

# Household Solar Survey

City of Wildwood, Missouri  
August 2023

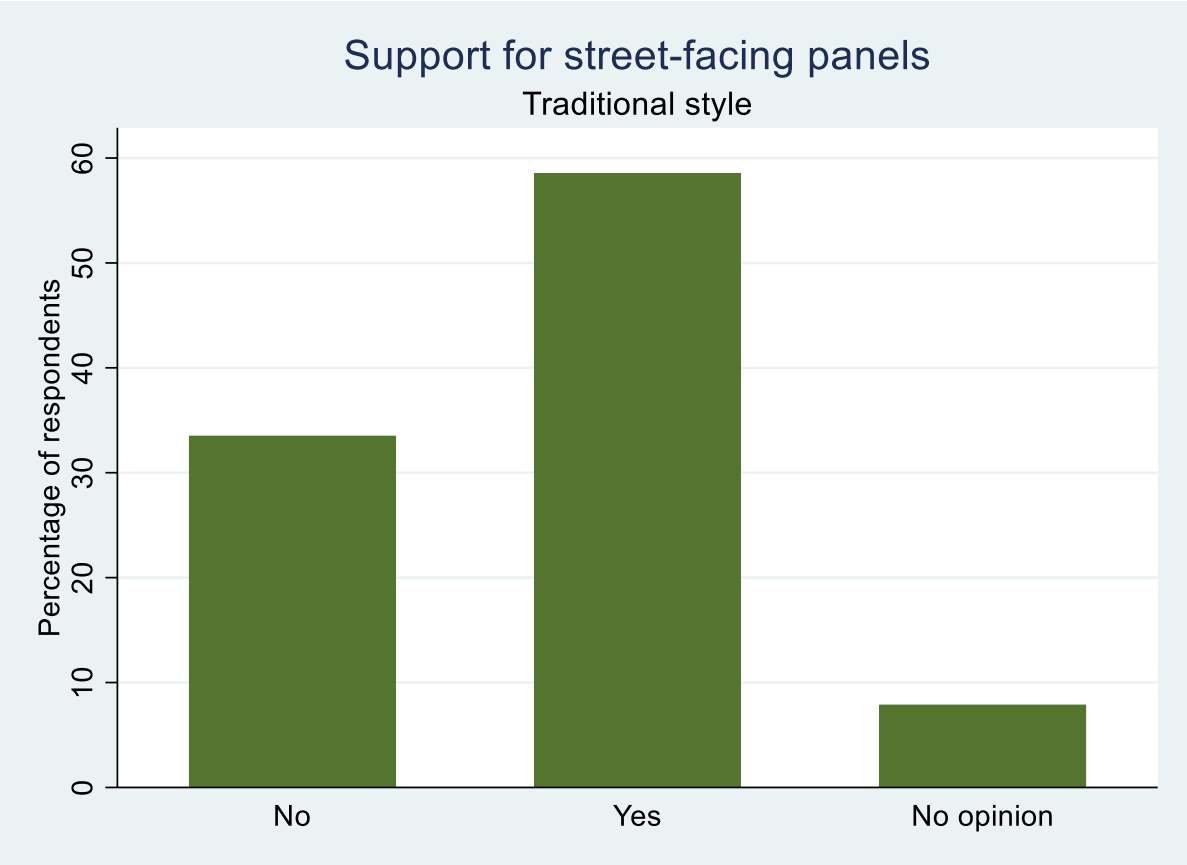
# Objectives

- Identify Wildwood residents' attitudes about roof-mounted solar panels that can be seen from the public street
- Ensure that attitudes are representative of all residents (and only residents)
- Accurately describe variation across the city's diverse neighborhood types

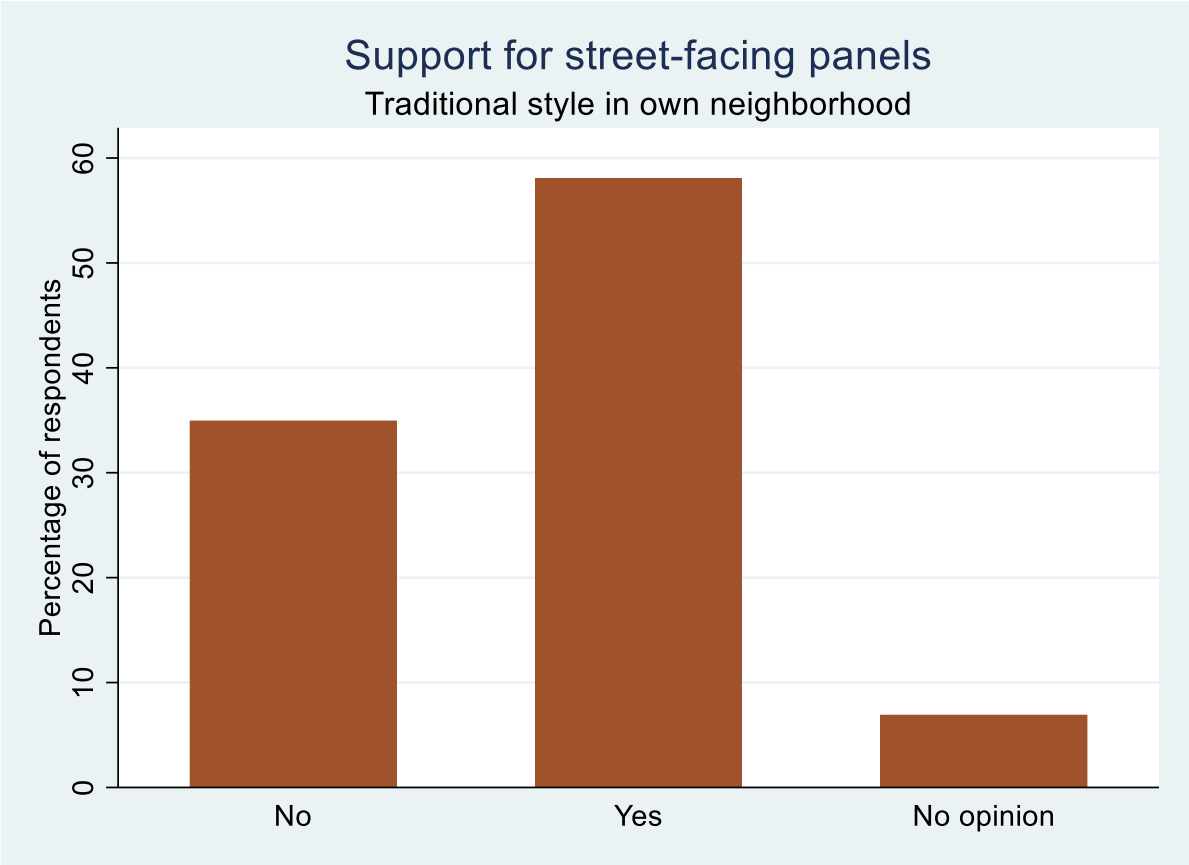
# Methodology

- Five-question survey of residents
  - Approved by city council
  - Implemented by an independent consultant and the city manager's office
- Representative sample of 676 residents (56% response rate)
  - Randomly selected 150 households in each of the 8 wards
  - Mailed a letter of invitation
  - Option to take the survey online or via provided paper copy & pre-stamped return envelope
  - Follow-up reminder letter
- Opt-in survey
  - Available to all interested respondents
  - Link posted on City website

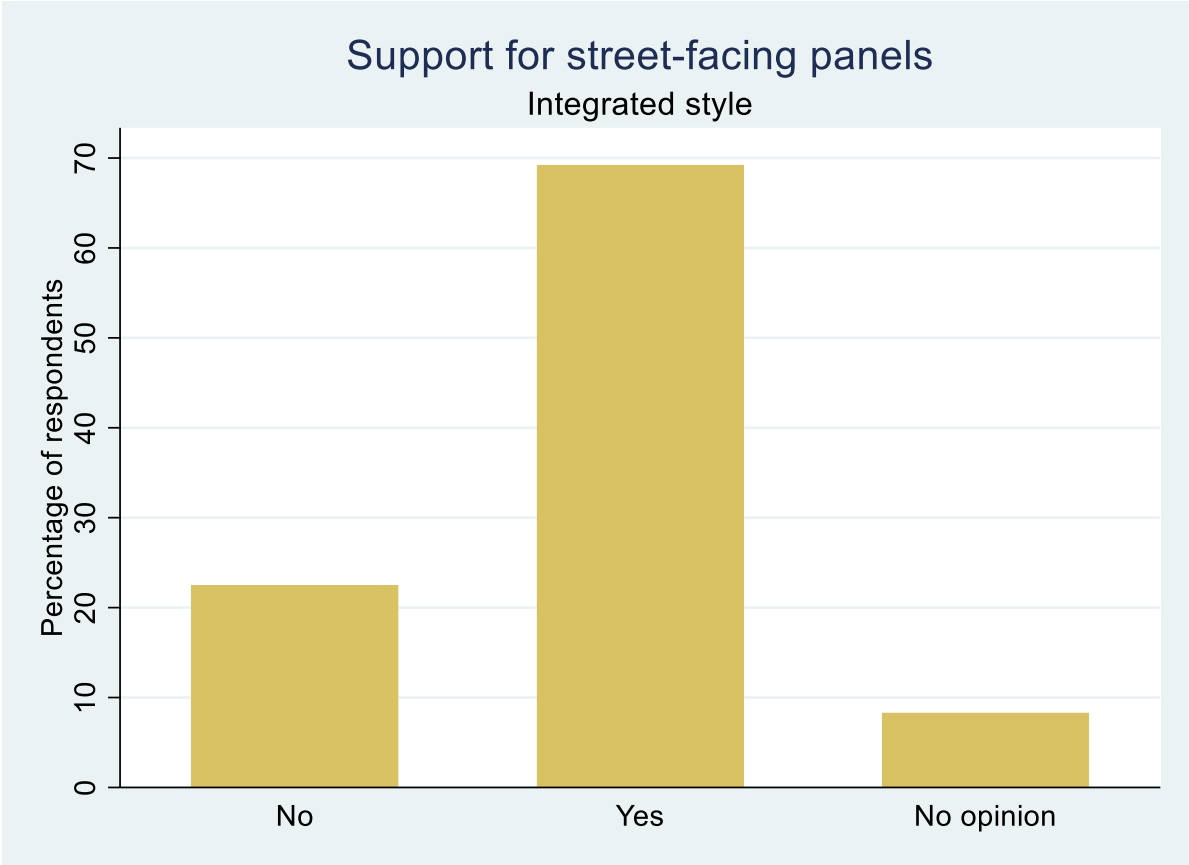
In your opinion, should Wildwood residents be allowed to install traditional roof-mounted solar panels on the front of their homes if those panels are visible from the street?



In your opinion, should residents in your neighborhood be allowed to install traditional roof-mounted solar panels on the front of their homes if those panels are visible from the street?

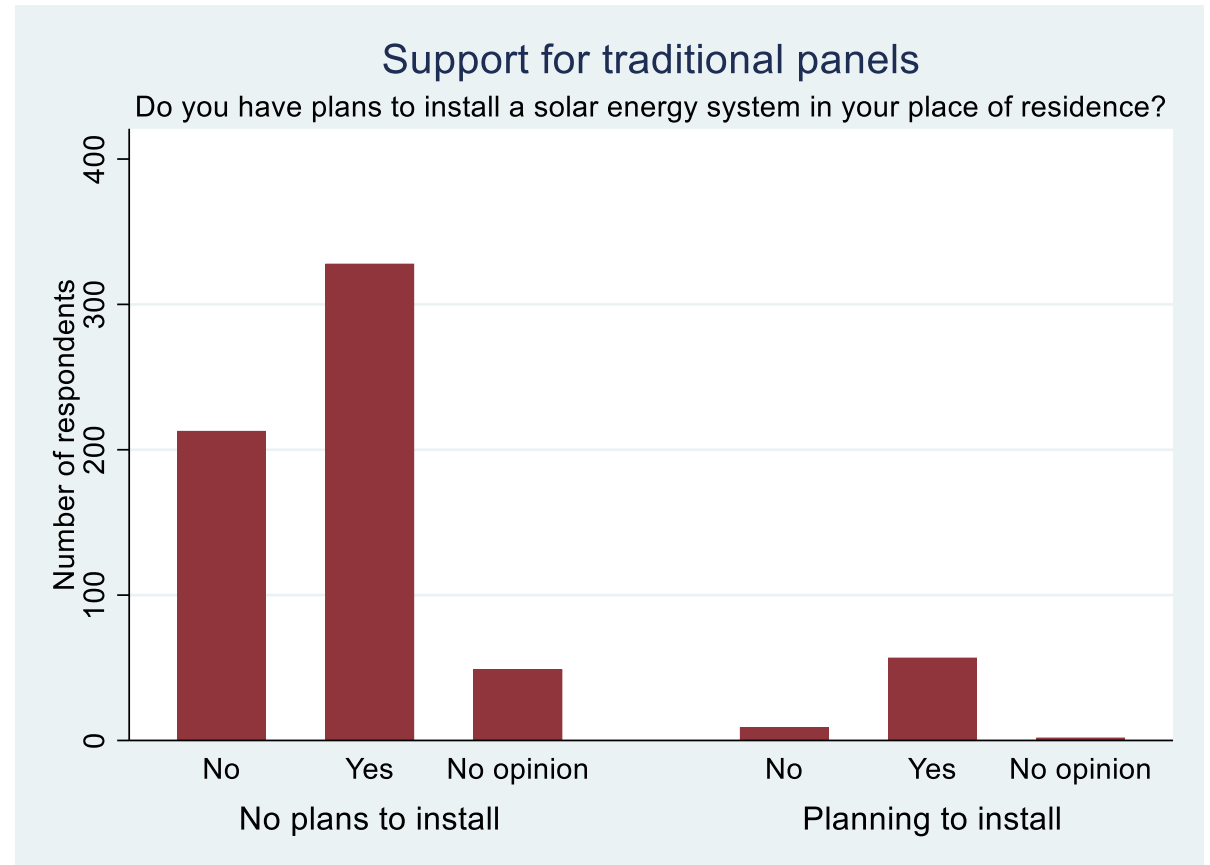


In your opinion, should Wildwood residents be allowed to install building integrated solar energy systems on the front of their homes if components of the system are visible from the street?



# Experiences with household solar products

- 5 respondents **already have** solar installed in their home
- 68 respondents say they **plan to install** solar in their home
- A large majority of respondents *with and without* plans to install solar support allowing street-visible panels



## Results by ward (**have** solar panels)

Ward	Responses	Yes %	No %
1	95	1.0	99.0
2	86	0.0	100.0
3	89	0.0	100.0
4	88	0.0	100.0
5	86	1.2	98.8
6	80	3.8	96.3
7	72	0.0	100.0
8	77	0.0	100.0
<b>TOTAL</b>	<b>673</b>	<b>0.7</b>	<b>99.3</b>

*Percentages rounded to the nearest 0.1 may not sum to 100*



# Results by ward (**plan to install** solar panels)

Ward	Responses	Yes %	No %
1	92	16.3	83.7
2	85	9.4	90.6
3	89	11.2	88.8
4	86	7.0	93.0
5	85	13.0	87.0
6	77	15.6	84.4
7	71	4.2	95.8
8	75	4.0	96.0
<b>TOTAL</b>	660	10.3	89.7

*Percentages rounded to the nearest 0.1 may not sum to 100*

## Results by ward (**traditional** solar panels)

Ward	Responses	Yes %	No %	No opinion %	Margin Yes-No
1	95	56.8	33.7	9.5	+23.1
2	86	57.0	37.2	5.8	+19.8
3	90	54.6	43.2	2.2	+11.4
4	88	62.5	25.0	12.5	+37.5
5	86	67.1	27.1	5.9	+40.0
6	81	58.8	36.3	5.0	+22.5
7	72	65.3	23.6	11.1	+41.7
8	78	46.8	41.6	11.7	+5.2
<b>TOTAL</b>	671	58.6	33.5	7.9	+25.1

*Percentages rounded to the nearest 0.1 may not sum to 100*

# Results by ward (traditional solar panels – own neighborhood)

Ward	Responses	Yes %	No %	No opinion %	Margin Yes-No
1	92	55.4	35.9	8.7	+19.5
2	80	53.8	41.3	5.0	+12.5
3	88	55.7	43.2	1.1	+12.5
4	85	64.7	23.5	11.8	+41.2
5	83	65.1	27.7	7.2	+37.4
6	78	61.5	35.9	2.6	+25.6
7	69	62.3	26.1	11.6	+36.2
8	74	46.0	46.0	8.1	0.0
<b>TOTAL</b>	649	58.1	35.0	6.9	+23.1

*Percentages rounded to the nearest 0.1 may not sum to 100*

## Results by ward (integrated solar panels)

Ward	Responses	Yes %	No %	No opinion %	Margin Yes-No
1	92	71.7	21.7	6.5	+50.0
2	81	69.1	25.9	4.9	+43.2
3	88	65.9	30.7	3.4	+35.2
4	85	75.3	14.1	10.6	+61.2
5	83	72.3	19.3	8.4	+53.0
6	78	70.5	23.1	6.4	+47.4
7	69	71.0	15.9	13.0	+55.1
8	74	56.8	28.4	14.9	+28.4
<b>TOTAL</b>	650	69.2	22.5	8.3	+46.7

*Percentages rounded to the nearest 0.1 may not sum to 100*

# Opt-in survey

- To allow full resident participation, a second “opt-in” survey was conducted
- Link posted to City website; all welcome to participate
- **This sample is NOT representative of city residents. THE OPT-IN SURVEY IS NOT STATISTICALLY RELEVANT**
- Impossible to verify residency status or eliminate duplicate responses

	Have solar	Plan to install solar	Allow front-facing traditional panels	Allow front-facing traditional panels in own neighborhood	Allow front facing integrated panels
<b>Yes %</b>	3.7	27.5	74.0	74.2	83.0
<b>No %</b>	96.3	72.5	22.0	22.3	12.0
<b>No opinion %</b>	--		4.0	3.5	5.0
<b>Margin Y-N</b>			+52.0	+51.9	+71.0

# Summary and Conclusions

- Wildwood residents **support** allowing roof-mounted solar panels facing the street at a margin of nearly **2 to 1**
- A **majority of respondents support** solar no matter how the data is cut, including
  - Randomly-selected household
  - Opt-in survey takers
  - Those without plans to install solar on their own homes
  - Online respondents
  - Mail-in respondents
- In every ward, more residents support than oppose allowing street-facing traditional panels

# Appendix: Data Validation

- Randomly selected 150 addresses per ward (1200 total addresses)
  - Validated residential addresses using google street view
- Each selected household received a unique 8-digit invitation code
- Received 742 total responses
  - 412 by mail, 330 online
- Excluded 48 surveys with invitation code left blank
- 18 invitation codes used twice. In most cases, answers were identical.
  - Retained the most recent submission
- 23 surveys contained an invalid invitation code
  - Identified a likely typo in each and replaced with a valid code
  - 5 were duplicates with previously-counted codes → retained the most recent submission only
- End results based on 676 valid responses