Planning and Policy Framework for Green Streets

Bob Leiter, FAICP
Overview

• Defining Our Terms
• Green Streets: Opportunities and Challenges
  • Policies and Regulations
  • Funding and Financing
  • Research and Education
• A Success Story – Paseo Santa Fe Streetscape Project
• Connecting the Dots
“When we try to pick out anything by itself, we find it hitched to everything else in the Universe.”

-- John Muir
Defining Our Terms

• Sustainable Development
• Smart Growth / Smart Mobility
• Complete Streets
• Green Infrastructure
• Green Streets
Planning for *sustaining places* is a dynamic, democratic process through which communities plan to meet the needs of current and future generations without compromising the ecosystems upon which they depend by balancing social, economic, and environmental resources, incorporating resilience and linking local actions to regional and global concerns.

*Source:* American Planning Association  
Sustaining Places Task Force
Regional Smart Growth / Smart Mobility Planning

Defining Smart Growth: Smart growth is a compact, efficient, and environmentally-sensitive pattern of development that provides people with additional travel, housing, and employment choices by focusing future growth away from rural areas and closer to existing and planned job centers and public facilities, while preserving open space and natural resources and making more efficient use of existing urban infrastructure. (Regional Comprehensive Plan, 2004)
Complete Streets

Why?

Three key state laws establish policy to guide the region in terms of reducing VMT and promoting smart growth and sustainability principles.

• California’s Complete Streets Act of 2008 (AB 1358) requires jurisdictions to include Complete Streets policies as part of their general plans as they update their local circulation elements.

• The Sustainable Communities and Climate Protection Act of 2008 (SB 375) supports the State's climate action goals to reduce greenhouse gas (GHG) emissions through coordinated transportation and land use planning with the goal of more sustainable communities.

• SB 743 creates a process to change the way transportation impacts are analyzed under CEQA to include VMT.
Complete Streets

How?

Complete streets are streets that accommodate people of all ages and abilities, traveling by all modes, including walking, biking, using public transit, and driving cars or commercial vehicles. The Regional Complete Streets Policy defines complete streets as it will be used to guide SANDAG in its role as an implementer of regional transportation projects. The policy includes implementation action items to provide the tools, training and procedures necessary to ensure all projects implemented by SANDAG consider local complete streets initiatives and accommodate the needs of all travel modes. SANDAG has established a dedicated website sandag.org/CompleteStreets that provides access to tools and resources to assist the region and local governments in implementing Complete Streets.

Source: SANDAG Website
http://www.sdforward.com/NearTermActions/3_VMT.aspx
Green Infrastructure
Green Infrastructure

Green Infrastructure is an approach to stormwater and flood management that protects, restores, and mimics the natural water cycle using vegetation, mulch, soils, and natural processes while creating healthier environments. At the County scale, green infrastructure refers to the network of natural features that provides habitat, flood protection, cleaner air, and cleaner water. At the scale of a neighborhood or site, green infrastructure refers to stormwater and flood management systems that mimic nature by soaking up and storing water.

Source: County of San Diego, BMP Design Manual, 2016.
Green Streets

Pavement on roadways can contribute to excess stormwater runoff and increased levels of pollutants in the County’s waterways. Green infrastructure reduces stormwater runoff and improves water quality. The Green Streets program incorporates a wide variety of Green Infrastructure design elements including, but not limited to: tree wells, rain gardens, rock gardens and permeable pavement. The use of Green Streets offers the capability of transforming a significant stormwater and pollutant source into an innovative treatment system.

Additionally, the State of California is in the midst of a severe drought, with water years of 2012-14 recording the driest three consecutive years in the state’s history, as well as setting new records for statewide average temperatures. On April 1st, 2015 Governor Brown signed executive order B-29-15 setting the first mandatory statewide water restrictions. This order prohibits ornamental turf on public street medians, and requires a reduction in potable water use for irrigation. The Green Streets program promotes water conservation through the use of low water use and drought tolerant plants (xeriscape) and improving groundwater supplies through infiltration.

Source: County of San Diego, BMP Design Manual, 2016.
**PDP VS. GREEN STREET PDP EXEMPTION**

**Priority Development Project**
- Meets MS4 requirements for PDP
  - Retention, Pollutant Control, Hydromodification
- Standard pavements
- Biofiltration or Biofiltration + additional Storage

**Green Street PDP Exemption**
- Exempt from PDP using USEPA Green Streets criteria
  - Retention, Pollutant Control
- No Structural BMPs
- Green Infrastructure
What is Alternative Compliance

- Method of storm water mitigation
  - Allowed as part of San Diego's 2013 Municipal Storm Water Permit in Section II.E.3.c.(3)

Optional program with specific requirements
- Offsite structural Best Management Practices (BMPs)
- Reduce post-development storm water impacts
  - Water Quality: Pollutant Control
  - Hydromodification: Flow Control
PDP and ACP

- **Priority Development Project (PDP)**
  - Exceeds square footage threshold of impervious surface and/or supports specific uses (requires numerically-sized structural BMPs)

- **Alternative Compliance Project (ACP)**
  - Implemented *in lieu* of structural BMPs onsite; flow-thru BMPs onsite
Why consider Alternative Compliance

- **Potential benefits** to the City of San Diego and its stakeholders include:
  - Water Quality
    - Improvements to water quality for discharges generated by existing development
  - Concurrent Compliance with Multiple Regulations for Storm Water Discharges
    - Regional MS4 Permit
    - Clean Water Act Sections 401 and 404
    - California Department of Fish and Wildlife - Section 1602
  - Flexibility for Land Development
Why consider Alternative Compliance

- Potential Benefits
  - Flood Control
  - Habitat Restoration
Why consider Alternative Compliance

❖ Potential Benefits
  ➢ Aesthetic and Pedestrian Improvements
  ➢ Education
  ➢ Recreation
  ➢ Reliability of BMPs
    o Ease of maintenance
    o Ease of inspection by City staff

What type of projects

- **Structural BMPs**
  - Retrofit BMP
  - Regional BMP
  - Water Supply BMP

- **Natural System Management Practices**
  - Stream Rehabilitation
  - Land Restoration
  - Land Preservation
Structural BMPs

- Retrofit BMP
  - Adds or modifies structural BMPs in areas of existing development where practices do not already exist, are ineffective, or can be significantly enhanced.
What are the requirements

- Onsite, flow-thru treatment control BMPs, **Plus the ACP:**
  - located in the same watershed and within the City of San Diego jurisdiction,
  - provide greater water quality benefits, and
  - include funding for ongoing operations and maintenance.
Program Development Timeline

Phase 1
- Feb 2016
  Applicant (Developer) Implemented Projects Available
- Feb 2016 to Jun 2016*
  Credit System Work Plan Development

Phase 2
- Jul 2016 to Dec 2017*
  Credit System Work Plan Execution
- Jan 2018 to Jun 2018*
  RWQCB Approval and Local Adoption
- Jul 2018*
  Program Availability

* Draft timeline and is subject to change
Funding and Financing

Green Infrastructure Funding Sources

• Prop. 1 Water Resource Planning and Project Development
• Alternative Compliance Credit Banking Systems

Transportation Funding Sources

• SB 1 Gas Tax Funding
  • County and City Allocations
  • Competitive Grant Programs
• Developer Impact Fees
Research and Education

Resilient Communities

San Diegans have a long history of protecting our clean air and water, spectacular natural resources and enviable quality of life. However, our region is vulnerable to diminishing water supplies, increased wildfire risks, coastal erosion and other impacts of climate change. The San Diego Regional Climate Collaborative’s members are taking steps to identify vulnerabilities, advance research for informing risk reduction strategies, and support projects that sustain the region’s valuable resources and communities.

Climate-Smart Stormwater Management In the San Diego Region

The Climate Collaborative is working to develop partnerships between stormwater managers, watershed managers, land use planners, and public works professionals to advance green infrastructure projects as a climate resilience and community improvement strategy.
Challenges and Opportunities for Climate-Smart
Stormwater Management in San Diego

By Laura Walsh

https://docs.wixstatic.com/ugd/f0db5c_f2b039bc7a6e4ff69c5bcdf3e100679a.pdf
Paseo Santa Fe Streetscape Project

Green Street Concepts
Paseo Santa Fe - Vista, California
Paseo Santa Fe Streetscape Project
## Connecting the Dots: Integrated Planning for Sustainable Development

<table>
<thead>
<tr>
<th>Area</th>
<th>Land Use</th>
<th>Mobility</th>
<th>Infrastructure and Services</th>
<th>Natural Resources Conservation</th>
<th>Resiliency</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Region</strong></td>
<td>urban growth boundaries; urban service</td>
<td>regional transportation network plans; growth</td>
<td>water resource plans; energy supply and distribution plans; regional green infrastructure concepts</td>
<td>open space and natural resource conservation plans and policies</td>
<td>policies regarding location and design of regional facilities</td>
</tr>
<tr>
<td></td>
<td>boundaries</td>
<td>centers policies; mobility hub concepts</td>
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<tr>
<td><strong>City or County</strong></td>
<td>urban and rural land-use designations; planning for local growth centers; transit villages</td>
<td>local multimodal transportation network plans; complete street policies</td>
<td>local utility and service plans for urban and rural areas</td>
<td>resource protection designations (e.g., greenbelts, habitat conservation areas)</td>
<td>hazards maps; policies regarding hazards avoidance and adaptation</td>
</tr>
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<td></td>
<td>urban design guidelines for local growth centers; transit villages</td>
<td>complete street designations; mobility hub designations for key transit locations</td>
<td>community green infrastructure plans; food systems plans; park siting policies</td>
<td>plans for open space preserves; buffering policies</td>
<td>application of hazards maps and policies to community planning areas</td>
</tr>
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<td><strong>Community</strong></td>
<td>detailed land-use plans; implementation and financing strategies</td>
<td>detailed plans and designs for multimodal transportation facilities; financing strategies</td>
<td>detailed plans for green infrastructure projects and other necessary facilities (e.g., parks, libraries, community gardens)</td>
<td>design of open space/natural resource conservation projects for neighborhood planning area; financing strategies</td>
<td>application of hazards maps and policies to neighborhood planning areas</td>
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<td><strong>Subarea/Neighborhood</strong></td>
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"Off the Grid(s)" - How Soon?