



Application

13872 - 2020 Transit System Modernization

14076 - 2020 TSMOD for SW Village

Regional Solicitation - Transit and TDM Projects

Status: Submitted
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Primary Contact

Name:* David Ross Jacobson
Salutation First Name Middle Name Last Name

Title: COO

Department: Operations

Email: djacobson@swtransit.org

Address: 14405 West 62nd Street

* Eden Prairie Minnesota 55346
City State/Province Postal Code/Zip

Phone:* 952-974-3110
Phone Ext.

Fax: 952-974-7997

What Grant Programs are you most interested in? Regional Solicitation - Transit and TDM Projects

Organization Information

Name: SouthWest Transit

Jurisdictional Agency (if different):

Organization Type: Suburban Transit Provider
Organization Website: swtransit.org
Address: 14405 West 62nd Street

*
Eden Prairie Minnesota 55346
City State/Province Postal Code/Zip

County: Multiple

Phone:* 952-974-3110
Ext.

Fax: 952-974-7997

PeopleSoft Vendor Number

Project Information

Project Name Solar Array at SouthWest Village, Chanhassen
Primary County where the Project is Located Carver
Cities or Townships where the Project is Located: Chanhassen
Jurisdictional Agency (If Different than the Applicant): SouthWest Transit (SWT)

This application is for the purchase and installation (turnkey operation) of a solar array over the second level parking deck at SouthWest Village (SWV) park and ride station in Chanhassen. The primary goals of the project are to:

1) Eliminate or significantly reduce electric costs at SWV;

2) Position SWV to be self sufficient in generating its own electricity;

3) Selling excess electricity back to "the grid" (Minnesota Valley Electric Coop);

4) Provide multiple electric outlets/charging stations for automobiles; and

5) Become a charging station for replacement electric buses and Prime microtransit vehicles as SWT, working with the Metropolitan Council, begins replacements for its fleet.

All of this effort provides an alternative power source other than oil or coal reducing the carbon footprint of SWT for a cleaner environment and working towards a public agency's self sufficiency.

Brief Project Description (Include location, road name/functional class, type of improvement, etc.)

(Limit 2,800 characters; approximately 400 words)

TRANSPORTATION IMPROVEMENT PROGRAM (TIP) DESCRIPTION - will be used in TIP if the project is selected for funding. [See MnDOT's TIP description guidance.](#)

SouthWest Village's Solar Array

Project Length (Miles)

0

to the nearest one-tenth of a mile

Project Funding

Are you applying for competitive funds from another source(s) to implement this project? No

If yes, please identify the source(s)

Federal Amount \$4,840,000.00

Match Amount \$1,210,000.00

Minimum of 20% of project total

Project Total \$6,050,000.00

For transit projects, the total cost for the application is total cost minus fare revenues.

Match Percentage 20.0%

Minimum of 20%

Compute the match percentage by dividing the match amount by the project total

Source of Match Funds Metropolitan Council, SWT

A minimum of 20% of the total project cost must come from non-federal sources; additional match funds over the 20% minimum can come from other federal sources

Preferred Program Year

Select one: 2024

Select 2022 or 2023 for TDM projects only. For all other applications, select 2024 or 2025.

Additional Program Years: 2022, 2023

Select all years that are feasible if funding in an earlier year becomes available.

For All Projects

Identify the Transit Market Areas that the project serves: 3,4,5,8,9

See the "Transit Connections" map generated at the beginning of the application process.

For Park-and-Ride and Transit Station Projects Only

County, City, or Lead Agency Lead Agency - SouthWest Transit

Zip Code where Majority of Work is Being Performed 55317

(Approximate) Begin Construction Date 01/02/2023

(Approximate) End Construction Date 12/29/2023

Name of Park and Ride or Transit Station: SouthWest Village

e.g., MAPLE GROVE TRANSIT STATION

TERMINI: (Termini listed must be within 0.3 miles of any work)

From:
(Intersection or Address)

To:
(Intersection or Address)

DO NOT INCLUDE LEGAL DESCRIPTION

Or At: 650 Southwest Village Drive, MN 55317
(Intersection or Address)

Primary Types of Work Construct a solar array that also provides partial vehicle cover for SWT commuters.

Examples: GRADE, AGG BASE, BIT BASE, BIT SURF, SIDEWALK, CURB AND GUTTER, STORM SEWER, SIGNALS, LIGHTING, GUARDRAIL, BIKE PATH, PED RAMPS, PARK AND RIDE, ETC.

Requirements - All Projects

All Projects

1. The project must be consistent with the goals and policies in these adopted regional plans: Thrive MSP 2040 (2014), the 2040 Transportation Policy Plan (2018), the 2040 Regional Parks Policy Plan (2018), and the 2040 Water Resources Policy Plan (2015).

Check the box to indicate that the project meets this requirement. Yes

2. The project must be consistent with the 2040 Transportation Policy Plan. Reference the 2040 Transportation Plan goals, objectives, and strategies that relate to the project.

This project fits many principles of regional plans including the 2040 TPP specifically:

- 1) Page 35 - Sustainability, first bullet. Greenhouse gas emissions that states improving vehicle technology has been and is likely to continue to be the most effective way to reduce emissions.
- 2) The fourth bullet references electric vehicles. With this array, SWT will be able to make SouthWest Village, in Chanhassen, a mobility hub for those (general public) using electric vehicles and commute to downtown Minneapolis or the University of Minnesota. Additionally, once the technology of electric buses become more stable, SWT will begin replacing diesel buses with electric and it will already have an on-line charging location.

Briefly list the goals, objectives, strategies, and associated pages:

Limit 2,800 characters; approximately 400 words

3. The project or the transportation problem/need that the project addresses must be in a local planning or programming document. Reference the name of the appropriate comprehensive plan, regional/statewide plan, capital improvement program, corridor study document [studies on trunk highway must be approved by the Minnesota Department of Transportation and the Metropolitan Council], or other official plan or program of the applicant agency [includes Safe Routes to School Plans] that the project is included in and/or a transportation problem/need that the project addresses.

List the applicable documents and pages:

- 1) As was just discussed, the 2040 Metropolitan Council Policy Plan discussing the reduction in green-house gas emissions. All part of the Sustainability section of the TPP.

- 2) The plan of going electric using solar is in the SouthWest Transit (SWT) Long Range Plan. Page 6, the Technology Innovation Section.

Limit 2,800 characters, approximately 400 words

4. The project must exclude costs for studies, preliminary engineering, design, or construction engineering. Right-of-way costs are only eligible as part of transit stations/stops, transit terminals, park-and-ride facilities, or pool-and-ride lots. Noise barriers, drainage projects, fences, landscaping, etc., are not eligible for funding as a standalone project, but can be included as part of the larger submitted project, which is otherwise eligible.

Check the box to indicate that the project meets this requirement. Yes

5. Applicants that are not State Aid cities or counties in the seven-county metro area with populations over 5,000 must contact the MnDOT Metro State Aid Office prior to submitting their application to determine if a public agency sponsor is required.

Check the box to indicate that the project meets this requirement. Yes

6. Applicants must not submit an application for the same project elements in more than one funding application category.

Check the box to indicate that the project meets this requirement. Yes

7. The requested funding amount must be more than or equal to the minimum award and less than or equal to the maximum award. The cost of preparing a project for funding authorization can be substantial. For that reason, minimum federal amounts apply. Other federal funds may be combined with the requested funds for projects exceeding the maximum award, but the source(s) must be identified in the application. Funding amounts by application category are listed below.

Transit Expansion: \$500,000 to \$7,000,000

Transit Modernization: \$500,000 to \$7,000,000

Travel Demand Management (TDM): \$100,000 to \$500,000

Check the box to indicate that the project meets this requirement. Yes

8. The project must comply with the Americans with Disabilities Act (ADA).

Check the box to indicate that the project meets this requirement. Yes

9. In order for a selected project to be included in the Transportation Improvement Program (TIP) and approved by USDOT, the public agency sponsor must either have a current Americans with Disabilities Act (ADA) self-evaluation or transition plan that covers the public right of way/transportation, as required under Title II of the ADA. The plan must be completed by the local agency before the Regional Solicitation application deadline. For the 2022 Regional Solicitation funding cycle, this requirement may include that the plan is updated within the past five years.

The applicant is a public agency that employs 50 or more people and has a completed ADA transition plan that covers the public right of way/transportation.

Date plan completed:

Link to plan:

The applicant is a public agency that employs fewer than 50 people and has a completed ADA self-evaluation that covers the public right of way/transportation: Yes

Date self-evaluation completed: 02/22/2018

Link to plan:

Upload plan or self-evaluation if there is no link. 1585584569312_ADATransitionPlan Clean.docx

Upload as PDF

(TDM Applicants Only) The applicant is not a public agency subject to the self-evaluation requirements in Title II of the ADA.

10. The project must be accessible and open to the general public.

Check the box to indicate that the project meets this requirement. Yes

11. The owner/operator of the facility must operate and maintain the project year-round for the useful life of the improvement, per FHWA direction established 8/27/2008 and updated 6/27/2017.

Check the box to indicate that the project meets this requirement. Yes

12. The project must represent a permanent improvement with independent utility. The term independent utility means the project provides benefits described in the application by itself and does not depend on any construction elements of the project being funded from other sources outside the regional solicitation, excluding the required non-federal match.

Projects that include traffic management or transit operating funds as part of a construction project are exempt from this policy.

Check the box to indicate that the project meets this requirement. Yes

13. The project must not be a temporary construction project. A temporary construction project is defined as work that must be replaced within five years and is ineligible for funding. The project must also not be staged construction where the project will be replaced as part of future stages. Staged construction is eligible for funding as long as future stages build on, rather than replace, previous work.

Check the box to indicate that the project meets this requirement. Yes

14. The project applicant must send written notification regarding the proposed project to all affected state and local units of government prior to submitting the application.

Check the box to indicate that the project meets this requirement. Yes

Requirements - Transit and TDM Projects

For Transit Expansion Projects Only

1. The project must provide a new or expanded transit facility or service.

Check the box to indicate that the project meets this requirement. Yes

2. The applicant must have the capital and operating funds necessary to implement the entire project and commit to continuing to fund the service or facility project beyond the initial three-year funding period for transit operating funds if the applicant continues the project.

Check the box to indicate that the project meets this requirement. Yes

Transit Expansion and Transit Modernization projects only:

3. The project is not eligible for either capital or operating funds if the corresponding capital or operating costs have been funded in a previous solicitation. However, Transit Modernization projects are eligible to apply in multiple solicitations if new project elements are being added with each application. Each transit application must show independent utility and the points awarded in the application should only account for the improvements listed in the application.

Check the box to indicate that the project meets this requirement. Yes

4. The applicant must affirm that they are able to implement a Federal Transit Administration (FTA) funded project in accordance with the grant application, Master Agreement, and all applicable laws and regulations, using sound management practices. Furthermore, the applicant must certify that they have the technical capacity to carry out the proposed project and manage FTA grants in accordance with the grant agreement, sub recipient grant agreement (if applicable), and with all applicable laws. The applicant must certify that they have adequate staffing levels, staff training and experience, documented procedures, ability to submit required reports correctly and on time, ability to maintain project equipment, and ability to comply with FTA and grantee requirements.

Check the box to indicate that the project meets this requirement. Yes

Travel Demand Management projects only:

The applicant must be properly categorized as a subrecipient in accordance with 2CFR200.330.

Check the box to indicate that the project meets this requirement.

The applicant must adhere to Subpart E Cost Principles of 2CFR200 under the proposed subaward.

Check the box to indicate that the project meets this requirement.

Specific Roadway Elements

CONSTRUCTION PROJECT ELEMENTS/COST ESTIMATES	Cost
Mobilization (approx. 5% of total cost)	\$0.00
Removals (approx. 5% of total cost)	\$0.00
Roadway (grading, borrow, etc.)	\$0.00
Roadway (aggregates and paving)	\$0.00
Subgrade Correction (muck)	\$0.00
Storm Sewer	\$0.00
Ponds	\$0.00
Concrete Items (curb & gutter, sidewalks, median barriers)	\$0.00
Traffic Control	\$0.00
Striping	\$0.00
Signing	\$0.00
Lighting	\$0.00
Turf - Erosion & Landscaping	\$0.00
Bridge	\$0.00
Retaining Walls	\$0.00
Noise Wall (not calculated in cost effectiveness measure)	\$0.00
Traffic Signals	\$0.00
Wetland Mitigation	\$0.00
Other Natural and Cultural Resource Protection	\$0.00
RR Crossing	\$0.00
Roadway Contingencies	\$0.00
Other Roadway Elements	\$0.00
Totals	\$0.00

Specific Bicycle and Pedestrian Elements

CONSTRUCTION PROJECT ELEMENTS/COST ESTIMATES	Cost
Path/Trail Construction	\$0.00
Sidewalk Construction	\$0.00
On-Street Bicycle Facility Construction	\$0.00
Right-of-Way	\$0.00
Pedestrian Curb Ramps (ADA)	\$0.00
Crossing Aids (e.g., Audible Pedestrian Signals, HAWK)	\$0.00

Pedestrian-scale Lighting	\$0.00
Streetscaping	\$0.00
Wayfinding	\$0.00
Bicycle and Pedestrian Contingencies	\$0.00
Other Bicycle and Pedestrian Elements	\$0.00
Totals	\$0.00

Specific Transit and TDM Elements

CONSTRUCTION PROJECT ELEMENTS/COST ESTIMATES	Cost
Fixed Guideway Elements	\$0.00
Stations, Stops, and Terminals	\$5,500,000.00
Support Facilities	\$0.00
Transit Systems (e.g. communications, signals, controls, fare collection, etc.)	\$0.00
Vehicles	\$0.00
Contingencies	\$550,000.00
Right-of-Way	\$0.00
Other Transit and TDM Elements	\$0.00
Totals	\$6,050,000.00

Transit Operating Costs

Number of Platform hours	0
Cost Per Platform hour (full loaded Cost)	\$0.00
Subtotal	\$0.00
Other Costs - Administration, Overhead, etc.	\$0.00

Totals

Total Cost	\$6,050,000.00
Construction Cost Total	\$6,050,000.00
Transit Operating Cost Total	\$0.00

Measure A: Project Location Relative to Jobs, Manufacturing, and Education

Existing Employment within 1/4 (bus stop) or 1/2 mile (transitway station) buffer 157170

Post-Secondary Enrollment within 1/4 (bus stop) or 1/2 mile (transitway station) buffer 148

Existing employment outside of the 1/4 or 1/2 mile buffer to be served by shuttle service (Letter of Commitment required) 85881

Upload the "Letter of Commitment"

Please upload attachment in PDF form.

Existing Post-Secondary Enrollment outside of the 1/4 or 1/2 mile buffer to be served by shuttle service (Letter of Commitment required) 148

Upload the "Letter of Commitment"

Please upload attachment in PDF form.

Explanation of last-mile service, if necessary:

SWT will continue to provide Prime and Prime MD service to the SouthWest Village park and ride facility. Prime, which began in 2016, and Prime MD, which began in 2019. They both provide service to the Village facility as well as to the cities that make up the SWT Joint Powers Authority (JPA) plus under contract to provide service to the cities of Victoria and Carver. If SWT receives this grant, the next step is to procure electric vehicles for Prime, Prime MD and fixed route operation.

(Limit 1,400 characters; approximately 200 words)

Upload Map 1584045426211_Regional Economy.pdf

Please upload attachment in PDF form.

Measure B: Transit Ridership

Existing transit routes directly connected to the project 490, 493, 497, 600, 602, 690, 695, 697, 698, 699

Select all routes that apply.

Planned Transitways directly connected to the project (mode and alignment determined and identified in the Current Revenue Scenario of the 2040 TPP) N/A

Select all transitways that apply.

Upload Map 1584382286119_Transit Connections.pdf

Please upload attachment in PDF form.

Response

Met Council Staff Data Entry Only

Average number of weekday trips

112.0

Measure: Usage

Existing Transit Routes on the Project

600, 602, 690, 695, 697, 698, 699

Measure A: Connection to disadvantaged populations and projects benefits, impacts, and mitigation

Select one:

Project located in Area of Concentrated Poverty with 50% or more of residents are people of color (ACP50):

(up to 100% of maximum score)

Project located in Area of Concentrated Poverty:

(up to 80% of maximum score)

Projects census tracts are above the regional average for population in poverty or population of color:

(up to 60% of maximum score)

Project located in a census tract that is below the regional average for population in poverty or populations of color or includes children, people with disabilities, or the elderly:

Yes

(up to 40% of maximum score)

1.(0 to 3 points) A successful project is one that has actively engaged low-income populations, people of color, children, persons with disabilities, and the elderly during the project's development with the intent to limit negative impacts on them and, at the same time, provide the most benefits.

Describe how the project has encouraged or will engage the full cross-section of community in decision-making. Identify the communities to be engaged and where in the project development process engagement has occurred or will occur. Elements of quality engagement include: outreach to specific communities and populations that are likely to be directly impacted by the project; techniques to reach out to populations traditionally not involved in the community engagement related to transportation projects; residents or users identifying potential positive and negative elements of the project; and surveys, study recommendations, or plans that provide feedback from populations that may be impacted by the proposed project. If relevant, describe how NEPA or Title VI regulations will guide engagement activities.

The solar array project potentially impacts all residents of Chanhassen as well as the areas served by Minnesota Valley Electric Coop (MVEC) by:

1. Providing an endless supply of electricity;
2. Making SouthWest Village park and ride self-sustaining;
3. Selling the unused electric generated by the solar array back to the MVEC power company generating additional revenue for SouthWest Transit (SWT).
4. Establishes infrastructure for when the technology is right, SWT will procure electric vehicles as replacement vehicles to the fleet, either fixed route our Prime and Prime MD.

Response:

Once the project gets "approval" there will be elements of public engagement such as:

1. Outreach for all SWT riders and citizens of Chanhassen and Carver County through mailings and holding open houses;
- 2) The project's virtues will be shared; and
- 3) SWT will follow its SWT Commission and Metropolitan Council approved Title VI outreach plan/engagements to ensure all understand and show how they all will benefit.
- 4) Follow-up meetings will be held to ensure full engagement of the public and answer any questions or concerns.

(Limit 1,400 characters; approximately 200 words)

2.(0 to 7 points) Describe the projects benefits to low-income populations, people of color, children, people with disabilities, and the elderly. Benefits could relate to safety; public health; access to destinations; travel time; gap closure; leveraging of other beneficial projects and investments; and/or community cohesion. Note that this is not an exhaustive list.

The advantages to the identified populations include:

1. Cheaper electricity to the area;
2. Cleaner air in the area due to the new emphasis on electric vehicles where this park and ride will become a center for car and future electric large and small bus charging;
3. Helping SWT to become a self sufficient public organization by having the ability to sell excess electricity back to MVEC generating additional revenues for SouthWest Transit;
4. The electricity will be used for better lighting for seniors and providing power wheel-chair charging stations; and
5. SouthWest Village is already on a Carver County and Chanhassen trail for both walkers and bikers. With the additional electricity, additional lights can be placed through-out the property providing a safer more person friendly environment;
6. With the additional electricity and revenue, SWT will add high vision cameras to enhance security.

Response:

(Limit 2,800 characters; approximately 400 words)

3.(-3 to 0 points) Describe any negative externalities created by the project along with measures that will be taken to mitigate them. Negative externalities can result in a reduction in points, but mitigation of externalities can offset reductions.

Below is a list of negative impacts. Note that this is not an exhaustive list.

Increased difficulty in street crossing caused by increased roadway width, increased traffic speed, wider turning radii, or other elements that negatively impact pedestrian access.

Increased noise.

Decreased pedestrian access through sidewalk removal / narrowing, placement of barriers along the walking path, increase in auto-oriented curb cuts, etc.

Project elements that are detrimental to location-based air quality by increasing stop/start activity at intersections, creating vehicle idling areas, directing an increased number of vehicles to a particular point, etc.

Increased speed and/or cut-through traffic.

Removed or diminished safe bicycle access.

Inclusion of some other barrier to access to jobs and other destinations.

Displacement of residents and businesses.

Construction/implementation impacts such as dust; noise; reduced access for travelers and to businesses; disruption of utilities; and eliminated street crossings. These tend to be temporary.

Other

Response:

Because this project is located on an existing structure, SouthWest Village park and ride, it does not impact any of the points in the previous sections as well as causing any disruption in the process. This project makes the environment cleaner and brighter and allows SWT to replace the diesel and gas operated vehicles with electricity.

(Limit 2,800 characters; approximately 400 words)

Upload Map

1584385135163_Socio-Economic.pdf

Measure B: Part 1: Housing Performance Score

City	Number of Stops in City	Number of Stops/Total Number of Stops	Score	Housing Score Multiplied by Segment percent
Chanhassen	2.0	1.0	19.0	19.0
				19

Total Transit Stops

Total Transit Stops 2.0

Housing Performance Score

Total Housing Score 19.0

Housing Performance Score

Part 2: Affordable Housing Access

Reference Access to Affordable Housing Guidance located under Regional Solicitation Resources for information on how to respond to this measure and create the map.

If text box is not showing, click Edit or "Add" in top right of page.

SouthWest Village (SWV), with the array generating its own electricity, will positively impact access for residents of all types, including affordable housing, which has a development within the half mile. SWV will become a charging epicenter for all charging needs including small personal items for residents on a walk or biking to personal vehicles to buses going to downtown, State Fair, Vikings, Gophers Twins and everything in between.

Response:

The residents, as stated that are more than likely to not have a car, living in affordable housing that live within a half mile of SWV can, of course, walk there or with SWT's last mile microtransit service, Prime, have multiple options to get to SWV connecting them to where-ever they wish to go in the metropolitan area.

Eventually as SWT begins to replace its vehicle fleet with electric vehicles, air quality will become even better than it is now.

Attached is a map of affordable housing within a half mile of the project provided by the Carver County CDA.

(Limit 2,100 characters; approximately 300 words)

Upload map:

1585844762013_Affordable housing (SW Transit).docx

Measure A: Description of emissions reduced

By placing the Solar Array above the second deck of the SouthWest Village park and ride facility it will provide:

1. Some coverage for the vehicles that park there from the elements;
2. It will become a sustainable facility generating enough electricity for SouthWest Village facility and the vehicles that charge there making it a self sufficient facility;
3. With this electricity, SWT plans to have SouthWest Village become a true green facility with the ability to not only provide power to the facility but to make it a charging station for electric Prime and Prime MD vehicles, cars that park there when commuting and hopefully soon, large buses to operate on SWT routes; and
4. As SWT and the surrounding communities plus park and riders accumulates more electric vehicles, idling time is reduced. SWT's long range vision is to create an entire fleet of electric vehicles.
5. By building the solar array it will save in year 1, 1,246 metric tons of greenhouse gas equivalents. That equates to removing 269 passenger vehicles and their pollution from the roads annually.
6. The solar array, over a 30 year period, will save 34,779 metric tons in greenhouse gas equivalents. This equates to removing 7,514 passenger vehicles from the roads in the same time period.

Response:

(Limit 2,800 characters; approximately 400 words)

Applicants are recommended to provide any data to support their argument.

Upload any data

1585667988713_Metric Estimates.docx

Please upload attachment in PDF form.

Measure C: Improvements and Amenities

Customer amenities will continue to be SWT's primary objective. Currently SWT has at each of its stations, including SouthWest Village:

- Monitors showing real time on bus route arrivals and departures. Allows customer to know when the next fixed route and Prime buses are arriving. All electric.

- Ability to book Prime and Prime MD rides via an app or by phone. The additional electricity will be used so many different ways including: charging buses - big and small, charging customer automobiles, phones, personal devices, etc.
- Climate controlled waiting area.

- Embedding the "Acquire" software in the SWT website and kiosks, allowing face to face text chat with SWT Customer Services. With the customer's permission, it also allows the customer services agent to navigate while discussing the screen, like a schedule, with the customer. It provides better customer services.

Response

In addition to the current customer amenities, improvements planned include:

- With the addition of the array over the second deck parking area, it provides some protection from the elements for those who park under the array.

- Better/brighter lighting which provides a higher level of security.

- Addition of high definition cameras at SouthWest Village adding a higher level of security powered by the electricity generated by the array.

- Helps SWT work towards an ultimate goal of being self-sufficient.

Measure A: Roadway, Bicycle, and Pedestrian Improvements

Response

SouthWest Village park and ride facility is on the Carver County trail system (bike and walk). The generation of the electricity from the array allows for a brighter and safer location. It also allows for the addition of high definition cameras watching each and every move those visiting the East Creek park and ride site and minimizing any potential violence or vandalism to the SWT customers, visitors, and staff.

With the generation of additional electricity that can be sold/revenue, additional customer service items such as benches, way-finding signs and public art could be purchased to make SouthWest Village an even better customer experience.

(Limit 2,800 characters; approximately 400 words)

Transit Projects Not Requiring Construction

If the applicant is completing a transit application that is operations only, check the box and do not complete the remainder of the form. These projects will receive full points for the Risk Assessment.

Park-and-Ride and other transit construction projects require completion of the Risk Assessment below.

Check Here if Your Transit Project Does Not Require Construction

Measure A: Risk Assessment - Construction Projects

1)Layout (25 Percent of Points)

Layout should include proposed geometrics and existing and proposed right-of-way boundaries.

Layout approved by the applicant and all impacted jurisdictions (i.e., cities/counties that the project goes through or agencies that maintain the roadway(s)). A PDF of the layout must be attached along with letters from each jurisdiction to receive points.

100%

Attach Layout

Please upload attachment in PDF form.

Layout completed but not approved by all jurisdictions. A PDF of the layout must be attached to receive points. Yes

50%

Attach Layout

1585670729073_Village Lay-out.pdf

Please upload attachment in PDF form.

Layout has not been started

0%

Anticipated date or date of completion

12/29/2023

2)Review of Section 106 Historic Resources (15 Percent of Points)

No known historic properties eligible for or listed in the National Register of Historic Places are located in the project area, and project is not located on an identified historic bridge Yes

100%

There are historical/archeological properties present but determination of no historic properties affected is anticipated.

100%

Historic/archeological property impacted; determination of no adverse effect anticipated

80%

Historic/archeological property impacted; determination of adverse effect anticipated

40%

Unsure if there are any historic/archaeological properties in the project area.

0%

Project is located on an identified historic bridge

3)Right-of-Way (25 Percent of Points)

Right-of-way, permanent or temporary easements either not required or all have been acquired Yes

100%

Right-of-way, permanent or temporary easements required, plat, legal descriptions, or official map complete

50%

Right-of-way, permanent or temporary easements required, parcels identified

25%

Right-of-way, permanent or temporary easements required, parcels not all identified

0%

Anticipated date or date of acquisition

4)Railroad Involvement (15 Percent of Points)

No railroad involvement on project or railroad Right-of-Way agreement is executed (include signature page, if applicable) Yes

100%

Signature Page

Please upload attachment in PDF form.

Railroad Right-of-Way Agreement required; negotiations have begun

50%

Railroad Right-of-Way Agreement required; negotiations have not begun.

0%

Anticipated date or date of executed Agreement

5) Public Involvement (20 percent of points)

Projects that have been through a public process with residents and other interested public entities are more likely than others to be successful. The project applicant must indicate that events and/or targeted outreach (e.g., surveys and other web-based input) were held to help identify the transportation problem, how the potential solution was selected instead of other options, and the public involvement completed to date on the project. List Dates of most recent meetings and outreach specific to this project:

Meeting with general public:

Meeting with partner agencies:

Targeted online/mail outreach:

Number of respondents:

Meetings specific to this project with the general public and partner agencies have been used to help identify the project need.

100%

Targeted outreach to this project with the general public and partner agencies have been used to help identify the project need.

75%

At least one meeting specific to this project with the general public has been used to help identify the project need.

50%

At least one meeting specific to this project with key partner agencies has been used to help identify the project need.

50%

No meeting or outreach specific to this project was conducted, but the project was identified through meetings and/or outreach related to a larger planning effort. Yes

25%

No outreach has led to the selection of this project.

0%

Response (Limit 2,800 characters; approximately 400 words):

This project was discussed briefly in passing at one of Operations Advisory Committee meetings of SWT customers that happens quarterly. It wasn't on any agenda. Someone just brought it up. Staff said, we will look into it and here we are.

Measure: Cost Effectiveness

Total Annual Operating Cost:	\$0.00
Total Annual Capital Cost of Project	\$302,500.00
Total Annual Project Cost	\$302,500.00

Annual Revenue Generation:

- The proposed array will generate approximately 1.7 million kWh/year.
- SouthWest Village used 238,000 kWh in 2019, a typical year. This level leaves lots of room for consumption when electric vehicles become part of the SWT fleet as well as the addition of on-site car charging stations for commuters that go downtown or use Prime or Prime MD services.
- That leaves a surplus of approximately 1.5 million kWh for sale back to Minnesota Valley Electric Cooperative (MVEC).
- Any operating dollars needed to repair the array will come from the funds generated by the sale of excess electricity. There will be zero operating costs associated with this project.

Assumption Used:

Annual Capital Cost

- Project cost = \$6,050,000 million
- Useful life of solar panels are 20 years
- = That leaves an annual capital cost of \$302,500.

(Limit 1400 Characters; approximately 200 words)

Points Awarded in Previous Criteria

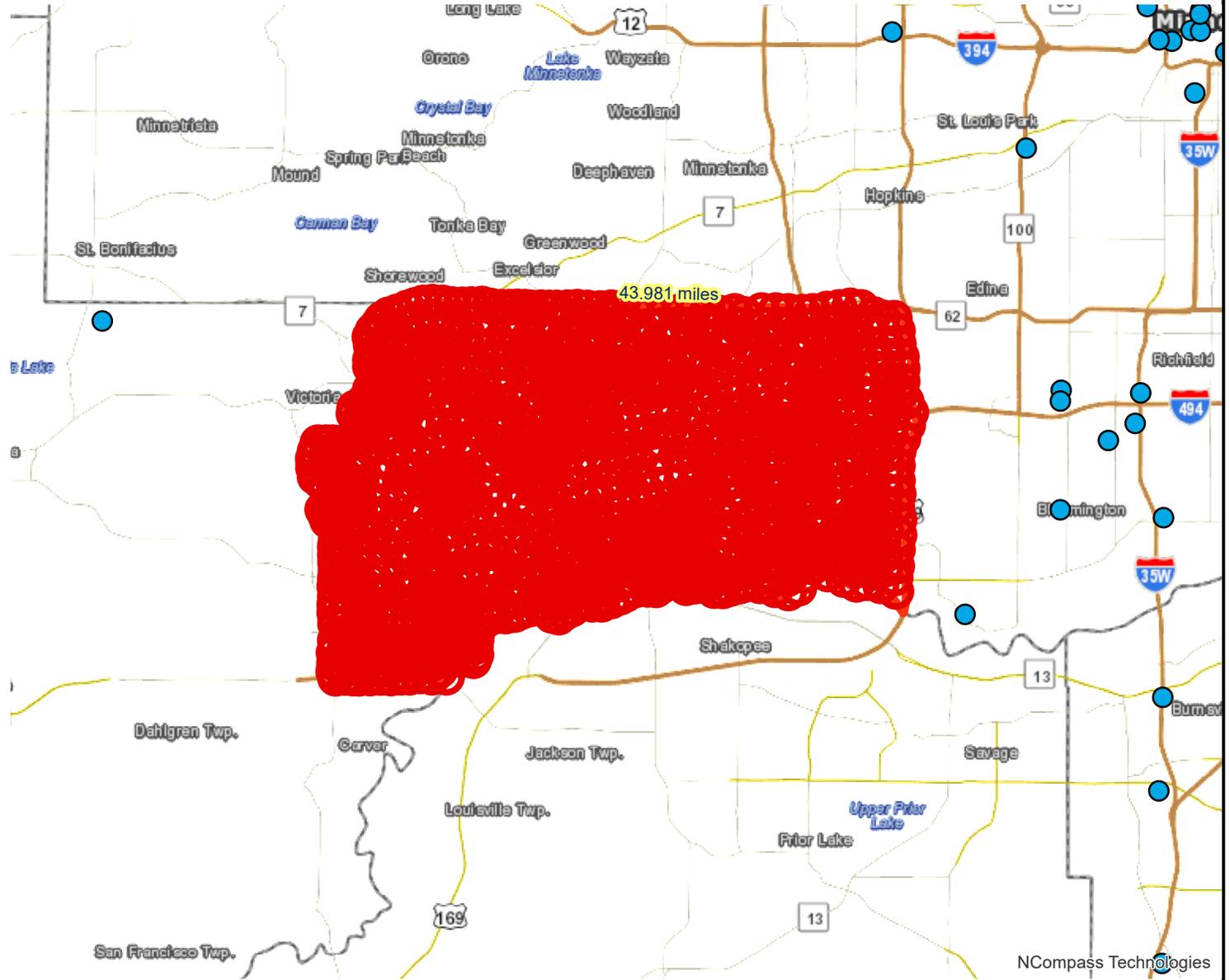
Cost Effectiveness	\$0.00
--------------------	--------

Other Attachments

File Name	Description	File Size
CDC let of Sup.pdf	Shared/CMAQ Grant/2020/Solar Array/Letters/Letter of Support/CDC let of sup	62 KB
Gerhardt email.docx	Copy of an email to notify the City of Chanhassen of the project. Todd Gerhardt is the City Administrator.	19 KB
Let_Chan_ 04-08-2020.pdf	Shared/CMAQ Grant/2020/Solar Array/Letters of Support/Let_Chan_04-08-2020. Support Letter from Mayor of Chanhassen.	838 KB
MC 20% letter solar.pdf	Met Council letter	180 KB
Metric Estimates.docx	Metric estimates by Ameresco.	25 KB
SWT Solar Info for the Chanhassen Parking Ramp.msg	General information	8.9 MB
Village Lay-out.pdf	SW Village lay-out	1.4 MB

Regional Economy

Transit System Modernization Project: Solar Array At SouthWest Village | Map ID: 1584036496244



Results

WITHIN ONE MI of project:
Postsecondary Students: 148

Total Population: 157170
Total Employment: 85881
Mfg and Dist Employment: 21841

○ Project Points ● Postsecondary Education Centers

— Project



Created: 3/12/2020
LandscapeRSA5

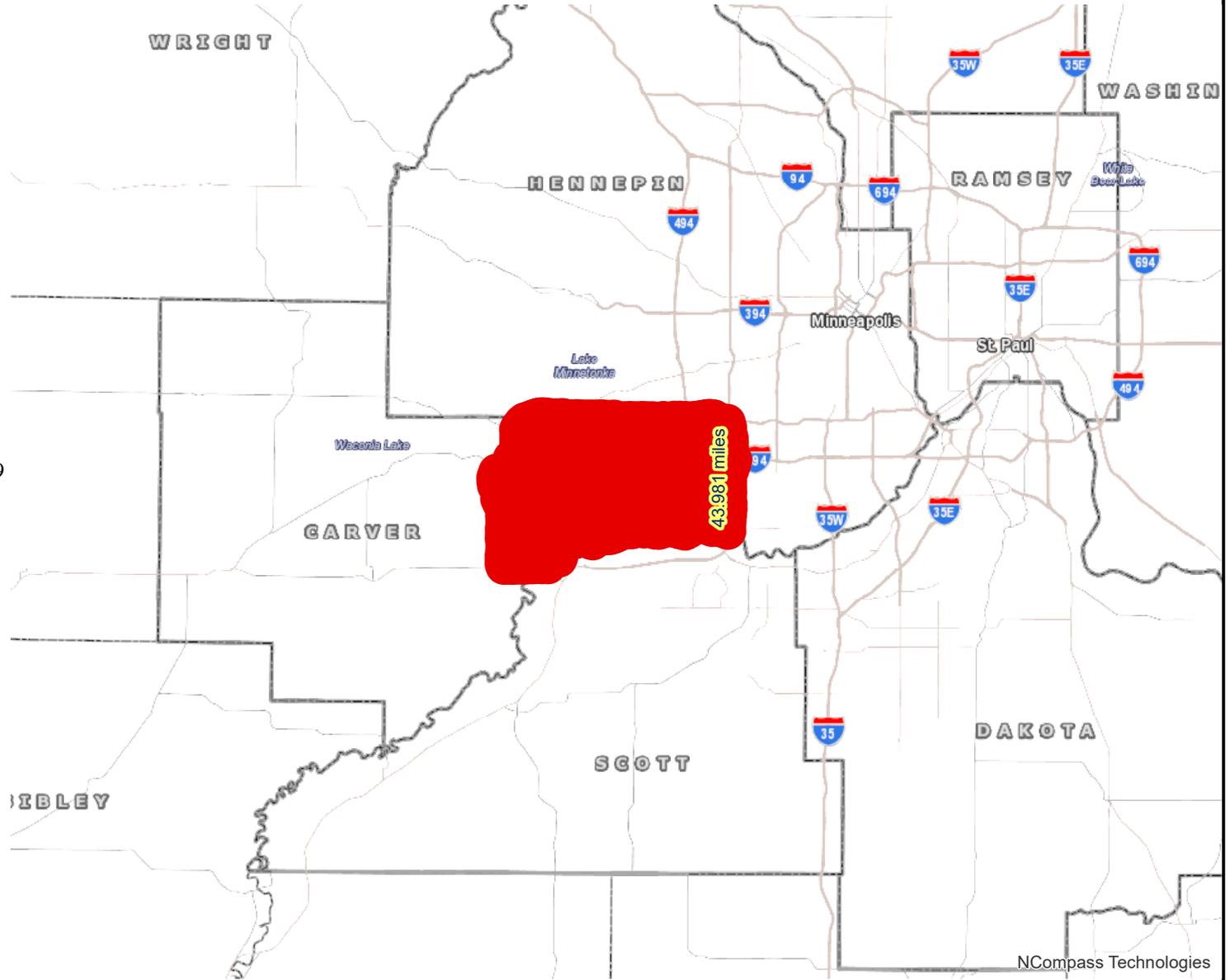


For complete disclaimer of accuracy, please visit
<http://giswebsite.metc.state.mn.us/gissitenew/notice.aspx>



Transit Connections

Transit System Modernization Project: Solar Array At SouthWest Village | Map ID: 1584036496244



Results

Transit with a Direct Connection to project:
490 493 497 498 600 602 690 695 697 698 699

- *American Boulevard
- *Green Line Extension
- *Highway 169

*indicates Planned Alignments

Transit Market areas: 3, 4, 5, 8, 9

-  Project Points
-  Project
-  Project Area



Created: 3/12/2020
LandscapeRSA3



For complete disclaimer of accuracy, please visit
<https://giswebsite.metc.state.mn.us/gisite/notice.aspx>



Results

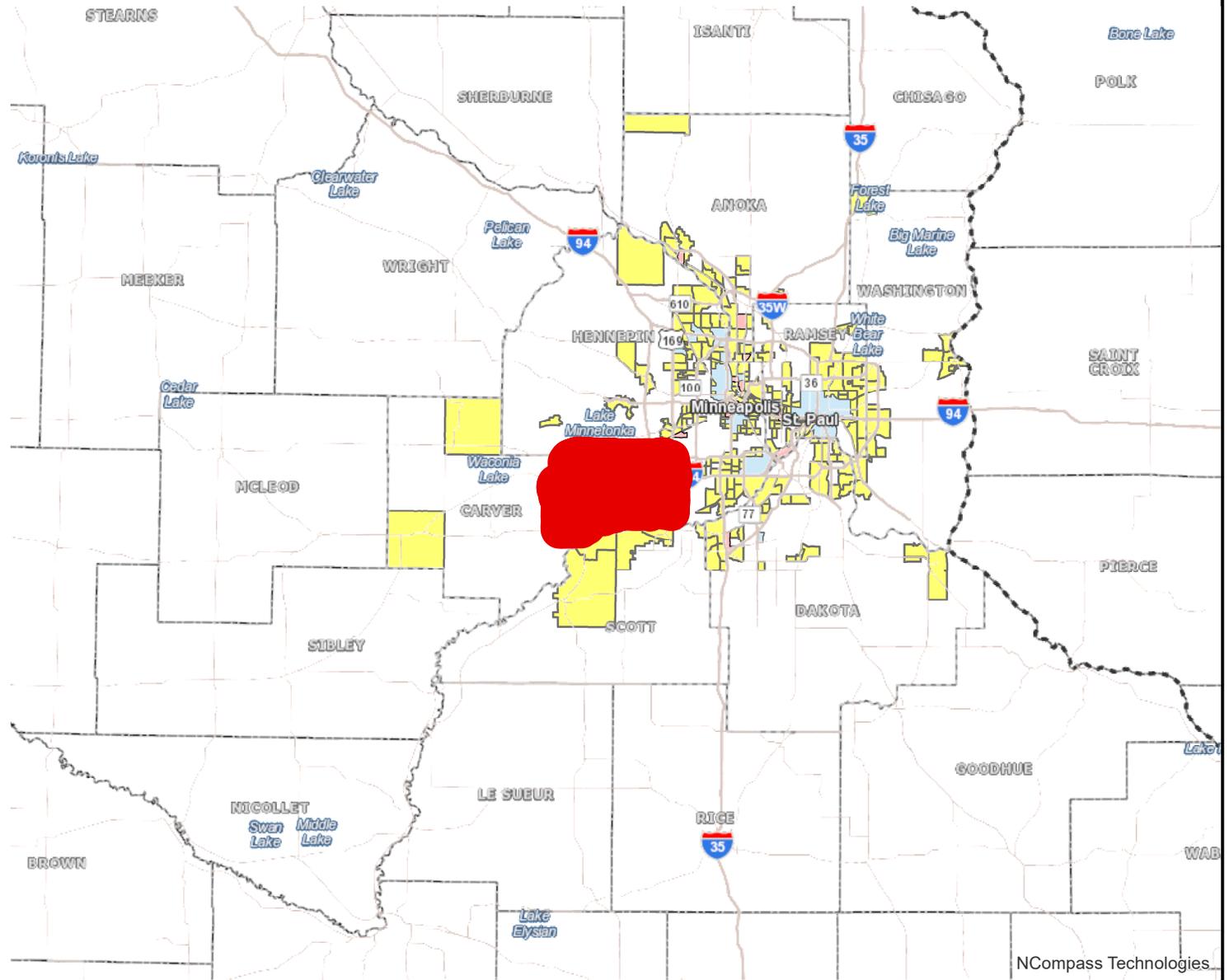
Socio-Economic Conditions

Project census tracts are above the regional average for population in poverty or population of color: (0 to 18 Points)

Tracts within half-mile:

- 23502 23902 25905
- 25906 25907 26005
- 26006 26007 26013
- 26014 26015 26016
- 26018 26019 26020
- 26021 26022 26104
- 26207 26208 27501
- 27503 27504 80201
- 80301 80400 80500
- 80700 90401 90402
- 90501 90502 90503
- 90601 90602 90701
- 90702 90800 90900
- 91000 91100

Transit System Modernization Project: Solar Array At SouthWest Village | Map ID: 1584036496244



- Points
- Lines
- Area of Concentrated Poverty > 50% residents of color

- Area of Concentrated Poverty
- Above reg'l avg conc of race/poverty



Created: 3/12/2020
LandscapeRSA2



For complete disclaimer of accuracy, please visit <http://giswebsite.metc.state.mn.us/gis/site/notice.aspx>



SWT Parking Garage SWT Village Garage, 44.842932, -93.538364

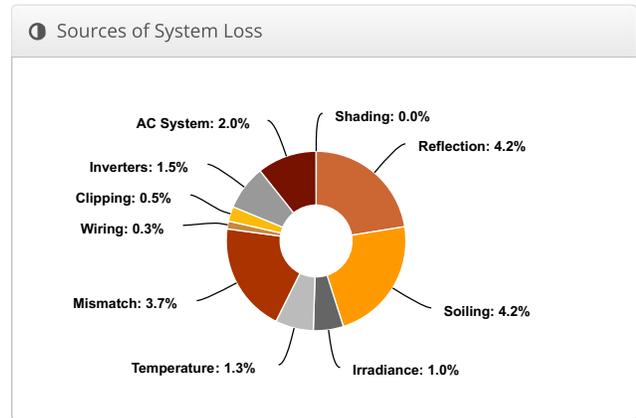
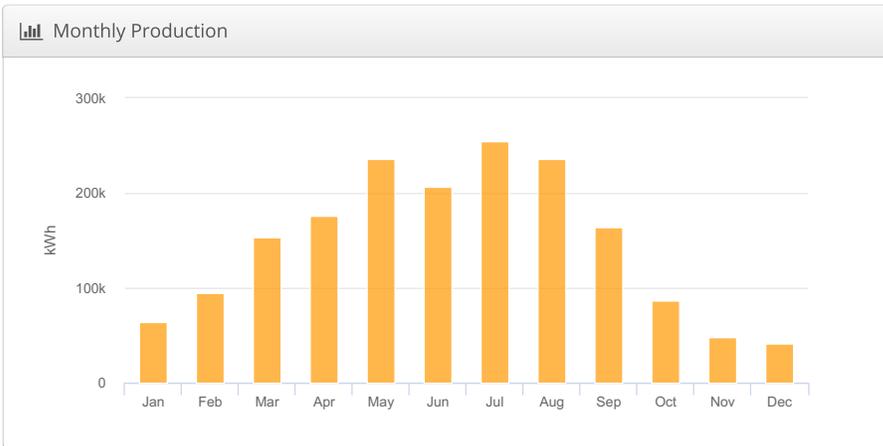
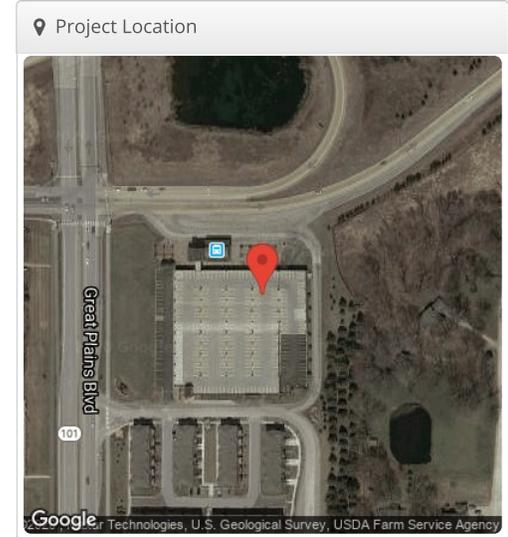
Report

Project Name	SWT Village Garage
Project Address	44.842932, -93.538364
Prepared By	Christian Meisu-Gyamfi cmeisu@ameresco.com



System Metrics

Design	SWT Parking Garage
Module DC Nameplate	1.56 MW
Inverter AC Nameplate	1.16 MW Load Ratio: 1.35
Annual Production	1.762 GWh
Performance Ratio	82.7%
kWh/kWp	1,132.1
Weather Dataset	TMY, FLYING CLOUD, NSRDB (tmy3, II)
Simulator Version	53caf6356a-31bc2ea330-54a027fc16-6c21db16e8



Annual Production

	Description	Output	% Delta
Irradiance (kWh/m ²)	Annual Global Horizontal Irradiance	1,334.1	
	POA Irradiance	1,368.5	2.6%
	Shaded Irradiance	1,368.4	0.0%
	Irradiance after Reflection	1,311.1	-4.2%
	Irradiance after Soiling	1,255.7	-4.2%
	Total Collector Irradiance	1,255.7	0.0%
Energy (kWh)	Nameplate	1,954,135.2	
	Output at Irradiance Levels	1,934,421.5	-1.0%
	Output at Cell Temperature Derate	1,909,581.8	-1.3%
	Output After Mismatch	1,838,915.9	-3.7%
	Optimal DC Output	1,834,148.5	-0.3%
	Constrained DC Output	1,825,052.7	-0.5%
	Inverter Output	1,797,540.0	-1.5%
	Energy to Grid	1,761,590.0	-2.0%
Temperature Metrics			
	Avg. Operating Ambient Temp		11.4 °C
	Avg. Operating Cell Temp		18.1 °C
Simulation Metrics			
	Operating Hours	4389	
	Solved Hours	4389	

Condition Set

Description	Condition Set 1												
Weather Dataset	TMY, FLYING CLOUD, NSRDB (tmy3, II)												
Solar Angle Location	Meteo Lat/Lng												
Transposition Model	Perez Model												
Temperature Model	Sandia Model												
Temperature Model Parameters	Rack Type	a	b	Temperature Delta									
	Fixed Tilt	-3.56	-0.075	3°C									
	Flush Mount	-2.81	-0.0455	0°C									
Soiling (%)	J	F	M	A	M	J	J	A	S	O	N	D	
	13	10	4	3	3	3	3	3	3	3	4	18	
Irradiation Variance	5%												
Cell Temperature Spread	4° C												
Module Binning Range	-2.5% to 2.5%												
AC System Derate	2.00%												
Module Characterizations	Module	Uploaded By						Characterization					
	JAM72S10-405/PR (1000V) (JA Solar)	Folsom Labs						Spec Sheet Characterization, PAN					
Component Characterizations	Device	Uploaded By						Characterization					
	SG55CX-US (Sungrow)	Folsom Labs						Spec Sheet					

Components

Component	Name	Count
Inverters	SG55CX-US (Sungrow)	21 (1.16 MW)
Strings	10 AWG (Copper)	226 (40,727.0 ft)
Module	JA Solar, JAM72S10-405/PR (1000V) (405W)	3,842 (1.56 MW)

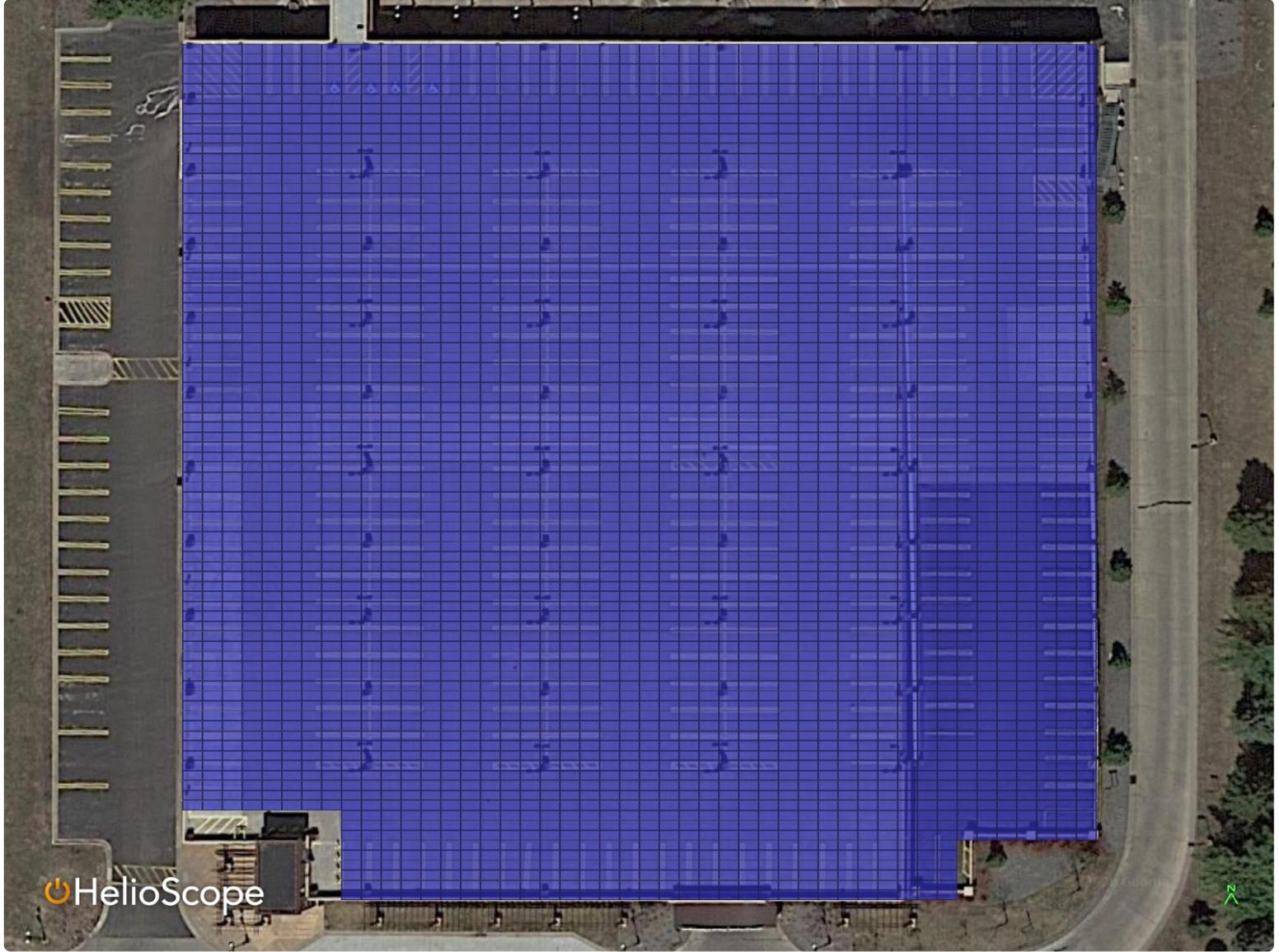
Wiring Zones

Description	Combiner Poles	String Size	Stringing Strategy
Wiring Zone	12	17-17	Along Racking

Field Segments

Description	Racking	Orientation	Tilt	Azimuth	Intrarow Spacing	Frame Size	Frames	Modules	Power
Field Segment 1	Carport	Landscape (Horizontal)	3°	180°	0.1 ft	1x1	3,842	3,842	1.56 MW

Detailed Layout





Carver County Community Development Agency

Mr. Len Simich
Chief Executive Officer
SouthWest Transit
650 SouthWest Village Drive
Chanhassen, MN 55317.

Dear Mr. Simich:

The purpose of this letter to show support for SouthWest Transit's (SWT) proposed grant application of a solar array located above the second deck at 650 SouthWest Village Drive, Chanhassen also known as SW Village Park and Ride.

The proposed solar array allows SWT to:

- Cover the total operating cost of the entire park and ride;
- Ability to provide multiple charging stations for commuters;
- Provides upper level cover for commuters;
- Located within a half mile of affordable housing allowing for easy access;
- Become part of the charging infrastructure as SWT begins moving towards replacing their old diesel and gas fleet with electric vehicles; and
- Whatever energy that is not consumed can be sold to the Minnesota Valley Electric Cooperative (MVEC) as a revenue generator for SWT.

Thank you SWT for your cutting-edge approach to delivering transit and most notably a cost-effective approach for the public sector in becoming more self-sufficient. We also appreciate the variety of services you provide for Carver County residents.

Sincerely,

Julie M. Frick
Executive Director



CITY OF CHANHASSEN

Chanhassen is a Community for Life - Providing for Today and Planning for Tomorrow

April 8, 2020

Mr. Len Simich
Chief Executive Officer
SouthWest Transit
650 SouthWest Village Drive
Chanhassen, MN 55317.

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The purpose of this letter to show support for SouthWest Transit's (SWT) proposed grant application of a solar array located above the second deck at 650 SouthWest Village Drive, Chanhassen.

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Thank you SWT for your cutting-edge approach to delivering transit and most notably a cost-effective approach for the public sector in becoming self-sufficient.

Sincerely,

Elise Ryan
Mayor

g:\admin\mayor\ryan\sw transit letter of support 04-08-2020.docx

May 8, 2020

Len Simich
SouthWest Transit Commission
13500 Technology Drive
Eden Prairie, MN 55344

Dear Mr. Simich,

The Metropolitan Council has received SWT's request to provide the 20% local match for the SouthWest Village Solar Array project if it is selected for the 2024-2025 Regional Solicitation funds.

Our understanding of the project scope is a solar array will be installed at the SouthWest Village Park and Ride.

The Council has a limited amount of regional transit capital (RTC) budgeted in its 2020-2025 Capital Improvement Program (CIP) for capital expansion projects. Its top priorities for regular route bus service are preservation of existing fleet (replacement of vehicles) and facilities, and maintenance of existing services (addressing overflow demand on existing services).

Given the above, the Council is unable to commit to expanded capital costs at the SouthWest Village Park and Ride.

Sincerely,

Nick Thompson

Nick Thompson (May 8, 2020)

Nick Thompson
Director, Metropolitan Transportation Services

cc:
Heather Agesen-Huebner
Matt Fyten

SWT Parking Garage SWT Village Garage, 44.842932, -93.538364

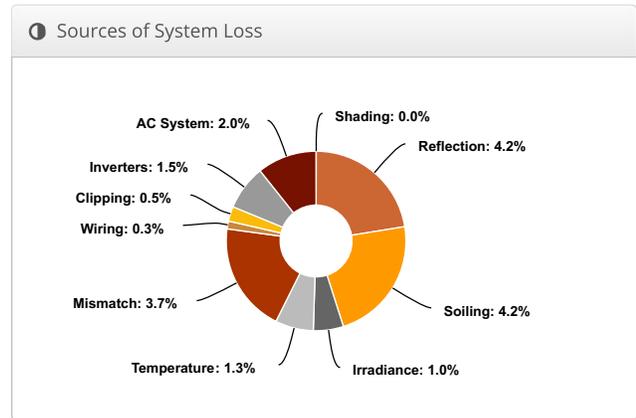
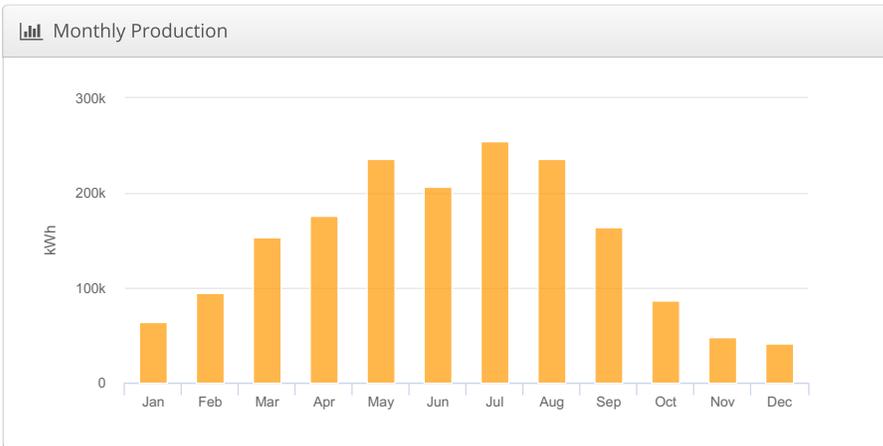
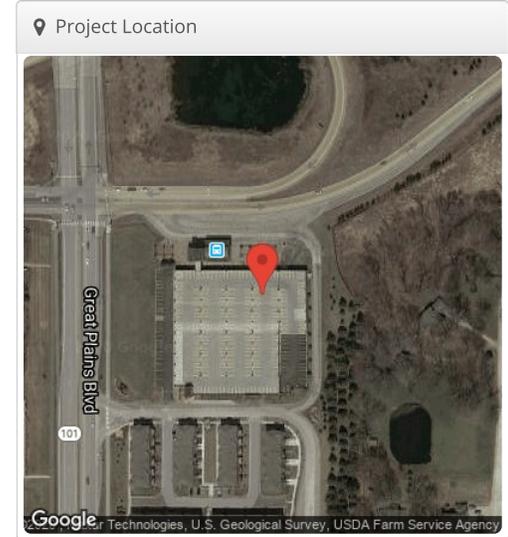
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