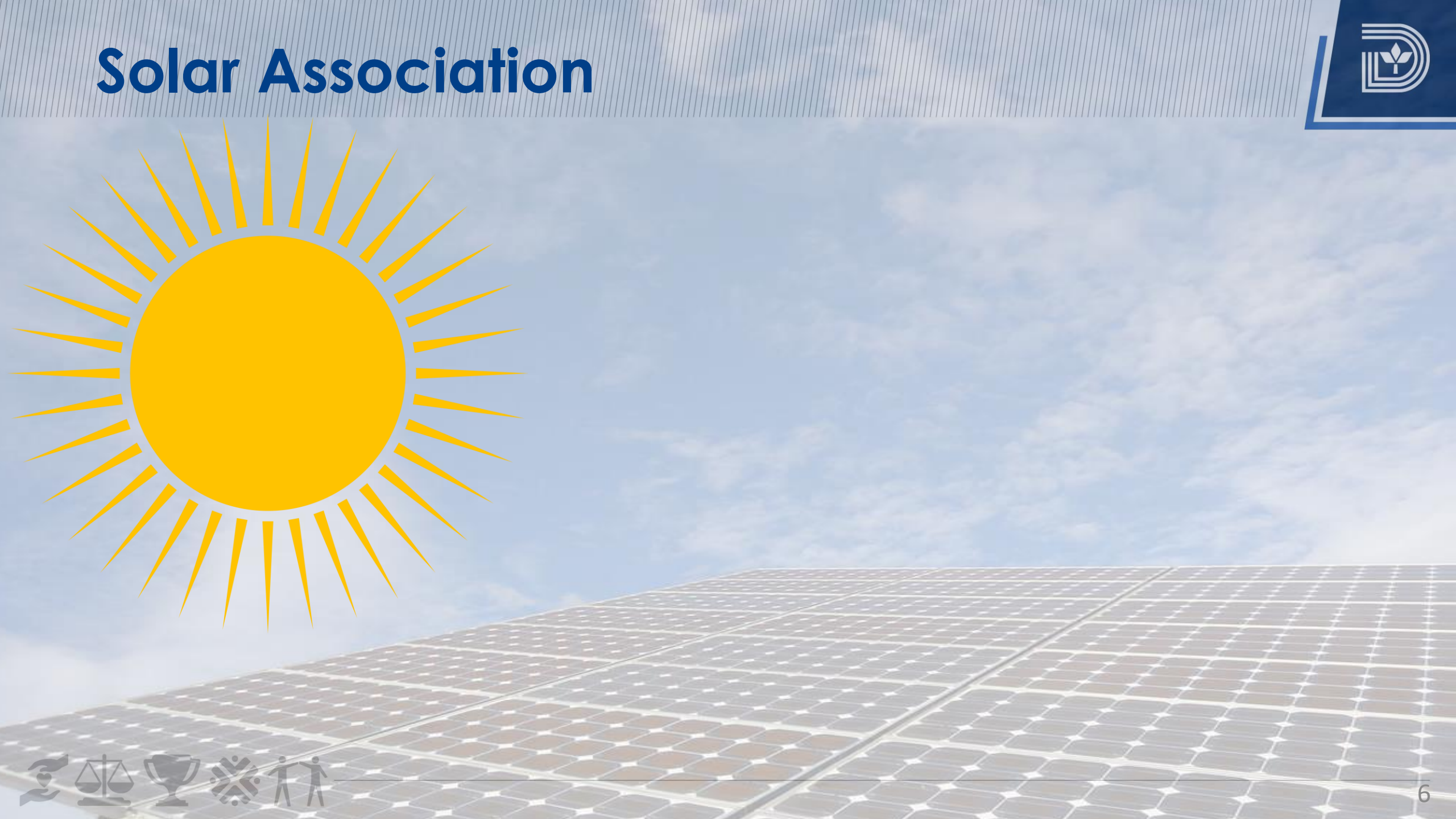
Terra Lumina Consulting

- Equity analysis + community engagement

TRCSS

- Community solar analysis

Solar Association



Solar Siting Study Scope

Initial Assessment Factors:

- Large City-owned properties near low- and moderate-income (LMI) communities
- Available space + amenable site conditions
- Maximize offset of building electricity use
- Cost-neutral to City
- Preserve tree canopy and open space
- No impact to protected species
- Preference to minimize solar parking canopies (carports)
- Ability to pilot newer technologies
- Community solar program potential

Adjustments Based on Feedback:

- Considered entire City of Dallas portfolio
- Sites eliminated based on department's future use plans and 2024 bond
- Preserve sites for housing
- For ground mount solar, adequate setback from trails to protect views
- Select solar carports ok
- Refined economic success criteria and constraints (e.g., City's low cost of electricity)

Solar Development Options

Building-Serving Solar Sites

- Solar panels installed onsite that directly serves the building's energy needs
- Can be rooftop, ground mount, or carport
- Avoids use of grid electricity in real time
- Can result in lower electricity costs (but it's complicated)

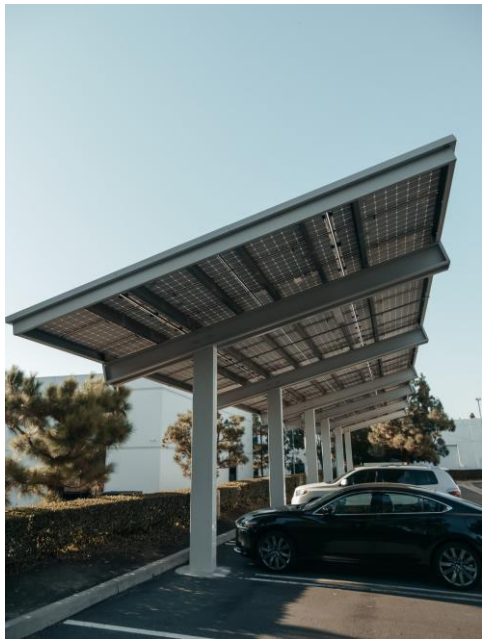
Community-Serving Solar Sites

- Solar panels that do not directly serve a nearby building but instead generate electricity for others to purchase through subscriptions
- Can be rooftop, ground mount, or carport
- Are typically larger than Building Serving Solar
- Typically run by a program administrator and facilitated by supportive policy

Solar Development Options (cont.)

Rooftop

Ground Mount



Carport

Study Approach

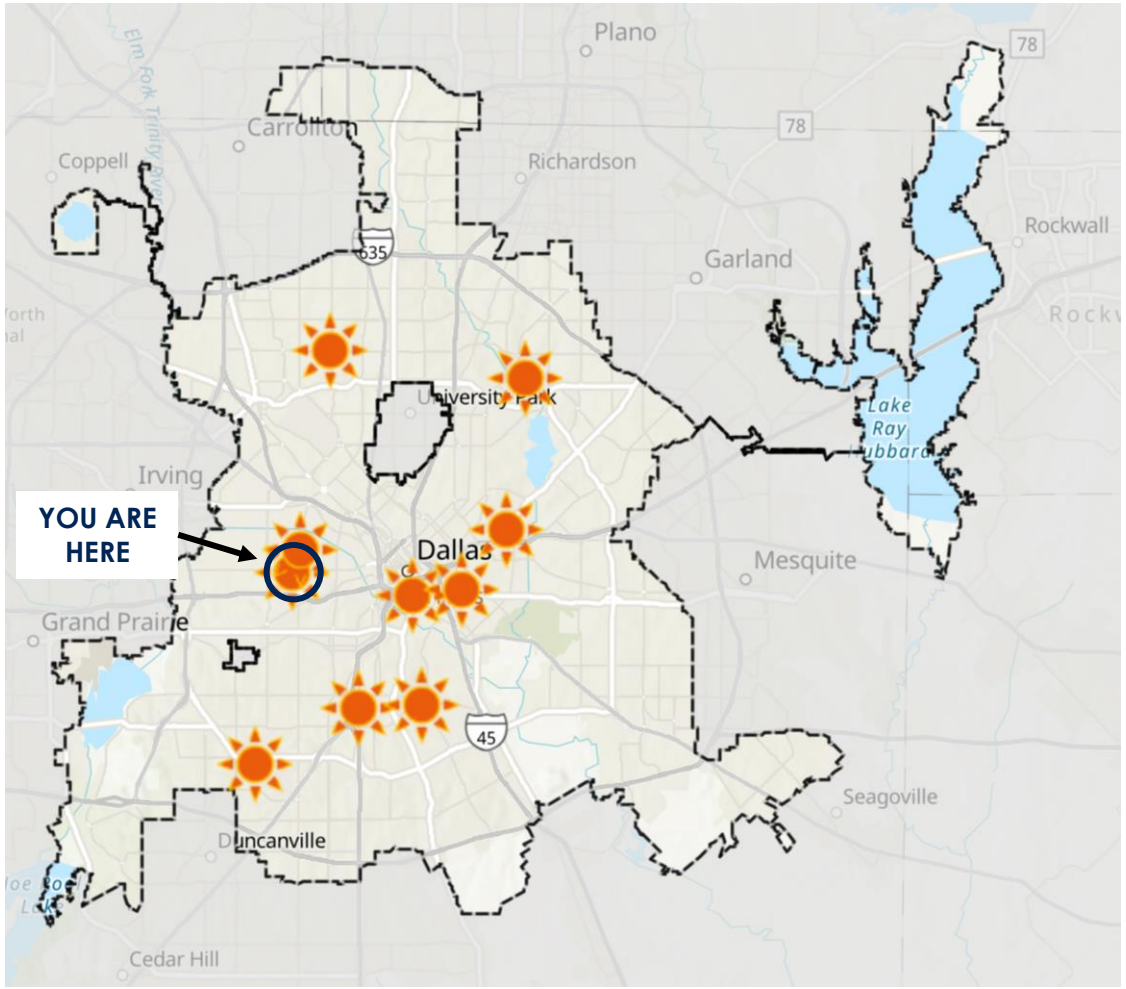
Technical
- How much solar energy can this site produce?
- Is there a good place to put solar panels at this site?
- For community-serving solar, is there a large enough area to support a community-scale system?

Financial
- How much will it cost to put solar panels at this site?
- How much can the City save on utility costs from solar panels at this site?
- How long will it take to break even (pay back) the solar panel installation costs?

Environmental
- Would trees or other desirable vegetation have to be removed? Would any protected species be affected?
- Is there a more desirable use than solar for this site?
- Would there be any water quality impacts?

Equity
- Does the presence of solar panels at this site affect the users of the site and/or surrounding community?
- Are there job creation and/or job training opportunities from putting solar panels at this site?
- For community-serving solar, could community members—especially those with low incomes—benefit from a solar subscription?

Priority City of Dallas Sites for Solar Development

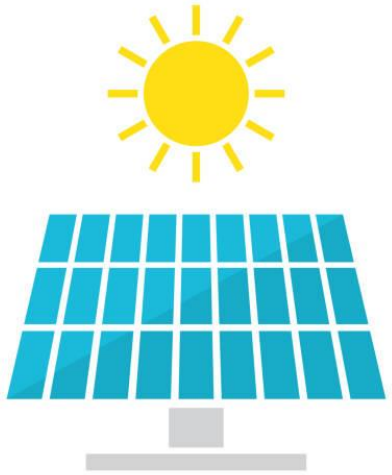


1. **Martin Luther King, Jr. Community Center***
   (1,088 kW, rooftop + carport)
2. **Southwest Transfer Station***
   (961 kW, ground mount)
3. **Paul Laurence Dunbar Lancaster-Kiest Branch Library** (265 kW, ground mount)
4. **Beckley-Saner Recreation Center**
   (253 kW, rooftop + carport)
5. **Walnut Hill Recreation Center**
   (220 kW, rooftop + carport)
6. **Nash-Davis Recreation Center**
   (187 kW, rooftop + carport)
7. **West Dallas Multipurpose Center**
   (169 kW, rooftop)
8. **Samuell-Grand Recreation Center**
   (167 kW, rooftop + carport)
9. **Northeast Service Center**
   (165 kW, rooftop)
10. **Quarter Master**
    (148 kW, rooftop)

* Potential community serving sites

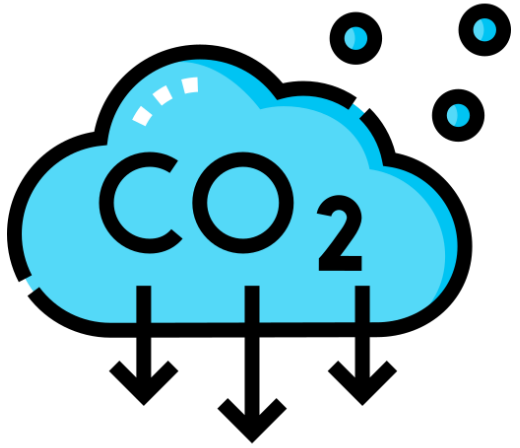
POTENTIAL IMPACT

10 sites = 3.6 MW installed solar



Produce 5.4 million kWh per year

Enough to power 420 Texas homes for a year



Avoid 2,945 $MTCO_2e$ /yr
69,378 $MTCO_2e$ by 2050

Priority Sites Overview

Building Serving Sites	System Details		Financial Overview				Environmental Impact	
Site Name	Solar System Size (kWdc)	Annual Production (kWh)	Installation Price	Year 1 Utility Bill Savings	Payback (Year)	Return on Investment	Annual GHG Emissions Avoided ($MTCO_2e$)	GHG Emissions Avoided by 2050 ($MTCO_2e$)
Martin Luther King Jr. Community Center	1,088	1,602,630	$4,317,584	$152,777	14	126.1%	872	20,534
Paul Laurence Dunbar Lancaster-Kiest Branch Library	265	417,926	$1,298,386	$46,382	13	140.3%	227	5,355
Beckley-Saner Recreation Center	253	375,448	$1,239,255	$32,405	16	77.8%	204	4,811
Walnut Hill Recreation Center	220	331,140	$1,114,871	$30,326	16	84.8%	180	4,243
Nash-Davis Recreation Center	187	272,475	$1,012,373	$28,565	15	91.8%	148	3,491
West Dallas Multipurpose Center	169	253,190	$740,690	$24,233	13	120.5%	138	3,244
Samuell-Grand Recreation Center	167	241,838	$961,953	$21,809	17	61.0%	132	3,099
Northeast Service Center	165	247,409	$763,523	$27,733	12	141.1%	135	3,170
Quarter Master	148	215,928	$709,719	$24,480	13	130.2%	117	2,767
Building Serving Portfolio Total	**2,662**	**3,957,984**	**$12,158,354**	**$388,710**	**14**	**111.7%**	**2,153**	**50,714**

Community Serving Sites	System Details				Environmental Impact	
Site Name	Solar System Size (kWdc)	Annual Production (kWh)	Installation Price	# of Community Solar Subscriptions	Annual GHG Emissions Avoided ($MTCO_2e$)	GHG Emissions Avoided by 2050 ($MTCO_2e$)
Martin Luther King Jr. Community Center	1,088	1,602,630	$4,317,584	119	872	20,534
Southwest Transfer Station	961	1,456,699	$4,099,586	108	792	18,664

Martin Luther King, Jr. Community Center

Use: Building serving or community serving

Type: Rooftop + carport

Size: 1,088 kW

Estimated Cost: $4.3 Million

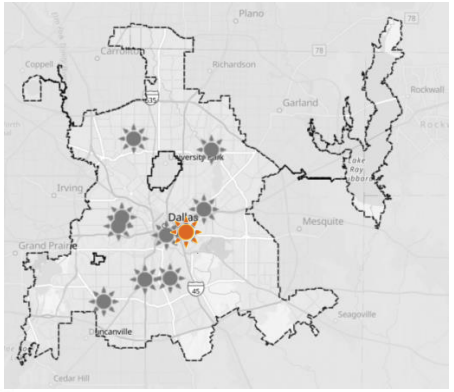
Year 1 Savings: $152,777

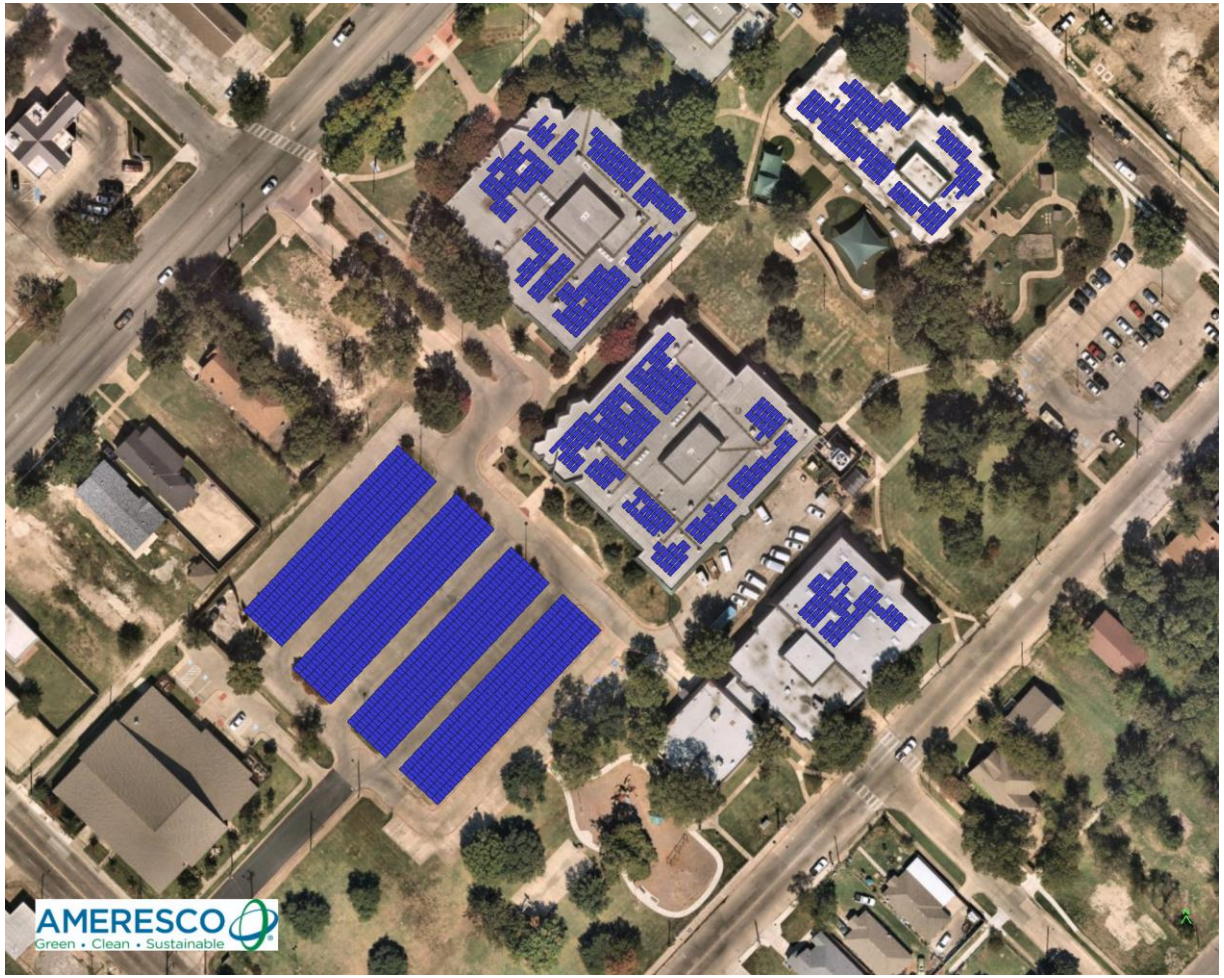
Payback (Yr): 14

Production: 1.6 million kWh
- 82% of site consumption
- Equivalent to 119 homes' annual consumption

Avoided GHG: 872 $MTCO_2e$ per year
20,534 $MTCO_2e$ by 2050

Location:





2922 Martin Luther King Jr Blvd, 75215

Paul Laurence Dunbar Lancaster-Kiest Branch Library

Use: Building serving

Type: Ground mount

Size: 265 kW

Estimated Cost: $1.3 Million

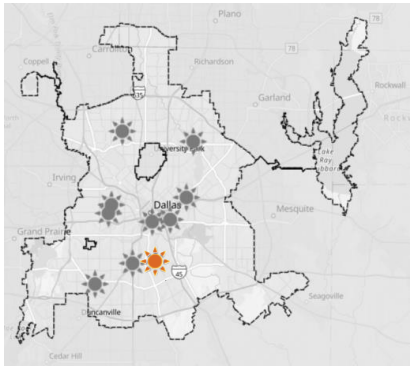
Year 1 Savings: $46,382

Payback (Yr): 13

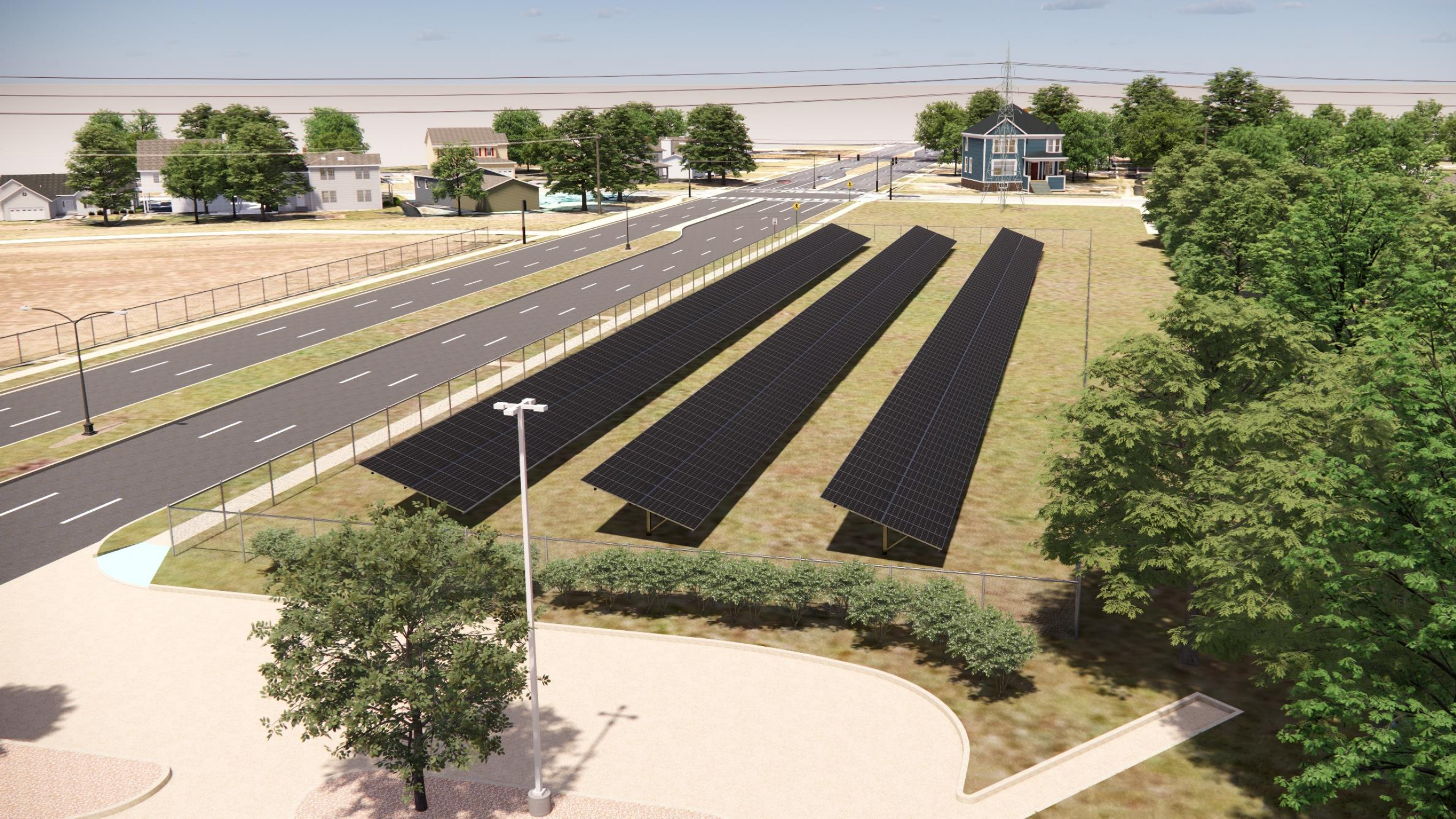
Production: 417,926 kWh
- 98% of site consumption
- Equivalent to 31 homes' annual consumption

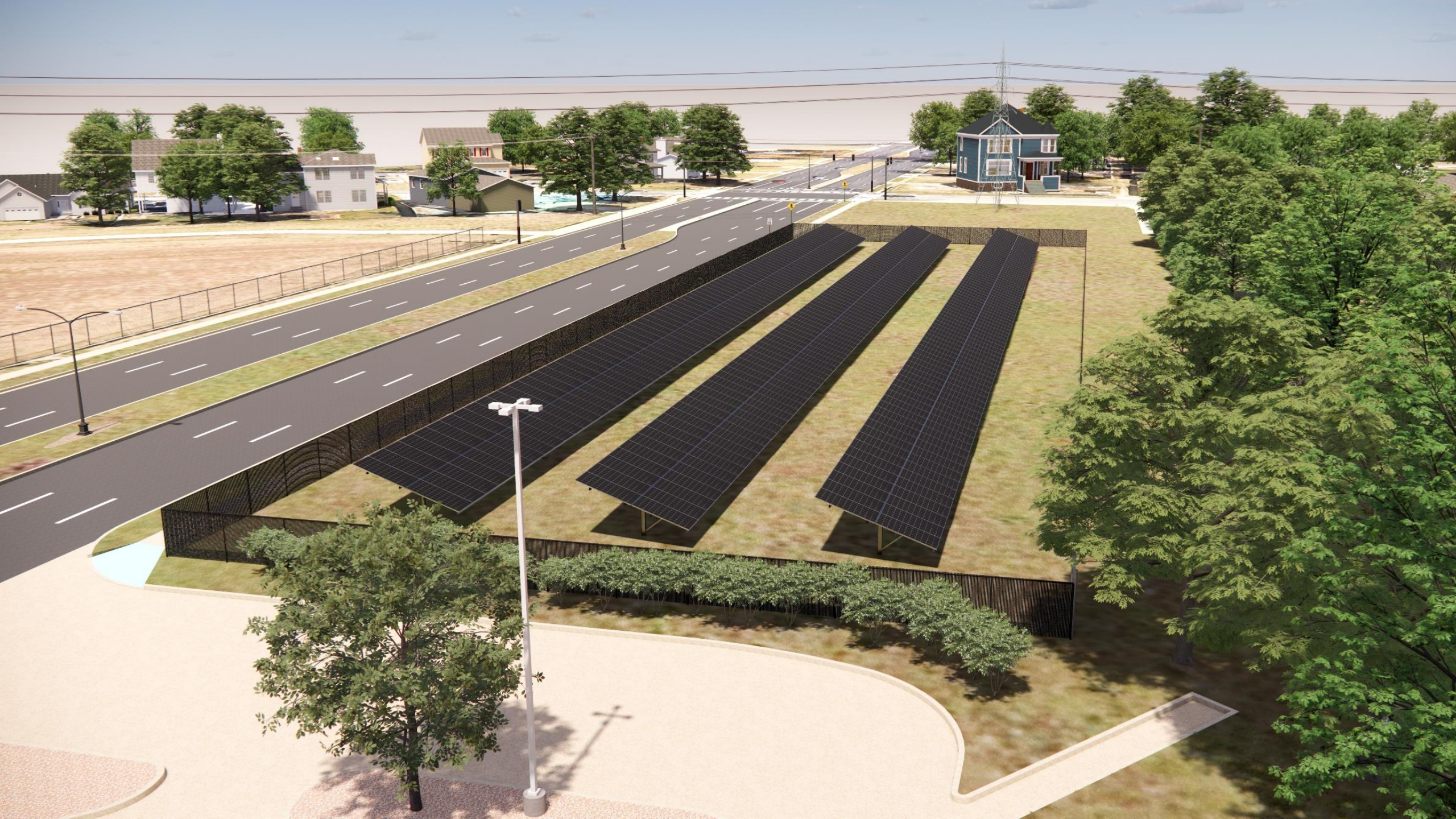
Avoided GHG: 227 $MTCO_2e$ per year
5,355 $MTCO_2e$ by 2050

Location:



2008 E Kiest Blvd, 75216





Beckley-Saner Recreation Center

Use: Building serving

Type: Rooftop + carport

Size: 253 kW

Estimated Cost: $1.24 Million

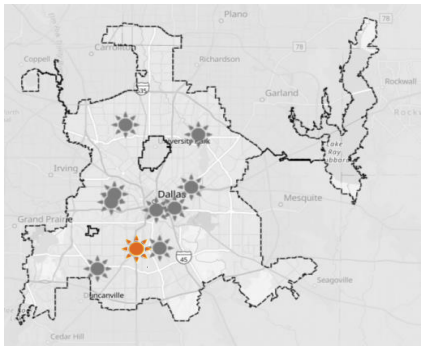
Year 1 Savings: $32,405

Payback (Yr): 16

Production: 375,448 kWh
- 84% of site consumption
- Equivalent to 28 homes' annual consumption

Avoided GHG: 204 $MTCO_2e$ per year
4,811 $MTCO_2e$ by 2050

Location:



114 W Hobson Ave, 75224

Walnut Hill Recreation Center

Use: Building serving

Type: Rooftop + carport

Size: 220 kW

Estimated Cost: $1.11 Million

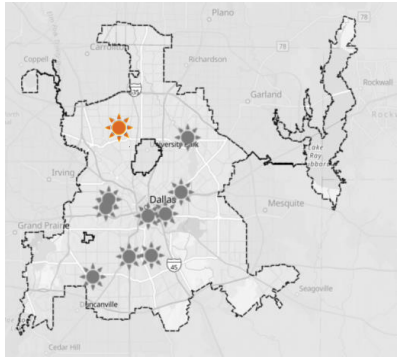
Year 1 Savings: $30,326

Payback (Yr): 16

Production: 331,140 kWh
- 99% of site consumption
- Equivalent to 25 homes' annual consumption

Avoided GHG: 180 $MTCO_2e$ per year
4,243 $MTCO_2e$ by 2050

Location:



10011 Midway Rd, 75229

Nash-Davis Recreation Center

Use: Building serving

Type: Rooftop + carport

Size: 187 kW

Estimated Cost: $1.01 Million

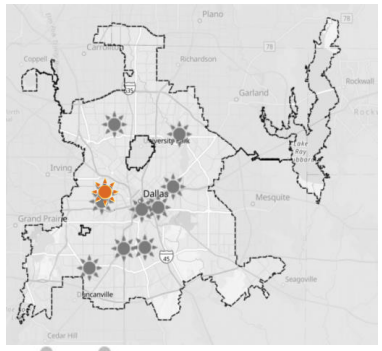
Year 1 Savings: $28,565

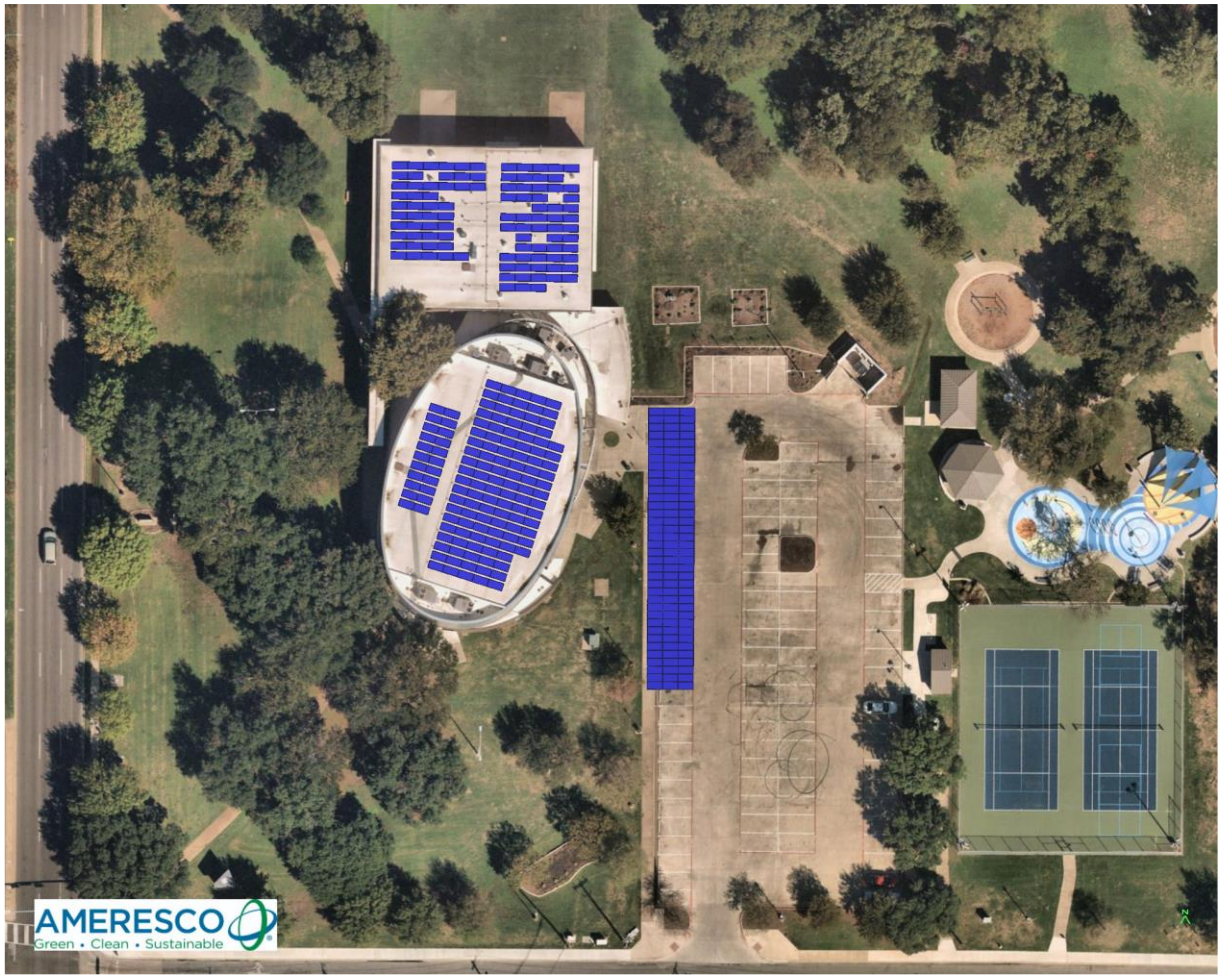
Payback (Yr): 15

Production: 272,475 kWh
- 92% of site consumption
- Equivalent to 20 homes' annual consumption

Avoided GHG: 148 $MTCO_2e$ per year
3,491 $MTCO_2e$ by 2050

Location:





3712 N Hampton Rd, 75212

West Dallas Multipurpose Center

Use: Building serving

Type: Rooftop

Size: 169 kW

Estimated Cost: $740,690

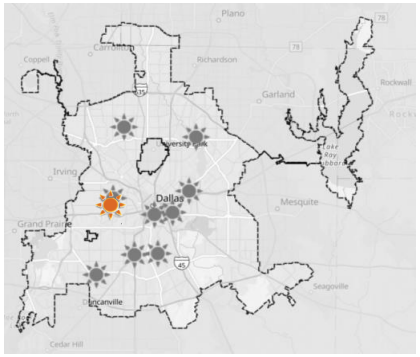
Year 1 Savings: $24,233

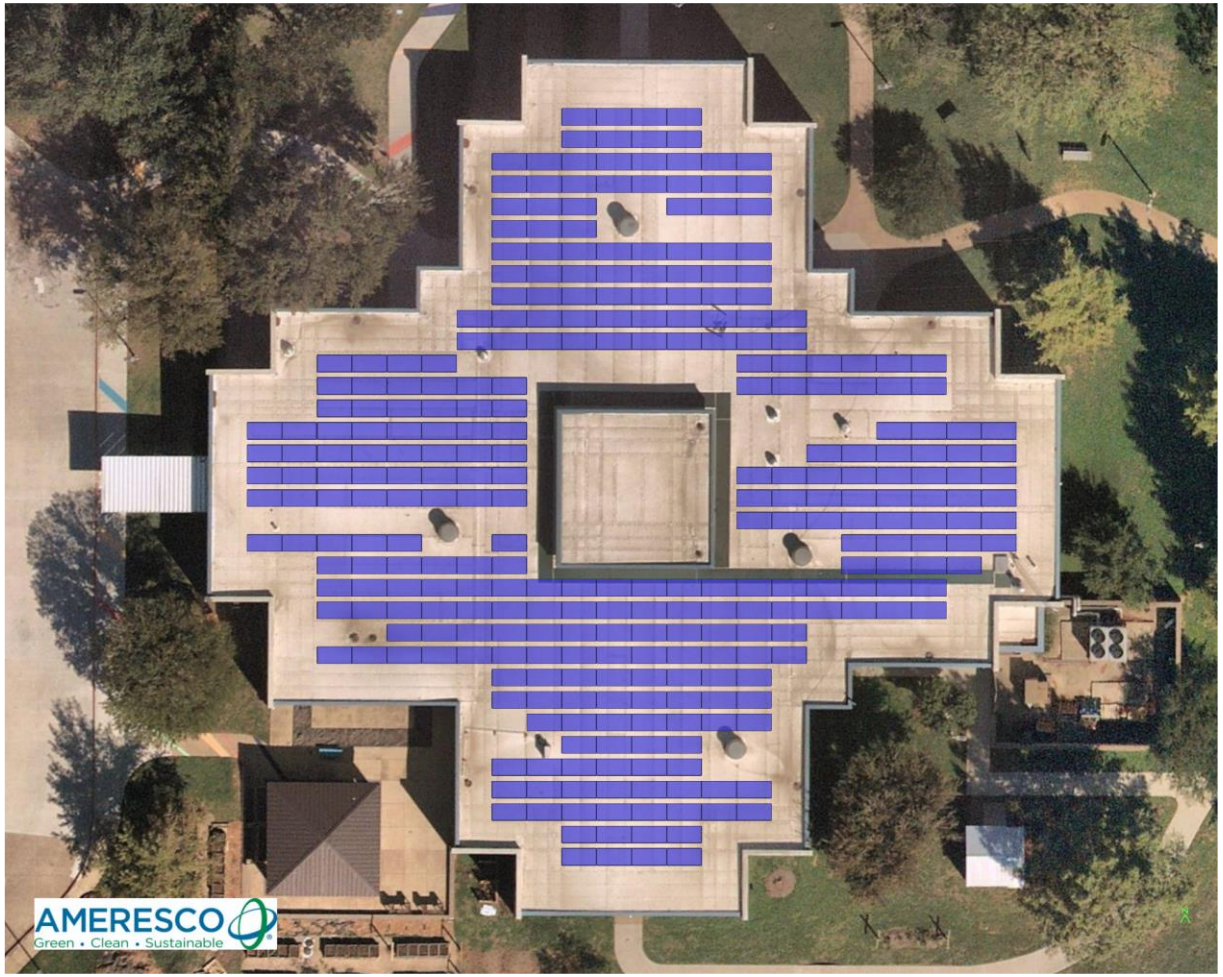
Payback (Yr): 13

Production: 253,190 kWh
- 65% of site consumption
- Equivalent to 19 homes' annual consumption

Avoided GHG: 138 $MTCO_2e$ per year
3,244 $MTCO_2e$ by 2050

Location:





2828 Fish Trap Rd, 75212

Samuell-Grand Recreation Center

Use: Building serving

Type: Rooftop + carport

Size: 167 kW

Estimated Cost: $961,953

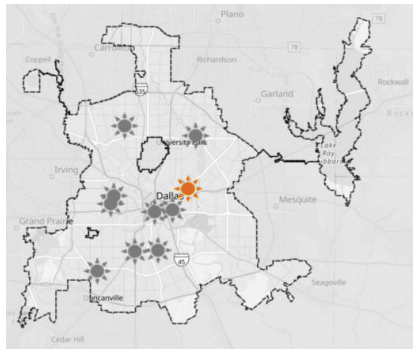
Year 1 Savings: $21,809

Payback (Yr): 17

Production: 241,838 kWh
- 94% of site consumption
- Equivalent to 18 homes' annual consumption

Avoided GHG: 132 $MTCO_2e$ per year
3,099 $MTCO_2e$ by 2050

Location:



6200 E Grand Ave, 75223

Northeast Service Center

Use: Building serving

Type: Rooftop

Size: 165 kW

Estimated Cost: $763,535

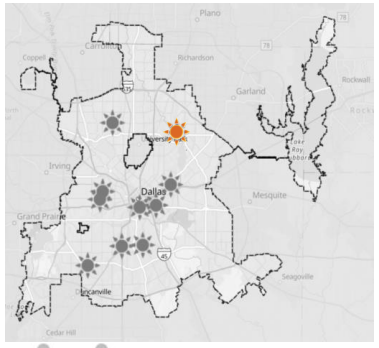
Year 1 Savings: $27,733

Payback (Yr): 12

Production: 247,409 kWh
- 92% of site consumption
- Equivalent to 18 homes' annual consumption

Avoided GHG: 135 $MTCO_2e$ per year
3,170 $MTCO_2e$ y 2050

Location:



8935 Adlora Ln, 75238

Quarter Master

Use: Building serving

Type: Rooftop

Size: 148 kW

Estimated Cost: $709,719

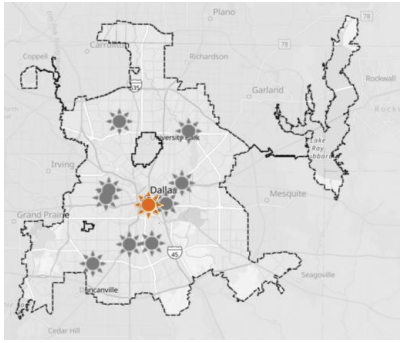
Year 1 Savings: $24,480

Payback (Yr): 13

Production: 215,928 kWh
- 89% of site consumption
- Equivalent to 16 homes' annual consumption

Avoided GHG: 117 $MTCO_2e$ per year
2,767 $MTCO_2e$ by 2050

Location:



1600 Botham Jean Blvd, 75215

Southwest Transfer Station

Use: Community serving

Type: Ground mount

Size: 961 kW

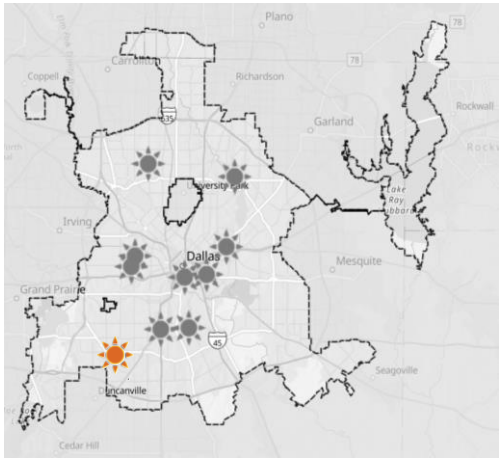
Estimated Cost: $4.1 Million

Production: 1.5 million kWh

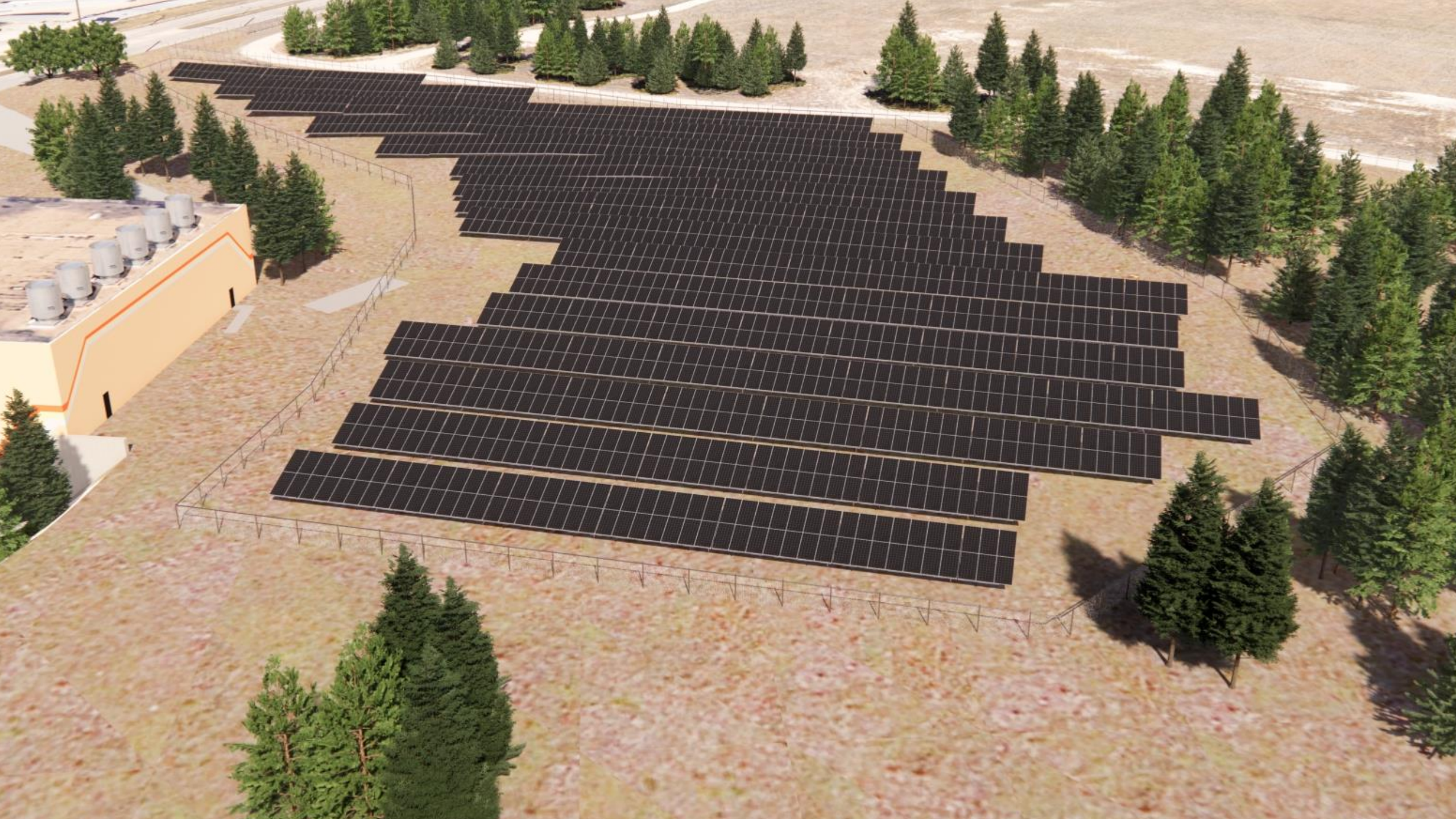
- Able to support approximately 100 residential subscriptions

Avoided GHG: 792 $MTCO_2e$ per year
18,664 $MTCO_2e$ by 2050

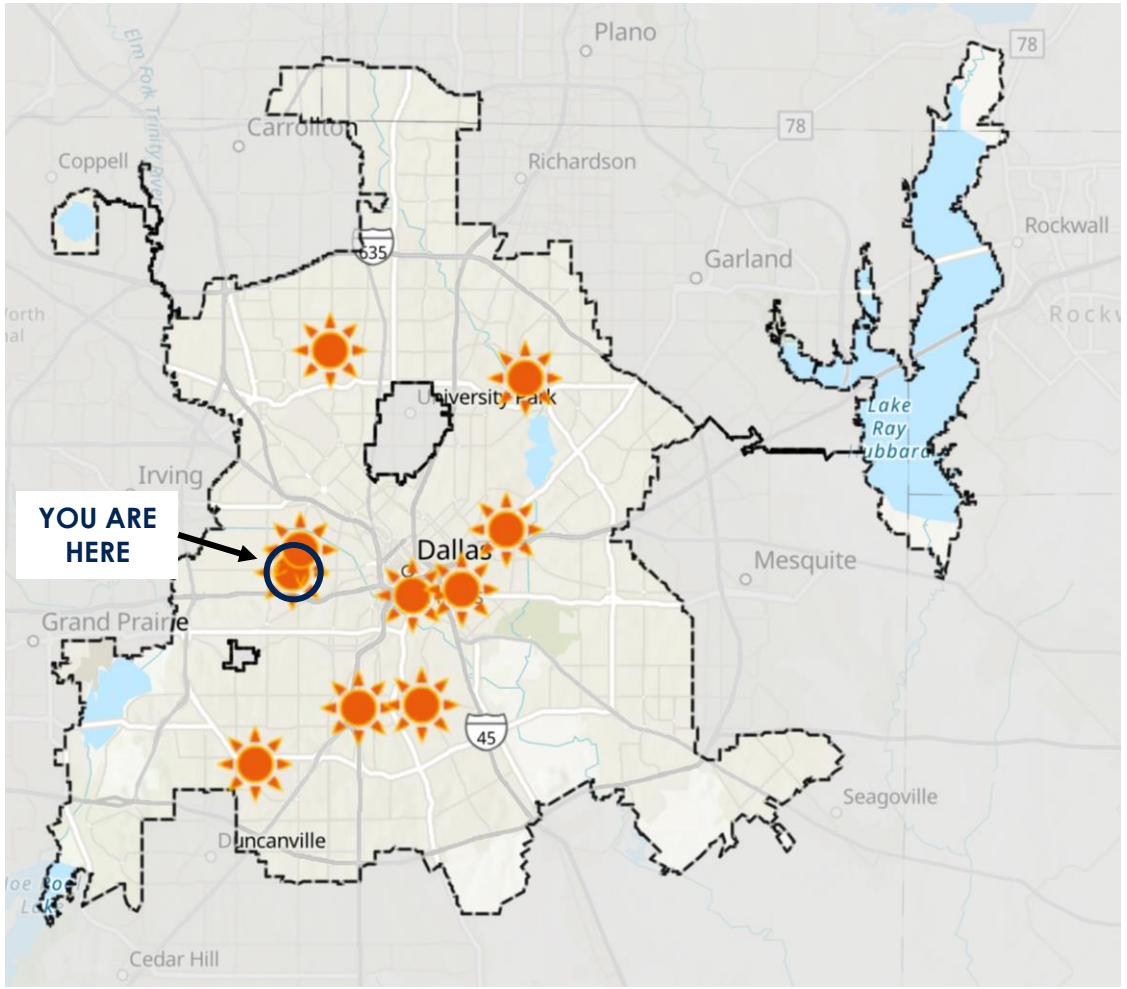
Location:



4610 S Westmoreland Rd, 75237



Priority City of Dallas Sites for Solar Development



Priority Site Map

City of Dallas

bitly

Link: bit.ly/CODSolarSiteMap

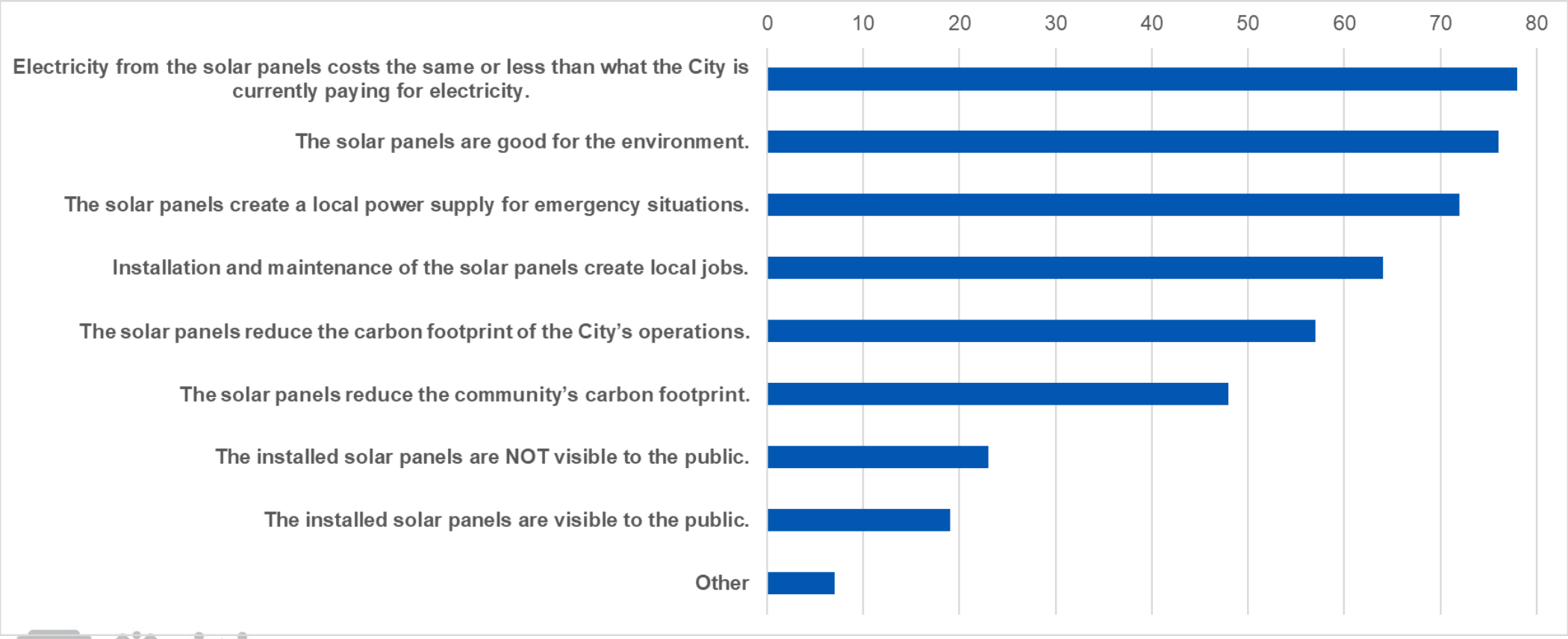
Stakeholder Feedback

- Community Feedback: Survey + Town Halls
- City Departments
- Environmental Commission
- Upcoming: City Council Parks, Trails, & the Environment Committee

Community Survey Feedback

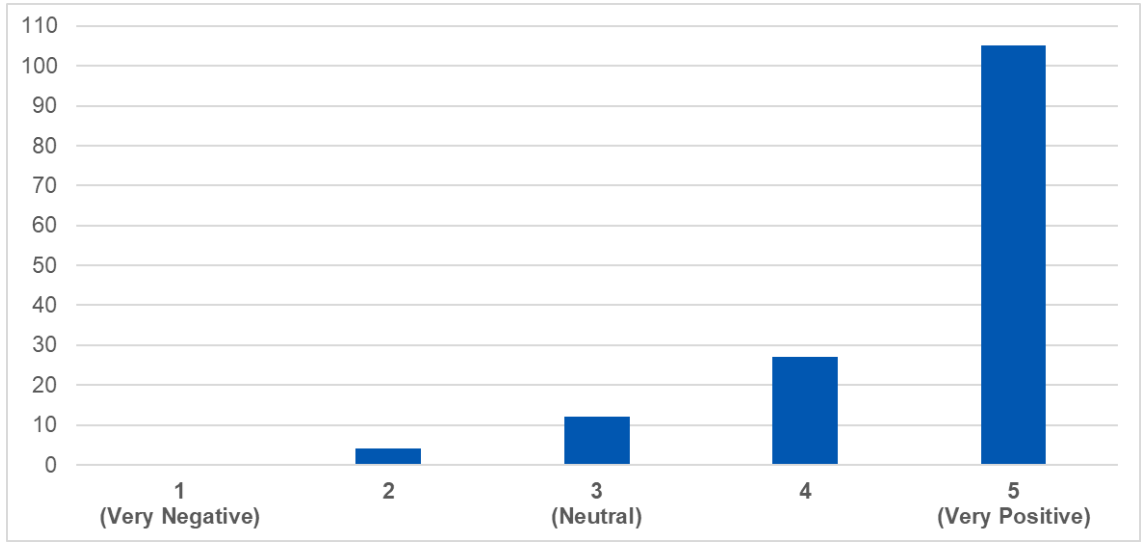
Which of the following would be most important to you for the City of Dallas to consider when installing solar panels at City properties?

Please select your top three (3) priorities from the list below.

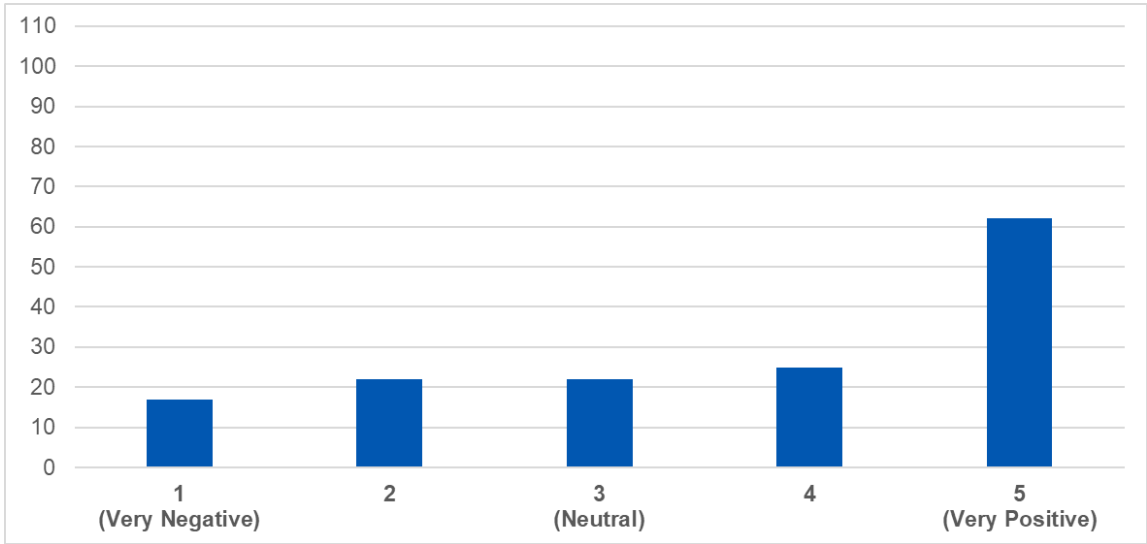


Community Survey Feedback (cont.)

How would you feel about solar panels being installed on City of Dallas buildings like City Hall, libraries, and recreation centers?



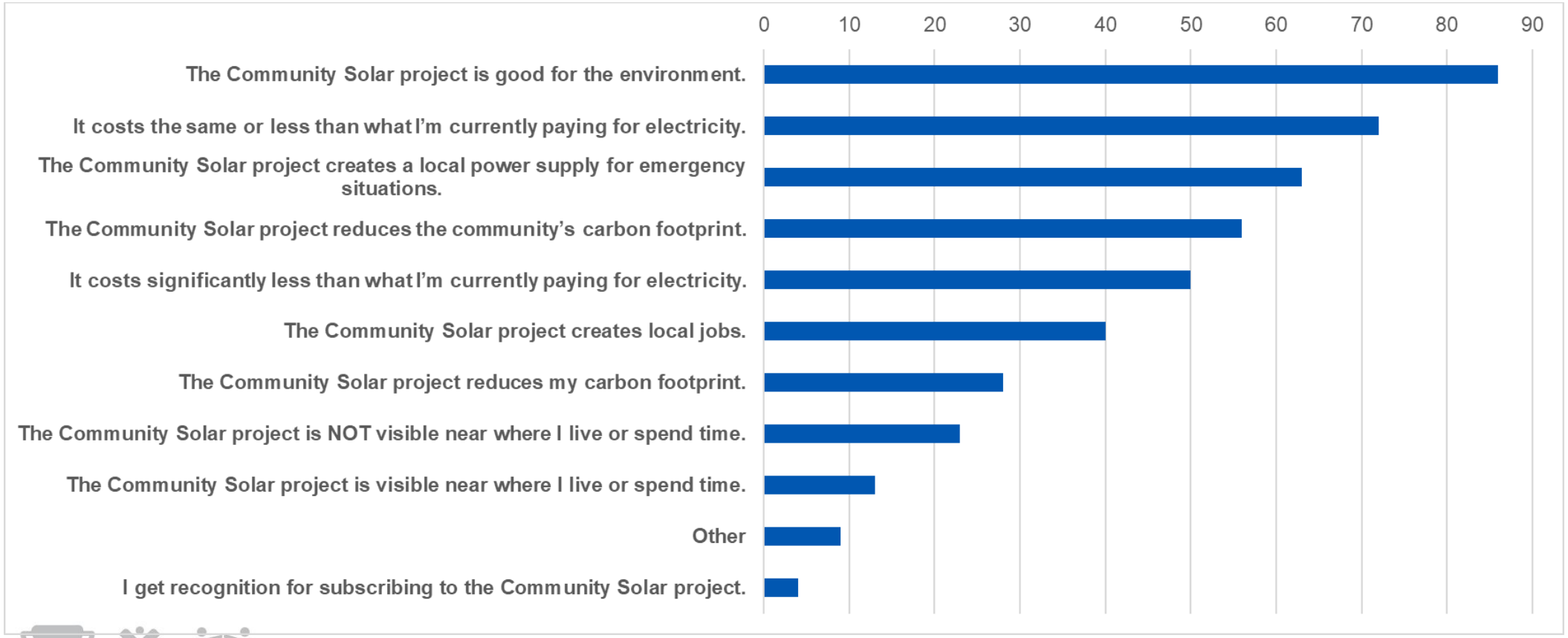
How would you feel about solar panels being installed on City of Dallas parks and other open spaces?

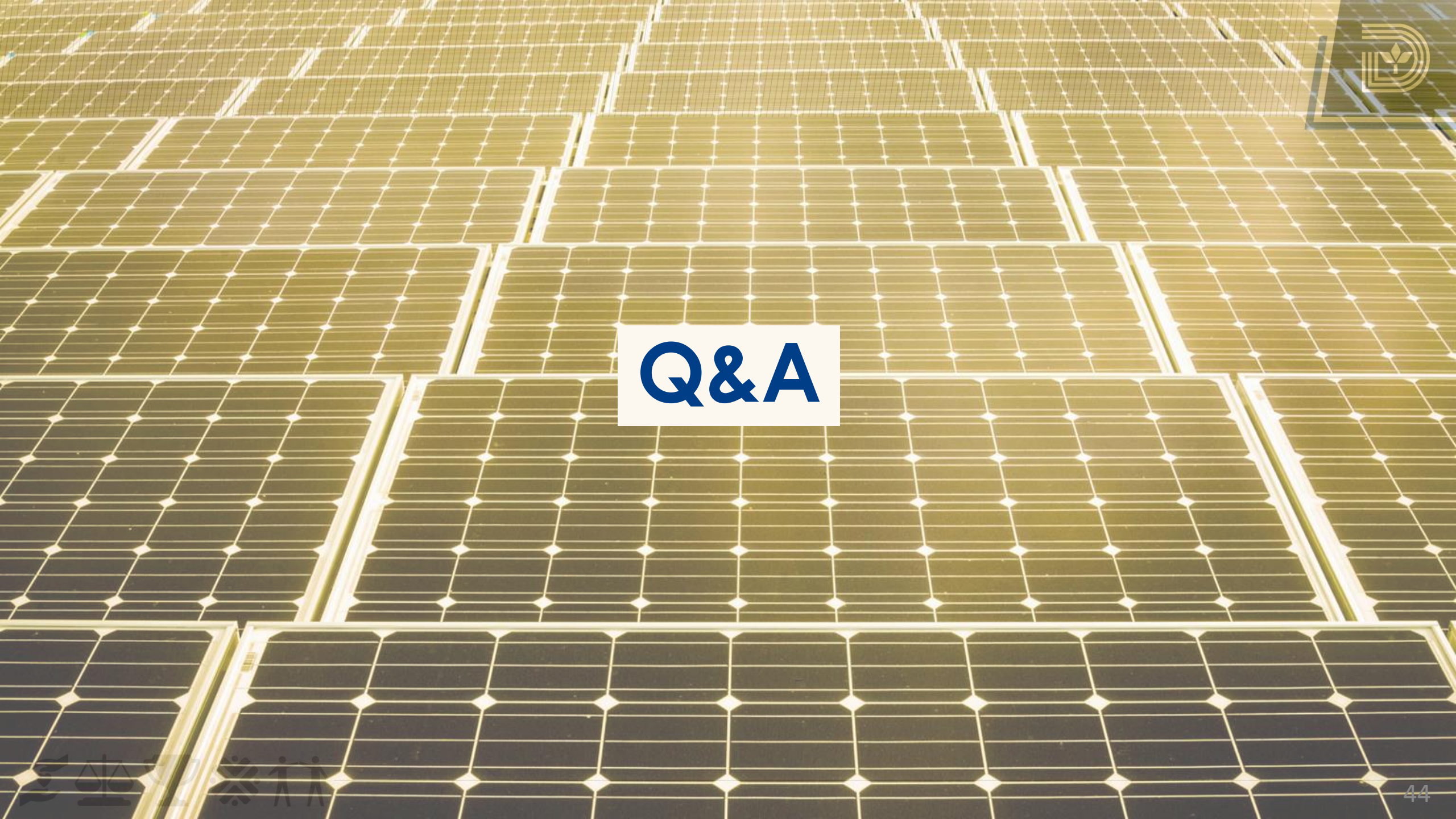


Community Survey Feedback (cont.)

Which of the following would be most important to you in deciding whether to subscribe to a Community Solar project?

Please select your top three (3) priorities from the list below.




Q&A

Help us prioritize!

Cast your vote for the TOP 3 sites you'd like the City of Dallas to prioritize for solar.

https://www.menti.com/alp46q5483vh

Code: 73 00 68 3

Closing & Next Steps

- Feb. 21 – Virtual Town Hall
  - Encourage others to register: bit.ly/DallasSolarTownHall
- Mar. 4 – City Council Parks, Trails, & the Environment Committee
- Consultant team will integrate community feedback in the final report.
- OEQS will use the report findings to seek funding and issue solicitation documents for priority sites.

City of Dallas

Solar Siting Study Town Hall

February 15, 2024

Office of Environmental
Quality & Sustainability
City of Dallas

Community Survey Feedback (cont.)

How much more would you be willing to pay for a Community Solar subscription to help members of households with lower incomes receive discounted Community Solar subscriptions?