



Sustainability Assessment for Developments of Regional Importance

Introduction

Sustainable Pittsburgh (SP) is a regional nonprofit that has been working with communities in Southwestern Pennsylvania on issues of sustainable development for almost 20 years. Sustainable Pittsburgh affects decision-making for the Pittsburgh region to integrate economic prosperity, social equity, and environmental quality as the enduring accountability, bringing sustainable solutions for communities and businesses.

To hasten the policy and practice of sustainable development in southwestern Pennsylvania, SP conducts Sustainability Assessments of proposed development projects that can serve as examples of projects with regional importance. Our approach is to work with a developer on the ways in which a particular development both advances sustainability and on areas in which it could see improvement. In this way, the assessment serves to inform the developer about the principles of sustainable development and facilitates collaboration in design and review for enhancing development around the region. Our purpose is to facilitate dialogue and create better regional outcomes.

This Sustainability Assessment reviews [NAME OF PROPERTY] using evaluation criteria that are widely accepted as emerging best practices.

Sustainability Assessment

The assessment is organized around the interplay of the three driving values of sustainability: simultaneous benefit to the economy, environment and social equity. It is designed to systematically understand and measurably assess the social, economic, and environmental implications of this development.

In conducting assessments of development projects in southwestern Pennsylvania, Sustainable Pittsburgh is a realist. We understand the need for developers to make a profit. Clearly demand must exist in the marketplace before a developer can respond. In meeting this demand the developer must be able to marshal the financial resources to control the site, engage designers, plan the roads, water and sewer systems, hire contractors to build the infrastructure and buildings, and attract buyers and tenants to the development and stay in business. In short, a well designed and financially profitable project will benefit many people with a wide range of skills. However, Sustainable Pittsburgh believes that all of this can occur, while at the same time, adhering to sustainability principles. In fact, studies have indicated that adhering to such principles can result in lower front-end and on-going operational and maintenance costs and make for a more desirable and profitable development. At the same time the owners and tenants will enjoy a superior quality of life in their sustainable community.

Numerous guidelines were utilized in creating this sustainability assessment, including the U.S. Green Building Council's (USGBC's) Leadership in Energy and Environmental Design - Neighborhood Development (LEED-ND) guidelines, A Living Future's - Living Building Challenge criteria, The Passive House Institute US certification, the 2015 Enterprise Green Communities Criteria, and the guidelines used for Allegheny County's Tax Increment Financing (TIF) Program.

LEED-ND certification, A Living Building Challenge, The Passive House Institute US certification and Enterprise Green Communities Criteria all provide independent, third-party verification that a development project is environmentally responsible, profitable and a healthy place to live and work. There are typically substantial costs for documentation required for those who seek these certifications.

The guidelines contained in the Allegheny County TIF program are leveraged when a developer seeks the County's financial assistance through the issuance bonds. The bond is re-paid by a portion of the future real estate tax revenue that would otherwise be paid to the county, municipality and school district. Applicants to Allegheny County for a TIF have the opportunity to voluntarily meet a range of sustainability criteria. To incentivize sustainable development, Allegheny County will increase their portion of tax increment that can be used to support the bond if the developer meets certain criteria. The criteria include items such as:

- Using best management practices to deal with stormwater. These practices include on-site retention, infiltration and recycling of stormwater.
- Use of sustainable, low emitting materials and implementation of a construction waste management system to recycle excess building material.
- Use of renewable energy sources.
- Greenspace preservation consistent with the Allegheny County comprehensive plan, "Allegheny Places". The Greenprint Plan encourages preservation of wooded slopes, floodplains, and stream corridors.

These criteria raise the bar for developments seeking public financing support and will help promote sustainable development by providing incentive to developers to encourage the incorporation of the sustainability criteria into their project designs. For assessments in counties other than Allegheny, these criteria are used as a guideline relative to Southwestern Pennsylvania and are superseded by the comprehensive plans, if a recent one exists, of the County where the development is located.

The goal of this Sustainability Assessment is to be consistent with these systems, create awareness, and allow Sustainable Pittsburgh to openly support developments that meet the criteria found within. There is no fee for the process and it is not intended to be as rigorous as, nor replace a LEED-ND certification or similar assessment. If the final assessment meets or exceeds the criteria, we may offer to provide the developer with Sustainable Pittsburgh's public endorsement. Toward being cooperative, if a developer demonstrates a sincere effort to work with Sustainable Pittsburgh and puts in the time required to complete the Assessment, and the results are such that Sustainable Pittsburgh does not offer to speak in favor, the results will be kept between us and the developer. This approach is in step with a process that is focused on developing good rapport and hopefully leads to developers voluntarily enhancing their projects to be all the more sustainable. If the developer chooses to not collaborate or complete the Sustainability Assessment including a completed comprehensive vision statement, Sustainable Pittsburgh will let it be known whether it intends to proceed with a more limited sustainability review based on the publicly available documents submitted to the government/s involved, with a possible public disclosure of findings.

In order to ensure that this assessment does not burden developers who are seeking to gain accreditation for their proposed development through other robust sustainability certification programs, the following certifications will either automatically pass this assessment or will receive the credits indicated below:

- * A LEED-ND certified development or one actively seeking LEED-ND certification does not need to complete this assessment.
- * A LEED Building Design and Construction Certified Building that accounts for more than 30% of the proposed developments floor space will receive full credit for F.1, F.2, and an additional 10 points for Silver, 20 points for Gold, or 30 points for Platinum for this assessment.
- * A Living Future, Living Building or Living Building Petals certified development or one actively seeking certification does not need to complete this assessment.
- * A Living Future Net Zero Energy certified building that accounts for more than 30% of the proposed developments floor space will receive full credit for F.1, F.2 and an additional 30 points on this assessment.
- * A Passive House Certified building that accounts for more than 30% of the proposed development's floor space will receive full credit for F.1, F.2, and an additional 20 points on this assessment.
- * An Energy Star Certified building that accounts for more than 50% of the proposed development's floors space will receive full credit for F.1, F.2, and an additional 10 points on this assessment.
- * A 2015 Enterprise Green Communities certified development or one seeking certification that has or will score more than 50 points on the 2015 EGCC does not need to complete this assessment.

To achieve Sustainable Pittsburgh’s certification, a development must complete each criteria marked Mandatory (M) and accumulate at least 65 points.

Vision Statement			
A.0	M	<input type="checkbox"/> articulates a detailed statement of the overall sustainability goals, attributes, and plans of the project and intended outcomes Include the mandatory information for the following sections: A.1, E.1, E.2, G.1, and H.1 and the voluntary information if points are desired for A.4, A.5, B.1, C.2, D.1, D.3, D.4, H.2, H.4 J.2, and/or J.3	

I. Economy			
A. Genuine Progress.			
Sustainability is advanced when development takes place in or adjacent to existing developed places. Sustainable development brings net positive economic impact to investors, tenants, owners, etc. and to the community at large. The proposed development:			
Item #	Points	Criteria	Score
<u>Economic Impact</u>			
A.1	M	<input type="checkbox"/> creates new economic benefits, as opposed to simply transferring benefits from another location. State the argument for why a development of this kind will bring new economic life to the region in the vision statement. Please provide evidence to support this claim, such as a market analysis created when considering the property for development or demographic data explaining the basic market conditions and employment trends in the region.	
A.2	M	<input type="checkbox"/> is in agreement with the county's or the municipality's comprehensive plan (if the plan was created within the past 9 years) or is integrated in the community's existing infrastructure and its current economic niche if a recent comprehensive plan is not available OR a logical argument is made that the current comprehensive plan does not adequately recognize sustainable development and the proposed development does.	
A.3	4	<input type="checkbox"/> advances mixed use development (i.e. Retail, Housing, Civic, Health, Professional Service, Entertainment) with at least 3 diverse amenities, other than residential, found on site. The amenities must be publically accessible.	
A.4	2	<input type="checkbox"/> does not rely on local public subsidy in the form of local tax forgiveness, grants, etc. (less than 10% of total project cost) Include in vision statement.	
A.5	3	<input type="checkbox"/> uses local contractors, suppliers, and materials to reduce emissions, and to support the local economy. -25% local labor (live within 10 miles) and 50% local supplies (produced within 500 miles). Include plan to accomplish this in the vision statement.	
Section A - Total Points Available:		9	Section A Total: 0
Recommendations:			

B. Infrastructure.

Use of existing, often underutilized, infrastructure saves tax dollars not only for residents of the given municipality but also statewide because fewer municipalities will need to ask for state help to remain viable.

Item #	Points	Criteria	Score
B.1	M	<input type="checkbox"/> is not on productive agricultural land or a greenfield - A request may be made to negate this mandatory requirement if the proposed development is infill and advances clustered/dense development (suburban: > 7 units/acre; urban: > 12 units/acre; These density calculations do not include the property's continuous open space (>1/4 acre) included in the development) in an area where 4 or more diverse amenities are found within a walkable 1/4 mile (urban), 3/4 mile (suburban).	
B.2	3	<input type="checkbox"/> available and sufficient roads and water and sewer lines to the site (No need to increase the number of fixed road lanes (turning (no longer than 500') or bike lanes that ensure safe access excluded) or enlarged storm sewer infrastructure that service the site). Please site the review process that qualifies this (i.e. County Planning review or traffic engineers review).	
B.3	2	<input type="checkbox"/> sufficiently accessible community amenities. - schools and/or library within 1 mile walking distance, or park/parklet within 1/2 mile walking distance; 1 pt. each.	
Section B - Total Points Available:		5	Section B Total: 0
Recommendations:			

C. Transportation.

Sustainable development requires the smallest possible carbon footprint by emphasizing walking and other non-motorized types of transportation for local trips and public transit for longer ones.

Item #	Points	Criteria	Score
C.1	M	<input type="checkbox"/> a complete streets design that is accommodating and supportive of transit, walking, biking and persons of all abilities and ages. - ADA compliant ramps at all crosswalks and at every intersection and additional crosswalks and signalization where pedestrian traffic would be higher, such as near large community centers, schools, etc. - sidewalks on both sides of the street - cartways limited to 11 foot maximum in residential areas (goal 10 feet) - driveways and garages located behind buildings (where possible) - if transit is present, clear way-finding and protected waiting areas available. - bike lanes (protected lanes and trails preferred) providing connectivity to least 40% of the development.	
C.2	3	<input type="checkbox"/> surface parking is limited to 70% of what the ICC (code 801.2.1) suggests for the given development typology where transit is available and 85% where it is not. Include creative parking solutions in both situations (shared car or bike rental access, priority parking for low emission vehicles, electric vehicle charging stations, etc.). Explain creative solutions in vision statement.	
C.3	4	<input type="checkbox"/> Transit Oriented Development (TOD) 90% of units are within 1/2 mile of transit access that has a minimum vehicle departure/arrival frequency of 30 minutes. 4 pts. or access to transit within 1/2 mile with walkable sidewalks (Cannot claim these points if TOD points were claimed). 3 pts.	
Section C - Total Points Available		7	Section C Total: 0
Recommendations:			

II. Environment

D. Plan and Greenspace

Item #	Points	Criteria	Score
D.1	4	<input type="checkbox"/> work with the municipality/community on a "Conservation by Design" development process and plan (A process created by Natural Lands Trust and Pennsylvania's DCNR) and develop less than 10% of area with slopes greater than 15% and none of the area with slopes greater than 25%. Explain in design vision statement.	
D.2	3	<input type="checkbox"/> set aside open space (cannot include paved roads, parking, or areas with slopes greater than 25%) for use by all residents and/or public 20% = 1 points 30% = 2 points 40% = 3 points	
Natural Vegetation and Wildlife			
D.3	3	<input type="checkbox"/> preserve flora and fauna habitat and migration corridors, specifically those protected by the Pennsylvania Natural Heritage Program or recognized as federally endangered species and limit tree and shrub removal to building footprints and essential pedestrian, vehicular, and utility access. Indicate the flora and fauna present in vision statement.	
D.4	2	<input type="checkbox"/> all landscaping is comprised of native and non-invasive plant material and the vision statement states development will prohibit the use of persistent herbicides and pesticides	
Section D - Total Points Available:	12	Section D Total:	0
Recommendations:			

E. Buildings.

Sustainable development brings a long term view to resource utilization and includes conserving energy and promoting public health by being attentive to building orientation and the materials that are used for building and renovation.

Item #	Points	Criteria	Score
E.1	M	<input type="checkbox"/> commit to a waste management plan (in vision statement) for reduction, reuse, recycling of resources during construction, and minimizing waste sent to landfill during construction. Goal: 50% reduction.	
E.2	M	<input type="checkbox"/> provide a manual that includes: a routine maintenance plan; instructions for all appliances, HVAC and filtration operations, water, waste and recycling systems, lighting equipment and other systems that are part of each occupancy unit; an occupancy turnover plan that describes in detail the process of educating the tenant about proper use and maintenance of all building systems; and information on how to maintain the green features of the site, including all ventilation fans, paving materials and landscaping (including encouraging use of natural fertilizers and materials). Include in vision statement	
E.3	4	<input type="checkbox"/> position more than 50% of the buildings (based on floor space) so the longer side (at least 1.5 times the length of the shorter side) of the building/s are within 15 degrees of due south and provides structural shading to benefit from passive solar energy.	
E.4	3	<input type="checkbox"/> decouple the HVAC system such that the Ventilation, Heating and Cooling, Filtration, and Humidity can all be independently controlled.	
Section F - Total Points Available	7	Section F Total:	0
Recommendations:			

F. Energy.
 Decreasing reliance on nonrenewable energy through conservation, efficiency, and alternative energy sources pays on the double bottom line. This saves money adding value and affordability and also lessens environmental impact.

Item #	Points	Criteria	Score
F.1	4	<input type="checkbox"/> utilize energy coming from clean renewable energy sources (such as wind, biomass, hydropower, solar or geo-thermal) on site or off. 20% from renewables: 1 pt.; 40 % from renewables: 2 pts; 60 % from renewables: 3 pts; 100% from renewables: 4 pts;	
F.2	4	<input type="checkbox"/> reduce energy consumption 25% less Energy Use Intensity (EUI) than national median: 1 pt.; 35% less EUI than national median: 2 pts; 45% less EUI than national median: 3 pts; 60 % less EUI than national median: 4 pts.	

Section G - Total Points Available	8	Section G Total:	0
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Recommendations:

H. Water Quality.
 Each development project brings new opportunity to help improve water resource management over poor practices of the past. Contemporary approaches to water management take a comprehensive stewardship view of both "quality" and "quantity" needs. Best practices will include measures to:

Item #	Points	Criteria	Score
G.1	M	<input type="checkbox"/> clearly describe stormwater best management practices in the vision statement, including evidence that stormwater leaving the site will have the same quality or better than it was previous to the development. Label storm drains or storm inlets clearly to indicate where the drain or inlet leads.	
G.2	4	<input type="checkbox"/> maintain (if in a natural undeveloped state) or improve the quality of streams or watersheds for recreation and other uses (not including stormwater retention). - (a) do not develop within 50 feet of wetlands and 100 feet of water bodies, except minor improvements or it is previously developed land. - (b) include vegetated buffers around waterways, and water bodies including wetlands where minimal development is necessary.	
G.3	4	<input type="checkbox"/> use infiltration, bio-swales, vegetated green roofs, rain barrels and other green techniques to distribute stormwater to open space for recharge and flooding prevention (design system to remove at least 75% of the site's stormwater runoff from impermeable surfaces from a 90% rain based on NOAA)	
G.4	4	<input type="checkbox"/> reduce water use intensity (WUI) percentage below national median for similar developments - 15% below local median average: 1 pt; - 25% below local median average: 2 pts; - 35% below local median average: 3 pts; - 50% below local median average: 4 pts.	

Section H - Total Points Available	12	Section H Total:	0
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Recommendations:

III. Social Equity

I. Access to Opportunity.

Development that accrues benefit to the whole community, not just limited to a privileged few, derives public support, investment, and engenders an environment that will serve to protect and enhance investment over the long haul. Also, this approach provides better opportunities for lower income and, often, communities of color to access new jobs more easily. This includes bringing:

Item #	Points	Criteria	Score
H.1	M	<input type="checkbox"/> considerable opportunity for public participation in development planning (public meetings, council meetings, open houses) 3 letters of support from community/local organizations.	
H.2	4	<input type="checkbox"/> a commitment in the vision statement (if the development will be owned by developer) to only hire people at or above a living wage (based on the average of MIT's Living Wage Calculation in the location of the development for a single adult and an adult with child) Currently \$15.53 in Allegheny County or \$14.70 in Lawrence County. (March 2016)	
H.3	3	<input type="checkbox"/> residential units near accessible jobs (within 30 minute transit ride of regional employment center)	
H.4	2	<input type="checkbox"/> A stated commitment to hire at least 1 MWBE for every 4 businesses working on the development during design and construction.	
Section I - Total Points Available	9	Section I Total:	0
Recommendations:			

J. Community Character and Sense of Place.

This somewhat difficult to define attribute is a powerful factor in determining whether we find places attractive and comfortable. Designing for promoting human interaction is key with preference given to pedestrians and other non-motorized transportation. The goal is a 20% reduction of vehicle trips relative to a typical development. Also sustainable design provides substantial green space for active recreation as well as passive enjoyment of natural assets.

Item #	Points	Criteria	Score
<u>Human Scale</u>			
I.1	4	<input type="checkbox"/> grid-like street pattern or well interconnected streets (intersections no more than 500 feet apart), including direct linkages to contiguous developments.	
I.2	2	<input type="checkbox"/> shelters for transit/shuttle riders (1pt) and/or bike lockers provided for employees or residents (2pt)	
<u>Parks, Trails, & Amenities</u>			
I.3	4	<input type="checkbox"/> active (tennis courts, soccer field, swimming pool, skate park, etc.) and passive (parks, plazas, trails, etc.) recreation available for all age and ability groups (2pts for each category)	
I.4	1	<input type="checkbox"/> gardening (shared community and/or private), back yard clothes lines, and/or small animal livestock and chicken raising permitted. (1 pt each)	
I.5	2	<input type="checkbox"/> street furniture is provided including benches at least every 500 feet, integrated lights, and in retail areas - sidewalk dining is permitted	
<u>Health and Safety</u>			
I.6	M	<input type="checkbox"/> air quality is tested for and kept below healthy levels of volatile substances, particulate matter, inorganic gases and radon, the ventilation system must comply with all ASHRAE 62.1-2013 requirements and air filtration is sufficient to maintain those levels.	

I.7	3	<input type="checkbox"/> volatile organic compounds (VOC) used in building construction and interior decoration is limited to the 2007 CARB standards and mold and microbes are prevented and controlled.	
I.8	2	<input type="checkbox"/> Water quality is tested for turbidity, total coliforms, dissolved metals, organic pollutants, and agricultural contaminants and is maintained at recommended healthy levels (if needed with additional filtration).	
I.9	3	<input type="checkbox"/> in projects 5 floors or less, at least one common stair case is located within 7.5 m of the entrance and/or is clearly visible from the main entrance to the project or visually before any elevators and in taller buildings there are stair cases that are always accessible.	
I.10	2	<input type="checkbox"/> minimal residential setbacks (less than 20 ft), with forward facing windows and porches, and utility lines are placed underground and in alleys.	
Section J - Total Points Available		23	Section J Total: 0
Recommendations:			

Health and Safety

K. Housing.			
Community building calls for interaction by a population marked by income, racial and ethnic diversity rather than the islands of homogeneity that characterize most suburban subdivisions.			
Item #	Points	Criteria	Score
J.1	3	<input type="checkbox"/> the development plan contains a diversity of lot sizes and housing types; at least 4 significantly diverse sizes, prices, tenures, and/or densities	
J.2	3	<input type="checkbox"/> affordability – at least 15% of the units are affordable to low-moderate income persons (under 80% of the region's median income) Include in vision statement	
J.3	2	<input type="checkbox"/> site employees with the median annual income can afford housing within the municipality (based on median housing/rental value and 30% gross income) Include proposed median annual income in vision statement.	
Section K - Total Points Available		8	Section K Total: 0
Recommendations:			

Total Points Available	100	[65 points for certification]	Total Points:	0
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