NEW ALBANY
COMMUNITY CONNECTS US

**New Albany Architectural Review Board Agenda**
Monday, February 13, 2023 7:00pm

Members of the public must attend the meeting in-person to participate and provide comment. The in-person meeting is held at New Albany Village Hall, 99 West Main Street. The meeting will be streamed for viewing purposes only via the city website at https://newalbanyohio.org/answers/streaming-meetings/

**I. Call to order**

**II. Roll call**

**III. Action on minutes:** January 9, 2023

**IV. Additions or corrections to agenda**

- Administer the oath to all witnesses/applicants/staff who plan to address the board, "Do you swear to tell the truth and nothing but the truth."

**V. Cases**

- None

**VI. Other business**

- New Albany Solar Energy Initiative Best Practices Report

**VII. Poll members for comment**

**VIII. Adjourn**

NEW ALBANY
COMMUNITY CONNECTS US

**New Albany Architectural Review Board**
**DRAFT Meeting Minutes**
Monday, January 9, 2023

I. Call to order.
The New Albany Architectural Review Board met in regular session in the Council Chambers at Village Hall, 99 W. Main Street, New Albany, Ohio.

Planning Manager Steve Mayer introduced Council Member Wiltrout to the board and explained that she would be replacing Council Member Durik as council liaison.

The board welcomed CM Wiltrout.

Chair Hinson called the meeting to order at 7:05 p.m.

II. Roll call.
Those answering roll call:

| | |
|---|---|
| Mr. Alan Hinson, Chair | Present |
| Mr. Jonathan Iten, Vice Chair | Present |
| Mr. Jim Brown, Secretary | Present |
| Mr. Andrew Maletz | Present |
| Ms. Traci Moore | Present |
| Mr. Strahler | Absent |
| Mr. E.J. Thomas | Absent |
| Ms. Andrea Wiltrout (council liaison) | Present |

Staff members present: Adrienne Joly, Director of Administrative Services; Chelsea Nichols, Planner; Steven Mayer, Planning Manager; Chris Christian, Planner II; Christina Madriguera, Deputy Clerk.

III. Action on minutes.
Chair Hinson asked if there were additions or corrections to the December 12, 2022 meeting minutes. Board Member Iten moved to approve the minutes. Board Member Maletz seconded the motion.

Upon roll call: Mr. Iten, yes; Mr. Maletz, yes; Ms. Moore, yes; Mr. Hinson, yes; Mr. Brown, yes. Having 5 yes votes; 0 nay votes; 0 abstentions, the motion passed 5-0 and the December 12, 2022 minutes were approved without change.

IV. Addition or corrections to agenda.
Chair Hinson asked if there were any additions or corrections to the agenda. Planner Christian answered that there were not.

Chair Hinson administered the oath, "to tell the truth and nothing but the truth," to all witnesses, applicants, and staff who planned to address the board regarding an application on the agenda.

V. Hearing of visitors for items not on tonight's agenda.
Chair Hinson asked if there were any visitors who wished to address the board for items not on tonight's agenda. There was no response.

VI. Cases.

The board discussed whether to proceed with the cases in the order on the agenda or whether to discuss ARB-147-2022, the proposed parking garage first.

Planner Christian stated that the cases on the agenda were related and he was prepared to explain them with a comprehensive presentation.

The board elected to proceed with the agenda as submitted and the comprehensive presentation as suggested.

Planner Christian delivered the staff report. He provided an overview of the relevant review criteria for the applications for certificates of appropriateness which included, the review criteria under C.O. 1157.09 for demolition of structures and a site plan showing the location of the three structures, the criteria under UCC Section 2.2 for additional building typology requests, the review criteria under C.O. 1157.09 for design appropriateness for the construction of a parking garage.

Regarding the construction of the parking garage, Planner Christian noted that City Architect David Bullock had reviewed and was supportive of the proposed garage design.

Planner Christian also stated that the proposed garage itself constituted a major environmental change as defined in C.O. 1157.07(b) and as such would require the board's approval, however all other proposed improvements related to the Rose Run II project constitute minor changes and as such do not require the board's review.

Director Joly addressed the board on behalf of the applicant, City of New Albany. She thanked the board for hearing her presentation in December. She introduced the following members of the design team: Jeff Pongonis from MKSK, Danial Hanes from Columbus Architectural Studio, Tom Rubey from New Albany Company, and Preston Gumberich of RAMSA. Director Joly stated that the City had a good partnership with this team and further noted that MKSK had been working with the City for over 20 years. Director Joly discussed the overall goals of the Rose Run II project, those being: to restore the Rose Run stream corridor, to honor veterans by improving New Albany's Veterans' Memorial, to improve Dublin-Granville Road, and to expand New Albany's public parking options and reservoir. Director Joly explained the parking garage site plan and demolition requests. She also showed photos of the interior of the mill warehouse, and the parking structures at the police station proposed for demolition.

Mr. Pongonis from MKSK stated that one of the primary goals of these four applications was to open up the space for the stream and the park, and for this space to be accessible for residents. He explained the proposed parking garage's orientation to the street and to

the Village Hall and noted that there would be a small road with additional on-street parking on the northside of the parking garage.

Mr. Gumberich from RAMSA, the architect of the proposed parking garage, stated that it was designed not as a parking structure first but as a building in the Village Center first and a parking garage second. He used the Village Hall and Police Department as data and design points to bookend the proposed garage. He pointed out that the proposed garage included stairs, an elevator, and restrooms. He also discussed the following building features: ingress and egress, scale, elevational details of each side, lighting, the occlusion of trash receptacles and utilities, construction of a top level parapet to prevent automobile high beam light from spilling out, usage of materials such as glen-gery brick, vinyl-clad windows to match the windows at Market and Main, fiberglass usage within the bays themselves, gfrp colonettes and spandrels painted to simulate wrought iron for the openings on the south side, painted aluminum frames and slatted louvers to conceal light spillage from the two parking ramps, and mesh on the northside (without the ramps). Mr. Gumberich then displayed photographs of the architectural precedents used.

Board Member Iten suggested that each of the applications be reviewed individually because they did not all present the same degree of difficulty.

The board agreed.

**ARB-145-2022 Certificate of Appropriateness**
Certificate of Appropriateness to allow for the demolition of an existing structure, known as the New Albany Mill warehouse building, generally located east of Main Street, south of Granville Street, west of High Street and north of Village Hall Road (PID: 222-000070).
**Applicant: City of New Albany**

Board Member stated that he was satisfied that all three criteria (established in C.O. 1157.09) were met here.

Board Member Maletz agreed and stated that he had studied the structure carefully and had concluded that it should be demolished.

Board Member Iten moved to approve the certificate of appropriateness for ARB-145-2022 to allow the demolition of the New Albany Mill warehouse building. Chair Hinson seconded the motion.

Upon roll call: Mr. Iten, yes; Mr. Hinson, yes; Ms. Moore, yes; Mr. Maletz, yes; Mr. Brown, yes. Having 5 yes votes; 0 nay votes; 0 abstention, the motion passed by a vote of 5-0.

**ARB-148-2022 Certificate of Appropriateness**
Certificate of Appropriateness to allow for the demolition of two parking garages on the New Albany Police Department site located at 50 Village Hall Road (PID: 222-003477).
**Applicant: City of New Albany**

Board Member Iten stated that he was satisfied that one of the criteria existed in this case, that being that the garages did not have architectural significance. He noted however,

that there was not more than one of the criteria and it was unfortunate that the garages could not be useful.

Director Joly advised the board that staff had studied every option for repurposing the parking structures and found no economic benefit to continued use of the structures.

Board Member Maletz asked whether other alterations to the north elevation of the police department, lighting or otherwise, would be required after the garages were removed.

Director Joly responded in the affirmative and explained that the current structures shield the sally port and that when those structures were removed a landscaped buffer would be installed to screen the area and to clarify that the area was not for public access. She continued that a one-rail fence may be installed to further demarcate that area as not a public area.

Board Member Brown asked whether the curb cut would further clarify that this was not an area for public access.

Director Joly said yes and there would be signage as well.

Council Member Wiltrout asked whether New Albany Police Chief Jones was consulted on whether emergency services would be impeded if police vehicles were parked on the lower level of the parking garage.

Director Joly responded that Chief Jones was consulted at length. She explained that there were five spaces that would continue to be used as well as parking at Village Hall and that he was satisfied that response time would not be impeded.

Board Member Maletz asked whether it would be made clear with paving or striping that this area was for police department use only.

Director Joly answered, absolutely.

Mr. Rubey of New Albany Company stated that the Bath and Body Works building parking and fencing would be eliminated.

Board Member Maletz asked whether the curb cut would be eliminated as well.

Mr. Rubey answered that it would.

Chair Hinson asked whether there was a view of the north elevation because the packet contained only south elevation views and reiterated concerns about public access to the police area.

Director Joly responded that the north elevation could be seen from the photo of police department garages. She further stated that the City was open to suggestions about ways to further delineate that the area was not for public access.

Board Member Iten stated that the board could include, as a condition of approval, that the landscape design be approved by the board.

The board members indicated agreement.

Director Joly indicated the City would agree to the condition.

Board Member Brown moved to approve ARB-148-2022 the Certificate of Appropriateness for the demolition of two parking garages on the New Albany Police Department site subject to the following condition: that the eventual landscape package behind the police station and any architectural elevation changes to the building be approved by the Architectural Review Board. Board Member Iten seconded the motion.

Upon roll call: Mr. Brown, yes; Mr. Iten, yes; Mr. Hinson, yes; Mr. Maletz, yes; Ms. Moore, yes. Having 5 yes votes; 0 no votes; and 0 abstentions, the motion passed by a vote of 5-0.

**ARB-146-2022 Certificate of Appropriateness**
Certificate of Appropriateness to add a Public Parking Garage building typology to the Urban Center Code for a development site generally located east of Main Street, south of Granville Street, west of High Street and north of Village Hall Road (PIDs: 222-002282, 222-003477 and 222-002283).
**Applicant: City of New Albany**

The board members discussed the location of the building typology.

Board Member Iten confirmed with Planner Christian that this building typology is specific to, and only applies to the Rose Run II project.

Board Member Iten stated that his only question was why was the height maximum for the typology 55 ft, why wasn't it the same as the Village Hall which was about 37 ½ feet?

Planner Christian explained that the standards were drafted to match the existing typologies in the subdistrict and further that he thought it (the maximum height) could be lowered.

Board Member Iten followed, why approve 55 when we don't need it.

Council Member Wiltrout asked whether the height was 37 ½ feet with the ends.

Planner Christian answered yes.

Planner Christian further stated that the City would be comfortable with a maximum height of 40 ft for this building typology.

Board Member Maletz then asked whether it should be limited by story rather than a maximum unit of measure.

There was discussion on the issue and the consensus was that for this typology, a maximum height expressed in unit of measure was sufficient.

Board Member Maletz then asked for clarification purposes, whether, if another parking garage were proposed, an additional typology would need to be approved.

Planner Christian answered yes, in the event another stand-alone parking garage was sought, an additional typology would need to be approved.

Board Member Iten moved to approve ARB-146-2022 to add a public parking garage building typology to the Urban Center Code subject to the following condition: that the building height maximum was 40 feet. Chair Hinson seconded the motion.

Upon roll call: Mr. Iten, yes; Mr. Hinson, yes; Mr. Brown, yes; Ms. Moore, yes; Mr. Maletz, yes. Having 5 yes votes; 0 no votes; and 0 abstentions, the motion passed by a vote of 5-0.

**ARB-147-2022 Certificate of Appropriateness**
Certificate of Appropriateness to allow the construction of a public parking garage on a development site generally located east of Main Street, south of Granville Street, west of High Street and north of Village Hall Road (PIDs: 222-002282, 222-003477 and 222-002283).
**Applicant: City of New Albany**

Chair Hinson stated that in general he wondered whether the center of the parking structure should be more pronounced particularly because it faced a public street.

Board Member Iten agreed and stated that in the context of what the board had to approve, DGR, Section 8, III(3) provided, entrances to civic buildings shall be oriented toward primary roads and shall be of a distinctive character that makes them easy to locate. The entrances on the sides of this proposed garage did not look like the front of the building and did not look like the primary façade. Board Member Iten further pointed out that each of the precedential buildings displayed in the design team presentation had a front, central, and recognizable entrance point.

Board Member Brown stated, relatedly, that he wondered what future development would take place on the south side of Village Hall and whether a more central access point would be called for in light of future developments.

Board Member Iten then asked Planner Christian to display the photo of the Williamsburg garage from Glavin Holmes which clearly indicated the front and central entrance as opposed to a long, blank facade.

Board Member Maletz commented that this presented a question of honesty about the structure. He stated that the entrances were not central but they were prominent as they related to the function of the building and in that regard, he supported the proportion and scale of the building. But he struggled in terms of the honesty of this structure and recognized that this was always the case with parking garages. He further noted that he did not think a central entrance was the correct way to go with this structure and there were benefits to the side entrances. He further observed that from the south side, this structure had a stadium aesthetic and he wondered if whether the central bay would benefit from additional articulation, perhaps height in accordance with the bend in the street.

Board Member Iten stated that would meet his concern.

Board Member Moore agreed with not calling attention to the entrance, and commented that she appreciated that the garage was conceived of as a building in order to preserve the character of the Village Center first and a parking garage second. She further stated that she liked the entrances on the side and that she had done a study and calculated the width of the building which was 350 feet and increasing the height of the center parapet by 25% would create more of a delineation.

Chair Hinson agreed and stated that if the building were a mill, the center parapet would be the place where the name, Durik & Co., would be found.

Mr. Gumberich responded that it was coincidental that this issue was raised because he had considered the same issue during his travel to New Albany that day.

Board Member Iten confirmed that the idea appealed to Mr. Gumberich.

Chair Hinson stated that he really liked the building and acknowledged that the landscaping had yet to be configured and added to the plans.

Board Member Iten stated that another concern he had was the choice of color for the screens, in particular on the Village Hall Road side. The openings between the brick were dark and there were only a few structures in town with similarly dark openings. The darkness made him think of a structure more appropriate for the office park, rather than in the Village Center, and he was concerned about whether the openings should be this dark.

Chair Hinson thought it was a valid concern but concluded it would be okay on the south side of the building considering that it was well-lit and the need for shading.

Board Member Maletz acknowledged the that the dark opening created a negative space and that there was lack of precedent for this and also wondered about the maintenance involved, but stated that he found it appealing aesthetically. He also pointed out that it could be mediated by what would occur in the center three bays.

Board Member Iten stated that his other concern was the landscaping package and the lighting package should come back to the board for review.

The board agreed that they would like to see the landscaping and lighting packages.

Board Member Iten then asked how the board should proceed regarding revisions to the façade, and questioned whether it would be enough to add a condition that required that the height of the center parapet be raised.

Director Joly stated that it (making the center bay more prominent) could be added as a condition. She stated that the City and design team would work to resolve the issue since, as evidenced by Mr. Gumberich's remarks earlier, they were headed in that direction and could return to the board if they ran across a stumbling block.

The board indicated they were comfortable trusting Director Joly and the design team with that condition.

Board Member Maletz commented that he was comfortable with the overall design and this condition regarding the facade was of a narrow nature.

Board Member Iten agreed and further remarked that this was a beautiful and a very New Albany design.

Board Member Iten moved for approval of ARB-147-2022 Certificate of Appropriateness to allow the construction of a parking garage on a development site generally located east of Main Street, south of Granville Street, west of High Street, and north of Village Hall Road subject to the following three conditions:

(1) the lighting plan for the site must be reviewed and approved by the Architectural Review Board;
(2) the landscape plan must be reviewed and approved by the Architectural Review Board;
(3) the center three bays on the south elevation be made more prominent in a manner that is subject to staff approval.

Board Member Maletz seconded the motion.

Upon roll call: Mr. Iten, yes; Mr. Maletz, yes; Ms. Moore, yes; Mr. Brown, yes; Mr. Hinson, yes. Having 5 yes votes; 0 no votes; and 0 abstentions, the motion passed.

Chair Hinson thanked the City.

Director Joly thanked the board for their thoughtful review and remarks.

VII. Other business.
Chair Hinson asked whether there was other business to come before the board. There was no response.

VIII. Poll members for comment.
Chair Hinson asked the members whether they had comments. There was no response.

IX. Adjournment.
Chair Hinson moved to adjourn the meeting. Board Member Maletz seconded the motion.

Upon roll call: Mr. Alan Hinson, yes; Mr. Maletz, yes; Ms. Moore, yes; Mr. Iten, yes; Mr. Brown, yes. Having 5 yes votes; 0 no votes; 0 abstentions, the motion to adjourn was passed.

The meeting was adjourned at 8:07 p.m.

Submitted by Christina Madriguera, Deputy Clerk.

**Appendix**
Records of Action.

NEW ALBANY

## Community Development Department

RE: City of New Albany Board and Commission Record of Action

Dear City of New Albany,

Attached is the Record of Action for your recent application that was heard by one of the City of New Albany Boards and Commissions. Please retain this document for your records.

This Record of Action does not constitute a permit or license to construct, demolish, occupy or make alterations to any land area or building. A building and/or zoning permit is required before any work can be performed. For more information on the permitting process, please contact the Community Development Department.

Additionally, if the Record of Action lists conditions of approval these conditions must be met prior to issuance of any zoning or building permits.

Please contact our office at (614) 939-2254 with any questions.

Thank you.

NEW ALBANY

## Community Development Department

# Decision and Record of Action

Monday, January 09, 2023

The New Albany Architectural Review Board took the following action on 01/09/2023 .

## Certificate of Appropriateness

**Location:** Generally located east of Main Street, south of Granville Street, west of High Street and north of Village Hall Road (PID: 222-000070).
**Applicant:** City of New Albany,

**Application:** PLARB20220145
**Request:** Certificate of Appropriateness to allow for the demolition of an existing structure, known as the New Albany Mill warehouse building, generally located east of Main Street, south of Granville Street, west of High Street and north of Village Hall Road (PID: 222-000070).
**Motion:** Move to approve

**Commission Vote:** Motion Approved, 5-0

**Result:** Certificate of Appropriateness, PLARB20220145 was Approved, by a vote of 5-0.

Recorded in the Official Journal this January 09, 2023

**Condition(s) of Approval: None.**

Staff Certification:

Chris Christian

Chris Christian
Planner II

NEW ALBANY

## Community Development Department

RE: City of New Albany Board and Commission Record of Action

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Thank you.

NEW ALBANY

## Community Development Department

# Decision and Record of Action

Monday, January 09, 2023

The New Albany Architectural Review Board took the following action on 01/09/2023 .

## Certificate of Appropriateness

**Location:** 50 VILLAGE HALL RD
**Applicant:** City of New Albany,

**Application:** PLARB20220148
**Request:** Certificate of Appropriateness to allow for the demolition of two parking garages on the New Albany Police Department site located at 50 Village Hall Road (PID: 222-003477).

**Motion:** Move to approve with conditions

**Commission Vote:** Motion Approval with Conditions, 5-0

**Result:** Certificate of Appropriateness, PLARB20220148 was Approval with Conditions, by a vote of 5-0.

Recorded in the Official Journal this January 09, 2023

**Condition(s) of Approval:**

1. Police department garage landscape plan and any architectural elevation changes to the building must be reviewed and approved by the ARB.

Staff Certification:

Chris Christian

Chris Christian
Planner II

NEW ALBANY

## Community Development Department

RE: City of New Albany Board and Commission Record of Action

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Additionally, if the Record of Action lists conditions of approval these conditions must be met prior to issuance of any zoning or building permits.

Please contact our office at (614) 939-2254 with any questions.

Thank you.

NEW ALBANY

## Community Development Department

# Decision and Record of Action

Tuesday, January 10, 2023

The New Albany Architectural Review Board took the following action on 01/09/2023 .

## Certificate of Appropriateness

**Location:** Generally located east of Main Street, south of Granville Street, west of High Street and north of Village Hall Road (PIDs: 222-002282, 222-003477 and 222-002283).
**Applicant:** City of New Albany,

**Application:** PLARB20220146
**Request:** Certificate of Appropriateness to add a Public Parking Garage building typology to the Urban Center Code for a development site generally located east of Main Street, south of Granville Street, west of High Street and north of Village Hall Road (PIDs: 222-002282, 222-003477 and 222-002283).
**Motion:** Move to approve with conditions

**Commission Vote:** Motion Approved with Conditions, 5-0

**Result:** Certificate of Appropriateness, PLARB20220146 was Approved with Conditions, by a vote of 5-0.

Recorded in the Official Journal this January 10, 2023

**Condition(s) of Approval:**

1. The maximum permitted height of the garage is 40 feet.

Staff Certification:

Chris Christian

Chris Christian
Planner II

NEW ALBANY

## Community Development Department

RE: City of New Albany Board and Commission Record of Action

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Additionally, if the Record of Action lists conditions of approval these conditions must be met prior to issuance of any zoning or building permits.

Please contact our office at (614) 939-2254 with any questions.

Thank you.

NEW ALBANY

## Community Development Department

# Decision and Record of Action

Monday, January 09, 2023

The New Albany Architectural Review Board took the following action on 01/09/2023 .

## Certificate of Appropriateness

**Location:** 50 VILLAGE HALL RD
**Applicant:** City of New Albany,

**Application:** PLARB20220148
**Request:** Certificate of Appropriateness to allow the construction of a public parking garage on a development site generally located east of Main Street, south of Granville Street, west of High Street and north of Village Hall Road (PIDs: 222-002282, 222-003477 and 222-002283).
**Motion:** Move to approve with conditions

**Commission Vote:** Motion Approval with Conditions, 5-0

**Result:** Certificate of Appropriateness, PLARB20220148 was Approval with Conditions, by a vote of 5-0.

Recorded in the Official Journal this January 09, 2023

**Condition(s) of Approval:**

1. Police department garage landscape plan and any architectural elevation changes to the building must be reviewed and approved by the ARB.

Staff Certification:

Chris Christian

Chris Christian
Planner II

NEW ALBANY
COMMUNITY CONNECTS US

TO: New Albany Architectural Review Board

CC: Steve Mayer, Planning Manager;
Chelsea Nichols, Planner

FROM: Anna van der Zwaag, Planner II

DATE: February 3, 2023

RE: New Albany Solar Energy Initiative

**BACKGROUND AND PURPOSE**

Over the course of 2022, several new legislative changes were enacted which have the potential to significantly impact solar access in Ohio, as well as increase demand for installation of solar panels by both homeowners and businesses within New Albany. At a federal level, the Inflation Reduction Act of 2022 went into effect. This act aims to reduce energy costs for consumers while incentivizing clean energy and reducing United States' carbon emissions over the next decade.

In September 2022, Ohio Senate Bill 61 took effect with the goal of protecting the rights of homeowners in planned communities who wish to install solar systems on their property. The legislation stated solar panels are permissible uses in planned communities unless expressly prohibited by an HOA or COA. Associations who do not prohibit solar panels may only place "reasonable restrictions" on the size, place, and manner of solar panel installations; however, the bill does not define what a reasonable restriction looks like.

Currently, New Albany's zoning code does not provide regulations for solar energy systems. There are no specific zoning regulations for solar panels that are applicable to residential neighborhoods; it often falls to HOAs within the city to regulate their installation. At the same time, there are constantly new technologies emerging in the realm of solar energy. It is important that, with the increased availability, incentivization and technology associated with solar energy, the city determine the best path forward for solar energy regulation. To do this, New Albany worked with MKSK, the city's planning and urban design consultants, to develop the New Albany Solar Energy Initiative Best Practices Report.

The intent of this report is to provide New Albany with an overview of best practice solar applications. This report is informed by an exploration of existing solar energy in New Albany, emerging technologies in solar energy, recent legislation and incentives, and strategies implemented in peer communities around the Midwest. Using this research, a set of best practices

for solar applications and recommendations for the city have been compiled to guide New Albany down the path to becoming a solar-ready community.

## REPORT OVERVIEW

The New Albany Solar Energy Initiative Best Practices Report not only considers where solar might be installed, but also the types of installations, emerging trends, and case studies from peer communities. Ultimately, the report provides a list of recommendations the city can utilize to develop appropriate code changes that reflect the regulatory needs of the community. The sections of the report are summarized below.

*Types of Solar Applications (Report p. 4)*
The city wanted to explore the various locations where solar might be installed. The report defines solar installation types for residential, commercial/industrial, institutional, community solar, and accessory structures. This allows the city to consider how other communities break down their regulations by type and determine the appropriateness of different types of solar in various development settings.

*Recent Solar Legislation (Report p. 6)*
This section of the report explains in more detail the legislation described above.

*Solar Trends and Emerging Technologies (Report p. 8)*
The city wanted to better understand the most common types of solar installations, as well as how solar energy is expected to grow and evolve as technology becomes more affordable and readily available. This section describes the latest trends and where they are most likely to be found in a community. These trends include the following:

- Building integrated photovoltaics (solar shingles)
- Solar tracking mounts
- Solar energy storage (battery storage)
- Floatovoltaics (floating solar panels)
- Parking lot solar installations
- Solar-ready building design
- Photovoltaic noise barriers along roadways
- SolSmart designation program.

This emerging technology research was then utilized to develop recommendations for solar trends and appropriate use applications. These recommendations detail which technologies are appropriate for the land uses defined in the Types of Solar Applications section.

*Case Studies in Solar Energy Provisions (Report p. 16)*
This section addresses the main purpose of the report – exploring what other similar communities are doing, if anything, to regulate solar. In order to determine the methods and regulations New Albany should pursue, it is necessary to understand how similar cities are addressing the balance between solar technology, aesthetic considerations, and historic preservation, among others considerations. This section assesses the following:

- Whether solar is permitted in the codified ordinances and which zones solar is permitted in
- Conditional use criteria for solar installations
- Types of regulations enforced on solar installations (location, setbacks, screening, color, shape, and more)

- Solar resources available online to community members
- Review processes that must be followed before installing solar
- Local incentives available to offset the cost of solar panels and equipment

The table below summarizes the key findings from the eight communities that were studied.

| Community | Restriction Level | SolSmart | Other findings |
|---|---|---|---|
| Upper Arlington, Ohio | Low | Gold | Updated zoning code, online checklist, streamlined permitting process, online map of solar installations |
| German Village, Columbus, Ohio | High | No | Design guidelines, historic district preservation, architectural review process, no publicly visible solar panels |
| Westerville, Ohio | Low | No | Updated zoning code, solar rebates, front of house installations allowed, regulated appearance for panels |
| Dublin, Ohio | High | No | Ongoing discussion on residential panels, concerns for maintaining aesthetics, in-progress zoning code amendment |
| Bexley, Ohio | Moderate | In progress | Zoning code update, architectural review process, solar webpage with resources, front of house installations conditionally permitted |
| Shaker Heights, Ohio | High | No | Architectural review process, solar webpage with resources, no mention of solar panels in codified ordinances, historic preservation focus |
| Carmel, Indiana | Low | Silver | Updated zoning code, solar webpage with resources, education and engagement efforts, city-owned solar arrays, improved permitting |
| Naperville, Illinois | Low | Silver | Updated zoning code, solar rebates and grants, historic district guidelines, regulations for building-integrated and building-mounted |

*Peer Communities Summary (Report p. 35)*
While some communities permit solar in all zoning districts outright, others allow solar outright in only certain zoning districts or if certain conditions are met. For instance, Westerville permits solar installation on pitched roofs in all zoning districts except non-residential planned districts and the Uptown Zoning District; however, ground-mounted installations are conditional uses in all zoning districts.

Most communities place some sort of regulation related to the aesthetics of solar installations. Some communities, especially those with many historic properties, require all applications be reviewed by an Architectural Review Board. Many communities require anti-reflective coating to reduce glare, and some communities limit the height a panel and mounting equipment may extend above the roof. Other communities place restrictions on color and require screening from the public right-of-way.

When it comes to location of roof-mounted solar panels, many communities state a preference for rear or side location, or they state panels should not be visible from the public right-of-way. Similarly, ground-mounted panels are often required to be located in the rear or side yards and are mandated to meet certain setback requirements. Most communities limit the height of ground-mounted panels and require that the panels contribute to the lot coverage requirement.

*Best Practices for Solar Applications (Report p. 40)*
The above case studies informed the development of best practices for solar applications. Various other reports and resources were also utilized in the development of recommendations for solar applications. An informed list of recommendations on how solar energy systems should be regulated was developed for each use application category (residential, commercial, institutional, Village Center, community solar, and accessory structures). New Albany can use these categorized recommendations to move forward on any necessary code amendments.

## BOARD & COMMISSION FEEDBACK PROCESS

The Best Practices Report includes recommendations for application of solar installations in New Albany. The city staff requests feedback from boards and commissions to determine if these recommendations align with the priorities of residents and city officials through a variety of perspectives (sustainability, architecture, and planning & zoning).

A presentation was given to the city Sustainability Advisory Board on January 11, 2023 and their feedback is documented in a separate memo. Presentations will be given to the Architectural Review Board on February 13, 2023 and Planning Commission on February 22, 2023.

## CONCLUSION & NEXT STEPS

The New Albany Solar Energy Initiative Best Practices Report provides information and factors for city staff and officials to consider for code updates related to solar energy. The boards and commissions play an important role in determining if these recommendations are appropriate for New Albany. Once feedback is obtained from these boards and commissions, city staff will summarize the response and work with the project's consultant to update the recommendations as necessary and appropriate.

NEW ALBANY
COMMUNITY CONNECTS US

TO: New Albany Architectural Review Board

CC: Steve Mayer, Planning Manager
Chelsea Nichols, Planner

FROM: Anna van der Zwaag, Planner II

DATE: February 13, 2023

RE: Sustainability Advisory Board's New Albany Solar Energy Initiative Comments

**INTRODUCTION**

In 2022, several new federal and state-level laws took effect incentivizing solar energy projects and reducing barriers to solar installations for homeowners. As a result of this legislation, New Albany city staff anticipates an increase in the demand for solar energy permits and installations within the New Albany community. At present, the city's codified ordinances are silent on solar energy installations; however, the Engage New Albany Strategic Plan includes a recommendation to "promote the use of solar panels and geothermal systems and adjust the city regulations to appropriately permit them within the community."

In order to effectively prepare for any increase in demand for solar permits, city staff need to understand appropriate placement and type of solar energy installations to maintain a balance between community character and sustainability. To do this, New Albany consultant, MKSK, was hired to research and report other communities' best practices for solar panel regulation. The resulting report is the New Albany Solar Energy Initiative Best Practices Report. City staff are presenting this best practice report to numerous boards and commissions to get their ideas, observations and an opportunity to provide direct feedback to ensure the city code updates reflect the values of all stakeholders in the New Albany community.

On January 11, 2023, city staff presented the Best Practices Report to the city's Sustainability Advisory Board (SAB). The goal of this presentation was to obtain feedback on the recommendations in the report. This feedback will be used to guide city staff as they start drafting code updates. City staff will also be presenting the report to the Planning Commission on February 22, 2023.

The following pages contain a summary of the comments received by SAB Members.

## SUSTAINABILITY ADVISORY BOARD COMMENTS

### Roof-Mounted Solar on Residential Homes

- Certain cities will allow residents to have solar panels as long as you are not installing it on the front of the house. If their front side is south facing, some cities will say even though it would work functionally, from an aesthetic standpoint it cannot be there. However, there are cases where it could potentially work if the home was designed correctly with bump outs, additions, and accessory structures if it is facing a certain way and tucked back.
- Many houses in our neighborhoods have a back yard that faces north so that entire group of houses would be ineligible to get solar panels if the code requires them to be rear facing.
- Would be in favor of allowing panels that are in the front of the house if they need to be there to be south facing.
- Dublin is considering requiring residents to use integrated building material for front facing and to go through a secondary review. However integrated building materials are costlier and the question of equity is still there.
- Would rather leave leeway for front facing panels.
- In favor of having open opportunity for people to put solar anywhere on their roof and anywhere on their property that they own.
- It is a balance; you have to find the balance because there are people on both sides. It is important to find a compromise.

### Other Design Considerations for Residential Solar

- Being more restrictive on color, symmetry, or other aesthetics so that panels can be allowed on the front of the house/street-facing.
- There is an idea of equity and not negating people from the right to have panels if they desire.
- Some members thought there should be very little to no regulations. Solar panels can be inspiring and encourage people to consider their contribution.

### Ground-Mounted Panels

- Ground mounted most likely won't be a popular choice for residential homeowners but a screening requirement could be an appropriate choice rather than completely eliminating that opportunity.
- Screening is a common practice for even utility-scale solar. Even in very rural areas there are requirements for installing screening and abiding by setbacks.

### Solar on Institutional Buildings

- With regard to the institutional piece, the report advocates for visibility with government and schools. It is interesting that it would be okay for public institutions to make it as visible as possible but not okay with residents to do so.
- Concern with the potential conflicting message for the Village Center criteria. The first recommendation states it should not be visible but earlier on in the report it stated solar panels should be visible on government and institutional buildings.
- The solar panels at the Service Department as an educational tool. Can it be used as an example of a success story, especially through the financial lens?
- It is important to work with schools to put solar on the educational campus.
- City parking decks are another solar opportunity.

**SolSmart**

- SolSmart is a key piece that will provide communication outreach that will be helpful. SolSmart will help with that. In addition, given the city was just designated as a silver-status Sustainable2050 community, SolSmart could help increase the points New Albany is eligible for.
- SolSmart can provide a rendering as well as a break down on the economic and financial impact if that is needed for a community survey.

**Other Comments**

- For residential, aesthetics is an important consideration. Many residents could be very eager to install solar panels and it would be best to put guidance out there sooner rather than later.
- Note: Community solar is not permitted under AEP territory; however, it can be done under in a rural co-op. There is a rural co-op in Licking County and the city can look into those areas if that becomes of interest.
- Solar panels on a roof can inspire people. It can make them understand what it means to be a citizen of the world that makes them think about things beyond what they see outside of their front window all of the time. It has the potential to attract folks in the community that have the funds to invest in renewable energy.
- One member said she would not add regulations or change the code at all. Her feeling is that they need to be encouraging people to do this instead of setting up limitations.
- Encouraged staff to solicit feedback from the HOAs.
- The city should be proactive with businesses in educating and encouraging them on solar panels. There could be a sustainability award.
- Concern with regard to whether it is the intent to use solar to promote something positive or whether it is to be hidden. This should be something the city is proud of. Should be proud that this is a priority of the city.
- Just because other cities are doing something, it does not mean the city has to do the same thing. This movement towards more alternative energy sources like solar is something to be proud of.
- With regard to other code standards, should steer clear of solar sound barriers.
- There should be a webpage on the city's website.
- Thinks residents and employers in New Albany are more pro-solar energy than one would think.
- Panels look better than they used to.
- Suggestion that the city conduct a survey so that they do not make it more restrictive than people are asking for.
- A conceptual rendering of what solar panels might look like on Market Street and perhaps other locations within the city could be used in a survey.

# NEW ALBANY SOLAR ENERGY INITIATIVE

Best Practices Report

## Table of Contents



**Introduction & Purpose**

The intent of this report is to provide New Albany with an overview of best practice solar applications. This report is informed by an exploration of existing solar energy in New Albany, emerging technologies in solar energy, recent legislation and incentives, and strategies implemented in peer communities around the Midwest. Using this research, a set of best practices for solar applications and recommendations for the city have been compiled to guide New Albany down the path to becoming a solar-ready community.

## Solar Energy in New Albany Today

Currently, the zoning code for the city of New Albany does not provide regulations for solar energy systems. There are no specific zoning regulations for solar panels that are applicable to residential neighborhoods; it often falls to Homeowners Associations within the city to regulate their installation. Historically, the city has used standards in the Design Guidelines and Requirements (DGRs) and accessory structures chapter to help guide the location of solar panels on the ground and on buildings. The city does require a zoning permit and electrical sub-permit for solar panels.

The city has completed one solar panel project to-date, which was the installation of 271 panels on the roof of the New Albany Public Service Complex garage in 2021. This installation came about as a result of the Engage New Albany Strategic Plan, which recommends the adoption of alternative energy sources within the city. This strategy contributes to the city's larger goal of promoting environmental sustainability in the community.

As New Albany moves toward the future of solar energy in the community, providing more detailed guidelines for solar installations will make for a much smoother design and permitting process. Looking at different types of solar use applications and analyzing how these different types of installations can fit into the context of New Albany is an important first step to understanding solar energy. This information can help the city determine what to control for in a new set of DGRs geared toward solar panels. The next page contains a summary of the different types of solar use applications.

*New Albany Public Service Complex Solar Installation*
*Source: City of New Albany*

# TYPES OF SOLAR APPLICATIONS

**Residential**

Residential solar installations are typically mounted on a pitched roof, though some municipalities allow for ground-mounted panels in residential zones. These panels are typically installed parallel to the roof in a rectangular shape. Some innovative solutions, such as solar roof tiles, are discussed later in this document.

**Commercial & Industrial**

Commercial and industrial solar panels are often installed on flat roof structures or on the ground, depending on how much space is available on the site. Flat roof systems are usually installed at an angle to maximize the efficiency of each panel. Parapets on flat roof structures conveniently hide the equipment.

**Institutional**

Institutional solar energy refers to systems installed on public buildings, such as schools, churches, governmental facilities and other municipal buildings. These types of installations are often installed in a visible location that allows the city to proudly display its commitment to clean energy and sustainability in the public realm.

## Community Solar

Community solar is an emerging trend that gives entire neighborhoods and communities access to clean energy without installing panels on individual homes. These fields of solar arrays are often run by co-ops or energy providers to collect and distribute energy to many homes without the use of fossil fuels.

## Accessory Structures

The use of solar panels on accessory structures includes a wide variety of potential uses. Carports, crosswalk lights, sheds, detached garages, pool houses, and accessory dwelling units are just some of the possibilities for accessory solar panel installations. These creative uses can be applied in private and public spaces.

# RECENT SOLAR LEGISLATION

Several new legislative changes took place in 2022 that have significant impacts on solar access in Ohio and the United States as a whole. Recent government efforts are attempting to make solar energy and other methods of collecting clean renewable energy more accessible to the general population. These measures include tax incentives for clean energy choices, investments in energy security, and protecting solar access for residents. The legislation affecting Ohio citizens include the national Inflation Reduction Act of 2022 and Ohio Senate Bill 61 regarding solar access in HOAs.

## Inflation Reduction Act

The Inflation Reduction Act of 2022 tackles many different issues, one of which is the fight against climate change. The bill aims to reduce energy costs for consumers while incentivizing clean energy, and additionally sets a goal to reduce U.S. carbon emissions by 40% by 2030. The provisions for clean energy in this bill include:

- Tax payers will be able to claim up to 30% of total cost in tax subsidies for the installation costs of residential solar energy systems as well as leased or purchased battery storage systems.
- Clean energy credits are set to last through 2024 for producing electricity from renewable sources, and through 2034 for residential clean energy. The 30% credit for nonbusiness energy property expenditures is extended through 2032.
- For the first time, publicly-owned utilities and non-profits will be eligible to claim the tax credits, which make up a large portion of energy providers in the United States.
- Overall, an estimated $369 billion will be invested at the federal level into energy security and climate change efforts.
- The bill also encourages the purchase of American-made electric vehicles through subsidies and tax credits for vehicles placed in service through 2032. Using a solar energy system to charge an electric vehicle will eliminate both fossil fuel costs and gas emissions.

## Ohio Senate Bill 61: Solar Access

Ohio S.B. 61, which took effect on September 13, 2022, protects the rights of homeowners in planned communities who wish to install solar energy systems on their property. Many Homeowners Associations (HOAs) and Condominium Owners Associations (COAs) have regulations written in their declarations in regard to solar panels. Under S.B. 61, these associations are to be limited in how they can regulate solar panels within their communities. The following is a summary of the major implications of the bill:

- Solar panels are a permissible use in planned communities unless expressly prohibited by the HOA or COA.
- Associations who do not prohibit solar panels in their communities may only place "reasonable restrictions" on the size, place, and manner of solar panel installations. The bill does not define what a reasonable restriction looks like.
- Homeowners whose HOA does not prohibit solar panels are permitted to install them if the cost to "insure, maintain, repair, and replace" the panels is covered entirely by the homeowner or if the community's declaration specifically allows and regulates the installation of solar panels within the community. The declaration must also establish the homeowner's responsibility to "insure, maintain, repair, and replace" the panels.
- Homeowners in violation of the above rules must be given written notice of the violation before a charge for damages is issued.
- Condominium owners are further restricted in that their COA declarations must also state that the condominium unit includes the roof in addition to the conditions above.

# SOLAR TRENDS AND EMERGING TECHNOLOGIES

Solar energy continues to grow and evolve as technology becomes less expensive and more widely available. More people are looking for clean and sustainable energy solutions and companies are continually delivering new innovations to the market. With new incentive programs at the federal level and more statewide funding opportunities available, the future growth of the solar energy industry demands more creative solutions and continued refinement of existing ideas. The following trends and emerging technologies in solar energy highlight some of the innovative solutions being introduced today.

## Building Integrated Photovoltaics

Building-integrated photovoltaics (BIPV) involves the aesthetic enhancement for solar products to match the appearance of a building for a more traditional or refined appearance. Many people desire a way to integrate solar energy into their homes or businesses but find the appearance of conventional solar panels to be abrasive or distracting.

Some companies offer solar skin design, a graphic skin for photovoltaic panels to create a design or match the appearance of existing roof tiles to make solar systems more visually appealing.

Solar roof shingles are typically comprised of glass solar tiles and steel roofing tiles, integrating solar energy capability into a seamless roof design. As solutions like this become more widely available, the prospect of residential solar becomes more attractive.

Clear PV glass panels have also been used for windows, skylights, building facades and more. These panels are more customizable in appearance and let sunlight into a building while they harness the sun's rays.

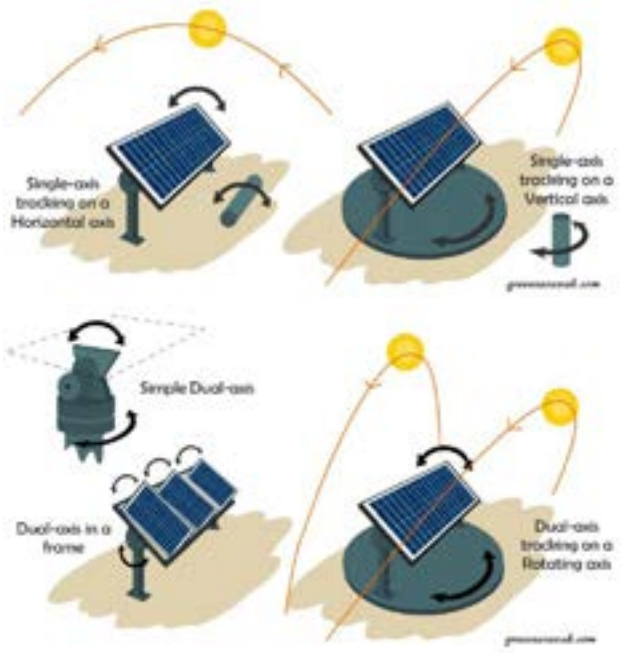

Solar shingle products provide a more seamless, less conspicuous appearance to rooftop solar than traditional solar panel installations.


This skylight in the Cuyahoga Community College STEM Building provides light to the atrium while collecting solar energy.

## Solar Tracking Mounts

Tracking mounts allow for solar energy collection to be maximized by tilting panels to follow the sun's path throughout the day. They can be single- or dual-axis depending on how much flexibility is desired and what direction the panels are facing. Tracking mounts are especially useful for ground-mounted solar arrays where there may be more obstructions between the panels and the sun.

With solar panel prices declining over 60% since 2010, the price of tracking mounts now outweighs the price of panels themselves, making tracking mounts a less likely option when space isn't a concern. However, if space is limited, a tracking mount can produce an additional 20-30% increase in production from a solar panel.




*Source: Solar Reviews*

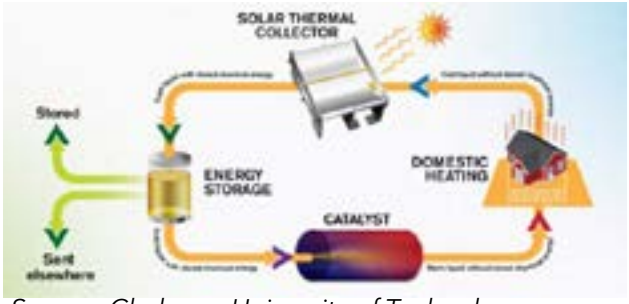
## Solar Energy Storage

Solar energy systems often require some form of energy storage because the panels alone are only able to collect energy. The other option would be for excess energy to be sent back into the grid. Some methods of storage include a solar battery or a solar thermal fuel.

Solar batteries are ancillary equipment that store harvested solar energy just like a regular battery. They are typically installed on the exterior of a building in an inconspicuous location, like the side or rear. Solar thermal fuels are an alternative to conventional battery storage. Thermal fuels store solar energy as a charged liquid rather than as heat to prevent energy dissipation over time as heat naturally cools. This allows more solar energy to be stored overnight or on cloudy days without energy being lost.

*Source: Tesla*

Solar panels and building-integrated systems are often bundled with battery storage devices, allowing energy to be stored and used later.




*Source: Chalmers University of Technology*

## Floatovoltaics

Floating PV solar panels, also referred to as floatovoltaics, are a unique installation type that taps into unused surface area on ponds, lakes and reservoirs. Floating PV panels on a body of water allows solar energy to be captured on a large swath of unobstructed "land". The concept was first introduced in Japan in 2007 and has been implemented in various locations around the globe since.

The floatovoltaic system is mutually beneficial. The cooling effect of the water keeps the panels from overheating and reduces energy spent on operating cooling mechanisms, and the water can help keep the panels from getting dirty. In return, the water management procedure is benefited by the panels which cast shade onto the water's surface, preventing excessive algae growth and inhibiting evaporation. Studies from the National Renewable Energy Laboratory (NREL) have shown that floatovoltaics implemented on just one-fourth of the United States's man-made reservoirs could produce 10% of the nation's energy needs.

This method of installing solar farms has the potential to produce a significant amount of energy from solar power without taking up large amounts of undeveloped land, and even tends to be less expensive than land installations because there is no need to clear land or treat soil in preparation for the solar array.


A water treatment facility in Walden, Colorado has embraced floatovoltaics.


The United States Army unveiled their own floating solar energy system at Big Muddy Lake at Fort Bragg in North Carolina in June of 2022. It's the first floating solar array implemented by the Department of Defense.

## Parking Lot Solar Installations

Another innovative method of applying solar energy collection to underutilized spaces is the use of solar arrays as carports covering large parking lots. These types of installations sit over top parking spaces, collecting solar energy in a large, unobstructed location while providing shade to the cars parked below. These types of solutions are especially popular in hot or arid climates such as Arizona and California, but parking lot solar installations can be effective anywhere since the lots have already accounted for land clearing and stormwater impacts.

An excellent example of a local parking lot solar installation can be found at the JP Morgan Chase McCoy Center at Polaris in Columbus. The massive array (pictured top-right) was completed in 2021 and is comprised of about 40,000 solar panels spanning over 165,000 square feet of parking lot. The panels are estimated to produce 14.8 megawatts of power, enough to run over 1,000 homes. This array comes in addition to panels installed several years prior on the building itself. Together, the panels installed on site will be able to meet 75% of the McCoy Center's  The parking lot solar project at the McCoy Center is the second largest commercial office solar installation in the world, only outnumbered by Apple's offices in Cupertino.

*Source: Doral Chenoweth / Columbus Dispatch*

The JP Morgan Chase McCoy Center at Polaris has an abundantly large parking lot which has been leveraged as an alternative energy source.

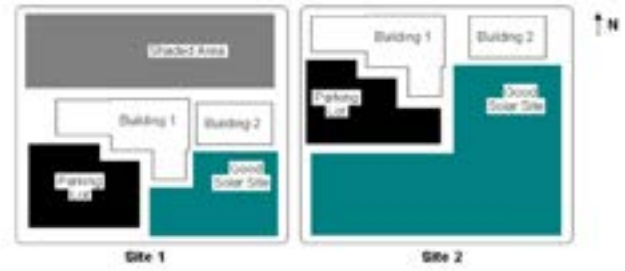
*Source: Steve Proehl / Getty Images*

## Solar-Ready Building Design

Several places around the United States including the state of California and Tucson, Arizona have added solar-ready design mandates to their legislation to ensure new construction is prepared to host solar energy systems. Solar-ready design considers multiple factors when designing a site: building orientation and shading, roof design and specifications, PV equipment and installation considerations, and initial PV system design. Ensuring these factors are conducive to solar energy applications makes for a smoother installation process in the future if property owners wish to install solar panels.

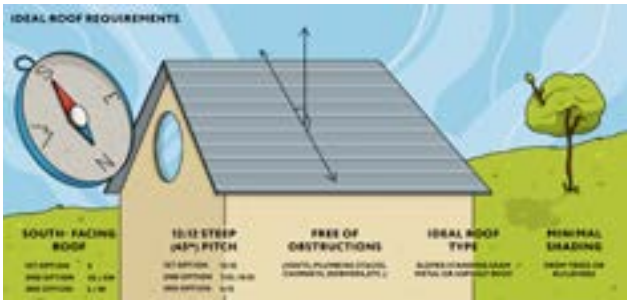
In addition to these building and site planning tenets, solar ready design should also take existing policies, zoning laws, and permitting requirements into consideration. The end goal is to ensure solar energy is viable on future sites with a hassle-free process.

*Source: NREL*




Site layout can have a significant impact on where solar panels are considered feasible, both on buildings or ground installations.

*Source: A1 Solar Store*




Various factors can make for the ideal roof conditions for a solar panel installation, including slope, material, and orientation relative to the sun.

## Photovoltaic Noise Barriers

Highways are often lined with noise barriers to reduce noise pollution into populated areas. Simultaneously, these noise barriers can reduce air pollution by containing emissions within the highway area and reducing the spread of harmful fumes. Constructing noise barriers out of PV materials provides a great opportunity to collect renewable energy in addition to the benefits of reduced noise and air pollution from highways.


The PV barrier technique has been applied to a highway in Italy, mitigating noise pollution while generating clean energy.

## SolSmart Designation Program

A popular pursuit among many communities is the SolSmart program. SolSmart recognizes cities, counties, and regional organizations who have taken up initiatives to develop their local solar markets. The program was launched in 2016 by the International City/County Management Association and the Interstate Renewable Energy Council (IREC) to award designation to local governments and regional organizations who meet the goals of the program.

SolSmart offers no-cost technical assistance to communities seeking designation. This assistance can consist of in-person or online consultations, with some communities hosting a SolSmart Advisor on-site for up to six months at no cost to the community. SolSmart criteria are organized into five categories: Permitting and Inspection, Planning and Zoning, Government Operations, Community Engagement, and Market Development. Communities can achieve designation at the Bronze, Silver, or Gold level depending on how many credits are earned in each of the five criteria categories.

The benefits of the SolSmart designation process include saving money at the local government level, fostering growth in the local economy, and helping the community gain national recognition for its solar energy provisions. More information on the program can be found at: https://solsmart.org/.


*Source: SolSmart*

Currently, there are over 400 cities, counties, and regional organizations around the country who have achieved SolSmart designation, including 11 communities and organizations in Ohio.

## Draft Recommendations for Solar Trends

### *1. Highly encourage the use of building-integrated photovoltaics in new construction and renovation projects.*

These products are much less conspicuous than traditional solar panel installations and can contribute to the aesthetic and design of the building.

### *2. Create internal criteria for when solar tracking mounts are appropriate uses.*

These mounts can be considered in proposals for commercial, institutional, or community solar uses in which space is limited and output needs to be maximized. Aesthetic concerns, excess energy use, and noise drawbacks should be considered before approval.

### *3. Allow the use of solar energy storage in all use applications.*

While excess energy can be returned to the grid through net metering, allowing for energy storage increases community resilience in the event of outages. Design Guidelines and Requirements (DGRs) can define preferred appearances or installation parameters for these storage devices.

### *4. Explore the use of floatovoltaics as an alternative to ground-mounted array proposals on applicable properties.*

Properties that have retention ponds or similar bodies of water can leverage these features to maintain more open or developable land.

### *5. Consider a solar-ready design regulation for new buildings.*

This regulation may facilitate future solar installations while abiding by the aesthetic considerations for solar panels. Regulations may include limiting the amount of shade cast on a site or encouraging south-facing roofs when applicable.

### *6. Analyze the potential for PV noise barriers as a possibility for New Albany.*

These noise barriers may be another way for industrial properties to integrate solar energy, or could even become a source of community solar along SR 161.

### *7. Consider implementing solar panels as part of the parking lot design code for future parking lots built in New Albany.*

New Albany's codified ordinances already contain a section that regulates the design and landscaping of parking lots built in the city. Solar panels could be added to these design requirements in various ways to further encourage renewable energy in the city.

### *8. Consider applying to the SolSmart Designation program to recognize New Albany's commitment to solar energy.*

# SOLAR TRENDS AND EMERGING TECHNOLOGIES

Draft Recommended Appropriate Use Applications

| | Residential | Commercial | Institutional | Village Center | Community Solar | Accessory Structures |
|---|---|---|---|---|---|---|
| Building-Integrated Photovoltaics | X | X | X | X | | X |
| Solar Tracking Mounts | | X* | X* | | X* | |
| Solar Energy Storage | X | X | X | X | X | X |
| Floatovoltaics | | X | X | | X | |
| Solar-Ready Building Design | X | X | X | X | | |
| Photovoltaic Noise Barriers | | X | | | X | |
| Parking Lot Solar Installations | | X | X | X | | |

* = conditional use

# PEER COMMUNITIES

# CASE STUDIES IN SOLAR ENERGY PROVISIONS

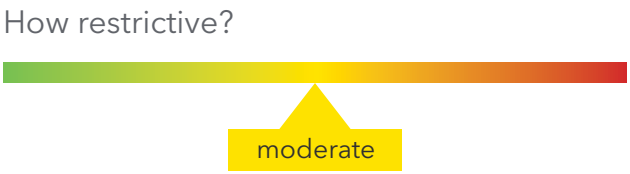
This section contains case studies from peer communities around Central Ohio and beyond, each of which New Albany may choose to look toward as a reference when building their own solar energy guidelines. Each community has a slightly different approach to regulating solar panel installations: some have updated their zoning code language to allow for solar energy, while others use design guidelines or precedents and an architectural review process to determine the appropriateness of an installation. Different permitting processes, aesthetic considerations, and solar energy incentives exist in each of the peer communities depending on the priorities of that community. The goal of these case studies is to use existing provisions in similar jurisdictions to help New Albany determine their priorities and concerns when building out solar energy guidelines and regulations. The methods of regulation seen in these communities were also used to inform the best practice recommendations found later in this document (see page 40.)

Additionally, links to each peer community's solar energy websites and other relevant resources can be found on page 58.

**The Scale Bar**

Each peer community has a scale bar which indicates how the design guidelines, zoning codes, processes and other regulatory functions of that community restrict or inhibit the installation of solar panels. This rating is informed by various factors such as:

- Whether or not solar is permitted in the codified ordinances, and which zones solar is permitted in
- Conditional use criteria for solar installations
- Types of regulations enforced on solar installations (location, setbacks, screening, color, shape, and more)
- Solar resources available online to community members
- What, if any, review processes must be followed before installing solar
- What, if any, local monetary incentives are available to offset the cost of solar panels and equipment




These considerations provide a baseline for the level of difficulty to install solar on homes or businesses. This is not to say that any of these communities are actively prohibiting solar energy, but rather to provide some insight on how each community's regulations affect the solar installation process. The goal is to use this scale bar as a reference point that summarizes how each community's policies and guidelines affect the solar panel installation process.

# PEER COMMUNITY: UPPER ARLINGTON, OHIO


Key findings:

- SolSmart Gold community
- Updated zoning code
- Front of house installations allowed
- Solar by-right accessory use
- Online checklist
- Streamlined permitting process
- Solar-trained staff
- Online map of solar installations
- Same regulations for residential and commercial structures

How restrictive?

low

Top priorities:

Access to solar energy

Expedited process

Promote solar industry

Upper Arlington is one of Central Ohio's leaders in sustainability. The city has many different programs surrounding renewable energy and natural resource conservation that set it apart from other communities in the region.

Upper Arlington is Ohio's first SolSmart Gold certified community. This recognizes the city as a leader in solar energy development. The city's policies and processes related to solar energy are not particularly restrictive when it comes to design or procedure, making it one of the easier places for residents to install solar energy systems on their properties.

In Central Ohio, Upper Arlington is one of the few communities to allow street-facing rooftop solar panel installations on homes and businesses without having to apply for code variances or submit designs to a review board. The city maintains a map of solar energy systems that have been installed since 2017 to show how their policy changes and streamlined process have made it easier for residents and business owners to go solar.

## Zoning Code Regulations

Upper Arlington's zoning code has few restrictions and regulations which make it easier for residents to install solar panels. Some regulations include:

- Ground-mounted solar panels larger than 2 square feet in area may be located in a rear or side yard only, must maintain a 10-foot setback from property lines, and be fully screened from adjacent properties.
- Roof-mounted panels are expressly permitted "on any principal residence, detached garage or accessory structure."
- Solar panels installed on a pitched roof may not project vertically above the roof peak.
- Solar panels installed on a flat roof may not project more than 5 feet above the roof surface.
- The code does not provide different regulations between residential and commercial uses.

## SolSmart Designation

Upper Arlington has implemented various policies and resources that helped the city achieve SolSmart Gold designation. Some of the criteria met include:

- An online permitting checklist has been made available online for community members and solar installers to reference.
- The city identified and resolved restrictive language in the local zoning code that was intentionally or unintentionally inhibiting solar energy development.
- The updated code allows solar by-right accessory uses in all zones to eliminate the need for special permits or hearings.
- Inspection and permitting staff in the city are trained in solar photovoltaic (PV) technology.
- A streamlined permitting process has been implemented for small PV systems.

# PEER COMMUNITY: GERMAN VILLAGE, OHIO

Key findings:

- Design guidelines
- Historic district preservation
- Architectural review process
- Stricter regulations than city zoning code enforces
- No publicly visible solar panels
- Solar panels on non-historic parts of buildings
- No mention of regulations for commercial buildings
- No mention of ground-mounted panel regulations

How restrictive?

high

Top priorities:

Historic preservation

Maintain community character

Regulate design

German Village is a historic district in Columbus, meaning the city of Columbus is responsible for code enforcement in the district. But with the distinct character and rich history of the neighborhood, many residents feel that the architectural charm of the area needs to be protected. Instead of relying on zoning code for solar panel regulation, German Village uses historic preservation design guidelines and an architectural review process for exterior changes to historic homes. These guidelines and review processes help maintain the historic character and aesthetic of the neighborhood.

The German Village Society has a page on their website outlining the benefits of solar energy systems and some of the guidelines for solar panel installations in the neighborhood. German Village generally encourages residents to implement solar to improve the sustainability in the neighborhood, but there are many aesthetic considerations that will need to be approved by the German Village Commission before proceeding. More information can be found here: https://germanvillage.com/making-german-village-even-greener-solar-panels/.

### German Village Commission Approval

Any exterior changes to buildings in the neighborhood must be submitted to the German Village Commission, the body responsible for architectural review in German Village. Applicants must receive a Certificate of Appropriateness (COA) from the Commission before any exterior modifications are made. This process ensures a few different things:

- Any changes to the neighborhood remain consistent with German Village Guidelines.
- Changes made to historic properties are appropriately documented.
- Solar panels are not visible from the public right-of-way.
- Solar panels do not detract from the historic character of the home.
- The guidelines used to determine appropriateness make no mention of different regulations for commercial properties in the district.

### National Park Service Historic Preservation Guidelines

German Village's criteria for solar energy are informed by the National Park Service's Rehabilitation Standards and Guidelines for solar technology. Some of their recommendations include:

- Install solar panels on the non-historic portion of the house when possible.
- Implement a low-profile installation to keep solar panels out of view from the public right-of-way.
- Ensure the solar energy system does not damage the historic character or materials of the home.
- Install solar panels parallel to the roof to reduce visibility.

For a full list of NPS's standards and guidelines on solar technology, visit https://www.nps.gov/tps/standards/rehabilitation/guidelines/solar-technology.htm.

# PEER COMMUNITY: WESTERVILLE, OHIO


Key findings:

- Updated zoning code
- Solar rebates
- Front of house installations allowed
- Design requirements written in zoning code
- Regulated appearance for panels
- Building and zoning permitting process
- Same regulations for residential and commercial structures

How restrictive?

low

Top priorities:

Regulate design

Access to solar energy

Monetary incentives

Westerville is another Central Ohio community that allows for solar panel installations on the fronts of buildings in their solar energy guidelines, although the city is not SolSmart designated like Upper Arlington. Westerville's solar energy guidelines can be found in the city's zoning code.

In addition to the zoning regulations, Westerville also has a Commercial Solar Rebate Program that encourages businesses to implement solar energy by offsetting the cost of installation for commercial partners. The rebate program offers $.10 per watt up to $10,000.

American Municipal Power, in partnership with the Westerville Electric Division, offers the EcoSmart Choice program which gives Westerville customers the option to join and offset their monthly electricity usage with renewable energy for a small additional fee.

Westerville's detailed regulations on solar panel installations combined with the various incentives and rebates available to the community provide a nice balance between regulating design parameters and encouraging clean energy in the city.

**Zoning Code Regulations**

Limitations on solar energy in Westerville include:

- Zones where solar is permitted

  Flat roof installations not visible from any street are permitted in all zones.

  Pitched roof installations are permitted in all zones except Non-residential Planned Districts and Uptown Zoning District.

  Roof-mounted systems in Planned Zoning Districts (except residential planned districts) and the Uptown Zoning District are conditional uses; these require adherence to additional design guidelines and Planning Commission approval.

  Ground installations are conditional uses in all zoning districts that require additional design guidelines and Planning Commission approval.
- Roof installation limitations on location, height, appearance
- Ground installation limitations on setbacks, screening, and maintenance

Roof-mounted solar systems are to be installed in a regular quadrangular shape and may not project vertically from a pitched roof. Flat roof installations may project vertically as long as they are not visible from the street.

Appearance regulations in the zoning code include a non-reflective coating, uniform color and appearance, structural supports that do not extend more than five inches from the roof surface, and all wires installed below the roof line. These regulations are the same for residential and commercial applications.

All alternative energy system proposals require a building permit from the Chief Building Official and zoning certificate issued by the Zoning Officer before a system can be installed. The application must be submitted to the Planning and Zoning Department and include the following:

- Site plans
- Description of proposed energy system
- Specifications
- Landscaping plans
- Written consent from landowner (if applicant is not owner)

All of Westerville's zoning regulations for solar panels can be found in the city's code of ordinances under section 1176.06.

# PEER COMMUNITY: DUBLIN, OHIO

Key findings:

- Solar panels permitted only in specific business districts
- Encourage sustainable businesses
- LEED Gold-certified buildings
- Ongoing discussions of residential solar panels
- Concerns for maintaining aesthetics
- In-progress zoning code amendment

How restrictive?

high

Top priorities:

Maintain community character

Showcase sustainability

Promote solar industry

At the time of this report, the city of Dublin currently has very little legislation that regulates solar energy within the community. According to a recent Neighborhood Association Leadership meeting, solar panel regulations exist within the Bridge Street District, West Innovation District, and the Dublin Corporate Area.

The city has long remained silent on solar energy in all other residential and commercial applications, which is a concern among many community members who are looking for solar panel guidelines that pertain to their homes or businesses. The Planning and Zoning Commission has been having ongoing conversations related to a code amendment to define regulations on solar panel installations in all applications. As of the Commission's October 20, 2022 meeting, the motion to write a code amendment has been approved. The city is looking to regulate residential and non-residential applications using the same criteria except for allowing larger ground-mounted installations in non-residential zones. The Commission's desired regulations include only allowing rooftop solar on side- or rear-facing surfaces, requiring solar panels match the color of the roof, and screening for ground-mounted installations.

## Existing Regulations in Special Districts

According to a recent Neighborhood Association Leadership meeting, solar panel provisions are in place in the following districts:

- Bridge Street District
- West Innovation District
- Dublin Corporate Area

Use of alternative energy is specifically encouraged within the Innovation District. This district is given incentive to construct LEED Gold-certified buildings, which may integrate solar panels to reach this certification. In the Bridge Street District, code language specifically permits the use of alternative energy systems, with some limitations on location and screening.

The only existing aesthetic requirement for building-mounted solar panels is that the equipment should be integrated into the architectural character of the building.

## Future of Solar Energy in Dublin

The Planning and Zoning Commission's ongoing discussions on solar panels within the city have been focused on aesthetic considerations in commercial and residential settings.

The biggest concern amongst residents is that there are differing opinions on whether solar panels should be permitted on the fronts of buildings or otherwise visible to the public. Other aesthetic concerns on the manner of installation and discussions of technologies such as solar roof tiles are brought up during the recent meetings.

The discussions being held in Dublin seem to align closely with New Albany's concerns for preserving community character. As Dublin's discussions advance and code amendments are made, the city of New Albany should continue to keep tabs on what regulations Dublin moves forward with in the future.

# PEER COMMUNITY: BEXLEY, OHIO

Key findings:

- SolSmart designation in progress
- Solar webpage with resource directory
- Zoning code update
- Architectural review process
- Front of house installations conditionally permitted
- Group bulk purchasing of solar energy
- Same regulations for residential and commercial structures

How restrictive?


Top priorities:

Maintain community character

Access to solar energy

Expedited process

The city of Bexley is committed to becoming a more sustainable community while preserving the aesthetics of their neighborhoods. The city encourages residents who are interested in renewable energy to pursue installations on their homes, and the city code includes solar zoning provisions to help residents determine how to approach solar energy installations on their individual homes.

Bexley is working to become a SolSmart designated community. The city's solar webpage outlines some of their efforts to make installing and accessing solar energy easier for residents and businesses.

Bexley announced in July of 2022 that the city would be joining the city of Columbus and Solar United Neighbors of Ohio in a regional co-op program that provides group bulk purchasing of solar energy and installation. The program welcomed members from anywhere in the Columbus area, but Bexley took an active role in promoting the co-op to community members. The co-op closed to new members on October 15, 2022 with a total of 265 members enrolled.

## Zoning Code Regulations

Bexley's zoning code outlines different requirements for rear-facing solar panels and front-facing solar panels. Front-facing installations are subject to the approval of the Architectural Review Board (ARB) and requires a site analysis that justifies the location of the installation.

Roof-mounted solar panels, regardless of location, cannot project vertically above the roof peak, nor should flat-roof installations project vertically more than four feet above the roof. Ground-mounted solar panels larger than 2 square feet are permitted in rear or side yards only, and must maintain a setback of at least ten feet from property lines. Ground-mounted and flat roof installations must also be appropriately screened from adjacent properties, as determined by the ARB and applicable design guidelines.

Installations totaling less than 2 square feet or those installed within the right-of-way by the city of Bexley are exempt from these code regulations.

## Solar Webpage

Bexley's solar resource webpage includes many useful tools for residents and business owners to utilize when exploring options for solar energy.

Checklists for the solar permitting and inspection processes are available on the website and are separated into two categories: solar panels not facing the street and solar panels facing the street. This resource guides applicants through all the necessary steps for their installation.

The webpage also provides links to different resources including where to find a contractor, financing and incentives available at federal and state levels, consumer protection information, state policies related to solar access and solar rights, and a solar map for determining the solar potential of a specific building or property. This resource is extremely user-friendly and helpful for anyone in the community considering solar energy.

# PEER COMMUNITY: SHAKER HEIGHTS, OHIO

Key findings:

- Design guidelines
- Architectural review process
- Solar webpage with resource directory and step-by-step guide
- No mention of solar panels in codified ordinances
- Historic preservation focus
- All solar installations conditionally permitted
- Same design precedents for residential and commercial structures

How restrictive?

high

Top priorities:

Maintain community character

Regulate design

Historic preservation

Shaker Heights, a suburb of Cleveland, is known for having strict zoning and building codes that maintain the character and aesthetic of the community. To maintain the beauty of Shaker Heights while encouraging sustainable practices and solar energy, the city has provided various resources to help community members decide whether solar is the right investment for their home or business.

The city of Shaker Heights does not mention solar panels at all in their zoning code due to the diversity of homes and commercial buildings found within the city. Instead of trying to implement standard rules for installation on every type of home or commercial building, all solar installation projects are submitted to the Architectural Board of Review (ABR) and approved or denied on a case-by-case basis.

Like Bexley, the city maintains a solar webpage which is titled the "Solar Guide." The webpage includes information and resources covering the various steps involved in the solar installation process.

**Solar Guide for Residents**

As mentioned above, Shaker Heights provides a solar guide to residents interested in solar energy systems for their properties. Sections of this guide include first steps, getting quotes, installation, and understanding the rules of solar installation in the city.

The guide suggests home and business owners invest in an energy audit and to inspect their roof to ensure solar is an appropriate and viable next step. From there, residents should obtain quotes from multiple installers to survey their options, and the city provides a list of installation companies that serve the area. Considerations for inquiring with installers are also listed on the webpage.

Finally, the solar guide outlines the precedents for solar installations that have been put in place by the Architectural Board of Review (ABR), the body responsible for reviewing all solar installations in the city.

**Architectural Board of Review**

Since there is no language in Shaker Heights' codified ordinances regarding solar panels nor is there a written set of design guidelines and recommendations, solar panel installation projects are instead reviewed and held to various precedents set by the ABR. These precedents include:

- The ABR prefers residents not place panels on the front of the building.
- The ABR prefers black solar panels and supporting structures.
- Panels should be flat to level with the roof and about 6 inches off the roof.
- Panels should be installed in a regular pattern on the roof.
- Electrical panels and converters are located in an unobtrusive location, like the back of the building.
- Lines are run inside the building, or if outside, enclosed in conduit matching the house color and placed in an unobtrusive area.

# PEER COMMUNITY: CARMEL, INDIANA

Key findings:

- SolSmart Silver designation
- Updated zoning code
- Improved permitting and inspection process
- Solar webpage with resource directory
- Education and engagement efforts
- City-owned solar arrays
- Same regulations for residential and commercial structures

How restrictive?

low

Top priorities:

Access to solar energy

Maintain community character

Showcase sustainability

The city of Carmel, Indiana is a suburb north of Indianapolis that is dedicated to fostering a more sustainable community. In 2021, Carmel issued a statement announcing its commitment to becoming a SolSmart-designated community. The goals outlined in this statement included a review of the current permitting processes and best practices, a revision of the planning and zoning process to enhance solar energy options without compromising history or character, and supporting local solar energy development through education and engagement efforts, including group purchase programs.

Through various efforts, the city of Caramel achieved SolSmart Silver designation and continues to work towards promoting solar energy development in the city.

Some of the ways Carmel has become a solar-focused community include updating their permitting and inspection processes, providing online checklists, updating the city's zoning code to allow for solar, and installing city-owned solar arrays to support public utilities.

## Zoning Code Regulations

The city of Caramel updated its codified ordinances to permit solar panels as accessory uses in all zoning districts with the approval of a building permit. Panels may be ground-mounted or roof-mounted with varying regulations on each installation type. These provisions do not differ between residential and commercial applications.

Ground-mounted panels cannot be located in a front yard adjacent to a street, and must have a minimum setback of 25 feet behind the principal building's front face or principal building setback line, whichever is greater. The panels must also be 5 feet from any side or rear property line and 3 feet away from any easements.

Roof-mounted panels must be mounted to an existing or approved building and the structure cannot exceed the height limit for the applicable zoning district with the addition of solar panels.

## City-owned Solar Arrays

Carmel installed two of its own solar arrays in 2020: one at the city's water treatment facility, and another near the city's largest sewer lift station. These solar arrays help power the city's water and sewage treatment activities. Together, the two arrays are made up of nearly 3,000 panels at 365W per panel, and the systems combined generate electricity amounts equivalent to what roughly 1,200 homes would use in one year. The arrays will provide savings of $140,000 per year; with the average solar panel life span of 25-30 years, the city could save up to $1.8 million in future city utility costs.

In spring of 2021, the city arranged a dedication ceremony for the new systems with tours of the facilities and educational materials. These measures help Carmel educate its residents on the benefits of solar and showcase the city's commitment to sustainable practices and clean energy.

# PEER COMMUNITY: NAPERVILLE, ILLINOIS

Key findings:

- SolSmart Silver community
- Updated zoning code
- Technical regulations based on electricity usage and utility connection standards
- Solar rebates and grants
- Historic district guidelines
- Regulations for building-integrated and building-mounted installations
- Different sizes permitted for residential and commercial ground-mounted systems

How restrictive?


Top priorities:

Monetary incentives

Maintain community character

Expedited process

Naperville is a suburb of Chicago that was also recognized as a SolSmart Silver community in 2019. The city is committed to environmental sustainability and has been working to reduce barriers to solar energy growth for Naperville residents.

Naperville's solar guidelines cover many different topics from utility connection standards and load calculations to zoning regulations and historic district guidelines. But even with these restrictions, the city has made solar energy more accessible for residents and businesses within Naperville through a variety of initiatives.

Like many other communities, Naperville has updated its zoning code to include provisions for solar energy and provided a permitting checklist for solar customers. One thing that sets Naperville apart from other peer communities is that the city's zoning code creates separate provisions for building-integrated solar energy systems and building-mounted systems. This distinction recognizes the innovations of things like PV glass and solar roof tiles as more aesthetically cohesive and acceptable applications of solar technology.

## Zoning Code Regulations

Building-integrated, building-mounted, and small-scale ground-mounted systems are permitted in all zoning districts in Naperville. Large-scale and medium-scale ground-mounted systems are permitted in all business and industrial districts, but can be authorized as conditional uses in residential districts.

Building-integrated systems have no regulations besides the approval of the Director of Public Utilities and the Director of Transportation, Engineering and Development.

Building-mounted systems must get approval from the same authorities, and may extend up to 3 feet above the maximum building height on flat roofs. Pitched roof installations must conform to the height of the existing roof.

Ground-mounted systems may not exceed 8 feet in height and must maintain at least a 5-foot setback from property lines. Ground installations are not permitted in a front yard or corner side yard, nor may they be located in any public easement.

## Funding for Renewable Energy

In addition to any federal or state funding available to Illinois residents, the city of Naperville offers some local funding opportunities for solar energy.

City of Naperville Electric Utility offers rebates ranging anywhere from $1,000 to $3,000 to homeowners who purchase and install either roof-mounted solar panels or a solar water heating system to their home. Residents need only to fill out an online application and provide any supporting documents to be eligible for the rebate program.

The Naperville Renewable Energy Program is a grant opportunity for non-residential customers to receive financial assistance for their renewable energy projects. Grants are up to $50,000 maximum reimbursement or 50% of the applicant's total project cost. Award amounts may not exceed the total project cost.

## Peer Community Codes and Guidelines Summary

The following pages contain a consolidated summary of each peer community's regulations and guidelines for solar panel installations within their jurisdiction. This is meant to be a quick reference point to use for comparing solar panel provisions across the different peer communities and identifying common regulation parameters. The summary is broken out into three sections: General Regulations, Roof-mounted Regulations, and Ground-mounted Regulations. Each section outlines how each community approached regulations for various factors such as setbacks, screening, and panel location, size and height. Any community listed as "N/A" for a section does not necessarily mean there are no limitations; rather, that city does not explicitly define any limitations for that factor in their zoning code or design guidelines.

# PEER COMMUNITIES

## Codes and Guidelines Summary

| General Regulations | |
|---|---|
| Zones where solar is permitted | |
| Upper Arlington | All zoning districts |
| German Village | N/A |
| Westerville | Flat roof installations not visible from right-of-way permitted in all zoning districts<br>Pitched roof installations permitted in all zoning districts except Non-residential Planned Districts and Uptown Zoning District; can be permitted as a conditional use in these zones with additional regulations<br>Pitched roof installations may be administratively approved in Planned Residential and Planned Neighborhood Districts unless prohibited by underlying zoning to a property<br>Ground-mounted installations are conditional uses in all zoning districts |
| Dublin | Permitted only in the Bridge Street District, West Innovation District, and Dublin Corporate Area<br>Code amendment in progress to allow solar in more zoning districts |
| Bexley | All zoning districts |
| Shaker Heights | Conditional use in all zoning districts |
| Carmel | All zoning districts |
| Naperville | Building-integrated installations permitted in all zoning districts<br>Building-mounted and ground-mounted permitted in all Business Districts and Industrial Districts<br>Building-mounted and small-scale ground-mounted permitted in all Residential Districts<br>Large-scale and medium-scale ground-mounted systems may be conditionally permitted in Residential Districts |
| Aesthetic considerations | |
| Upper Arlington | N/A |
| German Village | All installations are subject to architectural review and approval of the German Village Commission |
| Westerville | All panels must have a non-reflective coating to reduce glare<br>Must be uniform in appearance and color<br>Mounting brackets and structural supports shall not extend more than 5 inches above the roof surface and shall be covered in a manner architecturally compatible with the building |
| Dublin | Building-mounted solar panel equipment should be integrated into the architectural character of the building in zones where currently permitted |

# PEER COMMUNITIES
## Codes and Guidelines Summary

| | |
|---|---|
| Bexley | Color of rooftop panels should be complementary to the color of the roof<br>Flat roof installations should be appropriately screened, as determined by the Architectural Review Board<br>No glare or reflection shall be permitted that impairs the vision of a driver of any motor vehicle<br>Wiring and supporting structures should be minimally visible from right-of-way |
| Shaker Heights | All installations are subject to Architectural Board of Review approval<br>Black solar panels and supporting structures are preferred<br>Electrical panels and converters should be located in an unobtrusive location<br>Electricity lines should be run inside the house when possible, or enclosed in conduit that matches the building color and placed in an unobtrusive location |
| Carmel | N/A |
| Naperville | Systems must be maintained in good repair and operable condition at all times; the city may issue written notification when a system fails to comply with standards and give the owner 90 days to either repair or remove the system<br>Solar proposals in the Naperville Historic District must obtain a Certificate of Appropriateness from the Historic Preservation Commission |
| **Roof-mounted Regulations** | |
| Location | |
| Upper Arlington | May be located on any principal residence, detached garage, or accessory structure |
| German Village | Should not be visible from public right-of-way<br>Should be installed on non-historic portions of building when possible |
| Westerville | No portion of roof-mounted installations may extend below roof line or above highest point of roof<br>Positioned within roof plane with a proportional margin of roof between panels and roof plane edges |
| Dublin | N/A |
| Bexley | Roof- and flush-mounted panels are subject to architectural review and approval unless not visible from right-of-way<br>Rear and side locations are preferred |
| Shaker Heights | Rear and side locations preferred |
| Carmel | Must be mounted on the roof of an existing or approved building<br>Must meet the same setbacks as the principal building where the system is mounted |
| Naperville | N/A |

# PEER COMMUNITIES
## Codes and Guidelines Summary

| | |
|---|---|
| Size / Shape / Height | |
| Upper Arlington | Shall not project vertically from the roof peak or more than 5 feet above a flat roof |
| German Village | Should not be visible from public right of way |
| Westerville | Shall be either integrated into the roof layer (i.e. solar roof tiles or similar product) or flush-mounted panels attached to the roof<br>Shall not project vertically from pitched roofs; standard, low-profile mounting hardware is not considered a projection<br>Flat-roof installations may project vertically if they are not visible from any street<br>Panels should be installed in a regular quadrangular shape |
| Dublin | N/A |
| Bexley | Shall not project vertically above the peak of the roof on pitched installations<br>Shall not project vertically more than 4 feet above a flat roof<br>Configuration should be complementary to the roof line and avoid irregular shapes |
| Shaker Heights | Panels should be flat to level with the roof and about 6 inches off the roof<br>Panels should be configured in a regular pattern when possible |
| Carmel | Addition of panels may not exceed the height limit of the principal structure for the applicable zoning district |
| Naperville | Flat-roof installations may extend up to 3 feet above maximum building height limit for the subject building type or up to 5 feet above the highest point of the roof line, whichever is less<br>Pitched-roof installations must be flush with the roof |
| **Ground-mounted Regulations** | |
| Location / Setbacks | |
| Upper Arlington | May be located in rear or side yard only<br>Must maintain setback of 10 feet from property lines<br>Only utilities may install ground-mounted panels within an easement |
| German Village | Unknown |
| Westerville | May be located in rear or side yard only<br>Must adhere to setbacks of the underlying zoning district or development standards<br>In Residential Districts, setback standards for accessory structures shall be met<br>Explanation of why roof-mounted panels are not feasible is required to install panels on the ground<br>Must be configured to prevent any negative impact of glare or reflection on any neighboring property or right-of-way |
| Dublin | N/A |

# PEER COMMUNITIES
## Codes and Guidelines Summary

| | |
|---|---|
| Bexley | May be located in rear or side yard only<br>Must maintain a setback of at least 10 feet from property lines |
| Shaker Heights | N/A |
| Carmel | Must be mounted on the same lot as the principal building panels are accessory to<br>Must maintain a minimum setback of 25 feet behind the front line of the principal building or the principal building setback line, whichever is greater<br>Must maintain a setback of 5 feet from side and rear property lines<br>For corner and through lots, panels cannot be in any front yard adjacent to a street<br>Must also maintain a setback of 3 feet from any easements |
| Naperville | All parts of system shall not be located within a front yard or corner side yard, nor in any utility, water, sewer, or other type of easement<br>Must maintain a minimum setback of 5 feet from interior side and rear property lines |
| Size / Shape / Height | |
| Upper Arlington | Maximum height shall not exceed 8 feet |
| German Village | Unknown |
| Westerville | Maximum height shall not exceed 8 feet |
| Dublin | N/A |
| Bexley | Maximum height shall not exceed 6 feet |
| Shaker Heights | N/A |
| Carmel | Maximum height shall not exceed 18 feet |
| Naperville | Maximum height shall not exceed 8 feet when measured from base of pole to highest edge of system when oriented at maximum tilt |
| % Lot Coverage | |
| Upper Arlington | N/A |
| German Village | Unknown |
| Westerville | Ground area under installation must be maintained, or if hard surface is installed beneath panels, lot coverage standards in applicable district must be met |
| Dublin | N/A |
| Bexley | N/A |
| Shaker Heights | N/A |
| Carmel | Total lot coverage shall not exceed the maximum percentage for the applicable zoning district<br>Additionally, panels may not exceed 75% of the principal building's ground floor area |
| Naperville | N/A |

# PEER COMMUNITIES

## Codes and Guidelines Summary

| Screening | |
|---|---|
| Upper Arlington | Must be fully screened at grade from adjacent properties by fencing or structures (detached garage or other accessory structure) or a combination of evergreen and deciduous plantings |
| German Village | Unknown |
| Westerville | Appropriate landscaping and/or fencing is required for safety and screening purposes<br>Panels shall be appropriately labeled and secured from unauthorized access |
| Dublin | N/A |
| Bexley | Must be fully screened at grade from adjacent properties by fencing or structures (detached garage or other accessory structure) or a combination of evergreen and deciduous plantings |
| Shaker Heights | N/A |
| Carmel | N/A |
| Naperville | N/A |

# BEST PRACTICES FOR SOLAR APPLICATIONS

## Draft Application Recommendations

The best practices for solar use applications in New Albany are informed by the precedents gathered from each of the peer communities, as well as various reports and resources which outline strategies for solarizing communities. Through conversations held with the city, six different use application catergories have been identified and outlined with different best practices. The six categories are:

- Residential
- Commercial
- Institutional
- Village Center
- Community Solar
- Accessory Structures

Each category has an informed list of recommendations on how solar energy systems should be regulated in that application. These recommendations are tailored to New Albany, though in many cases it is recommended that the city follow in the footsteps of other communities. Using these categorized recommendations, New Albany can move towards drafting a code amendment or DGRs which will create provisions for solar energy in the city while maintaining character and regulating design.

## *Residential*

When it comes to regulating solar panels on residential applications, each community tends to take a different approach best suited for their goals and priorities. In the case of New Albany, preserving the character of the community is a high priority. The following recommendations outline steps New Albany should consider taking in order to regulate solar panels on residential applications.

### R.1. Encourage roof installations to be located in an inconspicuous location, such as the back or side of the house.

Like Bexley, New Albany should consider relaxing their rules for installations that aren't visible from the public right-of-way. Installations that are not visible to the public may be able to proceed straight to the permitting process, while those visible from the street could undergo an architectural review process before seeking permit approval. This process will ensure that publicly visible installations do not detract from the character of the home.

### R.2. Regulate the manner of installation of rooftop solar panels to have a regular shape and uniform appearance.

Common regulations among peer communities include setting a maximum distance from the roof for the installation, preferred colors for equipment, and mandating a quadrangular shape for the installation, just to name a few. These regulations can be tailored to the city's preferences, and the city can provide example imagery in their guidelines. Shaker Heights, Bexley, and German Village have more robust regulations that New Albany should use to inform their own regulatory tools.

### R.3. Utilize the permitting and review process to determine appropriateness of installation.

Many communities that allow solar panels require that installations obtain a permit and approval from the ARB before proceeding with the installation. New Albany should use these types of processes, but ensure they are still simple, easy, and efficient for residents to complete. The city can consider only using the ARB for front-facing installations.

### R.4. Make ground-mounted solar a conditional use requiring additional criteria on setbacks, screening, and lot coverage.

Ground-mounted panels in residential areas are uncommon and generally more conspicuous than roof-mounted systems, which is why requiring a conditional use application and stricter criteria is recommended. Most communities prefer that ground-mounted installations be located away from public view or fully screened at grade, and these may be conditions that need to be met for the installation to be approved. Setback requirements should either follow the same ones as defined in each zoning district or may have a separate setback requirement specific to solar installations, such as 5 or 10 feet from property lines. Regulating the size and height of these installations is also recommended for residential areas. Each peer community has a different height limit for ground-mounted solar, so it is recommended that New Albany considers a limit that is not overly restrictive nor too excessive and distracting. The most common limit among peer communities is a maximum of 8 feet, as seen in Upper Arlington, Westerville, and Naperville.

Among the peer communities, only two provide specific regulations for lot coverage: Westerville and Carmel. Since solar panels are usually defined as accessory uses within zoning codes, the best practice for regulating lot coverage would be to require ground-mounted solar panels to follow the area and lot coverage standards for accessory structures found in the applicable zoning code.

### R.5. Review building-integrated solar products as building materials.

Dublin's draft code amendment proposes that building-integrated materials like solar roof tiles or solar windows need not be reviewed as solar panel installations, but as building materials instead. New Albany could take a similar approach to encourage the use of building-integrated PV systems through simplified processes and different criteria for these materials. This approach is more appropriate for building-integrated systems since the primary purpose of these products is as a building material, and would not require any retrofitting or mounting hardware of a traditional solar panel.

### R.6. Consider regulations that require new homes to be "solar-ready."

Solar-ready construction makes it easier for future residents to integrate solar energy systems into their homes without compromising beauty or character. While this recommendation can be applied to all use applications within the city, New Albany should create separate guidelines for residential structures since these tend to look much different from commercial structures. Roof pitch and orientation, for example, is one factor that will be a greater concern for solar readiness in residential zones.

## *Commercial*

The commercial category may include offices, retail spaces, and industrial or warehouse buildings. Solar installations on commercial buildings are highly encouraged in many places to help these businesses and districts achieve their sustainability goals. Dublin specifically set regulations within some of their special districts to encourage solar panels which can help buildings in these areas achieve LEED certification. Encouraging more businesses and industrial facilities to implement solar may mean having more relaxed regulations in commercial and industrial zones.

### C.1. Set general regulations for the manner of installation on flat roof commercial structures.

Many commercial buildings are flat roof structures with parapets that conveniently hide mechanical equipment. This makes solar panels easy to install and conceal. Regulations for flat roof installations should state that panels should be installed at an angle from the roof for optimal performance and should not project vertically above the roof after a certain height. Bexley's regulations state that flat roof installations should not project more than four feet from the roof surface, while Naperville's limit is 3 feet and Upper Arlington's is 5 feet. Another option would be to prohibit panels from projecting vertically above the roof to avoid being seen from the public right-of-way, which is the standard in Westerville. Either setting specific height limit or simply requiring that panels are not visible from the street will ensure flat-roof buildings maintain a uniform appearance with the addition of solar panels.

### C.2. Consider looser restrictions for commercial buildings that do not have flat roof structures.

For those commercial structures that do not have flat roofs and parapets to hide equipment, similar guidelines should be applied as those for pitched roof structures such as homes, but with some loosened restrictions. Distance from the roof and quadrangular shapes can still be mandated, but loosening other restrictions like visibility from the public realm may be a possibility for commercial or industrial districts.

### C.3. Utilize the permitting and review process to determine appropriateness of installation.

A solar installation in a commercial shopping district may be subject to different scrutiny than one in a remote industrial district, therefore the permit and review process described for residential installations should also be applied to commercial buildings.

### C.4. Define setback and screening requirements for ground-mounted installations.

Some companies may want to opt for ground-mounted systems instead of roof-mounted. The city should define what setbacks and screening methods would be appropriate for commercial and industrial zones. Following the setback requirements for accessory structures in the applicable zone is a good practice for commercial and industrial zones, as well as maintaining New Albany's screening requirements for ground-mounted panels. Like Naperville, New Albany should allow for larger ground-mounted installations in commercial and industrial zones, while restricting them in residential zones.

## *Institutional*

Institutional solar applications are encouraged within communities because they set an example of renewable energy standards for the rest of the community to follow. Schools, churches, governmental facilities and other institutional buildings are all excellent candidates for large solar panel projects because these facilities are used by many people. With these buildings using large amounts of energy and serving large portions of the community, renewable energy has lots of potential on institutional sites.

### I.1. Ensure solar installations abide by the same installation regulations set out for other applications within New Albany.

The city should use the same guidelines as the ones set in residential and commercial applications when it comes to installations on institutional sites. Regulations on equipment color, quadrangular shape, projections and distance from rooftop all still apply for roof installations. It is important to hold institutions to the same standards as everyone else, if not higher.

### I.2. Make institutional solar applications visible to the community.

The one distinction that should be made between institutional solar and other applications is that it should be visible to the public if possible. This puts New Albany's openness to solar energy in the spotlight and encourages other community members to follow in the city's footsteps.

### I.3. Use institutional solar as an educational opportunity.

Institutional solar is not only on display to set an example, but also to educate community members on the benefits of solar energy. Creating educational opportunities with solar energy systems has the potential to influence more residents and neighborhoods in New Albany to invest in solar energy for their own homes once they understand it better.

### I.4. Define what types of locations qualify as institutional solar sites.

It's important for the city to define an institution before applying institutional solar guidelines to a solar project. Institutional locations are generally public spaces which may draw more attention than others and generate more awareness of the city's solar initiative. Parks, schools, churches, community centers, government buildings, and libraries are just some of the locations which many community members frequently use. Other examples of institutional locations that have been retrofitted with renewable energy include Upper Arlington's city hall and a church parking lot in Shaker Heights. Limits on what constitutes an institutional location will allow the city to determine when to apply these different design guidelines, while installations that fall outside the institutional definition may be held to other design standards, such as the commercial or Village Center guidelines.

## *Village Center*

The Village Center is New Albany's premier activity hub, with a distinct architectural style, beautified streets, walkability, and plenty of entertainment in the area. Preserving the charm of this community gathering place is extremely important to the continued enjoyment to be found in the Village Center. Solar energy can still be encouraged here, with special attention to preserving the distinct appearance of the area.

V.1. Highly encourage the use of building-integrated solar as the preferred solar energy application in the Village Center.

Solar roof tiles would be the most seamless option for solar panels to blend into the architectural character of the Village Center and should be encouraged before other options. Options like solar skin design to match roof patterns or traditional solar panels can also be considered, but are less preferable. See Naperville's different regulatory tools based on installation type; this method of regulation sets a good example of how to encourage building-integrated photovoltaics without excessive restrictions.

V.2. If traditional solar panels are proposed in the Village Center, the most preferred location is on flat roof buildings.

Traditional panels installed in the Village Center would be best suited in flat roof installations where the panels can be easily concealed from public view. Pitched roof installations, if necessary, should not be street-facing. Keeping solar equipment hidden from public view ensures the character of the Village Center is maintained. Exemptions may include institutional applications which are meant to be visible to the community. Solar carports in Village Center parking lots should also be explored.

V.3. Utilize similar regulations for pitched- and flat-roof installations as those outlined in the residential and commercial best practices.

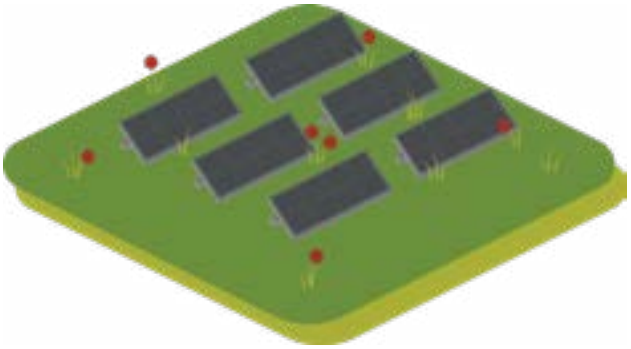
Aside from panel visibility, all the same design regulations should be enforced in the Village Center as in other applications on residential and commercial structures.

V.4. As solar technology evolves, continue to monitor new technologies and analyze whether these can be integrated into the Village Center.

New products are always being introduced and solar energy is seeing many new innovations roll out as time goes on. Keeping up with solar energy trends allows the city to track what kinds of innovations may fit into the Village Center context in the future to make the district more energy efficient and sustainable.

## *Community Solar*

Community solar farms are an alternative to individual solar energy systems. These facilities use large arrays to power entire neighborhoods without the need for individual solar panel installations on every house. These can be city-owned, utility company-owned, or realized through a community co-op. Some cities have programs that utilize solar energy to power service facilities in the city, such as the city-owned arrays in Carmel. This approach does not provide renewable energy directly to residents, but the panels can lead to utility cost savings.



### S.1. Determine what zones would be appropriate for a solar farm.

According to the Department of Energy, community solar arrays are often located strategically in off-site areas where the grid can benefit the most from a solar boost. New Albany should examine their existing zones to see if the city has any viable property for community solar projects.

### S.2. Ensure code updates allow for the option to pursue a community choice aggregation program.

Community choice aggregation (CCA) programs, also known as municipal aggregation programs, enable local governments in certain states with CCA-enabling legislation to obtain power for the community from an alternative provider while still using the existing transmission and distribution services. Ohio's legislation allows for CCA programs, meaning New Albany can use this program to purchase energy from a renewable source for its residents and businesses.

Clean Energy Columbus is the community choice aggregation program for the city of Columbus. The program is open to any resident or small business in Columbus utilizing 700,000 kWh per year or less who is served by AEP Ohio. Clean Energy Columbus provides 100% clean, renewable energy and quality service with the goal of providing all Ohio-based clean energy by 2024. The program has been active since June of 2021.

The city of Worthington also has an electric aggregation program offered for residents through a partnership with AEP. Eligible residents and small businesses were automatically enrolled at the beginning of the program and again in April of 2022 when more properties became eligible for the program unless those residents or small businesses opted out. This program has led to Worthington being recognized by the EPA as a Green Power Community.

New Albany should keep this option open to the community when updating the zoning code to allow for solar energy. This will ensure an efficient process if a CCA program is desired by the city in the future.

## *Accessory Structures*

Solar panels do not need to be installed exclusively on primary structures. There are many creative accessory uses for solar panels. Carports, electric vehicle charging stations, garages, sheds, crosswalk lights, and bus shelters are some of the many unique places where solar panels can be installed. While they may not generate as much energy as a larger installation on a home or business rooftop, these accessory uses can be used in scenarios where traditional rooftop or ground installations aren't viable.

### A.1. Set less restrictive standards for accessory structure solar installations.

Accessory uses for solar panels often involve smaller systems and structures that are less conspicuous than rooftop installations. Requirements for appearance can be relaxed on installations such as those on sheds or detached garages that sit behind homes. More scrutiny may be applied to installations of carports or other street-facing applications, but some design guidelines in place for these uses will help solar customers determine what is permissible in their neighborhood.

### A.2. Apply solar panels to accessory structures in the public realm.

Putting solar panels in parking lots, EV charging stations, or atop bike racks and crosswalk lights are some small ways for New Albany to continue exhibiting its commitment to sustainability.

### A.3. Provide regulation exemptions for solar panel installations under a certain size.

Some jurisdictions, like Bexley, do not observe their typical standards on installations smaller than 2 square feet. New Albany can implement a similar rule using the same or different criteria to expedite the installation of small solar energy collectors.

# SOLAR USE APPLICATIONS (DRAFT)

Recommended Installations and Design Guidelines

| | Residential | Commercial | Institutional | Village Center | Community Solar | Accessory Structures |
|---|---|---|---|---|---|---|
| **Recommended Allowed Solar Installations** | | | | | | |
| Roof-mounted panels - pitched roof | X | X | X | | | X |
| Roof-mounted panels - flat roof | X | X | X | X | | X |
| Ground-mounted panels | X* | X | X | | X | |
| Building-integrated PV materials | X | X | X | X | | X |
| **Design Criteria** | | | | | | |
| Roof-mounted allowed on front faces of buildings | | X* | X | | | X |
| Ground-mounted allowed in front yard | | | X* | | | |
| Require regular quadrangular shape on pitched roof | X | X | | | | X |
| Screening for ground-mounted panels | X | X | | | X | |

* = conditional use

# SOLAR USE APPLICATIONS (DRAFT)

Recommendations

| | |
|---|---|
| **Residential** | |
| R.1 | Encourage roof installations to be located in an inconspicuous location, such as the back of the house. |
| R.2 | Regulate the manner of installation of rooftop solar panels to have a regular shape and uniform appearance. |
| R.3 | Utilize the permitting and review process to determine appropriateness of installation. |
| R.4 | Make ground-mounted solar a conditional use, and require setbacks and screening as criteria for approval. |
| R.5 | Review building-integrated solar products as building materials. |
| R.6 | Require that new buildings be "solar-ready." |
| **Commercial** | |
| C.1 | Set general regulations for the manner of installation on flat roof commercial structures, including angle of installation and maximum height. |
| C.2 | Consider allowing pitched-roof structures to have solar panels visible from the public right-of-way in commercial and industrial settings. |
| C.3 | Utilize the permitting and review process to determine appropriateness of installation. |
| C.4 | Define setback and screening requirements for ground-mounted installations. |
| **Institutional** | |
| I.1 | Ensure institutional solar installations abide by the same installation regulations set out for other applications within New Albany. |
| I.2 | Make institutional solar installations visible to the community. |
| I.3 | Use institutional solar as an educational opportunity. |
| I.4 | Define what types of locations qualify as institutional solar sites. |

# SOLAR USE APPLICATIONS (DRAFT)

Recommendations

| | |
|---|---|
| **Village Center** | |
| V.1 | Highly encourage the use of building-integrated solar as the preferred solar energy application in the Village Center. |
| V.2 | Give preference to flat-roof installations over pitched-roof installations, and require that pitched-roof installations be fully concealed from public right-of-way. |
| V.3 | Utilize similar regulations for pitched- and flat-roof installations as those outlined in the residential and commercial best practices. |
| V.4 | As solar technology evolves, continue to monitor new technologies and analyze whether these can be integrated into the Village Center. |
| **Community Solar** | |
| S.1 | Determine what zones would be appropriate for a solar farm. |
| S.2 | Ensure code updates allow for the option to pursue a community choice aggregation program. |
| **Accessory Structures** | |
| A.1 | Set less restrictive standards for accessory structure solar installations. |
| A.2 | Apply solar panels to accessory structures in public spaces (park structures, bus shelters, etc.). |
| A.3 | Provide regulation exemptions for solar panel installations under a certain size. |

# NEXT STEPS

**(DRAFT)**

## *1. Adopt a resolution for the city to pursue solar energy regulations that outlines the goals of the initiative.*

Include key points related to the importance of encouraging renewable energy. These key points may highlight the benefits of reducing emissions, the desire to attract local companies who are part of the solar industry, or how solar energy brings positive recognition to the city. This resolution will help set out the desired outcomes of the city as it moves toward adopting solar regulations.

## *2. Develop Design Guidelines and Requirements (DGRs) for solar panels in New Albany based on the application/use best practices outlined previously in this document.*

Break up the DGRs into six sections to set different regulations based on use application as each category was described earlier in the document:

- Residential
- Commercial
- Institutional
- Village Center
- Community Solar
- Accessory Use

These DGRs can establish such regulations as location, arrangement, color, screening, setbacks, and size of solar energy equipment. Including precedent and best practice imagery in these guidelines will help community members and solar installers better understand the aesthetic considerations the city is concerned about. Opting for DGRs provides the opportunity to make necessary information more accessible and user-friendly, and the ability to provide more detail on the kinds of aesthetic concerns New Albany is trying to preserve. The city may want to include some guidelines for the maintenance, upkeep, and replacement of solar panels in addition to the design and installation guidelines. It's important not only to ensure solar panels are installed in an acceptable manner, but also that panels are being well-maintained and continuing to meet New Albany's design standards.

## *3. Add solar panels as a permitted accessory use in all zoning districts within the Codified Ordinances.*

Currently, the New Albany city code does not contain any language regarding solar panels. Once the DGRs are developed, the Codified Ordinances should be updated to state that solar panels are permitted in all zones and refer users to the DGRs to help them proceed with solar installations in the correct manner. This step is important in creating clear, concise regulations on solar energy within the city.

This can be approached in different ways: some communities grant explicit permission for solar panels in the language for each individual zoning district, while other cities provide their permissions for solar in a separate section which applies to all zoning districts.

## *4. Provide a clear permitting process for reviewing applications and performing inspections on solar energy systems.*

The city of New Albany prides itself on having a quick and efficient permit review process, so it's important to uphold this standard under the new provisions for solar energy. Steps to ensure easy permitting and inspection processes include:

- Provide an online checklist for permitting requirements.
- Adopt an online permit submission process.
- Train solar inspectors on city staff for reviewing applications and performing inspections on solar energy systems.

All of these steps can make the solar installation process faster and easier for both the city and the residents of New Albany by consolidating paperwork into an online platform, providing specific, clear steps for solar customers to follow, and educating staff members on solar energy systems to strengthen the city's review process.

## *5. Create a page on New Albany's website dedicated to solar energy resources to increase awareness of solar energy regulations within the city.*

Having all solar resources located in one convenient online location makes the solar panel installation process easier for community members. This webpage can provide links to the Design Guidelines and Requirements, permitting and inspection checklists, best practice imagery, local solar energy installation companies, or even a step-by-step guide for residents to determine whether solar energy is right for them. This webpage becomes a great place to showcase New Albany's commitment to solar energy.

Several of the peer communities have good examples of these types of webpages, including Shaker Heights, Bexley, and Naperville.

## *6. Continue setting the precedent for solar energy systems in New Albany by implementing renewable energy improvements for city facilities.*

Implementing solar panels on city-owned buildings opens the door for more homes and businesses to adopt solar energy. These community facilities will be prominent examples of how New Albany can become more energy efficient without compromising beauty or character.

The city has already set a prime example of renewable energy standards at Bevelhymer Park with its solar installation on the Public Service building. The city should continue this precedent to incorporate more solar panels on other facilities throughout the community.

## *7. Consider implementing solar panels as part of the parking lot design code for future parking lots built in New Albany.*

New Albany's Codified Ordinances already contain a section that regulates the design and landscaping of parking lots built in the city. Existing parking lot requirements include screening and landscaping requirements to ensure parking lots maintain a particular aesthetic and do not detract from the community character. Solar panels could be added to these design requirements in various ways to further encourage renewable energy in the city. Solar-powered lights, electric vehicle charging stations, and solar carports that power facilities are some ways that solar energy can exist within these spaces.

## *8. Consider encouraging solar panels on various accessory structures and small installations (i.e. carports, sheds, pool houses, bike racks, bus shelters, etc.)*

Not only should solar panels be allowable accessory uses in the Codified Ordinances, but solar panels should also be considered on small structures such as the ones listed above. Small accessory uses in both public and private spaces encourage more creative and flexible uses of solar panels in less conspicuous locations.

# NEW ALBANY SOLAR ENERGY INITIATIVE
## Next Steps Checklist

- [ ] Adopt a resolution for the city to pursue solar energy regulations that outlines the goals of the initiative.
- [ ] Develop Design Guidelines & Requirements (DGRs) for solar panels in New Albany based on application/use best practices.
  - [ ] Residential
  - [ ] Commercial
  - [ ] Institutional
  - [ ] Village Center
  - [ ] Community Solar
  - [ ] Accessory Use
- [ ] Add solar panels as a permitted accessory use in all zoning districts within the Codified Ordinances.
- [ ] Provide a clear permitting process for reviewing applications and performing inspections.
  - [ ] Provide an online checklist for permitting requirements
  - [ ] Adopt an online permit submission process
  - [ ] Train solar inspectors on city staff to improve efficiency of city processes related to solar energy
- [ ] Create a page on New Albany's website dedicated to solar energy resources to increase awareness of solar energy regulations in the city.
- [ ] Continue setting the precedent for solar energy systems in New Albany by committing to higher renewable energy standards for city facilities.
- [ ] Consider implementing solar panels as part of the parking lot design code for future parking lots built in New Albany.
- [ ] Consider encouraging solar panels on various accessory structures and small installations (i.e. carports, sheds, pool houses, bike racks, bus shelters, etc.)

# RESOURCES AND REFERENCES

Peer Communities:

Upper Arlington:

https://upperarlingtonoh.gov/resources/sustainability-in-ua/

https://library.municode.com/oh/upper_arlington/codes/code_of_ordinances?nodeId=PT11UNDEOR_ART6DEST_S6.09ACSTUS

German Village:

https://germanvillage.com/making-german-village-even-greener-solar-panels/

https://www.nps.gov/articles/000/guidelines-for-applying-secretary-standards.htm (see Guidelines on Sustainability PDF)

Westerville:

https://www.westerville.org/services/electric/programs/commercial-solar-panel-rebate-program

https://codelibrary.amlegal.com/codes/westerville/latest/westerville_oh/0-0-0-18480

Dublin:

https://youtu.be/tURcgaKeilE (most recent code amendment discussion at PZC)

Bexley:

https://bexley.org/solar/

https://codelibrary.amlegal.com/codes/bexley/latest/bexley_oh/0-0-0-42301

Shaker Heights:

https://shakeronline.com/394/Solar-Guide

Carmel, Indiana:

https://www.carmel.in.gov/government/departments-services/community-services/solar-panels

Naperville, Illinois:

https://www.naperville.il.us/services/electric-utility/powering-our-community-for-the-future/solar-panel-guidelines/

https://library.municode.com/il/naperville/codes/code_of_ordinances?nodeId=TIT6ZORE_CH15SMWISOREENSY_6-15-5SOENSY

# RESOURCES AND REFERENCES

Solar Legislation:

Inflation Reduction Act of 2022:
https://www.huschblackwell.com/newsandinsights/a-guide-to-the-renewable-energy-provisions-of-the-inflation-reduction-act-of-2022

Ohio Senate Bill 61:
https://ohiosenate.gov/legislation/GA134-SB-61
https://www.dickinson-wright.com/news-alerts/-ohio-legislature-adopts-new-protections-for-solar-access

Solar Trends and Emerging Technologies:

https://www.nbcnews.com/mach/science/floating-solar-farms-how-floatovoltaics-could-provide-power-without-taking-ncna969091

https://www.nrel.gov/state-local-tribal/blog/posts/solar-ready-building-design-a-summary-of-technical-considerations.html

https://solarmagazine.com/solar-panels/thin-film-solar-panels/

https://www.solarunitedneighbors.org/learn-the-issues/solar-storage/

https://www.seia.org/initiatives/building-integrated-photovoltaics

https://www.solarreviews.com/blog/are-solar-axis-trackers-worth-the-additional-investment

https://e360.yale.edu/features/putting-solar-panels-atop-parking-lots-a-green-energy-solution

https://www.cnet.com/home/energy-and-utilities/why-isnt-every-parking-lot-covered-with-solar-panels/

https://pv-magazine-usa.com/2022/06/09/solar-highway-noise-barriers-to-be-deployed-across-north-america/

https://solsmart.org/how-we-help/what-is-solsmart/

Additional Resources:

https://www.energy.gov/eere/solar/community-solar-basics

https://cleanenergycolumbus.org/about-us/

https://www.energy.gov/eere/solar/local-government-guide-solar-deployment

https://www.planning.org/knowledgebase/resource/9169023/

https://www.planning.org/publications/report/9117592/