



Special Meeting Agenda

Jefferson County Planning Commission

Tuesday, December 7, 2021 at 7:00 PM

By order of the President of the Jefferson County Planning Commission, this meeting will be held live virtually via ZOOM. This meeting will NOT be a live broadcast on our website.

****Please use the following information to join the ZOOM Meeting****

Virtually via ZOOM (video or phone conference options available).

Join Zoom Meeting: <https://us02web.zoom.us/j/81559848914>

Dial by location: 301-715-8592 / Meeting ID: 815 5984 8914

Find your local number: <https://us02web.zoom.us/u/kbTrmvHiix>

1. **Public Hearing:** A proposed text amendment to the Jefferson County *Envision Jefferson 2035 Comprehensive Plan* (approved 1/14/15) to clarify and/or state that solar facilities are principal permitted uses in the rural and residential zoning districts, in accordance with WV Code 8A-3-11, 8A-3-6, and related statutes.
2. **Discussion and Possible Action:** Proposed *Envision Jefferson 2035 Comprehensive Plan* (approved 1/14/15) Text Amendment regarding solar facilities in the rural and residential zoning districts.



Jefferson County, West Virginia
Department of Engineering, Planning and Zoning
Office of Planning and Zoning
116 E. Washington Street, 2nd Floor
P.O. Box 716
Charles Town, West Virginia 25414

Email: planningdepartment@jeffersoncountywv.org
zoning@jeffersoncountywv.org

Phone: 304-728-3228
Fax: 304-728-8126

MEMO

TO: Planning Commission
FROM: Jennifer Brockman, County Planner
DATE: December 7, 2021
**RE: *Envision Jefferson 2035 Comprehensive Plan* Amendment for
12-7-21 Planning Commission Public Hearing**

Tonight's Public Hearing is to take comment on the proposed amendment to the *Envision Jefferson 2035 Comprehensive Plan*. The Planning Commission's role is to recommend the amendment to the County Commission, which is required to hold its own Public Hearing and take action on the amendment within 90 days of receipt of the Amendment. Per WV Code §8A-3-1, the general purpose of a Comprehensive Plan is to provide guidance to the County Commission to "accomplish a coordinated and compatible development of land and improvements within its territorial jurisdiction, in accordance with present and future needs and resources." After approval of the Plan Amendment, a Zoning Ordinance text amendment is anticipated to be drafted which will address the process and development details and will require additional Public Hearings at that time.

The history of the drafting of the *Envision Jefferson 2035 Comprehensive Plan* text amendment is as follows:

- A. September 2, 2021:
 - The Jefferson County Commission requested that the Planning Commission draft an amendment to the *Envision Jefferson 2035 Comprehensive Plan* in accordance with WV Code 8A-3-11, 8A-3-6, and related statutes to clarify and/or state that solar facilities are principal permitted uses in the rural and residential zoning districts.
- B. September 14, 2021:
 - The Planning Commission reviewed and discussed the County Commission's directive from 09/02/21 regarding an amendment to the Comprehensive Plan to identify and secure the role of solar facilities throughout the rural and residential zoning districts in Jefferson County, including consideration of an amendment to the Jefferson County Comprehensive Plan in accordance with WV Code 8A-3-11, 8A-3-6, and related statutes to clarify and/or state that solar facilities are principal permitted uses in the rural and residential zoning districts.
 - At this meeting, the Planning Commission also discussed the required public input process and established the following time frames:
 - September 28, 2021: a workshop to receive public input for writing the draft amendment and to provide staff direction to draft the amendment.
 - October 5, 2021: for Staff to review and discuss the proposed amendment with the Planning Commission.
 - November 16, 2021: a Public Hearing on the proposed draft amendment. (later changed to December 7, 2021)

C. September 28, 2021:

- After discussion, the Planning Commission directed staff to prepare a draft revision of the *Envision Jefferson 2035 Comprehensive Plan* to permit large scale solar facilities in the rural and residential growth districts and to have the draft by the October 5, 2021 meeting for review and consideration.
- The Planning Commission confirmed that the public could continue to submit written comments and information for the Planning Commission's consideration through the public hearing.

D. October 5, 2021:

- After review and discussion of both the Staff's recommended draft and a draft submitted by the Hough's, the Planning Commission provided feedback to staff on how to incorporate the recommendations into a single draft for consideration at a Public Hearing.
- At this time, the Planning Commission moved to change the scheduled Public Hearing to December 7, 2021 in order to allow sufficient time for the staff to incorporate the changes as discussed and the Planning Commission to review their final edits prior to the hearing and meet the legal notice requirements.

E. October 21, 2021:

- After discussion of the final draft amendment, the Planning Commission voted to accept the edits as presented by staff and to move forward public hearing scheduled for December 7, 2021.

GOALS AND OBJECTIVES

A key element of any land use planning document is the development of a statement of realistic Goals and Objectives which lay the groundwork for the recommendations and implementation strategies of the vision. As the planning process progressed, the Steering Committee grouped goals and recommendations into the following five broad elements which provide the framework for the Plan.

Land Use and Growth Management (includes Housing & Intergovernmental Coordination)
Economic Development, Employment, and Infrastructure (includes Transportation & Tourism)
Cultural, Historic, and Natural Resources, and Recreation
Education and Libraries
Finance and Public Safety (includes Impact Fees)

The Goals and Objectives of the *Envision Jefferson 2035 Comprehensive Plan* can be found in Appendix D. The Goals and Objectives were developed after the existing conditions (data and trends analysis) and issues analysis were completed and were agreed upon by the County Commission to provide direction to the Steering Committee as they continued the public input process for the purpose of developing the Recommendations of this Plan. As the Recommendations were developed, occasionally a strategy identified in the Goals and Objectives may have been determined by the County Commission to require a modification and the Recommendations may appear in conflict with the Goals and Objectives. If such conflict exists, the Recommendations are the final product of the Plan and are to be relied upon to provide guidance to the Planning Commission and County Commission in their land use and development decision making process. As such, the Goals and Objectives are a resource that reflects the evolution of the thought processes throughout the development of this Plan, but the Recommendations specify the end goal.

The five elements incorporate the components that are required and/or recommended by WV Code 8A. The components are:

Required: Land Use, Housing, Transportation, Infrastructure, Public Services, Rural, Recreation, Economic Development, Community Design, Preferred Development Areas, Renewal and/or Redevelopment, Financing, and Historic Preservation.

Recommended: History, Environmental, Tourism, Conservation, Safety, and Natural Resource(s).

A comprehensive planning document generally covers a twenty year planning horizon and is intended to reach beyond current physical, political, and institutional

constraints. The process of developing goals begins with an examination of existing conditions related to each of the categories listed above and the analysis of issues and opportunities throughout the County. The most important sources for the draft Goals and Objectives were public input from four public meetings conducted in 2013, results of an online survey available countywide, and discussion and submitted comments from the Steering Committee. For additional information related to the Existing Conditions and Public Involvement and Outreach, see Appendices B and C.

The previous four Comprehensive Plans for Jefferson County were policy based planning efforts. The *Envision Jefferson 2035 Comprehensive Plan* includes the creation of recommendations and related maps, including land use maps, which are the fundamental elements and are based on future needs and projected actions. The Future Land Use Guide will need to be viewed in conjunction with the recommendations found in the Plan when reviewing a variety of land use decisions. Foldout versions of all the maps are found in Appendix F.

One of the key concepts that a Comprehensive Plan addresses through its Future Land Use Map or Guide is the location of new development within the County. As the cost of maintaining and providing services and utilities increases, there is a need to target infrastructure and community service investments in these areas that will support new growth. The Future Land Development Map (as shown on page 15) provides a broad overview of these concepts. In Jefferson County, there are four broad types of land use activity which are identified and discussed in this Plan:

- Urban Growth Boundaries (UGBs), Charles Town and Ranson, which are locations within Jefferson County where urban scale development is anticipated over the planning horizon of Envision Jefferson 2035. Shepherdstown's adopted Growth Management Boundary (GMB) is not anticipated to have urban scale development if it remains in the unincorporated area. Therefore, the use of the term UGB throughout this document refers to the Charles Town and Ranson UGBs only.
- Six identified Preferred Growth Areas (PGAs) which are also locations within Jefferson County where urban scale development is to be targeted over the planning horizon of this Plan and a seventh PGA identified for Residential Areas identified for low and medium density residential detached housing.
- Rural/Agricultural Areas, where the Plan recommends that non-urban scale development occur and where the rural/agricultural economy is to be enhanced and promoted.
- Eight Village communities that can host increased growth, planned commercial services, and infrastructure development.

A larger version of the Future Land Development Map is available in Appendix F – Maps.

Jefferson County's percentage of arable agricultural land is 54.7%, more than any other county in West Virginia. That affords the County a rich mix of urban, suburban, and agricultural environments. With that consideration in mind, the Plan strengthens proposals related to its historic farming community's economic growth. It recommends potential amendments to the Zoning Ordinance and Subdivision Regulations, which will support a more robust, profitable agricultural and artisan economy through a diversity of uses. This Plan proposes a higher density cluster provision rather than allowing rural residential developments via the Land Evaluation Site Assessment (LESA) system / Conditional Use Permit (CUP) process; ~~and~~ to allow the use of the a more traditional CUP process in the Rural District for non-residential uses which are compatible in scale and intensity with the rural environment and that pose no threat to public health, safety, and welfare; and to allow more flexibility in multiple uses on agricultural properties to allow diversification of their businesses.

What are Goals, Objectives, and Recommendations?

Goals are general guidelines that broadly describe what the community wishes to achieve over the period of the Comprehensive Plan. Goals are generally bigger in scope than objectives.

Objectives are the types of actions or activities that are recommended in order to attain the goals.

Recommendations are implementation strategies that are specific steps that would be undertaken to achieve the goals and objectives. They can involve regulatory processes or actions that provide a means for the goals and objectives to be achieved.

Goals and Objectives are what a community wishes to achieve. Recommendations are implementation strategies of how a community looks to achieve them.

Rural/Agricultural Areas

Rural/Agricultural properties outside the UGBs and PGAs are allowed to develop using the “by right” standard of one lot per 15 acres and a cluster development of one lot per ten acres. Over the past number of years, the Zoning Ordinance has been amended to allow many additional uses in the Rural District to promote more rural agricultural uses and value added operations. The 2008 Subdivision and Land Development Regulations have been amended to reduce the site improvement standards for rural business. This Plan proposes that a holistic review of Rural zoned properties should occur that would allow for greater scope and variety of agriculture related activities and rural recreation, including the development of small or large scale solar energy facilities in the Rural areas of the County. It should be noted that regardless of location, whether in an UGB, GMB, or PGA, all Rural zoned properties shall be permitted to undertake the activities noted above. Additionally, this Plan proposes that the Zoning Ordinance be reviewed and amended to consider a higher density for rural/agricultural lots utilizing the cluster provision instead of allowing rural residential developments via the Condition Use Permit process.

***Land Evaluation Site Assessment (LESA)
also known as the
Conditional Use Permit (CUP) process
outside the UBG or PGA***

Currently, any land use not listed as a Principal Permitted Use in the Zoning Ordinance may be proposed on any property utilizing the LESA/CUP process. This Plan recommends eliminating the LESA system and modifying the CUP process for use exclusively for non-residential development projects in the Rural Zoning District.

It is expected that urban level residential and non-residential development (and redevelopment efforts) will focus in the UGBs and identified PGAs in the next two decades. In addition, it is anticipated that the bulk of new investment by public entities will take place in these areas over the 20-year timeframe of this Plan.

Retention of Existing Zoning Map Classifications

As part of the Envision Jefferson 2035 process, there are no zoning map amendments (rezoning requests) or reductions in existing zoning rights proposed by the County. The existing zoning on any property in the County will not be affected by this process. This Plan, including the Future Land Use Guide, does not propose to reduce the rights of any property owner. The Plan and the Future Land Use Guide propose to retain vested property rights which are reflected by the Future Land Use designations. The Future Land Use Guide includes a depiction of the Growth Area Boundary that was included on the Study Area Map of the *2004 Comprehensive Plan*.

Urban Level Development Recommendations (Goal 1)	
1.	Recognize the existing vested rights, development entitlements, and permitted density levels on properties in Jefferson County.
	a. No property’s zoning status will be changed as part of this Plan.
2.	Recognize that the County Commission has the authority to make land use decisions including Zoning Map Amendments based upon the finding of consistency with the Future Land Use Guide and the recommendations of this Plan; the County Commission may determine that petitions or decisions for zoning map amendments are consistent with the Comprehensive Plan if any of the following conditions are met after the entire Plan is taken into consideration:
	a. Economic Well-Being of the County; or
	b. Error or Under Scrutinized Property on the Future Land Use Guide; or
	c. Change in Neighborhood; or
	d. Any Other Circumstance that the Governing Body determines should have been considered when drafting the Future Land Use Guide; and/or
	e. Environmental impacts are considered.
3.	Identify opportunities for small area plans and involve key stakeholders.
4.	In coordination with the Jefferson County Development Authority, utility providers, and other agencies, extend natural gas services and alternative energy sources into Jefferson County and encourage the extension of these services into new subdivisions to provide access to alternatives for heating and cooking uses.
5.	Create urban level land uses within the municipalities, UGBs, PGAs, or Villages through rezoning that is consistent with the Plan recommendations.
	a. Direct new urban level residential developments to locate in preferred areas within the municipalities, UGBs, PGAs, or Villages where water and sewer services are available.
	b. Reduce application fees for urban level development located within the areas desired for urban future growth.
	c. Establish a greater variety of zoning district options (in commercial, residential, and mixed-use zoning categories) that adhere to predictability of land use options and outcomes based on the Plan recommendations.
	d. Consider the utilization of alternatives to use-separated (Euclidean) zoning within the UGB and PGA, such as the SmartCode adopted by the City of Ranson or performance based zoning to achieve the desired land used goals.
	e. Update the County’s zoning regulations in a way that balances flexibility of use for property owners and developers while preserving the quality of life for residents.

	<p>f. Streamline development review and permitting policies by establishing a two tiered system that would allow greater power for staff review for projects of a certain size or smaller scale, etc.</p>
6.	<p>Require new urban level development to provide opportunities for multi-modal accessibility and to occur in a manner that enables connectivity to existing street and infrastructure networks or for future connectivity as development is extended to municipalities, UGBs, PGAs, or Villages.</p>
	<p>a. Create and implement the results of small area studies that would address the potential provision of infrastructure, accessibility, place making, and community facilities.</p>
	<p>b. Require viable integration of multi-modal accessibility to facilities as part of new development plans.</p>
	<p>c. In coordination with the West Virginia Division of Highways, identify key corridors where publicly owned roadways might be beneficial to the overall development of the County.</p>
	<p>d. Coordinate with existing property owners/HOA's to extend existing roadway corridors when possible to connect into adjoining neighborhoods or new development. At a minimum, this may include pedestrian, non-motorized vehicle, and/or emergency access ways.</p>
7.	<p>Encourage the location of new infrastructure (water, sewer, <u>electrical, broadband, and other</u> utilities) within municipalities, UGBs, PGAs, or Villages.</p>
	<p>a. Direct new development to be contained in municipalities, UGBs, PGAs, Villages, and areas zoned for Residential Growth (RG), where public water and sewer will be available.</p>
	<p>b. In designating where public utilities are to be delivered, enable public utility providers the ability to right size the infrastructure needed as development occurs, while considering the ability of current and future customer base to assume the debt for the infrastructure.</p>
	<p>c. Encourage that new investment by public entities be focused toward the municipal areas, including the UGBs and the PGAs.</p>
	<p><u>d. Enable to location of alternative energy facilities such as solar, wind and hydropower facilities within the Rural and Residential Growth Zoning Districts throughout the county where most of the existing electrical transmission infrastructure is located.</u></p>
8.	<p>Encourage the location of new community public facilities (such as schools, libraries, parks) within Municipalities, UGBs, PGAs, or Villages.</p>
	<p>a. Encourage the clustering of development so that the developer retains their density while dedicating community facilities.</p>
	<p>b. Locate and integrate new neighborhoods so that existing community centers, schools, parks, or libraries serve the needs of the new</p>

	development.
	c. Whenever possible, construct community facilities in areas served by public water and/or sewer.
9.	Develop incentives for the protection of historic, cultural and/or natural resources during site development.
	a. Allow the applicant the ability to achieve permitted density and/or intensity on a site while allowing for the protection of the desired resource.
	b. Allow opportunities for development to take place at a higher density/intensity than might be otherwise be possible to offset the cost associated with protection of these resources.
10.	Encourage the adaptive reuse of existing buildings and previously used sites within Jefferson County in context with their surroundings, paying particular attention to brownfield and greyfield sites.
	a. Identify specific sites and structures where adaptive reuse could occur that will assist with the redevelopment of brownfields and greyfield areas where the existing building(s) can be rehabilitated. (using sites from <i>Ranson Renewed</i> as an example)
	b. Identify and obtain funding mechanisms to remediate sites and encourage the utilization of these areas.
	c. Collaborate with the development community and interested environmental associations that can assist the County in amending its development provisions to encourage universal design, energy efficiency, and enhanced on- or off-site storm water retention.
11.	Reduce stormwater runoff, nutrients, sediment, and waste materials that reach the Potomac and Shenandoah Rivers, as well as other water bodies through development oversight provisions.
	a. Amend the parking requirements to support walkable and/or transit oriented communities per the land development standards based on site design and site amenities.
	b. Allow developers the option to provide fewer than the minimum required parking spaces if it can be determined that sufficient mitigation measures are in place.
12.	Development on US 340 South should limit any land uses of a higher intensity than current zoning allows to the area between the existing US 340 right-of-way and the proposed preferred alignment right-of-way.
	a. The area to the east of the preferred alignment is to remain zoned Rural, except the intersection of Myerstown Road and the proposed preferred alignment.
	b. Once a Record of Decision is published by the West Virginia Division of Highways, within 18 months, the Departments of Planning and Zoning

	should begin an updated land use plan for this area to reflect the commitment on the part of the state to construct the new four lane road.
	c. Require that confirmation from public service providers be submitted, as a part of the application, stating that public water and sewer infrastructure can be provided to the proposed property to be rezoned (including cost), before any zoning map amendments occur in this area.
13.	Develop design criteria and access management standards for the WV 45 corridor west of the Shepherdstown Preferred Growth Area and within the Shepherdstown Growth Management Boundary to the Jefferson/Berkeley County line.
	a. Ensure that any new development or redevelopment along this corridor occur in a manner that recognizes and enhances the gateway aspect of this corridor.
	b. Require that an additional setback from the road right-of-way be set aside to allow for a roadway widening improvement easement, a pedestrian easement to include a hard surface trail, a landscaping strip wide enough to support large canopy trees, and the subsequent start of the development. This commitment of land shall not affect the overall permitted density and may require adjustments elsewhere in the development plan. This easement area shall be required whether or not the land is conveyed to a public agency.
	c. Require that developments be configured to eliminate lots having individual access onto WV 45. Lots shall use common access easements or rights-of-way to gain access to the state right-of-way.
14.	Require all commercial/industrial zoning map amendment requests to utilize new zoning categories adopted on June 1, 2014 (or later) and discourage the use of the existing Residential-Light Industrial-Commercial (R-LI-C) District as a zoning category for zoning map amendment requests.
	a. Encourage any development in a zone that permits mixed use to be developed according to the Mixed Residential/Commercial or Mixed Office/Commercial ratios found in the land use category recommended by this Plan, unless otherwise provided in the Zoning Ordinance.
15.	Develop new non-rural residential zoning categories in line with the residential land use categories recommended by this Plan and require that all non-rural residential zoning map amendment requests utilize the new categories, after the creation of such new residential zoning districts.
16.	Collaborate with state legislators to amend WV Code 8A to allow conditions to be imposed meeting specified requirements on proposed zoning map amendments.
	a. Encourage the state legislature to include adaptive reuse of historic structures in State Building Code.

1.B. Rural Land Use Planning

Between 1974 and 2007, nearly 14,000 acres of land were removed from agricultural production in the County. Approximately 78% of these acres were lands with prime soils or soils of statewide importance. It is important that viable existing farmlands are protected. By encouraging cluster residential development, a large portion of the property will be maintained for farming activities, which would allow Jefferson County's agricultural and rural character to be maintained. Additionally, developing provisions which allow for a greater scope and variety of agriculture related activities, including the development of small or large scale solar energy facilities, with land restoration and panel removal requirements, in the Rural areas of the County would also allow the County's agricultural and rural character to be maintained. Existing farmers who want to stay on their farms, but who cannot rely on traditional farming activities to do so, have expressed an interest in leasing portions of their land for solar energy facilities rather than selling the land for permanent conversion from agriculture. By requiring that solar energy production facilities be removed after their productive lives, the land is preserved for future agricultural uses.

Below is a soils map of Jefferson County and a larger version can be found in Appendix F – Maps.

With Jefferson County's close proximity to the Washington, D.C. and Baltimore, MD Metropolitan Areas, the possibility of rejuvenated local agricultural activity exists. Niche farming has expanded for both foods and materials used in the creation of goods. As value added agricultural and rural land use activities increase, they enable the retention of the agricultural and rural environment. These value added activities assist in providing farmers with additional revenue sources to maintain the farms. The growing movement toward more localized food sources has resulted in the creation of community farmers' markets, the revitalization of local farm markets, and the expansion and awareness of community supported agriculture (CSA) programs. Similarly local restaurants and schools are increasingly utilizing local grown food in their facilities.

Rural Land Use

One of the highest priorities of the Envision Jefferson 2035 Steering Committee and the public was the desire to preserve the rural landscapes, heritage, and lifestyle that attracted many residents to Jefferson County. Comments were received that indicated Jefferson County needs to balance the demands of growth with the protection of agricultural lands. Efforts of the agricultural and artisan communities can create desirable places for tourism to thrive. In these communities, visitors can visit working farms, shop at an artisan studio, and eat at restaurants that are either located on farms or that serve food derived from local enterprises.

The form and types of development that takes place in the rural environment should be respectful of the rural culture and historic nature of the community. Many of the residential and commercial structures built in Jefferson County are similar in design and scale to types of buildings constructed in other areas of the U.S. without consideration of local architectural style.

A variety of tools and means exist to assist in the protection of lands with prime or statewide importance, soils and active farm sites. These tools range from policy, such as purchase of development rights, to land development standards that allow for flexibility of agriculture based uses and activities on the farm.

Since zoning was adopted in Jefferson County, large residential developments and non-agricultural commercial developments were permitted in the Rural District through the Land Evaluation Site Assessment (LESA) system/Conditional Use Permit (CUP) process. As a result, rural land has been converted to non-agricultural uses. For this reason, this Plan recommends that the cluster provision of the Zoning Ordinance be the preferred method of residential development in the rural zoning district. The cluster provisions should be reviewed and amended to consider a higher density for rural/agricultural lots utilizing the cluster provision. This Plan further recommends amending the Zoning Ordinance to eliminate the LESA point system and to develop procedures that would allow the use of a more traditional CUP process in the Rural District for non-residential uses. This CUP process should require a public hearing before the Board of Zoning Appeals to determine if the use is compatible in scale and

intensity with the rural environment and poses no threat to public health, safety, and welfare. Additionally, this Plan recommends that the “by right” provisions in the Rural zoning district be retained allowing one lot per 15 acres, as well as the provisions allowing the transfer of land between parent and child and the minor subdivision process² for lots of record as of October 5, 1988.

There are two types of non-residential CUPs proposed by this Plan in the Rural District which may require different types of review. One type consists of fairly intensive uses that could occur on a farm, but may not be appropriate to be a by-right use in the Rural District. The second type is for uses not on a farm or uses that are not agricultural in nature. This second type of rural CUP should only be proposed on a small portion of a rural property to help preserve farmland and open space and continue agricultural operations. This requires amending the Zoning Ordinance to eliminate the LESA system and could require modifying the CUP process.

Although members of Jefferson County’s agricultural community are active in numerous civic and community organizations, a number of farm operators stated that issues related to agriculture in Jefferson County are not understood well by the community, County staff, and community leaders. By engaging the farm community to provide greater input into the planning process, it is hoped that the needs of farm operators will be more effectively addressed by both staff and the political leadership of Jefferson County. It is anticipated that residents and staff would be in a position to learn more about the role of agriculture and the impacts of farming activities in Jefferson County. Therefore, the ability to farm in Jefferson County would be better understood. To this end, this Plan recommends that alternative energy facilities, including solar, wind, and hydropower energy production, should be authorized as a Principal Permitted Use in the Rural and Residential Districts, including provisions that require the energy companies to return the land to a condition capable of being used for agriculture after the solar panels or wind facilities are removed. Additional information about the rural economy can be found in the Agricultural and Rural Economy section of the Economic Development, Employment and Infrastructure Element.

Other appropriate uses in the Rural District are value added agricultural operations and artisan activities, as described below.

Value Added Agriculture

Farm operators and artisans who participated in the Envision Jefferson 2035 process, expressed concerns regarding regulatory requirements on existing and potential activities that could take place on farms. Some of the areas of concerns related to state and/or federal regulations to mitigate the impact of agricultural, mining, or

² Jefferson County Zoning and Land Development Ordinance, Section 5.7(D) states that any property that was a lot of record as of October 5, 1988 may create two lots and a residue every five years through the Minor Subdivision Process (page 72 of the current Zoning Ordinance, effective 06-01-14).

residential subdivisions coexist within the County’s rural agricultural areas. Home sites in these subdivisions typically have larger lot sizes than in subdivisions in the existing Residential Growth (RG) Zoning District or subdivisions served by water and sewer, but are of a smaller scale than the farms that surround them. Homes in the large lot developments and rural residential subdivisions are typically served by private well and septic systems, with a limited probability that public services will be extended to these properties in the future. The preservation of the quality of life and rural lifestyle for existing and future residents is of great importance for property owners in these communities.

The following recommendations address the needs of the agricultural community, artisan community and the rural environment.

Rural Land Use Planning Recommendations (Goal 2)	
1.	Recognize the rights and viability of existing rural residential neighborhoods.
	a. Balance artisan, home occupation, and cottage industry rights with the maintenance of the character of rural neighborhoods by considering the size and scope of all activities within designated rural neighborhoods.
2.	Allow and promote a greater range of agricultural and/or artisan uses within the rural areas on existing farmlands to incentivize the expansion of the rural economy within Jefferson County.
	a. Collaborate with key stakeholders in the agricultural community to update the County’s zoning and land use recommendations to broaden the range of permitted complementary and accessory on-farm uses.
	b. Identify types of farm activities that may be successful based on the soils on individual properties and the proximity of Jefferson County to relevant markets.
3.	Revise existing Jefferson County land use requirements and site plan standards to reduce regulatory barriers related to agricultural and/or artisan operations.
	a. Revise local regulations to balance production and marketing of artisan or agricultural products on-site, considering the individual use, size, and scale of the operation as appropriate to the property site.
	b. Waive or modify the roads, parking, and stormwater regulations on farms for on-site production and marketing enterprises, to the extent possible.
4.	Protect the viability of agricultural lands and wildlife corridors by encouraging the utilization of cluster subdivisions as the preferred form of residential development within rural areas.
	a. Allow residential development outside of the Urban Growth Boundaries or Preferred Growth Areas to develop only as rural cluster subdivisions, in accordance with existing land use rights.
	b. Amend the Zoning Ordinance to eliminate the Land Evaluation Site Assessment (LESA) system and to modify the Conditional Use Permit (CUP) process in the Rural Zoning District, which would be used for compatible non-residential development only.

	<p>c. Amend the Zoning Ordinance density provisions related to Cluster Developments to utilize a higher density such as one unit per five acres, with provisions for a maximum lot size and a mandatory retention of a set percentage of the original tract in agricultural uses, open space, and/or forest/woods, instead of allowing for rural residential development to occur using the LESA/CUP system.</p>
	<p>d. Amend the Subdivision Regulations to permit a Cluster Development of any size to process as a minor subdivision, provided that the subdivision standards shall apply.</p>
	<p>e. Encourage the creation of subdivisions that incorporate working farmland or community gardens in Development Supported Agriculture programs.</p>
	<p>f. Consider amending the provision in the Jefferson County Zoning and Land Development Ordinance related to the transfer of land between parent and child to include other family members, such as sibling to sibling.</p>
	<p>g. <u>Amend the Zoning and Land Development Ordinances to allow small and large scale wholesale or commercial solar energy development as a Principal Permitted Use in the Rural and Residential Districts and provide for the removal of facilities after they have exhausted their useful lives, so that the land may be returned to agricultural use.</u></p>
5.	<p>Encourage a variety of mechanisms to protect existing farmlands, key farm buildings, and scenic corridors within Jefferson County.</p>
	<p>a. Identify funding sources for farmland protection which could come from local, state and federal sources in addition to fundraising opportunities.</p>
6.	<p>Involve members of the agricultural community in planning and land use decisions related to rural lands within Jefferson County.</p>
	<p>a. Establish collaborative and interactive mechanisms for the Planning and Zoning staff and economic development officials to coordinate with the agriculture community that will enable the farming community’s input in the planning and zoning process.</p>
7.	<p>Explore policies in concert with the Public Service District (PSD) and municipalities regarding rural water and sewer infrastructure.</p>
	<p>a. Explore legislative options that would allow equitable distribution of cost sharing with entire development community along with rate paying base (i.e. Capital Improvement Fees).</p>

2. Economic Development, Employment, and Infrastructure Element

Economic growth and development is closely tied to the availability of natural resources, technological innovation, infrastructure, utilities, energy production and human capital as well as its geographic proximity to major population centers, adequate roads, and infrastructure. Jefferson County is ideally situated to have a vital economy. The general health of an economy can be determined by examining two components: stability and balance. Stability is an indication of the ability of a local economy to withstand the fluctuations in the regional and national economy. Balance refers to the level of diversification of a local economy. The more diversified the local economic and employment base, the more difficult it is to disrupt the local economy. Any economy that is overly reliant on a single employer or employment sector is more highly impacted by economic shifts.

The major sectors of Jefferson County's economy include traditional economic development activity, including education and high tech training; agriculture and the rural economy; and recreational, historic and heritage tourism. This section of the Plan discusses each of these sectors in detail and provides recommendations for them. Additionally, because of the critical nexus of economic development with the adequacy and extent of the infrastructure and transportation system networks, these components are included in this element as well.

Five Major Economic Sections	
2.A. Economic Development and Employment	66
2.B. Agricultural and Rural Economy	74
2.C. Tourism	83
2.D. Infrastructure	87
2.E. Transportation	97

2.A. Economic Development and Employment

According to the Jefferson County Development Authority, Jefferson County's strategic Mid-Atlantic location close to Washington, D.C. and Baltimore, MD Metropolitan Areas coupled with ready access to major transportation routes makes the County ideally situated for business, manufacturing, and industry. Jefferson County is located in one of the fastest growing areas in the United States. The County is a major economic driver in a state that boasts the nation's fourth lowest cost of doing business, low utility rates, and a highly skilled and hard-working workforce. While facilitating relocations and start-up businesses, the Jefferson County Development Authority supports and promotes existing businesses.

While there has been a significant amount of commercial development in Jefferson County since the 2004 Comprehensive Plan, it has slowed considerably in recent years. During this same time period, residential growth occurred at a more rapid rate, particularly in the early 2000's. Additionally, Jefferson County's economic

These improvements will enhance the ability of Jefferson County to compete on an economic development basis with other communities in the region.

Target Industries

Jefferson County will encourage a diversity of business types to locate within its borders. As part of these efforts, the Jefferson County Development Authority (JCDA) has identified several industries and other sectors of employment towards which incentives and programming should be targeted (in no particular order):

Jefferson County Development Authority Identified Industry Sectors	
Agriculture Development	Manufacturing
Government	Small Business
Information Technology	Tourism

Each of these target industries are currently located in Jefferson County and will benefit from retention, expansion, and attraction to strengthen each cluster. Building on these assets will give the County a strong identification of its core business strengths. While not identified by the JCDA, there are several large non-profit organizations which are a significant part of Jefferson County’s economy. This provides additional economic and employment opportunities. In addition, more regional employers are looking to acquire renewably generated electricity to meet the demands of shareholders and expected future regulatory requirements. Starting around 2020, this demand has created interest in sourcing alternative energy production such as solar energy production facilities in Jefferson and surrounding counties. These facilities will place little stress on existing infrastructure and will add substantially to the tax base.

Additionally, small businesses, which can range from restaurants and artisan cottage industries to small technology and service firms, are an integral part of the local economy and have opportunities to grow stronger.

Federal Government

One of Jefferson County’s target industries is correlated with the presence of state and federal government facilities. Since the federal government has found success with their existing local facilities, the potential for additional federal employment opportunities to locate here is greatly enhanced. The following Table lists federal facilities, many of which have had a long term presence in the County.

Federal Facilities in Jefferson County
U.S. Coast Guard Administrative Support Facility
U.S. Customs and Border Protection Advanced Training Facility
Department of State Diplomatic Security Training Center
U.S. Fish and Wildlife, National Conservation Training Center
Harpers Ferry National Historical Park

for commercial, office, and/or industrial uses that may serve to bolster Jefferson County's employment base while balancing the environmental and quality of life concerns that may arise from larger scale businesses.

Focusing Economic Development in Municipalities, Urban Growth Boundaries, and Preferred Growth Areas

Envision Jefferson 2035 expects urban level commercial, office, and industrial activity to be located in the municipalities, within the Urban Growth Boundary and Preferred Growth Areas, where the infrastructure is expected to be available to support these uses. Within the unincorporated area, the County's industrial park and properties zoned industrial are also important to the economic growth and vitality of the County. The exception to this general philosophy is to allow alternative energy facilities, such as solar energy development, as a Principal Permitted Use in the County's Rural and Residential Districts as well.

In recent years, public, and private reinvestment in the urban core of the five municipalities has occurred and is continuing to grow, as the following examples illustrate:

- The Town of Ranson received numerous grants that focus on the Brownfield Commerce Corridor that is shared with Charles Town, and includes the redevelopment of vacant industrial buildings, street and streetscape improvements, and the expansion of a key transportation corridor through Ranson.
- Shepherdstown and Bolivar/Harpers Ferry have vital core commercial areas that support the local and tourist population in the County and serve as gateways into the County from neighboring states.
- Shepherdstown and Bolivar/Harpers Ferry are a part of the Canal Towns Partnership, comprised of several communities along the C&O Canal, which is an economic development initiative with the goal of cooperatively marketing and making improvements to attract visitors to the canal's gateway communities.
- The American Public University System made substantial investment in Charles Town and Ranson, including the redevelopment of existing structures and construction of administrative buildings and parking facilities.
- Hollywood Casino at Charles Town Races has been a strong component of economic activity in the County and continues to respond to a changing market by advancing alternative entertainment and horse racing options.

These examples of collaboration between local government entities and private entities bolster local economic development opportunities and this collaboration should continue.

The County's downtown areas are concentrations of local and regional government agencies, small offices, and a limited number of small shops, restaurants, and services which serve to attract visitors and residents to the downtown areas. The

Economic Development and Employment Recommendations (Goals 6 & 7)	
1.	Expand and strengthen the existing marketing and branding of Jefferson County’s qualities, facilities, and resources to potential businesses, residents, and visitors.
2.	Collaborate with HEPMPO and other transportation agencies to identify ways to improve transportation (commuter, air, rail, and bus services) connectivity and roadways between Jefferson County and nearby states.
	a. Establish a working relationship with Washington Metropolitan Council of Governments and Loudoun County’s Transportation and Safety Commission to address highway transportation problem areas identified in both counties.
3.	Work with key stakeholders to effectively streamline Jefferson County’s permitting and development review processes in a manner that balances the protection of the public health, safety, and welfare of the community with economic development priorities.
4.	Encourage the Jefferson County Development Authority (JCDA) to identify incentives for the specified target industries on an annual or semi-annual basis.
5.	Create a business friendly environment in Jefferson County.
	a. Streamline the State licensing of various business enterprises by providing regional or satellite offices in Jefferson County.
	b. Coordinate with local and state economic development agencies to identify potential funding sources for economic development efforts.
	c. Identify opportunities for public/private partnerships (or other creative forms of collaboration) between local and state government entities and private sector investment that would result in the creation or expansion of employment opportunities and infrastructure in Jefferson County.
	d. Develop a land bank program that would enable potential economic development projects such as a large federal facility or other regionally significant employment facility.
6.	Develop methods to promote local business growth which include providing research, support, and marketing resources that would assist business start-ups in Jefferson County.
	a. Plan with stakeholders’ co-work facilities or business incubators that provide space for start-up companies along with a small network of entrepreneurs to collaborate.
	b. Expand awareness of entrepreneurs’ forums, employer open houses, and job fairs taking place in Jefferson County and the Eastern Panhandle.
	c. Encourage local municipalities and residents of the County’s villages to research and create Business Improvement Districts (BID) to implement improvements and provide services to businesses located in the district.
7.	Encourage local employers and the JCDA to improve online and offline outreach to potential employees, including County residents and individuals outside the region.

8.	Coordinate with local businesses and the JCDA to identify and utilize methods to market Jefferson County’s products within the Mid-Atlantic region, the nation, and the world.
9.	Collaborate with various state and federal agencies to attract departments or agencies that would benefit from Jefferson County’s workforce and location.
	a. Encourage state and federal agencies to consider the location of new facilities in Jefferson County within the growth areas identified in this Plan.
	b. Encourage state and federal agencies planning to build new facilities in Jefferson County to adhere to local land use regulations as part of the site design process.
	c. Encourage the utilization of existing structures or the utilization of greyfield or brownfield sites for the development of new state and federal facilities.
	d. Coordinate with state and federal facilities locating in Jefferson County so that the following land use considerations are addressed and mitigated:
	i. Existing and potential impacts caused by land uses adjacent to proposed state and federal facilities are known in advance of first construction.
	ii. Existing and potential impacts of new or repurposed facility use on adjacent lands provide adequate buffers and setbacks to surrounding uses.
10.	Implement strong and vibrant relationships between Jefferson County businesses and business related organizations and all educational resources in the County, Eastern Panhandle, West Virginia, and the Mid-Atlantic region that will promote graduating students with job opportunities in Jefferson County.
	a. Expand partnerships with all local and regional institutes of higher education that focus on programs which would further educational opportunities in the core economic sectors identified by the JCDA.
	b. Maintain and expand relationships with local businesses and local/regional education institutions to increase availability of co-op and mentoring programs between students and businesses in Jefferson County and the Eastern Panhandle.
	c. Collaborate with key business and economic stakeholders to identify and create programs that would encourage the retention of highly skilled young graduates from the County’s institutions of higher learning.
	d. Coordinate with key business stakeholders to improve employer outreach and collaboration with regional and state university/college career centers to promote Jefferson County employment and internship opportunities to students on all academic levels.
	e. Coordinate with appropriate agencies to publicize available scholarship programs for students interested in the target industries to strengthen workforce development in Jefferson County.
11	Collaborate with Shepherd University, American Public University System (APUS), and other higher education entities to identify opportunities for Jefferson County based research programs that would combine classroom learning with virtual resources.

12

Recognize that modern and innovative energy sources including solar, wind and hydropwer energy facilities provide for clean economic development in the County and are vital to the emerging local, State and National trend/need for clean electrical energy.

2.B. Agricultural and Rural Economy

One of the more significant issues expressed by County residents involved in the Envision Jefferson 2035 process was maintaining the rural economy and small town lifestyle of Jefferson County. It is important that this discussion not be framed by the concept of preservation but of creating opportunities for farms to be economically viable. This would include identifying ways to protect and enhance the farms and open spaces that provide the rural character along with the agribusinesses that have been the historical heart of the Jefferson County economy. One goal of this Plan is to maintain productive farmland soils and the rural character and economy of the County by reducing the conversion of farmland to non-agricultural based uses. Alternatively, providing other opportunities for farmers to use their land for a interim use, and then return it to farming in the future, would help maintain the County's rural economy. One option noted in this Plan maintains that allowing solar facilities to be located within the Rural zoning district is a way to preserve farms for a generation and then return the land to agricultural uses. This protects large acreage from permanent residential development, while allowing other portions of the properties to continue to farm

There must be a viable rural economy to maintain the rural landscape. The rural economy is much more than traditional farming. It includes innovative agriculture, horticulture, forestry, commercial and non-commercial equine industry, other forms of animal husbandry, tourism, rural based public and commercial recreation, ancillary rural business, ~~and~~ compatible rural institutional uses, and other profitable uses such as alternative energy production (solar, wind, hydropower). Many of these sectors are growing and collectively contribute significantly to Jefferson County's economy and provide several thousand jobs. The County's citizens benefit from the proximity of rural based activities and services and the rural enterprises benefit from nearby markets for goods and services. With this potential, the rural areas of Jefferson County should be seen as ripe for investment and reinvestment.

A key aspect of the County's rural economy is recognizing the changes in the regional and national marketplace that might affect agricultural activities at the local level. In some instances, farm operators have adapted to these changes by diversifying into additional farm based activities, changing the types of farming activities taking place on a site, or seeking to include direct sales and on-site marketing, and value added processing of crops or products. The ability of a farm operator to diversify or change their operations to meet the needs of the marketplace is an important consideration in providing a framework for the continuation and enhancement of farm and agricultural activities in Jefferson County. Consideration of an amendment to the Zoning and Land Development Ordinance to permit alternative energy production facilities to be located on large tracts of land in the Rural and Residential zoning districts should be considered as an option that may in the long run protect farms from other development.

The enhancement of the rural economy is a central focus of the rural strategy of this Plan and requires the support of the County Commission, Planning Commission and the Jefferson County Development Authority and other organizations which support the agricultural economy. A broad-based rural economy can be a net-revenue generator for the County because tax revenues generally exceed expenditures for rural properties. The County recognizes its fiscal responsibility to protect the land resource for the rural economy, to provide fundamental protection for rural businesses, to ensure prudent fiscal management of limited public resources, and to provide needed protection of the public health and safety.

Rural Economic Activities

The agricultural community in Jefferson County recommended the following priorities to strengthen the rural economy:

Agricultural Community Priorities
Diversify farm operations through the sale and marketing of value added products (such as the processing and marketing of products on-site);
Allow farm operators to work with nearby farm operators to market and sell each other's goods on each individual farm;
Allow a wider range of service activities to take place on agricultural properties.

The rural areas of Jefferson County include not only farms and residences, but also a variety of small artisan studios and other cottage industries. While the preservation of agriculture is essential to the protection of rural areas, it is also important to provide for the ability of appropriately scaled businesses to succeed. When permitting additional uses in the rural area, it is important that the size and scale of both the property and the business be correlated. The intensity of the activity permitted should directly relate to the size of the rural property which would enable larger rural properties to undertake more activities. By correlating scale and intensity of uses to the rural property size, it is anticipated that off-site impacts would be mitigated for the surrounding landowners. Some uses may require performance standards which should be incorporated into the local land use regulations.

By enabling farm operators to have more options and encouraging the creation of cottage industries that reflect the rural aesthetic, the viability of operating rural based businesses in the County's rural areas will be enhanced in the coming decades. While Jefferson County has modified its Zoning and Land Development Ordinance to allow for a greater variety of uses, additional steps might be needed to improve opportunities for farm operators to continue or expand their businesses, and for artisans and other individuals to operate small businesses that complement these activities. A streamlined process for uses with minimal impacts to surrounding neighbors should be developed.

As discussed above (see Land Use and Growth Management: Rural/Agricultural Components), significant new opportunities exist for farms located near existing electrical infrastructure to lease their land for the production of solar power. These opportunities will provide those farmers, some of whom have indicated they cannot maintain their farms without additional sources of revenue, to access new income sources and to maintain the rest of their farms in agricultural uses. By permitting the provision of alternative energy facilities as a Principal Permitted Use in the Rural and Residential zones, while requiring these facilities to provide reclamation and facility removal standards, the impacts to the rural landscape will be minimized, while allowing farming and other agricultural uses to return once the land is reclaimed.

The land use component of this Plan recognizes an example of a non-residential Conditional Use Permit (CUP) in the Rural area referred to as an Agricultural Based Economic Empowerment Area, defined as a commercial agricultural hub that is not located on a farm, but is located in a rural area and focuses on intensively supporting agricultural activity through the value added processing, holistic health and marketing of local goods. Other appropriate uses in the Rural district (some of which may require a CUP) include, but are not limited to, artisan activities; home based businesses; agricultural equipment sales, rental, and repair services; veterinary services; farm co-ops; product storage and seed supply; agri-tourism, bed-and-breakfast enterprises; farm markets, wayside stands, and similar types of uses, provided that these uses are designed in a manner compatible with the rural character of the area.

There are many creative people that live and work in Jefferson County, using their talents to create poetry, pottery, paintings, plays, performances, photographs, novels, fabric art, sculpture, carvings, installations, music and dance, and the fine art and culture of all forms. The County is home to numerous cultural and historical organizations as well as artist studios, galleries, museums, and theaters which host a number of activities and events throughout the year. These activities and organizations add to the cultural value in the County and provide economic resources for the artisan. This Plan supports the artisan community and its needs for developing a robust economic and cultural community.

While most of these types of Cottage Industries and Home Occupations are permitted by right in the Rural District, some more intense uses may require a CUP. This Plan recommends that the use of the CUP in the Rural District be limited to non-residential uses not permitted in the Rural District which are compatible in scale and intensity with the rural environment and that pose no threat to public health, safety, and welfare. Some non-agricultural/non-residential related rural CUPs should only be proposed on a small portion of a rural property to help preserve farmland and open space, and continue agricultural operations. This requires eliminating the Land Evaluation Site Assessment (LESA) system and modifying the CUP process. For additional discussion, see Rural Land Use Planning Section (page 34).

Agricultural Service Facilities

An issue expressed by members of Jefferson County's agricultural community during the planning of this document was the lack of agricultural service facilities located in Jefferson County. Farm operators currently travel to Winchester, Hagerstown, or Frederick to purchase farm machinery or to get their machinery repaired. Farmers raising livestock also need to travel out of state to sell or purchase animals at auctions. There are few large animal veterinarians in Jefferson County that can assist with maintaining the health of animals or be available in case of emergency. There are no meat processing facilities in the County and nearby out of state facilities are limited to mass production which excludes small farmers from receiving this service. The lack of service facilities could have a negative impact on the maintenance or expansion of agricultural activities in Jefferson County in the coming years.

Distribution and Marketing of the County's Agricultural Products

In recent years, there has been a change in the way farm products are marketed and sold in Jefferson County. In the past, a large number of farm products cultivated on Jefferson County farms were commodities, with little differentiation between the products of individual farm operators. Currently this is changing due to the increasing reliance of the local farm community on farmers' markets and direct sales to local and regional restaurants. There are several farmers' markets operating in Jefferson County on a weekly basis, during the growing season, at temporary sites. A permanent year-round farmers' market could provide opportunities for a winter market in a place that could also be used for the sales of arts and crafts, root crops, or value added products. Incorporating a farmers' market into a regional agricultural center complex could serve as another means of selling the County's farm products and could include dining and/or commercial kitchen facilities.

While the farmers' markets have helped individual farm operators differentiate between their products, there is still a limited local or regional identity when it comes to agriculture in the Eastern Panhandle. In some cases, individual farms have addressed this concern through the creation of an identity for the farm and/or for the product being produced. It would be beneficial to the Jefferson County rural economy if a more unified effort occurred through a shared marketing mechanism, regional branding, or the creation of common distribution and marketing facilities.

An increasing movement toward smaller farming operations of less than 40 acres in size in the County should not be discounted, even though a number of farms in Jefferson County are located on large tracts of land. According to the 2012 U.S. Agricultural Census, over half of all farms in Jefferson County provide a limited income to farm operators; however, there are opportunities for expansion of smaller farming operations. The majority of the farms in Jefferson County have the opportunity to provide a viable range of income generating agricultural activities to an individual farm operator.

Enhance Farmland Protection Activities

In 2000, Jefferson County formed a Farmland Preservation Program that is funded by a portion of the transfer tax collected when a house or land is sold. To date, this program has purchased the development rights of 3,900 acres. As mentioned in the Land Use element, the funding that is available to support the County's farmland protection program is much less than the demand from farm operators to participate in it. Since the County's farmland protection program is funded by a portion of the transfer tax, the viability of the program is subject to a widely fluctuating real estate marketplace. In times when there is a great deal of real estate activity, revenue generated for the program is strong, enhancing the ability to purchase development rights and protect farmlands. Conversely, in times when the real estate market is slow, the amount of money available for protection efforts is limited. Therefore, it is important to establish reliable funding sources to support farmland protection

activities. One option to protect farmland is to coordinate with the American Battlefield Protection program to make the most efficient use of funding resources.

To reduce the conversion of farmland, the Plan recommends that clustering should be the preferred method of any rural residential development. This would allow land owners to group lots in a traditional rural community pattern, while retaining a majority of the land for agricultural and rural economic uses. Even when the development of a residential cluster results in the loss of some farm land, the goal of the regulations related to cluster developments is to retain as much farmland as possible by adjusting the number and size of the lots in the cluster and requiring the balance of the farm (the residue) to be retained as a permanent agricultural use. Cluster developments on a property should minimize the use of high quality soils and maximize the use of less

productive agricultural land. In order to retain the maximum amount of land in farm use and rural economic activity, the open space requirement for residential cluster development shall be met by the residue which will retain no development rights.

Transportation in the Rural Environment

The County's rural road network originally evolved serving the needs of the farming community and is not intended to serve the needs associated with the higher traffic volumes and speeds required for large residential subdivisions. At certain seasons of the year conflict can be created between residential traffic and large pieces of slow moving farm equipment. The LESA/CUP system has not effectively protected the rural road network from this type of development pressure. As such, this Plan recommends utilizing cluster developments as the preferred form of residential development within the rural areas. Limiting suburban development in the rural area helps protect agricultural land use activities.

Most of the roads in the County's rural area are paved, but tend to have narrow widths, excessive horizontal and vertical curvatures, bridge and drainage problems, and poor intersection alignments. These conditions contribute to the safety concerns associated with increasing motor vehicle traffic on the rural roads. The increased residential densities that have occurred in the rural area in the past are producing additional traffic volume and requiring more maintenance of the rural road network of predominantly narrow, two-lane paved roads with existing design issues.

Utilities in the Rural Environment

The availability of electricity is an important resource to support all residential, commercial and agricultural operations in Jefferson County. The federal government is working to encourage states to develop policies that encourage an increase in the amount of power generated by alternative renewable energy sources such as solar, wind and hydropower. The location of transmission lines and substations in Jefferson County are a local resource which could provide opportunities for future renewable energy resources to connect to the power grid in an efficient manner.

Utility scale alternative renewable energy systems are large-scale installations that provide clean energy to a regional energy provider. One example is utility scale solar facilities which are commonly mounted on the ground and span across fields of land to generate electricity to assist in meeting renewable energy and sustainable energy production goals. Proximity to transmission lines and substations, elevation/slope, flood zones, wetlands, and soils all affect a site's buildability for any large scale alternative renewable energy facility.

Solar facilities are compatible with rural lands and agricultural uses as they have minimal negative off-site impacts. A primary impact of utility-scale solar facilities is the removal of rural and agricultural land from active use; however, this use can preserve the land for future agricultural use, and applicants typically state that the land will be restored to its previous condition. Generally, large scale solar facility system owners choose to lease instead of purchasing property, allowing local farmers to retain ownership of the land. Some farmers also retain portions of their land for on-going agricultural uses compatible with the solar facilities. Solar energy systems have a typical lifespan of 25-30 years; so the system owner would be paying the lease for decades, ensuring an economic contribution to the property owner for the duration of the system's life and allowing to property to revert to agricultural uses in the future if the landowner desires.

Solar energy facilities which are required to be removed upon expiration of their usable lives can provide farmers with the income necessary to retain their farms while having minimal impact on the rural aesthetic or the permanent conversion of land to non-agricultural use. Permitting these facilities as Principal Permitted Uses will also generate construction jobs and tax revenues while placing almost no strain on existing infrastructure and will thereby promote the economic well-being of the County and the Rural and Residential Districts. Additionally, the land will be reclaimed for the ability to farm the land or provide for other permitted agricultural uses in the future.

Agriculture Tourism

The rural areas of the County contribute to the local tourism economy in a variety of ways. Not least of these is the maintenance of attractive viewsheds to enhance the experience of visitors to battlefields, historic sites and villages. Tourism is addressed later in this Element on page 81.

The following recommendations provide action steps to foster and expand the diverse rural economy through a variety of policy, regulatory, incentive-based, and programmatic approaches that will protect the rural land, structures, and character necessary to advance the rural economy.

Agricultural and Rural Economy Recommendations (Goal 8)	
1.	Support West Virginia’s and Jefferson County’s “Right to Farm” policies which protect the rights of existing and future farms and farmers by developing zoning standards, other legislation, and educational programs designed to reduce potential conflicts arising from the proximity of agriculture to residential development (State Code § 19-19; Section 4.5 of the County’s Zoning Ordinance).
	a. Identify and utilize a wider variety of funding sources that could serve to expand the County’s farmland protection program.
	b. Create an educational pamphlet informing developers, realtors, and potential homeowners of the offsite impacts of living adjacent to farming activities.
2.	Enact Zoning Ordinance provisions to reduce the intensity of residential development in the Rural zone, other than by clustering, thereby protecting and increasing the investment potential and attractiveness of the agricultural lands for families, entrepreneurs, and businesses.
	a. Decrease the problems of rural traffic volume and the need for additional costly public infrastructure services in rural areas while conserving areas of the Rural zone for agricultural uses and the rural economy through support for rural cluster development vs large subdivisions of new home growth.
3.	Support the rural economy by amending the Subdivision Regulations to establish rural business site plan standards to include:
	a. performance criteria, including compatible size, scale, use, intensity, traffic capacity limits, employee limits, site design standards (i.e. buffering, siting), and standards that protect public health, safety, and welfare; and
	b. the adaptive reuse of existing historic and agricultural structures.
4.	Collaborate with the County’s agricultural community to assess the current land use regulations and determine what opportunities for agriculture might currently exist and what additional opportunities might be able to succeed in Jefferson County.
5.	Amend the Zoning and Land Development Ordinance to permit additional non-residential rurally compatible uses.
	a. Incorporate into the zoning provisions innovative agricultural uses including the creation of standards which permit flexibility in the sale of farm products and related auxiliary products.
	b. Amend local land use regulations to permit non-agriculturally related commercial uses by the Conditional Use Permit (CUP) process in the Rural zone if the use is agriculturally and rurally compatible in scale and intensity, poses no threat to public health, safety, and welfare, and if the use helps to preserve farmland and open space and continue agricultural operations.

	<p><u>c. Amend the local land use regulations to permit utilities which generate electricity by alternative renewable energy sources (such as solar, wind and hydropower) to be permitted as a principal permitted use throughout the County; provided also that developers or owners provide security guarabteeing the removal of the renewable energy facilities at the expiration of their usable life so that land may be returned to farming or other agricultural uses.</u></p>
	<p><u>e-d.</u> Require that new non-rural commercial uses that are not compatible with the dominant agricultural land use pattern locate only in the Urban Growth Boundaries (UGBs) and Preferred Growth Areas (PGAs) as identified by the future land use recommendations of this Plan.</p>
6.	<p>Coordinate with local businesses and the Jefferson County Development Authority (JCDA) to brand and market Jefferson County farms and products by identifying and linking potential partnerships and matching suppliers with potential local and regional markets.</p>
	<p>a. Conduct market research on high-value agricultural products, ancillary farm businesses, and other rural economic uses such as farm agri-tourism, retreats, and country inns;</p>
	<p>b. Develop and expand, in conjunction with the Jefferson County Convention and Visitors Bureau, brand identification of Jefferson County farm products;</p>
	<p>c. Provide more alternatives to promote rural tourism and rural land uses.</p>
7.	<p>Work with Jefferson County’s agricultural community to effectively distribute local agricultural products and encourage the growth of the market for local products.</p>
	<p>a. Facilitate the establishment of year round marketing outlets to support the farm community, such as farmers’ markets or a product distribution center;</p>
	<p>b. Encourage the expansion of off-site farmers’ markets to provide marketplaces for farmers and artisans to sell their goods within a variety of Jefferson County commercial venues;</p>
	<p>c. Promote products to Jefferson County based businesses.</p>
8.	<p>Coordinate with key agricultural and rural stakeholders to identify ways to expand marketing and value added production activities for farmers and artisans on their properties in rural areas of Jefferson County.</p>
	<p>a. Amend existing regulations in order to identify and facilitate ways to allow the sale of items grown, processed, crafted, or manufactured in Jefferson County on farms other than the farm where the product originated.</p>
	<p>b. Develop a streamlined process for such uses when there are minimal impacts to surrounding neighbors.</p>
	<p>c. Expand and improve high speed Information Technology (IT) connections in rural areas of Jefferson County with local internet or advanced technologies providers to enable residents to run businesses from home or to telecommute.</p>

9.	Collaborate with the local artisan community and Jefferson Arts Council to review and amend the local land use regulations to promote and enhance the viability and livelihood of artisans in the rural areas of Jefferson County.
	a. Encourage local non-profit organizations and local and regional economic development agencies to create a regular forum where all County artisans, businesses, and members of the non-profit and arts communities can meet to network and collaborate.
	b. Work to improve connections between County businesses and artisans that may have products and services that can be sold in local stores or other businesses.
	c. Ensure that training and educational opportunities are available that would enable the success of such businesses.
	d. Establish and support an endowment for arts funding for rural crafted arts.
10.	Strengthen the Agricultural Committee of the JCDA by creating a public/private Rural Economic Development Council comprised of rural industry sector leaders. This organization will:
	a. link governmental, non-governmental, and regional organizations;
	b. link state and federal farm assistance programs to local farmers;
	c. receive and make grants;
	d. act as an advocacy group for rural issues; and
	e. promote activities that nurture the rural economy.
11.	Create a county or regional agricultural industrial park that could include sites for service providers such as farm equipment repair facilities, tractor and implement sales, meat processing facilities, and veterinarian services; as well as:
	a. A local or regional food hub that could be tied into Community Supported Agriculture (CSA) packaging and distribution, a regional food bank, and to serve as a marketing site for farms and farmers;
	b. A neighborhood based CSA or Development Supported Agriculture;
	c. A permanent, year-round farmers' market site;
	d. Sites for Industrial Agriculture such as Vertical Farming, Hydroponic Greenhouses, and Aquaponic Farming;
	e. Agriculture based training, research, and continuing education facilities created in conjunction with institutes of higher learning and research;
	f. Commercial aquaculture activities;
	g. A livestock auction facility;
	h. A Community Cold Storage/Meat Locker Facility that would allow county residents to rent space to purchase and store sides of meat; and/or
	i. Alternative Energy Production facilities, ranging from ethanol refining to algae production for biofuels.
12.	Promote and expand the commercial and recreational equine industry as a fundamental component of the rural economy by amending County ordinances to reflect the current practices and needs of the industry.

13	Collaborate with the County’s culinary, artisan, and farm communities and JCDA to study the feasibility of establishing a Culinary Center that would provide exposure to and for marketing the goods that are produced in Jefferson County and the Eastern Pa ⁿ handle.
	<ul style="list-style-type: none"> a. Collaborate with the West Virginia Extension Service, West Virginia Department of Agriculture, and local stakeholders to establish a regional commercial kitchen and packing facility in the Eastern Panhandle that could be used by farm operators in the manufacture of value added products.
14.	Expand vocational programs, either through the existing Future Farmers of America program in the County’s high schools or through programs that combine classroom exercise with a co-op program exposing students to a variety of agricultural formats and opportunities.
	<ul style="list-style-type: none"> a. Advocate for Jefferson County Schools to partner with Berkeley and Morgan County schools to create a regional Agriculture Magnet School whose curriculum would be focused on agriculture and agribusiness fields.
	<ul style="list-style-type: none"> b. Encourage the Board of Education to provide equal vocational education programs in all middle schools and high schools throughout the County.
15.	Coordinate with Jefferson County Schools to encourage the following agricultural activities:
	<ul style="list-style-type: none"> a. Preserve and expand the Future Farmers of America programs that are in place at the County’s middle and high schools.
	<ul style="list-style-type: none"> b. Coordinate with local artisans to improve accessibility and awareness of arts education and programming.
	<ul style="list-style-type: none"> c. In conjunction with local gardening organizations and Jefferson County Agricultural Development Office, expand school garden programs that could serve as a source of fresh foods for cafeterias.
	<ul style="list-style-type: none"> d. Encourage schools to use local agricultural products in cafeterias through partnerships with local farmers and CSA programs.
16.	Encourage the West Virginia University Extension Office to consider the creation of Mentoring/Training Programs similar to FarmLink programs that are in place in other states such as Maryland and Virginia.
17.	Support the County’s rural economic strategy by working with the State Legislature to review the State Code and consider the following amendments:
	<ul style="list-style-type: none"> a. Tax credits on farm-related capital improvements;
	<ul style="list-style-type: none"> b. Tax abatement or deferral when a farmer makes an investment in high-value crops that do not turn a profit for several years (orchards, Christmas trees, vineyards, etc.);
	<ul style="list-style-type: none"> c. Assessment of farm worker housing on farms below residential market value;
	<ul style="list-style-type: none"> d. Additional reduction in the real estate tax rate on rurally zoned property that is under permanent conservation easement.

may not meet current standards, to be upgraded or maintained. Recently, the County adopted a new stand-alone Stormwater Management Ordinance that includes additional standards related to water quality and includes provisions for low impact design stormwater provisions such as rain gardens, bio-swales, permeable pavers, and permeable asphalt. These new standards help to minimize the impact of sediment and certain identified nutrients as required by the Chesapeake Bay Program.

In addition to land development activities, the following point and non-point source activities impact the water quality in waterways due to stormwater run-off:

Point and non-point source pollution
Over-fertilization and the use of chemicals to maintain lawns by homeowners
Use of salt and chemicals on roads in winter weather by the State Division of Highways
The fertilizers used to grow crops
Industrial emissions
Waste products (rubber, gasoline, and various other fluids) associated with auto use
Animal husbandry activities

The effect of stormwater run-off on the local waterways, particularly the Shenandoah and Potomac Rivers, has a significant impact on our local and regional recreational and heritage tourism, as well as drinking water quality. There are a number of watershed protection groups in the County that are actively seeking to improve the quality of the surface and groundwater within particular watersheds. These groups have made efforts to clean-up the waters and restore aquatic life to Jefferson County waterways. Such efforts have included, river clean ups, water monitoring, septic tank pumping and repair reimbursement programs, fencing of livestock to keep them out of streams, tree plantings, and outreach to residents and businesses to educate them about how to combat pollution. These efforts will ensure that high quality of water in Jefferson County continues.

Alternative Energy

It is widely recognized that many of the resources that we rely on to heat, cool, and light homes, power electronics, provide transportation fuel, and other daily needs are finite. Consequently, there has been an increasing need to assess the viability of alternative and renewable energy sources that may assist in maintaining the quality of life of Jefferson County’s residents and businesses. In 2009, West Virginia adopted an Alternative and Renewable Energy Portfolio Standard that requires investor-owned electric utilities (such as Potomac Edison) with more than 30,000 residential customers to supply 25% of retail sales from eligible alternative and renewable energy resources by 2025. This standard was subsequently repealed by the state legislature in 2015; however many private utility providers and other large companies have set their own renewable energy or clean energy goals and are pursuing these alternatives without state or federal mandates.

Alternative and renewable energy sources are available, ranging from hydro (water), solar, and wind power to the use of various biofuels (algae, biomass, wood pulp, and other waste products), and plant crops (corn and switchgrass) that might be used to complement or replace existing power sources. Another alternative energy source that may be applicable for the heating and cooling of buildings is the use of geothermal systems (drawing up groundwater and circulating it through pipes embedded in a building's walls).

There are efforts underway at the local and state level to encourage the conservation of energy and the utilization of alternative energy sources. The most notable of these are the projects that have been incorporated into the expansion of the American Public University System (APUS) in Charles Town and Ranson. These projects include the use of solar collectors that also serve as cover for parked cars, the installation of several electric car charging stations, and the utilization of building improvements and materials that limit the use of energy needed for heating, cooling, and lighting. The improvements undertaken by APUS can serve as a role model to new development in Jefferson County and to the redevelopment of existing structures and sites.

Several large-scale alternative and renewable energy projects have taken place in the County. Concern has been expressed that legislation prohibiting Cooperatives or Communities to create a solar panel system that would feed multiple houses is impacting the expansion and viability of implementing other solar projects in the County. As the cost of improvements decreases and the efficiency of various renewable energy materials improves, the reliance on current energy sources will be reduced as more families and businesses adopt these improvements.

Emergent local, regional and national trends indicate that large scale alternative and renewable energy projects, such as solar, wind, and hydropower energy facilities, have become essential and will continue to be needed to provide clean energy throughout the region and into the power grid. In recent years, Jefferson County has been identified as an area that could accommodate these renewable energy facilities due to its proximity to the grid network, the gentler topography than many areas of West Virginia, and large open areas throughout the County. Opportunities to develop these alternative energy resources should be pursued in the County.

Natural Gas Services

Jefferson County regional economic development officials and businesses identified the need for natural gas services to homes and businesses. At present the only area of the County served by natural gas lines is the former Kodak/3M plant in Middleway; however, the potential exists for the expansion of service capacity in the Eastern Panhandle and the extension of natural gas lines from the Berkeley/Jefferson County line along WV Route 9 to various parts of the County. The extension of natural gas into Jefferson County would aid County economic development efforts while providing an alternative to electricity for residential and commercial purposes.

Infrastructure and Technology Recommendations (Goals 10 & 11)

1.	Require key stakeholders to coordinate planning and investment for both local and countywide infrastructure improvements.
	a. Require members of the development community and utility and service providers to collaborate regularly to plan for future infrastructure needs, while considering the impact on the individual consumer rates.
	b. Provide and encourage mechanisms to have consolidated water and sewer providers in the County.
2.	Bring natural gas into Jefferson County to grow the economy and increase the quality of life for the residents.
	a. Identify partners and funding sources for the expansion of natural gas services.
	b. Ensure that one or more compressed or liquid natural gas fueling stations is built to serve Jefferson County residents, businesses, and visitors.
	c. In coordination with Hagerstown Eastern Panhandle Metropolitan Planning Organization (HEPMPO), Jefferson County Schools, and Eastern Panhandle Transit Authority (EPTA), advocate for the wider utilization of natural gas as a fuel source for school buses and for EPTA.
3.	Create opportunities for the County’s water and sewer providers to share resources and better coordinate their systems and administration.
	a. Amend Subdivision and Land Development Regulations to require privately owned public water and sewer utilities to meet the local PSD standards, which would allow a local PSD to assume maintenance, and possible ownership in the future, with fewer upgrades and expenses.
	b. Provide opportunities for applicable homeowners associations and/or developers to enter into maintenance agreements for privately owned public water and/or sewer utilities with the applicable public utility providers in which the public utility providers will maintain new facilities.
	c. Coordinate with the County’s utility providers to identify methods that would limit the expansion of water and sewer trunk lines to areas within the Urban Growth Boundary and/or Preferred Growth Areas.
	d. Encourage the PSDs to promote cooperation with the local development community to work toward cost sharing on infrastructure projects.
4.	Collaborate with Village residents, businesses and utility providers to identify ways to provide water and sewer utilities within Village and village expansion areas.
5.	Enact and enforce requirements for maintenance and inspection of individual, on-site septic systems on a regular basis.
	a. Initiate a dynamic education and informational program for County residents concerning well and septic maintenance and use practices.
	b. Pursue an amendment to the state code to allow residents who are required to connect to an extended water or sewer network to continue to utilize existing individual well and septic systems for the lifetime of the home system if there are no public health issues.

	<p>c. Collaborate with local public utility providers to identify and provide incentives that would encourage property owners to transition from well and septic to a centralized system where and when needed to address public health issues.</p>
	<p>d. Find funding mechanisms to defray the costs of providing public utilities in areas where the provision of these utilities is necessary based on declining public health or environmental concerns.</p>
6.	<p>Coordinate with Region 9 and the County’s public service providers to identify and seek additional funding sources that would aid in the construction of needed capital facilities and for the upgrading of existing facilities to meet newer federal standards.</p>
	<p>a. Continue to monitor and participate in planning efforts related to the implementation of the Chesapeake Bay Watershed Improvement Plan.</p>
	<p>b. Assess and evaluate the County’s stormwater planning documents as best management practices in the field evolve.</p>
7.	<p>Identify ways that utility services can be regularly upgraded to meet the highest level of service and technology through coordination with local water, sewer, electric, gas, and telecommunications utility and service providers.</p>
	<p>a. Require all local electric, cable, and other utility providers to bury existing and new lines (serving new development) as a part of the regular maintenance and upgrading of their facilities.</p>
8.	<p>Encourage public <u>and private</u> entities to utilize alternative and renewable energy sources for a variety of energy needs.</p>
	<p>a. Enable the construction of renewable energy generation <u>and production</u> facilities by residents, and businesses, <u>and commercial alternative renewable energy providers</u>.</p>
	<p>b. Encourage County businesses and service stations to provide electric vehicle recharging stations within Jefferson County as soon as possible and use distinctive signage to guide residents and visitors to the charging stations.</p>
	<p>c. Develop regulations to enable cooperatives or communities to create a solar panel system that would feed multiple houses in the County.</p>
9.	<p>Collaborate with local economic development agencies and Information Technology (IT) providers to ensure that the current and future needs of small businesses within Jefferson County are met.</p>
	<p>a. Ensure that all areas of Jefferson County are served by high speed wireline and/or wireless services and other advanced technologies.</p>
	<p>b. Encourage private sector investment to improve wireless internet service availability in Jefferson County and the Eastern Panhandle.</p>
	<p>c. Ensure that, as next-generation wireless and cellular services are implemented, Jefferson County collaborates with providers, including any necessary regulatory changes, to ensure that providers are able to provide these services at the same time as other communities in the Washington, D.C. and Baltimore, MD Metropolitan Areas.</p>

<p>10.</p>	<p>Partner with IT providers, the Shepherd University Research Corporation (SURC), and the existing federal and state agencies located in Jefferson County to establish the feasibility and creation of an open access telecommunications network that could serve as a trunk line for regional services across the Eastern Panhandle.</p>
	<p>a. Market the availability of the established trunk line services across the Eastern Panhandle to potential businesses and organizations that are heavily reliant on a bandwidth intensive service and researching Jefferson County as a possible relocation site.</p>
<p>11.</p>	<p>Explore the creation of a reimbursement funding mechanism that would allow for pump stations and water mains that serve one subdivision to be oversized or expanded upon to serve nearby future development within the designated growth areas, not solely dependent on revenue from rate payers but also the development community.</p>
<p>12.</p>	<p>Explore policies in concert with the State legislature, Public Service District (PSD), and the municipalities to study and amend regulations related to water and sewer infrastructure development, including legislative options that would allow equitable distribution of cost sharing with entire development community along with rate paying base (i.e. Capital Improvement Fees).</p>

**December 7, 2021 Planning Commission Public Hearing
Comprehensive Plan Text Amendment**

The following members of the public submitted public comment:

1. Tim Ferguson, Potesta & Associates – emailed 11/30/21
2. Christine Marshall – emailed 11/30/21
3. Doug Rockwell – hand delivered 11/30/21
4. Susan Hough – emailed 12/01/21
5. Francis Daniel – emailed 12/02/21
6. Kim Gutierrez – emailed 12/02/21
7. Dr. Keith Berkeley – emailed 12/03/21
8. A.R. (Bob) Hoxton – mailed 12/03/21

Planning Department

From: Tim R. Ferguson <TRFerguson@potesta.com>
Sent: Tuesday, November 30, 2021 3:08 PM
To: Planning Department; Zoning
Cc: Chris Sternhagen; Ronald R. Potesta; Paul Raco; Joe Knechtel; Rhonda L. Henson; McLusky, Robert G.; Callas, Christopher L.
Subject: Agenda Packet Submittal: "Solar Study for Jefferson County"
Attachments: Jefferson County Zoning - Att A.pdf; Solar Study for Jefferson County (0101-19-0344-001) 11-30-21.docx

Follow Up Flag: Follow up
Flag Status: Completed

Categories: Important, Planning Commission

Dear Ms. Beaulieu,

Attached is information that has been compiled and is being submitted on behalf of EDF's Wild Hill Solar Project to be included in the Planning Commission's agenda packet for the solar amendment.

Please feel free to contact me if you have any questions or comments. Thank you.

(Rhonda- please file to 0101-19-0344-001)

Timothy Ferguson, M.S. | *Senior Scientist*

Potesta & Associates, Inc.
7012 MacCorkle Ave. SE, Charleston, WV 25304
phone (304) 342-1400 cell (304) 382-8217
email tferguson@potesta.com
www.potesta.com

This electronic communication and its attachments contain confidential information. The recommendations and/or design data included herein are provided as a matter of convenience and should not be used for final design or ultimate decision making. Rely only on the final hard copy materials bearing the consultant's original signature and seal. If you have received this information in error, please notify the sender immediately.

SOLAR POWER: Review of Existing Conditions and Services and Probable Future Changes in Jefferson and Surrounding Counties

I. Introduction: Changing Regulatory and Market Environment

Since Jefferson County issued its Comprehensive Plan in 2015, the politics and economics of renewable energy generation and consumption have changed significantly.¹ Currently, there are no utility-scale solar energy production facilities operating in Jefferson County and, at most, a handful anywhere in the State. In recent years, however, clean energy advocates have lobbied for access to more renewable sources of energy and pushed publicly-traded companies to source their power from renewable sources.² This has led to increased demand for renewable sources of energy in the mid-Atlantic region and for a reduction in the use of fossil fuels.

In West Virginia, during the 2020 Legislative Session, Michael Graney, the Executive Director of the West Virginia Development Office, testified to the State Senate that the inability of employers to fuel their facilities with solar energy in the State was retarding the Development Office's efforts to attract new employers.³ In response, the Legislature and the State Public Service Commission ("PSC") have recently streamlined the process for obtaining authorization to site and

¹ See "6 Graphics Show How U.S. Utilities are Turning Corporate Demand into Renewables Growth," World Resources Institute (May 17, 2017) (available at <https://www.wri.org/insights/6-graphics-show-how-us-utilities-are-turning-corporate-demand-renewables-growth>) (noting that wind and solar production has become cost competitive and that growing number of public companies have committed to using 100 percent renewable power). See also, "The Dam Has Broken and West Virginia Has Awoken to Solar Power," (*Forbes* May 16, 2021).

² See, for example, "Companies Continue to Drive Demand for Clean Energy," (*Forbes* Sept. 9, 2019) (quoting Graney as saying: "Not having, frankly the solar box checked is a problem, and we've heard that from a lot of companies."); "Solar Development in West Virginia: A pathway to a brighter economic future." (Downstream Strategies, Nature Conservancy and WVU Law Center for Energy & Sustainable Development (available at <https://www.nature.org/content/dam/tnc/nature/en/documents/solar-in-WV.pdf>)

³ See "Solar energy bill advances in Senate, with pro-coal provision added," (*Charleston Gazette-Mail*, Feb. 13, 2020).

construct new renewable sources of wholesale electric generation.⁴ Likewise, industrial power customers in West Virginia, which historically have had few choices but to purchase electricity from state-regulated power producers, are increasingly demanding access to alternative sources of commercial generation.⁵ In neighboring Virginia, there has likewise been a surge in demand for wholesale renewable power.⁶

With increased demand and streamlined state approval processes, solar developers have obtained options or leases for property and sought certificates of need from the State PSC. In Jefferson County, one developer already has a PSC siting certificate and another has a pending application.⁷ In addition, at least five projects have submitted proposed plans to the Jefferson County Planning and Zoning office.⁸ Plans have also been announced for construction of a \$100

⁴ During the 2020 West Virginia Legislative Session, the State Legislature passed Senate Bills 578 and 583. Bill 578 adjusted the taxable generating capacity of utility scale solar for purposes of calculating business and occupation taxes, normalizing the tax rate to reflect the actual generating capacity of solar facilities. Bill 583 established two programs for development of utility scale solar. One allowed existing regulated utilities to develop up to 50 megawatt projects on existing industrial sites and the other encouraged the development of utility scale solar by exempt wholesale generators. Unlike regulated utilities, these wholesale generators have no captive customers. Instead, they sell electricity at wholesale to electric utilities or regional transmission organizations at prices set either in power purchase agreements or by the spot market.

⁵ For example, see Statement of WV Manufacturers Association, “Utility Monopoly Hurts Ratepayers” (9/21/21) (claiming that West Virginian manufacturers stand to benefit from “increased competition of power generation choices” rather than having to purchase their power from state-regulated generators) (available at <https://www.wvma.com/press/wvma-news/4336-rebecca-mcphail-utility-monopoly-hurts-ratepayers-opinion.html>). In 2021, the West Virginia Legislature passed H. B. 3310, which specifies that, subject to caps on generation, solar energy facilities located on and designed to meet only the electrical needs of the premises of a retail electrical customer do not constitute a public service.

⁶ See “Dominion Energy Virginia Quadruples Renewable Energy and Energy Storage in Long-Term Integrated Resource Plan,” (5/1/20). Available at: <https://news.dominionenergy.com/2020-05-01-Dominion-Energy-Virginia-Quadruples-Renewable-Energy-and-Energy-Storage-in-Long-Term-Integrated-Resource-Plan>.

⁷ *Wild Hill Solar, LLC*, Case No. 20-0845-E-SCS-PW (Final Order dated February 11, 2021); *Horus West Virginia I, LLC*, Case No. 21-0664-E-SCS-PW (Application filed August 30, 2021).

⁸ See Pre-Proposal Conference Applications or Concept Plans by OPD Energy; Franklinton Farm LLC (Dakota Energy); Flowing Springs Farm LLC (Dakota); Torch Clean Energy (Rippon Project) and Wild Hill Solar, LLC.

million solar facility in neighboring Berkeley County.⁹ To date, however, those projects have been stymied by project opponents and by a judicial ruling that an amendment to the County's zoning ordinance to allow solar production as a principal permitted use in the rural zoning district was inconsistent with the existing Comprehensive Plan, in part because it determined that the amendment could facilitate the wholesale conversion of farms in the rural district to a non-agricultural commercial (power production) use at odds with a goal of the plan to maintain the rural aesthetic and to keep farmers on their land. *Christopher David Burke v. Jefferson County Planning Commission*, CC-19-2021-C-33, Order Regarding Validity of File ZTA 19-03 Regarding the Solar Text Amendment (Aug. 16, 2021) (Jeff. Co. Cir. Ct.).

II. The New Market: Opportunities, Effects, Benefits and Controls

The economic benefits of similarly-sized facilities planned for Jefferson County have been studied for the PSC. For example, the proposed 92.5-megawatt Wild Hill Solar, LLC project is expected to produce \$134.5 million in total economic output and \$12.6 million in total employee compensation during its construction phase.¹⁰ Additionally, the project is expected to result in 14 new jobs, produce \$9.2 million in overall economic output, and generate a substantial county property tax benefit. Thus, the tax benefits they are capable of generating is substantial, but the County will face competition from surrounding counties and from neighboring states as the host of such facilities unless it develops plans to accommodate them. Likewise, ensuring that

⁹ See "Plans for Berkeley County solar facility keeps WV's solar energy momentum going," (*Charleston Gazette-Mail*, Jan. 11, 2021).

¹⁰ "The Economic Impact of Wild Hill Solar Project on the West Virginia Economy" (Dr. Tom S. Witt, November 3, 2020) (included as Appendix F of Exhibit 1 to Wild Hill Solar, LLC WVPSC Application in Case No. 20-0845-E-SCS-PW and available at <http://www.psc.state.wv.us/scripts/WebDocket/ViewDocument.cfm? CaseActivityID=555626&NotType=%27WebDocket%27>).

renewable power sources are available to new commercial enterprises that require it will be critical to attracting new employers to the region in the future.

A utility scale solar project typically requires between 5 and 10 acres per megawatt of generating capacity. Therefore, a project generating 100 megawatts would typically require about 500-1,000 acres.¹¹ Some citizens have opposed the expansion of solar into areas zoned for rural development in order to preserve farmland and the rural character of the area. They express concern that an unregulated proliferation of solar farms will displace the agricultural community with “industrial” energy production facilities. There are, however, both market and regulatory programs in place and practical constraints to moderate such impacts.

Approximately 48 percent of Jefferson County, or nearly 67,000 acres, is farmland.¹² The economics of solar energy projects typically require that they be located adjacent to or very near existing transmission infrastructure.¹³ In Jefferson County, those transmission areas and the zoning districts are shown on Attachment A. Most of the foreseeable development would straddle the narrow corridors marked on that Attachment. That substantially reduces the acreage generally eligible for development and limits it to areas already under or adjacent to zoning-exempted essential utility infrastructure. Second, the slope of land is a limiting factor in siting solar facilities, and not all the land located adjacent to transmission infrastructure is considered desirable for solar

¹¹ See Solar Energy Industries Association “Siting, Permitting and Land Use for Utility-Scale Solar (2021). Available at: <https://www.seia.org/initiatives/siting-permitting-land-use-utility-scale-solar>.

¹² See Jefferson County Development Authority, “Agribusiness.” Available at <https://jcda.net/for-site-selectors/key-industries/agribusiness/?ap=t>.

¹³ See U.S. Environmental Protection Agency – RE-Powering America’s Land Initiative Discussion Paper. “The Value of Existing Infrastructure for Renewable Energy Development” (April 2020). Available at: https://www.epa.gov/sites/default/files/2020-04/documents/re-powering_existing_infrastructure_508_041420.pdf.

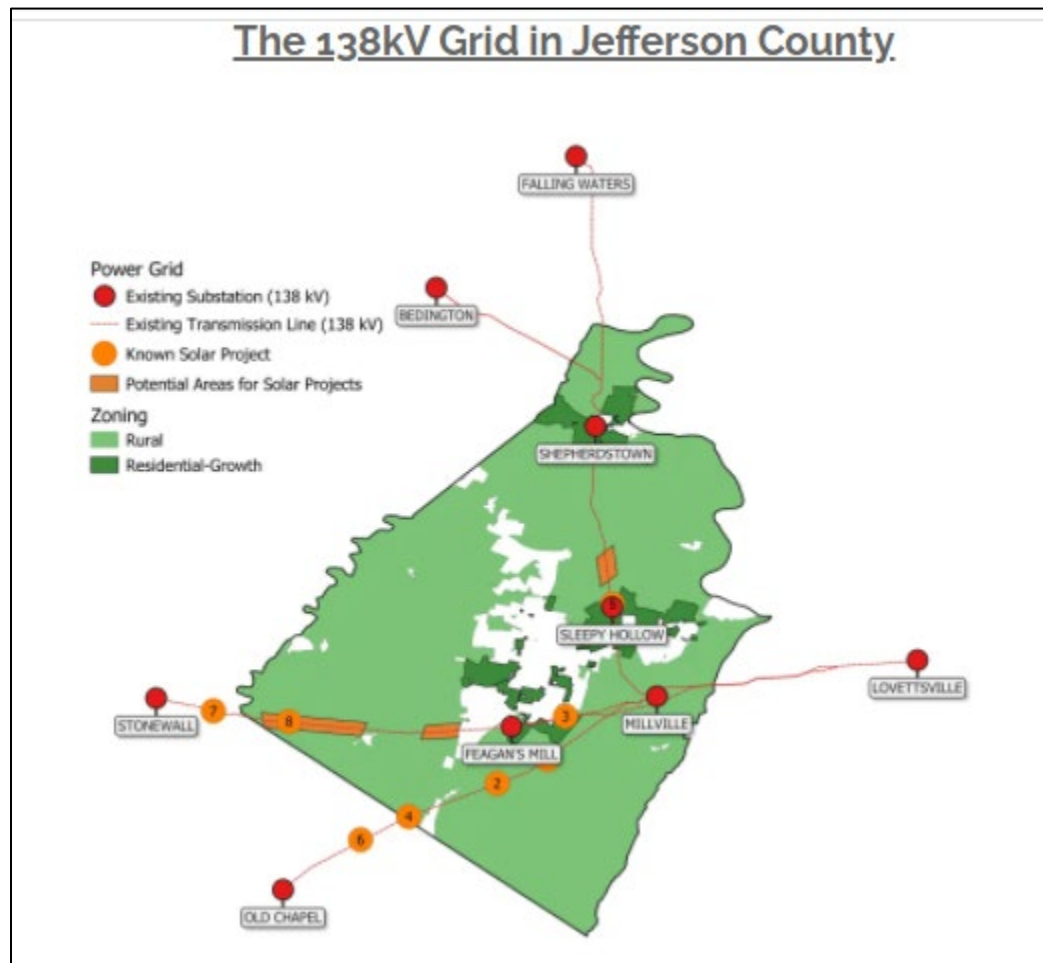
development. Typically, developers seek to avoid slopes exceeding 15 percent, which would exclude portions of the County. Third, the existing transmission infrastructure cannot accommodate unlimited new solar generation - there are capacity limitations which restrict the new load that the infrastructure can carry. Without significant upgrades to the existing 138 kV lines, the existing infrastructure will not likely support substantially more than the five (5) solar projects currently identified in the PJM queue. This further limits the rural lands available for solar development.

These observations were confirmed by experts in a workshop convened by the Planning Commission in August, 2020¹⁴ and, more recently, by an investigation by local journalists. They observed that: “the ideal project location is flat land without trees or rock, with a clear southern exposure” which is “close to transmission lines with a new substation and/or upgrades to existing substations.”¹⁵ They observed also that new facilities would connect to one of the 138kV lines in the County, but that the regional electrical grid operator, PJM Interconnection (PJM), was unlikely to allow more than 300 megawatts of new generation to connect to a single segment of the line, a constraint that would “limit the number of projects to 3 or fewer” on each line segment.” *See*

¹⁴ “Jefferson County Commissioners hear from experts at solar workshop,” *The Journal* (Aug. 20,2020) (available at https://www.journal-news.net/journal-news/jefferson-county-commissioners-hear-from-experts-at-solar-workshop/article_68a371bb-0fa9-57bc-a015-c87a596b22bf.html). *See also* Jefferson County Planning Commission, 8/20/20 Public Workshop #2 (links to developers’ presentations available at <http://www.jeffersoncountywv.org/county-government/departments/engineering-planning-and-zoning/office-of-planning-and-zoning/solar-facilities>) and “EXPERTS: Few Jefferson County sites can accommodate solar farms,” *Spirit of Jefferson* (Aug. 2020) (available at http://www.spiritofjefferson.com/news/article_ebbbec-e71a-11ea-a0bf-cbc866ea69b0.html).

¹⁵ “Connecting Solar in Jefferson County,” *Independent Observer* (Feb. 2021, map upgraded as of 2021 to show location of proposed solar projects and adjacent to Jefferson County) (available at <https://wearetheobserver.com/connecting-solar-to-the-grid/>) (“Connecting Solar”). *See also* Jefferson County Planning Commission, 8/20/20 Public Workshop #2 (report of Emily Dalager, pp. 4-5) (available at <http://www.jeffersoncountywv.org/county-government/departments/engineering-planning-and-zoning/office-of-planning-and-zoning/solar-facilities>).

“Connecting Solar.” Using information from the Department of Homeland Security, PJM, the Jefferson County Commission and the Jefferson County Farmland Protection Board, the authors of that investigation identified the lands in proximity to electrical infrastructure that were not protected farmland, not encumbered with wetlands or heavy forests and not residentially developed. With that information, they mapped the area with the greatest potential for solar projects as follows:



See fn. 15.

A separate analysis using ArcView Global Information Systems was performed to study the amount of land that could feasibly be available for solar energy production. Using publicly-

available data sources including protected land areas, U.S. Census Bureau and Microsoft Building Footprints layer for buildings, primary roads, railroads and transmission lines, all with an assumed 100 feet offset radius, was loaded onto a base map of the County. In addition, environmental datasets for wetlands, waterbodies, streams and floodplains with an assumed 50 feet offset radius were excluded from the study area. A slope analysis was performed using publicly-available topographic and elevation data and any areas with slope over 15 percent were excluded from the study area. Finally, Jefferson County zoning layers were added to the analysis. Rural and residential growth zones were included in the study area and the remaining zones were excluded from the study area. Site-specific locations were chosen based on contiguous areas of land over 500 acres in size with limited buildings or forested areas. Based on these assumptions and parameters, with the assumed setbacks, it is unlikely that more than 6,000 acres of land are feasibly available for solar energy production with the current transmission infrastructure present in the County. This represents approximately 4.5 percent of the total land mass of Jefferson County. This analysis could likely be further refined to limit the feasible acreage for solar development because site-specific surveys or analyses have not been completed and this analysis assumes full participating landowner compliance.

The only substantial intrusion by solar facilities is the number of acres they can occupy but, as noted above, even that factor is substantially mitigated by practical constraints. Beyond that, solar facilities do not stress local infrastructure - they do not create significant traffic once constructed and do not require significant new water or sewer infrastructure. Likewise, they are quiet and typically have limited potential for visual impacts - they generally do not extend more than about 13 feet vertically above the surface and are relatively easy to screen from public view with modest setbacks or screening requirements. In addition, the West Virginia Legislature passed

the West Virginia Wind and Solar Energy Facility Reclamation Act in its 2021 session to further mitigate the imposition of renewable facilities on the landscape.

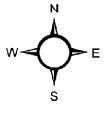
The new Bill requires the West Virginia Department of Environmental Protection to approve decommissioning plans for solar facilities once they have reached the end of their useful lives. They also require a financial instrument to ensure the costs of decommissioning are borne by the owner or developer.¹⁶ That program ensures that agricultural lands are restored to a condition capable of supporting agricultural use when solar facilities are no longer needed. These features of the Bill will prevent farms from permanent conversion to non-agricultural uses as has happened with the proliferation of housing developments throughout the region.

In addition, it is unlikely that new solar development in rural areas will have significant adverse impacts on property values. The American Society of Farm Managers & Rural Appraisers recently published a compilation of studies and reviews on the effect of commercial scale solar development on the value of rural properties. They reported that where modest setback and screening requirements were in place there was no consistent negative impact on property values from solar farms.¹⁷

¹⁶ See W.Va. Code §§ 22-32-1 to -8 (2021).

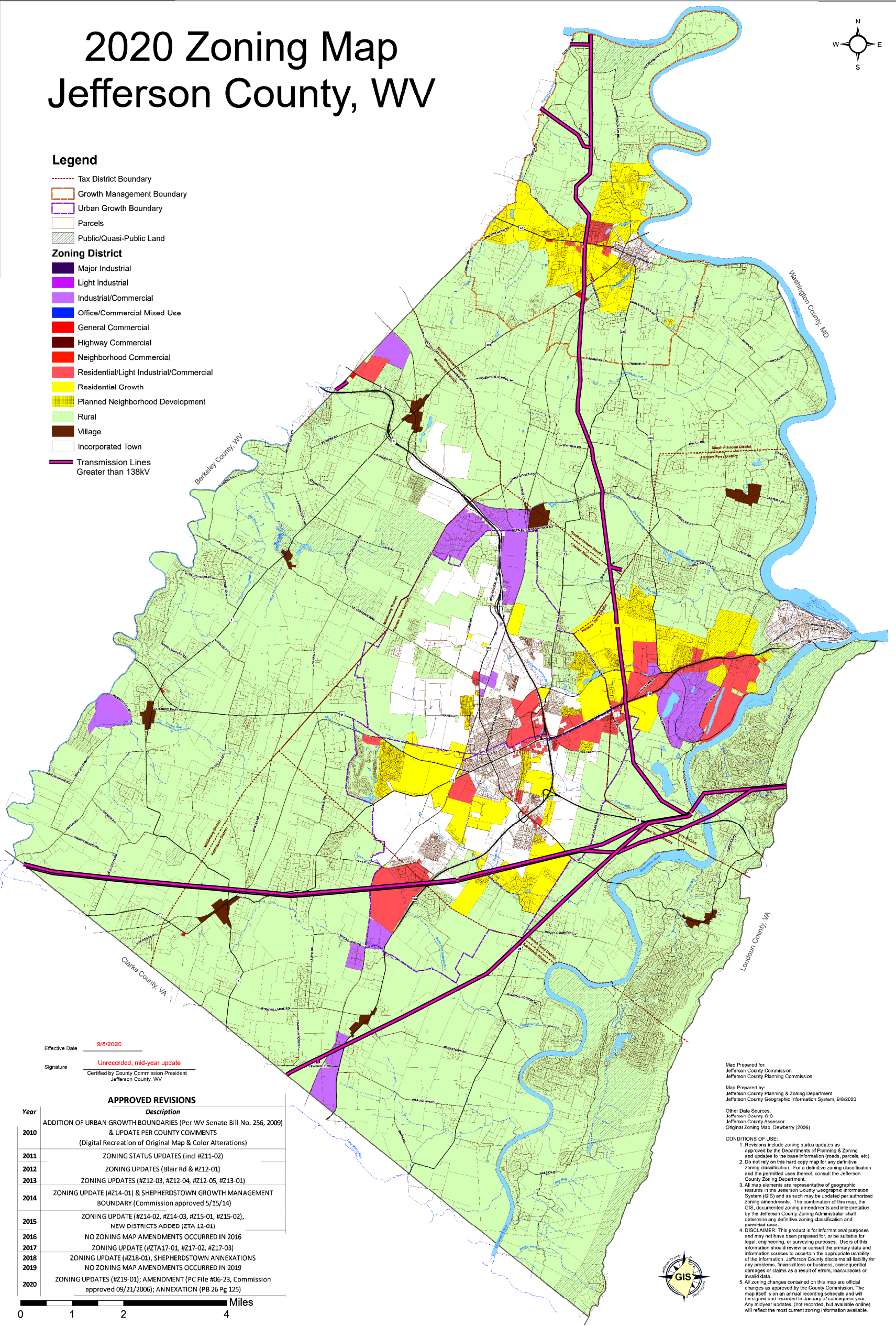
¹⁷ See “Solar’s Impact on Rural Property Values,” American Soc. Of Farm Managers & Rural Appraisers (posted 2/15/21). Available at <https://www.asfmra.org/blogs/asfmra-press/2021/02/16/solars-impact-on-land-values>.

2020 Zoning Map Jefferson County, WV



Legend

- - - - - Tax District Boundary
- Growth Management Boundary
- Urban Growth Boundary
- Parcels
- Public/Quasi-Public Land
- Zoning District**
- Major Industrial
- Light Industrial
- Industrial/Commercial
- Office/Commercial Mixed Use
- General Commercial
- Highway Commercial
- Neighborhood Commercial
- Residential/Light Industrial/Commercial
- Residential Growth
- Planned Neighborhood Development
- Rural
- Village
- Incorporated Town
- Transmission Lines Greater than 138kV

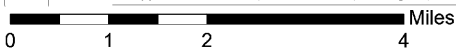


Effective Date 9/8/2020

Signature Unrecorded, mid-year update
Certified by County Commission President
Jefferson County, WV

APPROVED REVISIONS

Year	Description
2010	ADDITION OF URBAN GROWTH BOUNDARIES (Per WV Senate Bill No. 256, 2009) & UPDATE PER COUNTY COMMENTS (Digital Recreation of Original Map & Color Alterations)
2011	ZONING STATUS UPDATES (ind #Z11-02)
2012	ZONING UPDATES (Blair Rd & #Z12-01)
2013	ZONING UPDATES (#Z12-03, #Z12-04, #Z12-05, #Z13-01)
2014	ZONING UPDATE (#Z14-01) & SHEPHERDSTOWN GROWTH MANAGEMENT BOUNDARY (Commission approved 5/15/14)
2015	ZONING UPDATE (#Z14-02, #Z14-03, #Z15-01, #Z15-02), NEW DISTRICTS ADDED (ZTA 12-01)
2016	NO ZONING MAP AMENDMENTS OCCURRED IN 2016
2017	ZONING UPDATE (#Z17-01, #Z17-02, #Z17-03)
2018	ZONING UPDATE (#Z18-01), SHEPHERDSTOWN ANNEXATIONS
2019	NO ZONING MAP AMENDMENTS OCCURRED IN 2019
2020	ZONING UPDATES (#Z19-01); AMENDMENT (PC File #06-23, Commission approved 09/21/2006); ANNEXATION (PB 26 Pg 125)



Map Prepared for:
Jefferson County Commission
Jefferson County Planning Commission

Map Prepared by:
Jefferson County Planning & Zoning Department
Jefferson County Geographic Information System, 9/8/2020

Other Data Sources:
Jefferson County GIS
Jefferson County Assessor
Original Zoning Map; Dewberry (2006)

CONDITIONS OF USE:

1. Revisions include zoning status updates as approved by the Departments of Planning & Zoning and updates to the base information (roads, parcels, etc).
2. Do not rely on this hard copy map for any definitive zoning classification. For a definitive zoning classification and the permitted uses thereof, consult the Jefferson County Zoning Department.
3. All map elements are representative of geographic features in the Jefferson County Geographic Information System (GIS) and as such may be updated per authorized zoning amendments. The combination of this map, the GIS, documented zoning amendments and interpretation by the Jefferson County Zoning Administrator shall determine any definitive zoning classification and permitted uses.
4. **DISCLAIMER:** This product is for informational purposes and may not have been prepared for, or be suitable for, legal, engineering, or surveying purposes. Users of this information should review or consult the primary data and information sources to ascertain the appropriate usability of the information. Jefferson County disclaims all liability for any problems, financial loss or business, consequential damages or claims as a result of errors, inaccuracies or invalid data.
5. All zoning changes contained on this map are official changes as approved by the County Commission. The map itself is on an annual recording schedule and will be updated as it is recorded in calendar years. Any mid-year updates, (not recorded, but available online) will reflect the most current zoning information available.



Planning Department

From: Christine Marshall <balmertmarshall@icloud.com>
Sent: Tuesday, November 30, 2021 5:45 PM
To: Planning Department
Subject: 12/7/2021 Public Comment - JC Comprehensive Plan Amendments
Attachments: 1272021 Public Comment - JC Comprehensive Plan Amendments .pdf

December 7, 2021

Jefferson County Comprehensive Plan - Envision 2035 - Proposed Amendments - Public Comments

1 - Changes to the Comprehensive Plan should go through a rigorous and complete process that includes citizen working groups that are representative of all citizens and other stakeholders.

The process of changing the Comprehensive Plan should give residents of Jefferson County the opportunity to be part of all aspects of the process.

Whose goals and objectives are siting utility scale electric generation facilities (solar, wind, hydropower) in Jefferson County when the residents, that is, the community cannot participate fully in the process?

2 - p. 14/3 - “...and to allow more flexibility in multiple uses on agricultural properties to allow diversification of their businesses.”

Merriam Webster definition of agriculture: the science, art, or practice of cultivating the soil, producing crops, and raising livestock and in varying degrees the preparation and marketing of the resulting products.

Please define “agricultural properties”. If a former farm that is growing crops or in animal production converts all of the land to electric generation, will this land still be defined as an “agricultural property”? At what point does an agricultural property cease to be?

3 - p. 24/5 - Rural/Agricultural Area - “This Plan proposes that a holistic review of Rural zoned properties should occur that would allow for greater scope and variety of agriculture related activities and rural recreation, including the development of small or large scale solar energy facilities in the Rural areas of the County.”

If a farm had a small or large solar energy installation to serve in the production of agricultural products on the farm it is an agricultural related activity. If a farmer leases his/her land to a separate company and that company installs solar energy generation equipment to the sell the energy to the wholesale market place this is not an agricultural related product, but a commercial real estate activity; please describe activities accurately.

4 - p. 31/8 - Urban Level Development Recommendations Goal 1 - “d. Enable to location of alternative energy facilities such as solar, wind and hydropower facilities within the Rural and Residential Growth Zoning Districts throughout the county where most of the existing electrical transmission infrastructure is located.”

Please add a goal that prohibits additional new electrical transmission infrastructure lines. Please strike “wind and hydropower”.

5 - p. 34/11 - Rural Land Use Planning 1B - “Additionally, developing provisions which allow for a greater scope and variety of agriculture related activities, including the development of small or large scale solar energy facilities, with land restoration and panel removal requirements, in the Rural areas of the County would also allow the County’s agricultural and rural character to be maintained. Existing farmers who want to stay on their farms, but who cannot rely on traditional farming activities to do so, have expressed an interest in leasing portions of their land for solar energy facilities rather than selling the land for permanent conversion from agriculture. By requiring that solar energy production facilities be removed after their productive lives, the land is preserved for future agricultural uses.”

Again, utility scale solar is not an agriculture related activity. Please consider using a term that accurately describes the activity, such as commercial or utility energy generation and then create accurately named zones located adjacent to existing electrical transmission facilities.

6 - p. 37/14 - “To this end, this Plan recommends that alternative energy facilities, including solar, wind, and hydropower energy production, should be authorized as a Principal Permitted Use in the Rural and Residential Districts, including provisions that require the energy companies to return the land to a condition capable of being used for agriculture after the solar panels or wind facilities are removed.”

Are there wind and hydropower facilities currently being proposed? Are there dams and reservoirs in the planning or discussion phase now? Please strike “wind and hydropower” until intent is clarified.

7 - p. 40/16 - Rural Land Use Planning Recommendations (Goal 2)

“4 g. Amend the Zoning and Land Development Ordinances to allow small and large scale wholesale or commercial solar energy development as a Principal Permitted Use in the Rural and Residential Districts and provide for the removal of facilities after they have exhausted their useful lives, so that the land may be returned to agricultural use”

While it is a worthy goal to remove the solar panels after their useful lives, it should also be a goal that requires either the utility infrastructure owner or the land owner be required to pay for the removal and not the citizens/taxpayer of Jefferson County. Further, should it be a goal to restore Residential Districts to agricultural use?

Also, would it be worthwhile to create new “zones” along already existing electricity transmission lines for the express purpose of siting utility scale solar energy generating facilities? The goal being the ability to limit the total number of acres dedicated to transmission lines and solar panels in a thoughtful manner.

Please strike “Principal Permitted Use”.

8 - p. 69/21 - “The exception to this general philosophy is to allow alternative energy facilities, such as solar energy development, as a Principal Permitted Use in the County’s Rural and Residential Districts as well”.

Without specific zones or restrictions placed on utility scale solar energy generating facilities, communities cannot develop in a logical and predictable manner, therefore either utility scale energy generating facilities should proceed under a Conditional Use Permit or develop under clear rules that outline where these facilities can locate and how many total acres the county wants to dedicate to this form of energy generation.

9 - p. 74/27 - “Alternatively, providing other opportunities for farmers to use their land for a interim use, and then return it to farming in the future, would help maintain the County’s rural economy. One option noted in this Plan maintains that allowing solar facilities to be located within the Rural zoning district is a way to preserve farms for a generation and then return the land to agricultural uses. This protects large acreage from permanent residential development, while allowing other portions of the properties to continue to farm”

Is it realistic to believe that an individual farmer can remove all of its land from agricultural production, lease it to a utility or energy generation company and then a descendant a generation or two later would return that land to agricultural production? Why not rezone to something more appropriate?

However, if the goal is to allow farmers to lease a portion of their farm for energy production and a portion to remain in farming, why not set a percentage for each?

10 - p.82/35 - 5.c. “c. Amend the local land use regulations to permit utilities which generate electricity by alternative renewable energy sources (such as solar, wind and hydropower) to be permitted as a principal permitted use throughout the County; provided also that developers or owners provide security guarabteeing the removal of the renewable energy facilities at the expiration of their usable life so that land may be returned to farming or other agricultural uses.”

Please strike “principal permitted use” and “ wind and hydropower”.

11 - p. 94/40 - “Emergent local, regional and national trends indicate that large scale alternative and renewable energy projects, such as solar, wind, and hydropower energy facilities, have become essential and will continue to be needed to provide clean energy throughout the region and into the power grid. In recent years, Jefferson County has been identified as an area that could accommodate these renewable energy facilities due to its proximity to the grid network, the gentler topography than many areas of West Virginia, and large open areas throughout the County. Opportunities to develop these alternative energy resources should be pursued in the County”.

Please strike wind and hydropower. Please add to the end of the paragraph: opportunities to use alternative energy resources in Jefferson County should be pursued.

With 576.5 MW currently in the PJM New Service Request Queue for utility scale solar energy generation facilities, which amounts to between 3,459 to 5,765 acres of land in Jefferson County, let’s get this plan right! Please create a plan for Jefferson County that promotes the use of renewable energy, while at the same time preserves a place where people still want to live. Let’s not loose what is good about Jefferson County for one use.

Thank you,

Christine Marshall
Jefferson County, WV

RECEIVED

NOV 30 2021

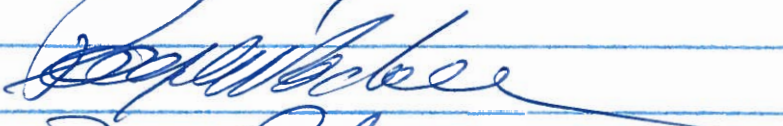
11-30-2021

JEFFERSON COUNTY PLANNING
ZONING & ENGINEERING

Jefferson County Planning Commission

I enclose three pages entitled "Coal #28
Alternative Energy Facilities - Section"
for your consideration.

Respectfully



Doug Rachwell

Box 727

Charles Town, WV

25414

GOAL #28: ALTERNATIVE ENERGY FACILITIES - SOLAR.

Jefferson County seeks to ensure that any utility scale renewable energy generation facility is consistent with and furthers the goals as found in the most current Comprehensive Plan. Furthermore, Jefferson desires to balance this land use with the various and valuable existing planned land uses and resources throughout the County and to that end these objectives are established:

- Objective #1:** Jefferson County desires to protect the County's historic properties and resources by balancing those interests with the interests of the solar generation facilities.
- i. Setbacks and buffering shall be required adjacent to such resource.
 - ii. Certain property, because of its historic value, should be discouraged from this land use entirely.
- Objective #2:** No facility shall be located on a property within a historic battlefield boundary or on recognized historically significant properties. Screening of those properties and the viewshed for those properties is required. The County shall require screening of any use, or portion thereof, upon determination that the use would have a direct negative visual impact.
- Objective #3:** Jefferson County desires to protect and enhance its agricultural and rural heritage and resources.
- i. Among other things size and scale of a renewable energy generation facility should be limited in order to maintain the County's rural viewshed and character.
 - ii. Siting of a facility on prime agricultural soils is discouraged. Non-agricultural producing lands or land which is of lower agricultural value should be explored first.
- Objective #4:** A. The Envision Jefferson 2035 Comprehensive Plan emphasizes the County's commitment to the preservation of agriculture as its primary industry. The limit on all utility scale solar development, in the aggregate, in the County is one percent (1%) of the total land mass of Jefferson County.
- B. Based upon the population projections of the Comprehensive Plan, the residential consumption of electricity by 2035 would be approximately 152 MW. It is recognized that electricity produced in Jefferson County by solar development will not necessarily be consumed in the County, nevertheless the County's own energy needs are a reasonable basis for the limitation of 153 MW, in the aggregate, of electricity produced by all solar facilities.
- Objective #5:** The scope or scale of utility scale solar projects have a direct correlation to numerous factors of concern. These include potential land disturbance, the ability to effectively screen and landscape a project, the traffic and other impacts during the construction process, the ease of decommissioning and other factors. In light of this, any single utility scale solar facility should be limited to no more than 300 acres of actual panel installation.
- Objective #6:** In order to protect the integrity of agricultural soils, mass grading of sites shall be limited to fifty (50) acres at a time.

- Objective #7:** During decommissioning it will be difficult to return the site of a utility scale solar facility to its original condition. Accordingly, no solar panels shall be located on parcels of land with an average gradient higher than 10% before grading or excavation thus preventing cut and fill.
- Objective #8:** In support of Objectives 1 and 3 above utility scale solar facilities shall only be located on parcels of land in existence as of July 1, 2021 which are within 500 feet of an existing electric transmission line or substation.
- Objective #9:** To prevent solar facility sprawl each utility scale solar facility shall be a minimum of two (2) miles from another solar facility.
- Objective #10:** To preserve farmland and open spaces and continued agricultural operations, a utility scale solar facility in the Rural District outside of the Urban Growth Boundary shall only be located on a parcel of land which existed before July 1, 2021 and shall occupy no more than 50% of said parcel notwithstanding the size of said parcel. Transfer or assignment of these development rights between parcels of land which existed before July 1, 2021 are permitted if the parcels are contiguous and owned by the same individual or entity.
- Objective #11:** Before issuance of a zoning certificate, adequate bonding and insurance shall be required for all phases of all projects, including but not limited to: an Erosion and Sediment Control Bond, Infrastructure Bond, Stormwater Management Bond, Construction and Performance Bond, Landscaping Bond, Decommissioning Bond, and Liability Insurance.
- Objective #12:** A decommissioning plan, updated every three years, is required to insure (i) that the real property will be returned to its original condition upon closure of any facility, or at the end of its useful life, and (ii) that decommissioned equipment and panels are disposed of appropriately and in an environmentally sound manner. In any event, decommissioning shall be guaranteed by cash, commercial surety, letter of credit, performance bond, etc. subject to the approval of the County and in accordance with any adopted County policy. Moreover, final inspection by the County, at the conclusion of decommissioning, will be required before any guarantee is released. Decommissioning surety shall be in place and adequate for the complete decommissioning of the project from its onset until it is decommissioned.
- Objective #13:** The zoning certificate or permit for a utility scale solar facility shall terminate upon decommissioning, abandonment or 25 years from issuance which ever first occurs. At which time lands in the present Rural District on which said solar facilities are located shall revert to farming or other allowed agricultural uses.
- Objective #14:** Before issuance of a zoning certificate or permit a solar panel specification disclosure, including composition, toxicological information and physical and chemical properties, shall be provided.
- Objective #15:** No solar cell or module containing an element or compound considered carcinogen by OSHA or the EPA is permitted in any solar energy generating facility.
- Objective #16:** Concentrated solar and solar thermal facilities are prohibited; solar towers are

prohibited.

Objective #17: Noise abatement is required during construction, operations and decommissioning of all solar facilities.

Objective #18: Limits shall be placed on the height of installed solar panels.

Objective #19: Minimum distance shall be established between solar panel arrays measured from solar panel to solar panel.

Objective #20: Areas of Jefferson County contain karst topography. On parcels of land with limestone outcrop, the installation and construction of utility scale solar facilities shall be limited or restricted.

Objective #21: Screening and buffers shall be required along all primary and secondary roadways.

Objective #22: Wildlife corridors shall be provided by utility scale solar facilities occupying more than 300 acres.

Planning Department

From: Susan Hough <farmwife90@aol.com>
Sent: Wednesday, December 1, 2021 2:29 PM
To: Planning Department
Subject: Solar support

Follow Up Flag: Follow up
Flag Status: Completed

Categories: Planning Commission

Dear Planning Commission Members,

My name is Susan Hough and I am writing to support the proposed changes to the Comprehensive Plan to allow solar farming in Jefferson County.

I am a lifelong resident of Jefferson County and a member of a family that has farmed here for generations. Farmers need diversification in order to keep farmland as farmland and not give into the temptation of selling for development.

There are so many false statements and fear tactics being circulated in this county about solar that need to be addressed. Residents need to realize that not every piece of farmland is suitable for solar panels. There are very specific requirements that have to be met in order to put solar panels on a piece of land.

Residents also need to understand that a document that was prepared in 2015 might not address the changing concerns of farmers and the agricultural community in 2021. I keep hearing how the rural views are so important to this county, and while I agree with that, it is not up to farmers to provide a "view" at their expense. Those who want "views" should buy a farm and look out their own windows.

Thank you,

Susan Hough
Charles Town

December 1, 2021

Steve Stolipher, President
Tricia Jackson, Vice President
Clare Ath, Commissioner
Caleb Wayne Hudson, Commissioner
Jane Tabb, Commissioner
Jefferson County Commission
116 East Washington Street
Charles Town, WV 25414

Mike Shepp, President
Donnie Fisher, Vice President
Wade Louthan, Secretary
Ron Thomas, Member
Matt Knott, Member
J. Ware, Member
Shane Roper, Member
Jack Hefestay, Member
Jefferson County Planning Commission
116 East Washington Street
Charles Town, WV 25414

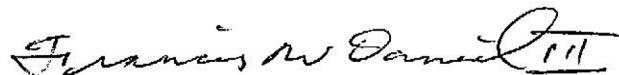
Dear Members of the Jefferson County Commission and Planning Commission:

I am a county resident, farmer and large animal veterinarian serving as Equine Medical Director for the WV Racing Commission. My family has maintained our family farm in Jefferson County for over 250 years. As such, my interests are very much tied to the continuation of agricultural pursuits in Jefferson County. I am highly in favor of allowing solar fields to be installed in the agricultural zone. I firmly believe it is an additional option and opportunity for the owners of agricultural land that provides for a lease and generates income from the property. That lease and those funds will be used to preserve agricultural lands currently and in the future. The only other option and opportunity available to farmers, unfortunately, is to sell their property, and the logical buyers of such properties are primarily housing developers. While I do not object to the construction of housing, I think everyone would agree that once the sale to a housing developer has occurred, the agricultural land will be lost and changed forever.

I enjoy being a resident of Jefferson County and breeding and raising livestock. I firmly believe that allowing solar in the agricultural zones will allow me and other landowners the opportunity to continue with our agricultural activities well into the future.

I look forward to learning, therefore, of the approval of the solar ordinance.

Sincerely,



Francis W. Daniel, III, DVM

December 1, 2021

Steve Stolipher, President
Tricia Jackson, Vice President
Clare Ath, Commissioner
Caleb Wayne Hudson, Commissioner
Jane Tabb, Commissioner
Jefferson County Commission
116 East Washington Street
Charles Town, WV 25414

Mike Shepp, President
Donnie Fisher, Vice President
Wade Louthan, Secretary
Ron Thomas, Member
Matt Knott, Member
J. Ware, Member
Shane Roper, Member
Jack Hefestay, Member
Jefferson County Planning Commission
116 East Washington Street
Charles Town, WV 25414

Dear Members of the Jefferson County Commission and Planning Commission:

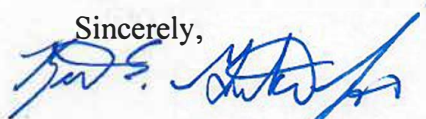
I am writing regarding the proposed solar ordinance which would allow for the installation of solar panels in the agricultural zone. I live in Jefferson County and my property adjoins property that is being proposed for the installation of solar panels. As a result, I have spent time analyzing the proposed plans for this solar panel installation, and given that I will be a next door neighbor to it, I have given it close and careful evaluation. The result is that I do not have any objection to my neighbor or anyone in Jefferson County having the ability to install solar panels on their property. As I see it, I do not believe that the installation of these panels will be a major detraction to the surrounding properties. I understand that these panels will be installed in close proximity to the ground and that the ordinance provides that the panels either be set back a specific distance from the property line and/or that there will be screening of vegetation and plantings along the property line.

I am a proponent of individuals having strong property rights and the ability to do what they want to do on their property. As I see it, installing these panels is similar to the planting of crops, and my neighbor should have the right to choose what he wants to do on his own property.

In addition to this correspondence, I have previously spoken in favor of this ordinance. I believe Jefferson County needs to step forward and become more business friendly by upgrading its Ordinances to allow for innovations such as the installation of solar panels as an option for the residents of Jefferson County.

Thank you for your anticipated approval of this solar ordinance.

Sincerely,



Kim Gutierrez

December 1, 2021

Steve Stolipher, President
Tricia Jackson, Vice President
Clare Ath, Commissioner
Caleb Wayne Hudson, Commissioner
Jane Tabb, Commissioner
Jefferson County Commission
116 East Washington Street
Charles Town, WV 25414

Mike Shepp, President
Donnie Fisher, Vice President
Wade Louthan, Secretary
Ron Thomas, Member
Matt Knott, Member
J. Ware, Member
Shane Roper, Member
Jack Hefestay, Member
Jefferson County Planning Commission
116 East Washington Street
Charles Town, WV 25414

Dear Members of the Jefferson County Commission and Planning Commission:

I am a resident of Jefferson County and a large animal veterinarian. Several years ago I served on the Jefferson County Agricultural Task Force which was charged with reviewing the Comprehensive Plan and Jefferson County Ordinances in order to try to come up with alternative uses for farmers living and working in the agricultural zone to allow for a farmer to diversify and continue to work as a farmer. As part of that agricultural action plan we recommended several new uses to include farm markets and pick your own vegetables and fruits. I am pleased to note that those have become common place in our County and are very well received.

I view solar in the agricultural zone in a similar light and as a new innovation it would fit very well in the agriculturally zoned areas of our County. It is a very low impact and low demand on County services and infrastructure. Further it provides much needed income for farmers and large property owners and allows them to preserve farm land. It is for these reasons that I whole heartedly support allowing solar fields to be installed in agriculturally zoned areas of our County.

I thank the Jefferson County Commission and its Planning Commission for their consideration and approval of this Ordinance.

Sincerely,

Keith B Berkeley, DVM

Dr. Keith Berkeley

A. R. (Rob) Hoxton, IV
Post Office Box 448
Shepherdstown WV 25443

RECEIVED

DEC 03 2021

JEFFERSON COUNTY PLANNING
ZONING & ENGINEERING

November 30, 2021

Steve Stolipher, President
Tricia Jackson, Vice President
Clare Ath, Commissioner
Caleb Wayne Hudson, Commissioner
Jane Tabb, Commissioner
Jefferson County Commission
116 East Washington Street
Charles Town, WV 25414

Mike Shepp, President
Donnie Fisher, Vice President
Wade Louthan, Secretary
Ron Thomas, Member
Matt Knott, Member
J. Ware, Member
Shane Roper, Member
Jack Hefestay, Member
Jefferson County Planning Commission
116 East Washington Street
Charles Town, WV 25414

Dear Members of the Jefferson County Commission and Planning Commission:

My name is Rob Hoxton and I am a resident of Shepherdstown living on a 201 year old family farm. Personally, I am not actively involved in agriculture, but as a landowner and resident I am interested in taking steps to preserve and keep farm land as farm land. As I see it, leasing of agricultural land for solar panels does exactly that and by providing an opportunity for the preservation of the land allows for the generation of revenue which can be used to preserve the land. Also, I am very interested in making sure that our locality and, in particular, Jefferson County plays a role in generating local electricity for Jefferson County consumption. By allowing solar in our County we are able to sustain ourselves with locally produced electricity as opposed to having to be supplied by large power generation facilities many states away.

Finally, by allowing solar panels on our Jefferson County farms we are allowing for a use that is without the impacts of sight, smell, sound, and which allows us to keep an agrarian field and lifestyle in our County. It is for these reasons that my family and I strongly support allowing solar to be installed in the agricultural zoned properties, and we ask the Jefferson County Planning Commission and County Commission to approve this ordinance.

Sincerely,



A.R.(Rob) Hoxton, IV