

Who's going to pay for this?!?

Financing Water Resource Management



ENVIRONMENTAL
FINANCE CENTER



UMD Environmental Finance Center

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www.efc.umd.edu

The Mid-Atlantic Region



Water Resource Financing

- Tools and resources
- Policy analysis
- Direct technical assistance

Water Resource Management Drivers

- Chesapeake Bay TMDL
- MS4 Permits
- Flooding
- Local Priorities



Our Approach

Apply a financing lens in a way that is:

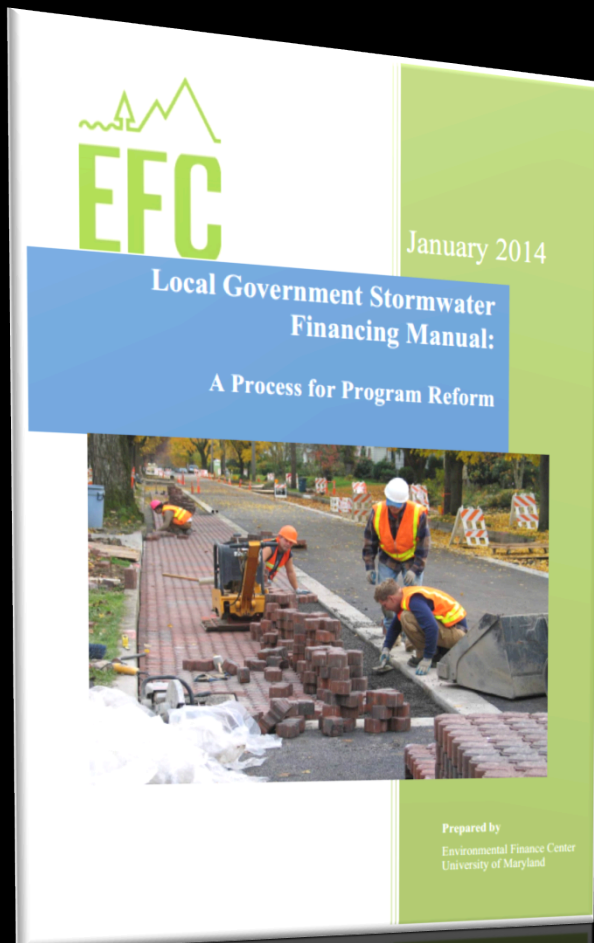
- Community-specific
- Bridges visions
- Encourages communities to think beyond grants

And looks to:

- Reduce implementation costs
- Deliver benefits that serve multiple community priorities
- Engage the private sector and spur behavior change
- Provide return on investment to local economies



Resources: EFC's Stormwater Financing Manual



- Created as a resource and framework that mirrors our process when working with communities
- Reference guide for communities who have capacity/political will to take this up on their own
- Each community is different but there is a framework for implementation

Resources: Municipal Online Stormwater Training Center

The screenshot displays the homepage of the Municipal Online Stormwater Training Center (MOST). The browser address bar shows the URL <https://mostcenter.org/courses/available-courses>. The website header includes the MOST logo, navigation links for HOME, COURSES, KNOWLEDGE CENTER, and ABOUT US, and a search bar. A breadcrumb trail indicates the current location: Courses / Available Courses. The main content area features six course tiles: 'Introduction to Local Government Stormwater Financing' (with a pie chart and bar graph), 'The Building Blocks of an Effective Stormwater Management Program' (with a diagram of success factors), 'Stormwater Financing 101' (with a green arrow and stacks of money), 'Erosion and Sediment Control for Construction Sites' (with a seedling in the rain), 'Asset Management for Stormwater' (with a house and rising bars), and 'Green Infrastructure and Low Impact Development 101' (with a park scene). The footer contains social media icons, a copyright notice for 2015 MOST Center, and an eNews Signup form with a 'GO' button.

Stormwater management and finance courses and resources
Free, self-paced, online
Replicating good practices and improving water quality.

Policy Analysis: State Level Financing Strategies

Options for Financing Chesapeake Bay Restoration in Pennsylvania

Environmental Finance Center, University of Maryland
November 2016



- Tailored to each state
- Assess the capacity of existing revenue streams and financing mechanisms
- Recommend additional strategies

Direct Technical Assistance: Financing Strategy Development

Water resource management is complicated!

- Responsibilities dispersed
- Large capital costs and evolving landscape
- Long term maintenance
- Need for better data and tracking to inform decisions
- Requires staff capacity
- Need for stakeholder education and engagement



Why does financing matter?

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



ELEMENTS OF A SUCCESSFUL FINANCING STRATEGY

Components of a Financing Strategy

Tend to interweave multiple elements

- Cost reduction strategies
- Revenue generators
- Engaging the private sector



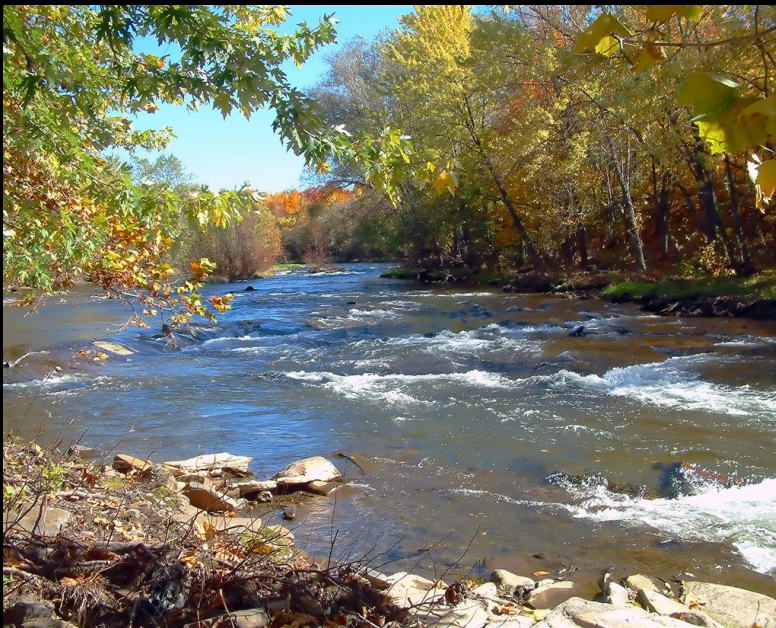
Cost Reduction Strategies

- Planning
- Effective, enforced regulations
- Asset management
- Integrated approach
- Partnerships



Cost Reduction Strategies: City of Scranton

- *Integrate all water-resource related activities*
- *Incorporate more green infrastructure*
- *Develop asset management program*
- *Develop partnerships*



Revenue Generators

- Grants, bonds, and dedicated fees



Open Space Bond:
Warrington Township, Pennsylvania

Stormwater Fee:
Berlin, Maryland



Bed Tax:
Chautauqua County, New York

Chautauqua County Bed Tax



- 3% for economic development in 2004
- Raised to 5% to include water resource management projects in 2008
- 2% capitalizes Lakes & Waterways grant fund
- Public agencies, private organizations, Chautauqua residents

Engaging the Private Sector

Incentivizing behavior change

- School systems
- Corporate campuses
- Private property owners
- Faith-based community
- Homeowners Associations



COLLABORATION FROM A FINANCING PERSPECTIVE

Benefits of Collaboration

- Create efficiencies
- Fill resource and capacity gaps
- Tap into existing resources and capacity
- Become more attractive and competitive to funders



Spectrum of Collaboration

Collaboration
on public
education and
outreach

MOU
developed for
defined shared
activities

Informal sharing
between staff of
equipment,
information,
technology, and
resources

Informal collaboration
through peer-to-peer
sharing

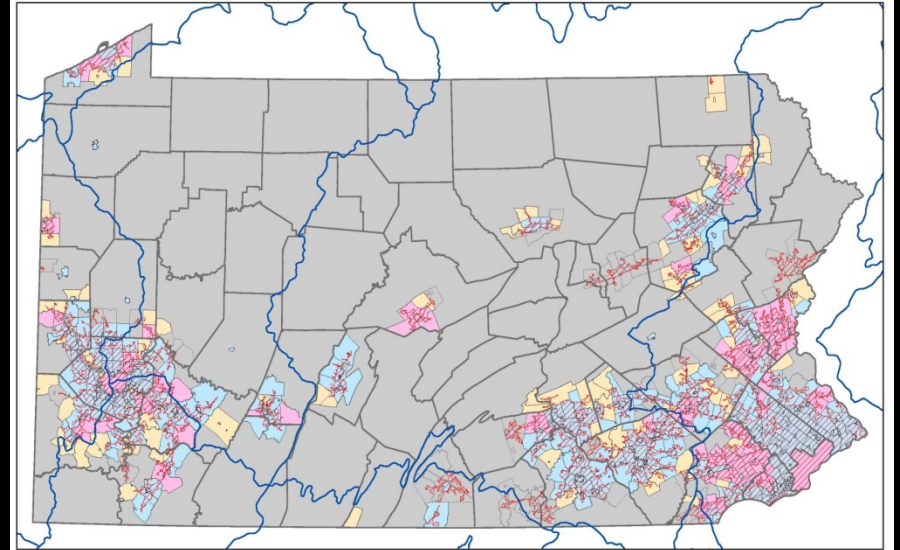
Formal regional entity
created/adapted to
manage stormwater



COLLABORATIVE APPROACHES: BLAIR COUNTY, PENNSYLVANIA

Collaboration within the Context of Pennsylvania

- More than 1,000 regulated entities
- Opportunity varies by
 - Geographic location
 - Existing relationships
 - Political will
- Greatest opportunity for collaboration is through education, outreach, training
- Watershed-scale leads to more robust partnerships



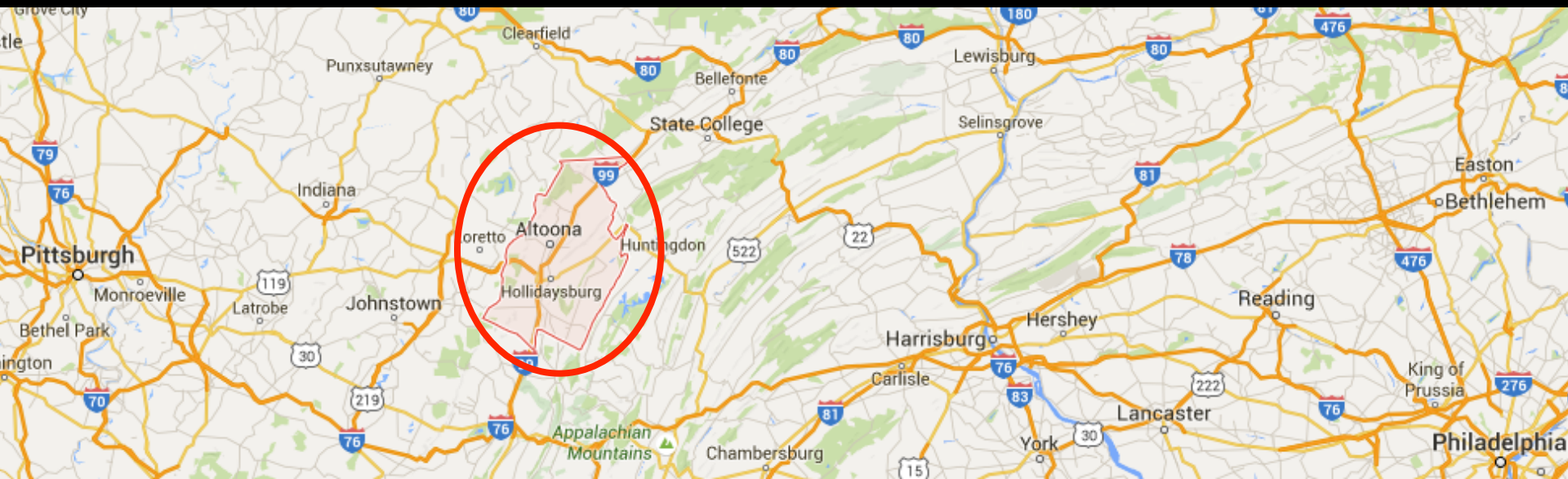
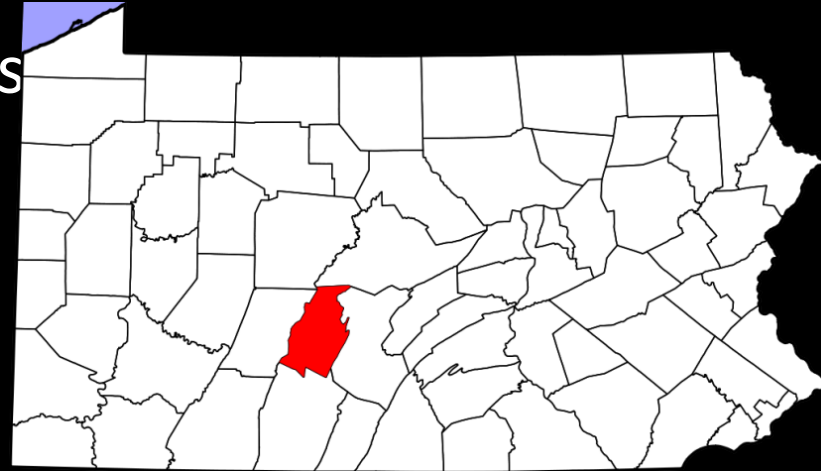
Map of Pennsylvania's NPDES MS4 Permitting Program, Pennsylvania Department of Environmental Protection,
http://files.dep.state.pa.us/Water/BNPNSM/StormwaterManagement/MS4_2010_UA.pdf.

Stormwater Program Finance Analysis and Development

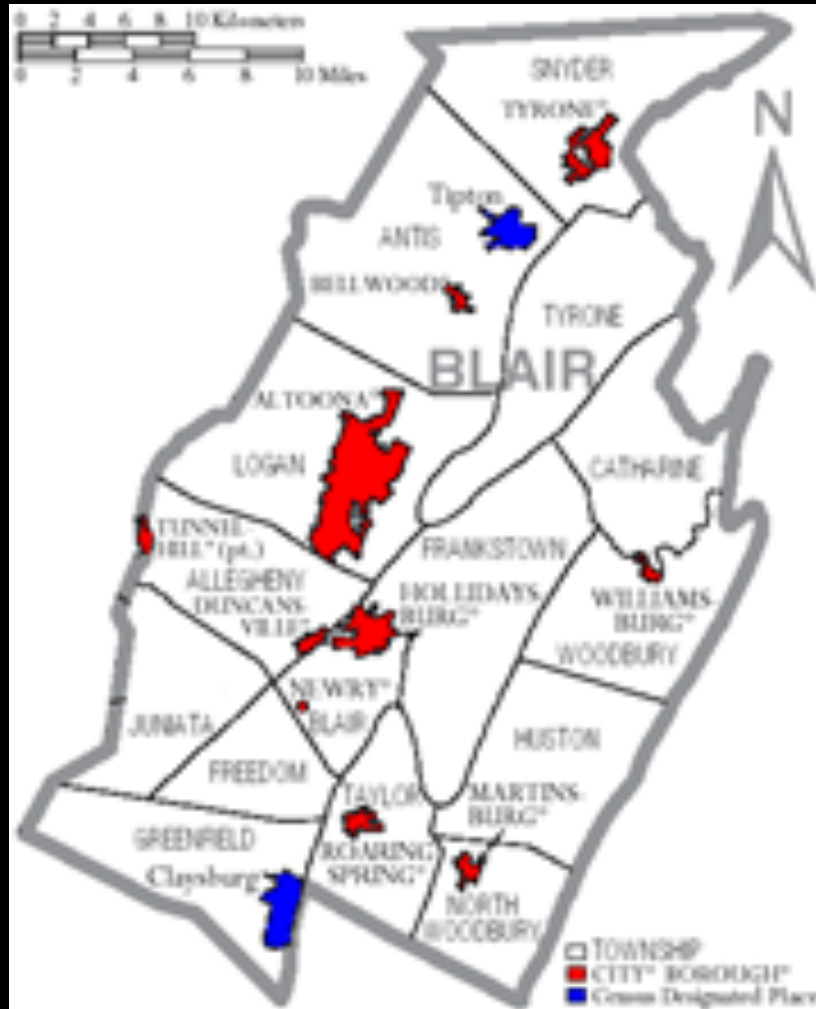


Blair County Demographics

- 24 municipalities:
1 city, 15 townships, 8 boroughs
- 527 square miles
- 65% Forest/Game Lands
20% Agricultural
Residential



Building a collaborative green infrastructure program



- 13 MS4s
- MS4 obligations
- CBPRP obligations
- TMDL obligations
- Local WQ goals

1

Assess current program

Bring together stakeholders, and identify:

- Community sentiment
- Political landscape
- Organizational capacity
- Regulated activities
- Local drivers
- Existing resources
- Existing relationships and partnership

2

Identify gaps and evaluate future needs



High



Medium



Minimal

3

Identify budget needs



LABOR

- Existing staff
- Hire additional staff
- Contractors

OPERATIONS & MAINTENANCE

- Software
- Supplies
- Equipment maintenance

CAPITAL

- Equipment
- Project identification
- Land acquisition

4

Determine associated costs

- 90 CBPRP projects: \$2.675 million
- **Estimated O&M: \$12,428 annually**
- Shared MS4 Manager: \$134,431 annually

**Total annual program costs:
\$326,781**



5

Develop a financing strategy to support budget needs

- Identify appropriate funding sources for budget items

GENERAL FUND

- Staff
- Engineering
 - Monitoring
- Asset management
- Training and technology

GRANT

- Pilot projects
- Early support for shared staff

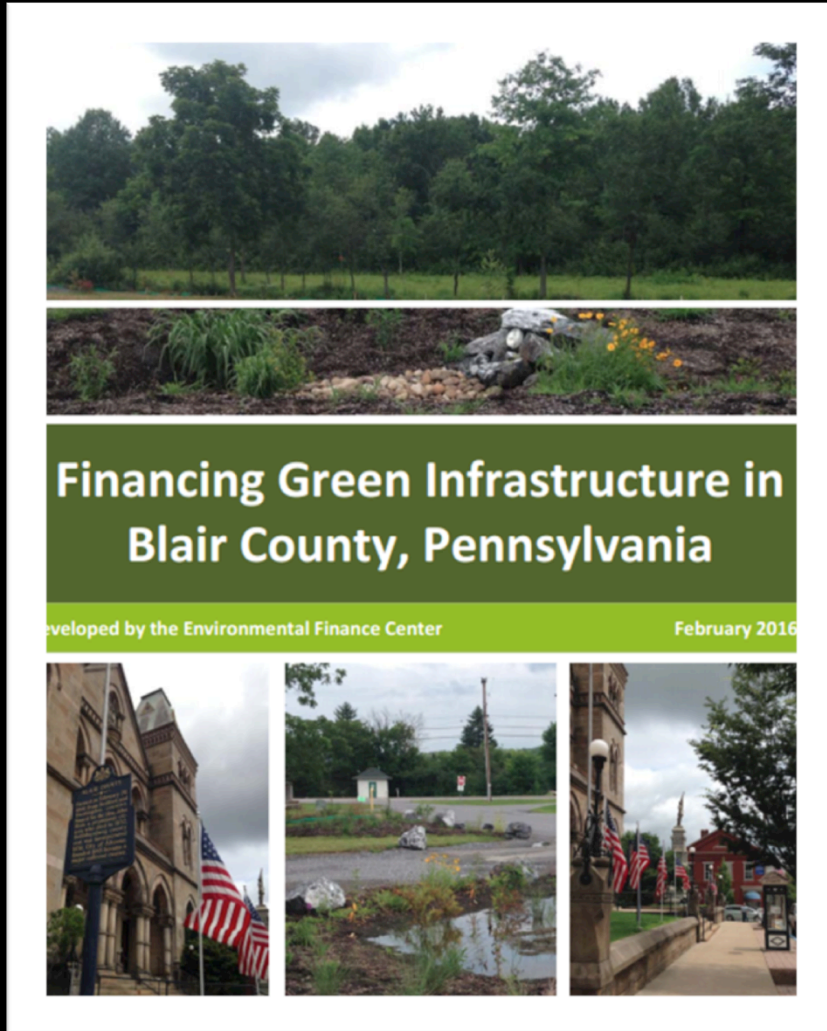
Partnership

- Education and outreach
- GIS services

Fee System

- CBPRP projects
- Long-term support for a shared SW Manager
- O&M

Financing Strategy Recommendations



Cost saving strategies

- Collaboration
- Green infrastructure
- Grant programs

Shared revenue stream

- 20:30:50 weighted scenario
- Stream length, population, impervious surface

Spectrum of Collaborative Approaches

Collaboration
on public
education and
outreach

Informal sharing
between staff of
equipment, tools,
and resources

MOU
developed for
defined shared
activities

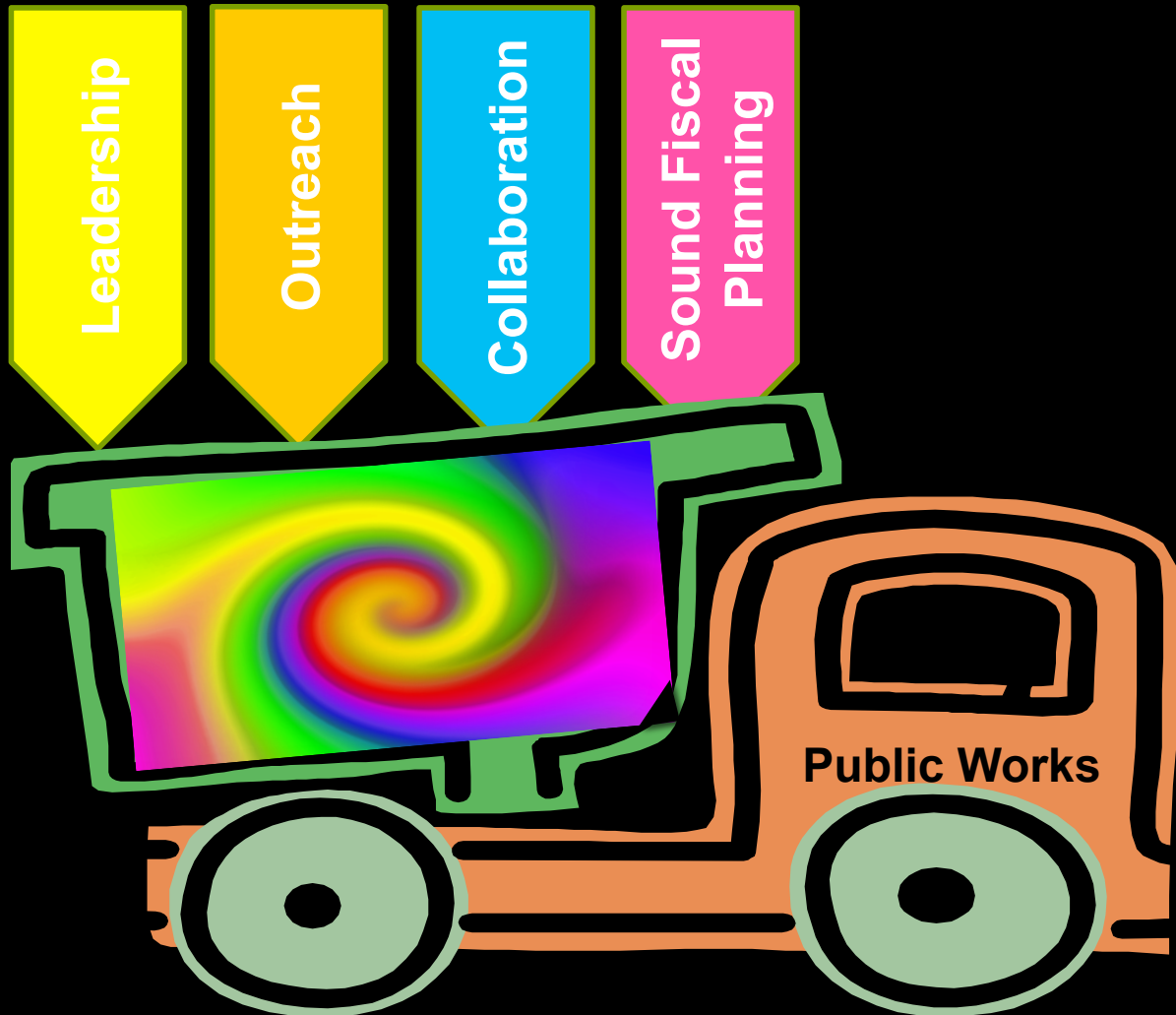
Informal collaboration
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Formal regional entity
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Creating a solution: Thinking long term

First hand observation reveals...



QUESTIONS?

