Green Infrastructure Financing

Jennifer Cotting
Environmental Finance Center

National Center for Smart Growth
University of Maryland

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Green Infrastructure Financing

What we will cover:

• Why financing important
• Characteristics of effective financing strategies
• Components of effective financing strategies
• Examples of effective financing strategies
• Resources for getting started
Green Infrastructure Financing

Coming to “terms”

- **Funding**: financial resources
- **Financing**: managing fiscal resources

Goal: increase return on investment
Financing Truth

There is not, has never been, and never will be enough grants - public or private - to fund natural resources protection and restoration, including green infrastructure.
Why does financing matter?

- Provides backbone for implementation plan
- Lends credibility with funders
- Resonates with decision-makers
- Your plan cannot become a reality without it!
Successful Financing Strategies

• Community-based
  • Local drivers and priorities
  • Local champions

• Integrated
  • A mix of financing mechanisms
  • A mix of funding sources

• Mirror the resource
  • Different stakeholders contribute in different ways
  • Mix of approaches based on the landscape
Sustainable Financing Strategies

Tend to interweave several elements

• Cost reduction strategies
• Revenue generators
• Market-based programs
Cost Reduction Strategies

Planning

• Strategic planning
• Community visioning
• Comprehensive planning
Cost Reduction Strategies

Effective, enforced rules and regulations:

- Zoning
- Subdivision ordinances
- Forest conservation laws
- Buffer set-back requirements
Cost Reduction Strategies

Coordination with other community priorities and programs

• Reduces costs through efficiencies
• Creates alliances
• Increases political will
Revenue Generators

Grant and loan programs

• Federal
• State
• Foundations
Revenue Generators

Sustainable, dedicated funding

Tax and fee-based sources

- Real Estate and Sales taxes
- Tax Increment Financing
- Impact fees
- Stormwater utilities
- Impervious surface fees
Market-based Programs

Regulatory Markets
• Clean Air Act, Clean Water Act, Endangered Species Act
• Planning and zoning ordinances

Voluntary Markets
• Incentive programs
• Tourism-based programs
• Private sector greening
• Other voluntary programs

Top photo from www.gcbl.org/system/files/rn_grdn3.jpg
Lower photo by Kevin Robert Perry, from pruned.blogspot.com/2008/02/hyperlocalizing-h...
Sustainable Financing Example: Lenexa, Kansas

- Kansas City Metropolitan Area
- Intense development pressure
- Major concerns with flood mitigation and stormwater management
Sustainable Financing Example: Lenexa, Kansas

Sustainable Financing Strategy

- Planning and regulation
- Existing public programs
- Sales tax
- Stormwater utility
- Clean Water State Revolving Fund
- New development charge
Sustainable Financing Example: Lenexa, Kansas

Planning and Regulation

- Land protection policies in 20 year comprehensive plan
- Green infrastructure approach to capital and redevelopment projects
- Stream set-back ordinance
Sustainable Financing Example: Lenexa, Kansas

Existing Public Programs

- Federal and state grants including USEPA nonpoint source funding
- Surface Transportation Project funding provided capital for demonstration projects which tied transportation to parks.
- The Johnson County Stormwater Management Advisory Council 1/10th cent sales tax and proceeds from basic permitting fees charged to developers
Sustainable Financing Example: Lenexa, Kansas

Sales Tax

- 2000 Voter-approved 1/8th cent sales tax
- Supported upgrades and repairs to existing infrastructure problems – capital costs
- Generated $7.2 million between 2000-2005
- Voters approved extension through 2010 projected to raise an additional $8.1 million
Sustainable Financing Example: Lenexa, Kansas

New Development Charge

- Systems Development Charge in 2004
- Developers pay a one-time fee when applying for a permit as a means of recovering the costs of capital improvements
- Growth pays for growth
Sustainable Financing Example: Lenexa, Kansas

Stormwater Utility

- A monthly $5.50 fee approximately $66 annually for residential properties
- Commercial and non-residential properties is based on the amount of stormwater runoff generated by the parcel.
- Collected by the County via annual property tax
- Covers long-term system upkeep
Sustainable Financing Example: Lenexa, Kansas

Clean Water State Revolving Fund

- Green project reserve funds
- $1 million low-interest loan
- Invested in “Central Green Streamway”
- Drains 65 acres of new mixed-use development through seven step pools
- Wetlands and trails connect to existing networks and enhance recreational activities
Sustainable Financing Example: Lenexa, Kansas

Current Status

- Sales tax has sunset
- Utility and new development charges provide sufficient income for operations and maintenance
- Focus shifts to outreach and education to engage private property
Sustainable Financing Example: Lancaster, Pennsylvania

Location:
• Lancaster County
• South Central Pennsylvania
• 7 square miles

Demographics:
• Population: 60,000
• Most of the population lives in area of 4 square miles
Sustainable Financing Example: Lancaster

Sustainable Financing Strategy

• Planning and regulation
• Existing public programs
• State revolving fund loan
• Stormwater authority (pending)
Sustainable Financing Example: Lancaster

Stormwater Management

• Old system combined rainwater and sewer water
• Heavy storms volumes would overtax the treatment facility
• Raw sewage dumps to the Conestoga River

Photo courtesy of US EPA
Sustainable Financing Example: Lancaster

Stormwater Management

• A gray infrastructure solution would cost about $300 million in capital costs
• Would also cost $1 per 1000 gallons for treatment of delayed flow – a total of close to $750,000 annually
• Use green infrastructure to divert 750 million gallons of rainwater from the system annually
Sustainable Financing Example: Lancaster

Green Roofs
• 77,000 square feet of vegetation
• Capture and retain 50-70%
• Slow 90% of rainfall

Park Improvements
• Basketball court replacement project
• Tweaked plans to reroute runoff
• Gravel bed under court, porous court surface
• Addresses run off for $0.16 per gallon, gray alternative would have cost $0.30 per gallon
Sustainable Financing Example: Lancaster

Rain Barrels
- Available to property owners at subsidized rates
- City partnering with LIVE Green
- Ones installed at City collect enough to water entire city garden

Tree Canopy
- Currently 25%, Goal: 40%
- Planting 6000 trees every 3 years
- Tree sale program – private property owners select from 20 different native species at wholesale price
- Benefits include increase in property value, rental rates, retail sales
Sustainable Financing Example: Lancaster

Sustainable Financing Strategy

- Green infrastructure approach would initially cost about $140 million
- Use existing city improvement projects as opportunities to incorporate green infrastructure
- Stormwater ordinance requires no net increase in runoff – looking to require 20% increase in on-site treatment
- Grant programs where appropriate/available
- $7 million from the Pennsylvania Infrastructure Investment Authority (PENNVEST)
- Working to put utility in place – proposed $10 quarterly
Green Infrastructure Resources

Information and tools

EFCs and Partners

• Green Infrastructure Resource Directory
  [efc.umd.edu/greeninfrastructure.html](efc.umd.edu/greeninfrastructure.html)

• Roadmap to Green Infrastructure in the Federal Agencies
  [narc.org/issueareas/environment/areas-of-interest/green-infrastructure-and-landcare/roadmap/](narc.org/issueareas/environment/areas-of-interest/green-infrastructure-and-landcare/roadmap/)
Green Infrastructure Resources

Information and tools

EPA

• Green Infrastructure
  www.epa.gov/greeninfrastructure

• Healthy Watersheds
  www.epa.gov/healthywatersheds

• Water Quality Scorecard
  www.epa.gov/smartgrowth/water_score_card.htm
Green Infrastructure Resources

Information and tools

• CNT’s Green Toolbox
greenvalues.cnt.org/
• American Rivers
www.americanrivers.org
• NRDC
www.nrdc.org and www.switchboard.nrdc.org
• The Conservation Fund
www.greeninfrastructure.net
• Trust for Public Land
www.tpl.org also www.landvote.org
For Further Information

Jennifer Cotting
Environmental Finance Center
University of Maryland

1210 Preinkert Field House
College Park, MD

jcotting@umd.edu
301-405-5495