

A Sample of Green Streets Definitions

Water Environment Research Foundation

Definition: Green Streets mimic local hydrology prior to development

Benefits:

- Stormwater management and volume reductions
- Providing a key link in the green infrastructure network
- Enhancing aesthetics
- Improving local air quality by intercepting airborne particulates and providing shade
- Enhancing economic development
- Improving the pedestrian experience

Elements: narrower street widths, bioretention, permeable pavers, street trees

Seattle

Definition: A Green Street is a street right-of-way that, through a variety of design and operational treatments, gives priority to pedestrian circulation and open space over other transportation uses. The treatments may include sidewalk widening, landscaping, traffic calming, and other pedestrian-oriented features.

Purpose/Benefits:

- Enhance and expand public open space, and to reinforce desired land use and transportation patterns on appropriate City street rights-of-way.
- Strengthen connections between residential enclaves and other Downtown amenities by improving the streetscape for pedestrians, bicycles and transit patrons.
- Support economic activity in Downtown neighborhoods by creating an attractive and welcoming “front door” for pedestrians.
- Maximize opportunities for trees and other landscaping to create a high quality open space.

Portland

Description: Green Street facilities manage stormwater runoff as a resource rather than a waste. Green Streets are landscaped streetside planters or swales that capture stormwater runoff and allow it to soak into the ground as soil and vegetation filter pollutants. This replenishes groundwater supplies that feed fresh, cool water to rivers and streams. Green Streets also make attractive streetscapes that connect business districts, neighborhoods, parks and schools, and they can be designed to accommodate the diverse traffic needs of cars, trucks, pedestrians and bicyclists.

Chicago Green Alley Program

Techniques:

- Regrading alley to properly drain
- Using permeable pavement in appropriate locations
- Using light colored paving to reduce urban heat island effect
- Incorporating recycled materials
- Using energy efficient light fixtures

EPA

Description: One principle of green infrastructure involves reducing and treating stormwater close to its source. Urban transportation right-of-ways integrated with green techniques are often called “green streets”. Green Streets achieve multiple benefits, such as improved water quality and more livable communities, through the integration of stormwater treatment techniques which use natural processes and landscaping.

Elements listed in the *Managing Wet Weather with Green Infrastructure Green Streets Municipal Handbook*: narrower street widths, swales, bioretention, permeable pavement, and tree boxes.

Philadelphia

Elements: Green stormwater infrastructure includes a range of soil-water-plant systems that intercept stormwater, infiltrate a portion of it into the ground, evaporate a portion of it into the air, and in some cases release a portion of it slowly back into the sewer system.

FHWA/Texas Transportation Institute

Green Streets Elements:

- Integrate a system of stormwater management within its right of way
- Reduce the amount of water that is piped directly to streams and rivers
- Be a visible component of a system of "green infrastructure" that is incorporated into the aesthetics of the community
- Make the best use of the street tree canopy for stormwater interception as well as temperature mitigation and air quality improvement
- Ensure the street has the least impact on its surroundings, particularly at locations where it crosses a stream or other sensitive area

Others

American Society of Civil Engineers: Sustainable materials, context sensitive engineering, sustainable maintenance, climate adaptation, livability, stormwater

Boston Green Streets Initiative: Encouraging alternative transportation

Smart Growth America: Sustainable Complete Streets include narrow widths, traffic calming, pervious pavement, cool pavements, bioswales, raingardens, street trees, and encourage low-emissions travel.

Adapted from the Following Resources

http://www.werf.org/liveablecommunities/toolbox/gst_design.htm

http://www.seattle.gov/transportation/rowmanual/manual/6_2.asp

<http://www.portlandoregon.gov/bes/article/209685>

http://www.texasmpo.org/tempo/documents/Green%20Streets%20Workshop_Flyer_February%202013.pdf

http://water.epa.gov/infrastructure/greeninfrastructure/upload/gi_munichandbook_green_streets.pdf

http://www.phillywatersheds.org/what_were_doing/green_infrastructure/programs/green_streets

<http://content.asce.org/files/pdf/GreenHighwaysFinalProgram.pdf>

<http://www.smartgrowthamerica.org/complete-streets/complete-streets-fundamentals/factsheets/green-streets/>

<http://gogreenstreets.org/>

http://www.cityofchicago.org/city/en/depts/cdot/provdrs/street/svcs/green_alleys.html