

Bethesda Downtown EcoDistrict

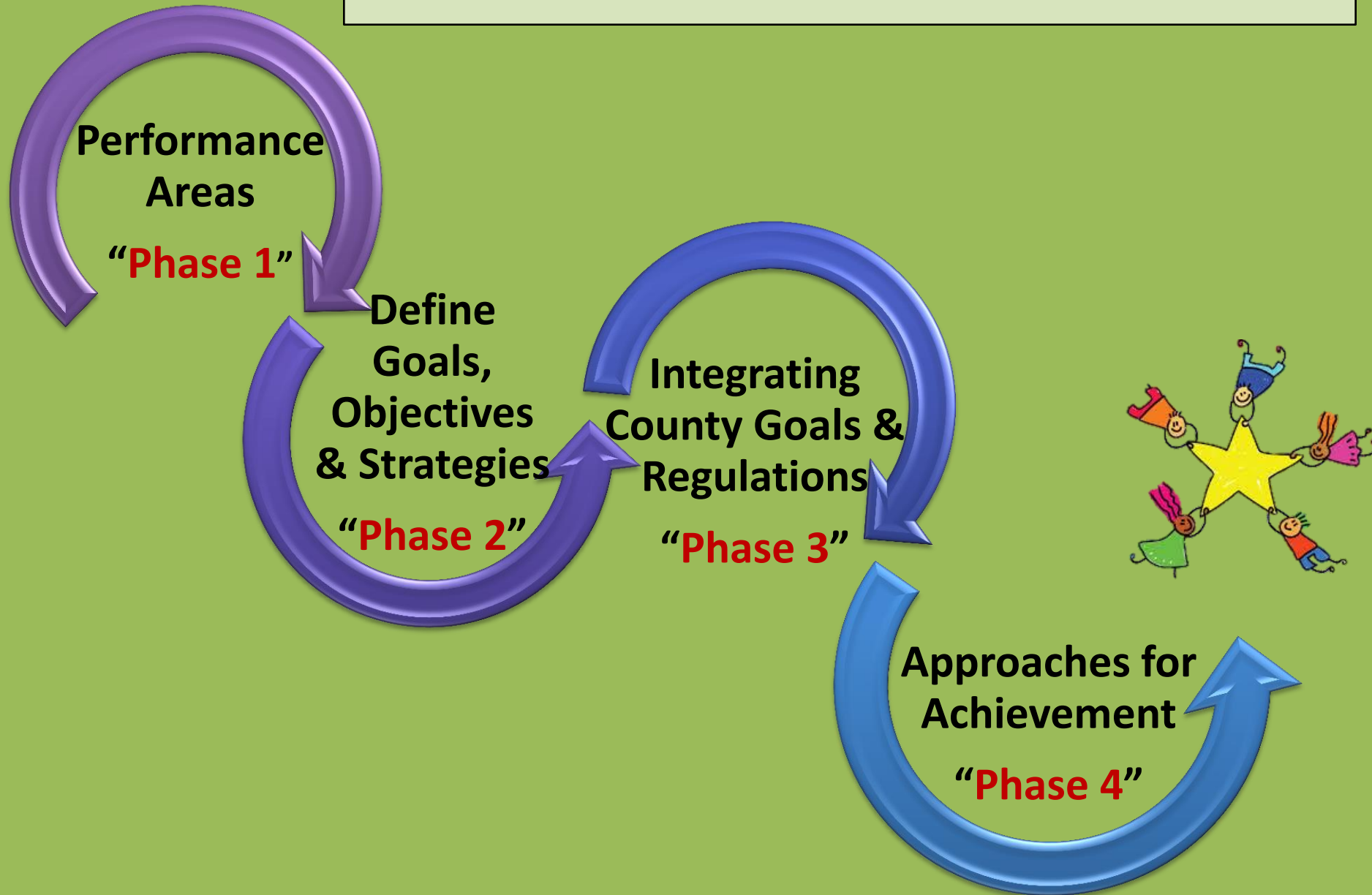
1. **Introduction:** Tina Schneider
2. **What is an EcoDistrict:** Otto Condon
3. **Examples of EcoDistricts**
4. **Process towards an EcoDistrict:** Tina Schneider
5. **Performance Areas**
6. **Establishing:**
 1. **Goals**
 2. **Objectives**
 3. **Strategies**
7. **Supporting regulations**
8. **Work Session:** All



Bethesda: Core Principles of Sustainability



Process



Buildings (New, Existing, Retrofits)



Streets

Community




Bethesda as a System





Phase 2



**Define Goals,
Objectives,
& Strategies**

Phase 2:



Performance Area: Equitable Development

Goal:

Promote equitable growth and opportunity

Objectives:

- **Affordability**
- **Job creation**
- **Socially & economically diverse population**



Strategies

- Affordable housing
- Incubator businesses
- Quality job opportunities
- Access to great libraries, schools, medical, etc.

- Generational mixes
- Age in place
- Social services
- ADA Compliance



Markus Dochantschi and company's runner-up Bronx plan.
Photo: Image: Pirate Design

Performance Area: Health & Well Being

Goal:

Promote health & well being

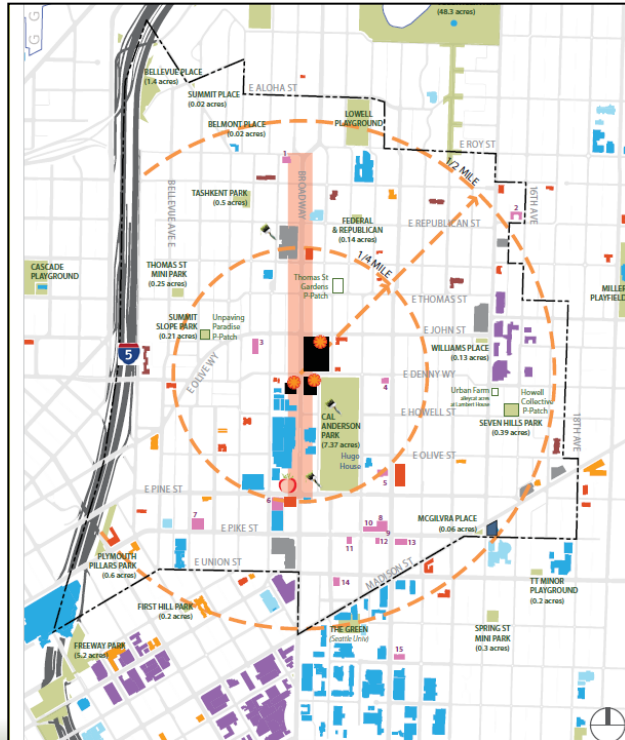
Objectives:

- **Safe & functional parks, recreation and natural areas**
- **Healthy indoor and outdoor air quality**
- **Access to healthy, local, & affordable food**

Strategies

- Parks & open space
- Economic opportunities for all
- Urban agriculture
- Healthy food sources
- Safe streets & pedestrian zones
- Civic spaces
- Reduce carbon emissions

- Community gardens
- Walkable sidewalks
- Links to networks
- Air quality standards
- 20 minute neighborhoods
- Dog parks



Performance Area: Community Identity

Goal: Create cohesive neighborhoods, & community vitality

Objectives:

- Create beautiful, artistic, accessible, safe places
- Foster social networks
- Create destination areas



Strategies

- Design standards for
- Create safe places
- Signature landmark, parks and buildings

- Green infrastructure
- Public Art
- Build in public open spaces



Destination places

Public Art



Landmark Buildings



Performance Area: Access & Mobility

Goal: Access to diverse, multi-model, & affordable options

Objectives:

- Transit choices
- Improved streets & sidewalks
- Low & zero emission vehicles
- Reduced vehicle miles traveled



Strategies

- Transit options & affordability
- Walkability
- Electric vehicle stations
- Bicycle networks
- Bike sharing & stations
- Reduce VMT
- Crosswalks

- Car sharing
- Traffic calming
- Sidewalk improvement
- Pedestrian friendly
- Transportation demand management
- Safe routes to schools
- Real-Time Arrival Info Monitors
- Pedestrian only zones



Performance Area: Energy

Goal: Annual net zero energy usage. Net positive

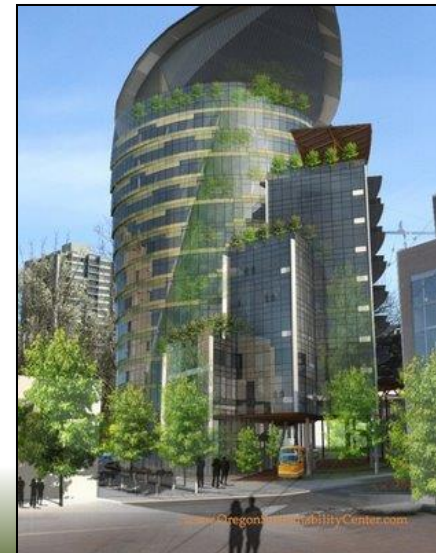
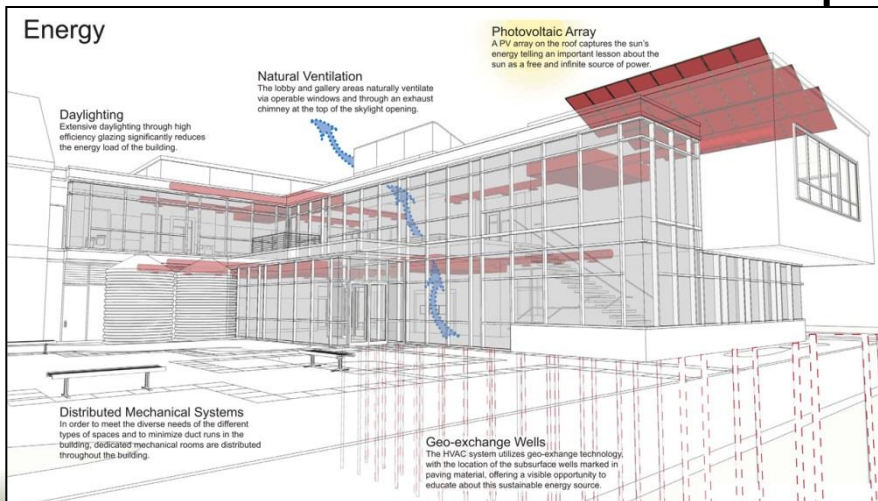
Objectives:

- Minimize demand
- Maximizing conservation
- Reduce carbon emissions



Strategies

- Use renewable energy
- Require higher building efficiency
- Incentivize zero-energy buildings
- Reduce Energy Consumption
 - Combined heat/power
 - Waste to energy
 - Energy retrofits
 - Energy Demand management
 - Smart grid
 - District energy
 - Building & street shading
- Construction performance standards
- Energy conservation retrofits
- Cap and trade emissions
- Geothermal
- Strive for carbon neutral/net positive
- Electric vehicle incentives & requirements
- Increase renewable energy use
- Non-Automobile transit areas
 - Solar orientation
 - Green roofs/cool roofs
 - Strict building regulations

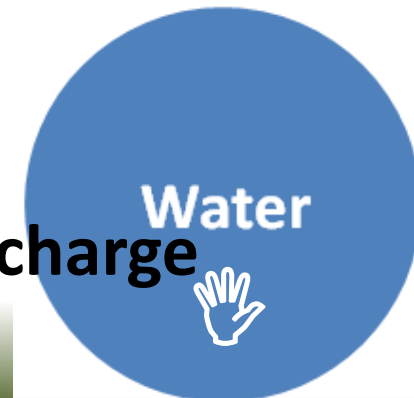


Performance Area: Water

Goal: Reliable, clean, water for natural & human needs

Objectives:

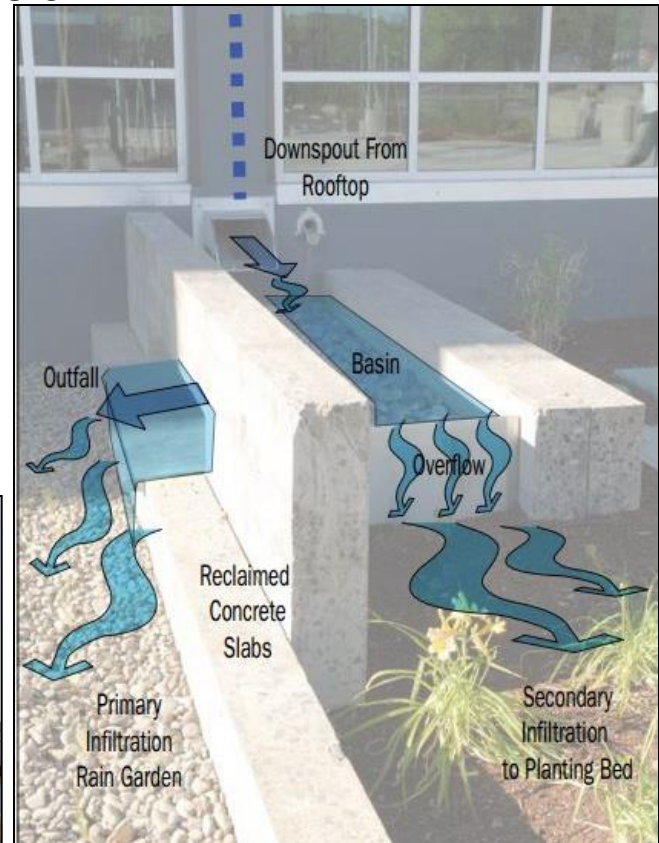
- Improve water quality
- Reduce water consumption through conservation
- Reuse and recycle water
- Manage stormwater & building water discharge



Strategies

- Stormwater retrofits (ROW)
- Stormwater retrofits (buildings)
- Rainwater harvesting
- Increase porous surfaces
- District wastewater reuse

- New construction performance standard
- Greywater use
- Reduce potable water needs
- Reduce water consumption
- Green roofs



Performance Area: Habitat & Ecosystems

Goal: Enrich urban habitat to promote biodiversity, community, and livability

Objectives:

- Increased tree canopy
- Habitat connectivity/corridors
- Advance current & emerging watershed goals
- Stratified, diverse vegetation

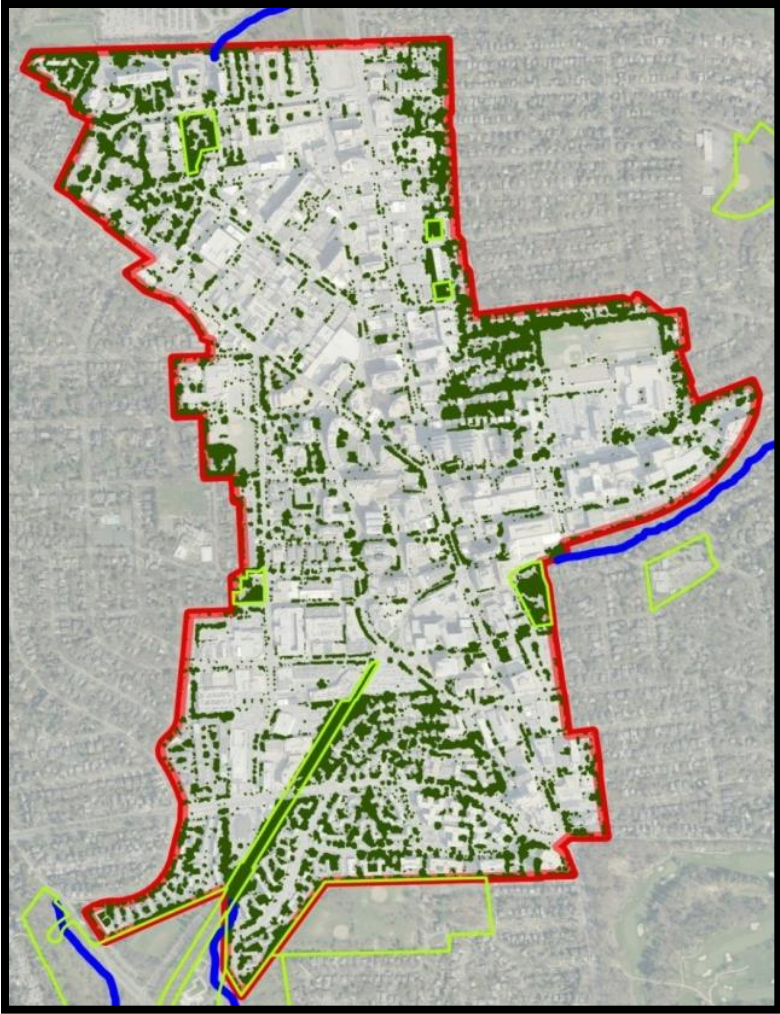


Strategies

- Tree planting
- Species diversity
- Tree planting
- Green surfaces (green roofs, roofs
- ESD/LID stormwater management

- Habitats in ROW
- Habitat corridors
- Urban agriculture
- Create Parks





Performance Area: Materials

Goal: Zero waste and optimized materials management

Objectives:

- 1. Capture residuals (composting/recycling)**
- 2. Optimize reuse and salvage materials**
- 3. Minimize use of virgin & toxic materials**

Materials



Strategies

- District composting
- District recycling
- Ample space for recycling
- Ample Space for Organic & Waste disposal
- Require use of recycled or natural materials
- Reuse & salvage materials

- Materials exchange centers
- Low or no VOC buildings
- Neighborhood Tool Library
- Waste to energy



Existing Supporting County Regulations

Bill 17-06: Energy Efficiency & Environmental Design

Bill 3-14: Buildings - Energy Efficiency - Energy

Bill 29-07: Environmental Sustainability, Climate Protection

Bill 2-14: Environmental Sustainability - Buildings – Benchmarking

Bill 9-14: Environmental Sustainability -
Renewable Energy - County Purchase

Bill 37-06: Green Buildings property tax credit

Bill 33-07: Renewable Energy

Bill 30-07: Energy Efficiency

Bill 10-14: Buildings - Solar Permits –

Bill 11-14: Electric Vehicle Charging Stations

Bill 32-07: Environmental Sustainability- Climate Protection Plan

Bill 35-07: Energy and Environmental Advocacy

Bill 34-07: Greenhouse Gas Emissions: Environmental Sustainability, Climate
Protection

Bill 3-14: Buildings - Energy Efficiency - Energy Standards

Bill 7-14: would create a preference for a certified green
business in the County's procurement of goods and services.



Most Germaine Regulations... Stormwater

National Pollutant Discharge Elimination System (NPDES) Municipal Separate Storm Sewer System Permit Program (MS4). The MS4 program was established to reduce and eliminate stormwater pollution throughout the United States.



Porous pavement
in parking lanes
Catch basin
receives overflows
Flow-through or
infiltration planters
at corners

Street trees for shading and
stormwater interception
LIDA swales, flow-through
planters or infiltration planters
Pedestrian crossing
over swale

Existing Supporting County Regulations Green Building Initiatives

Bill 3-14: Buildings - Energy Efficiency – Energy. Newly constructed buildings of 10,000 square feet or more or extensively modified buildings to achieve a Silver certification in the appropriate LEED rating system

Bill 2-14: Environmental Sustainability Building Benchmarking. Requires owners of certain building systems to improve energy efficiency

Bill 9-14: would require that 50% of the County's electric power usage be supplied with renewable energy by Fiscal Year 2015 and 100% by 2020.



Existing Supporting County Regulations

- Forest Conservation
 - Carbon

Montgomery County is committed to reducing green house gas emissions by **80% by2050.**

Forest Conservation Law (Chapter 22A)

Shades of Green (CBD)

Roadside Tree Law in Montgomery County?



Multi-Agency Collaboration

Community

- Bethesda Green
- BUP
- The Public

Local Agencies

- DOT
- DPS
- General Services
- DEP

Regional Agencies

- COG
- DC Planning
DC DEP
- Chamber of Commerce
- Consultants
- Economist
- County Council

Developer Community

- Housing
- Civic



QUESTIONS?



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Tina Schneider: MNCPPC, Environmental Planner, Tina.schneider@montgomeryplanning.org



Work session

1. Look at four (4) sections in Bethesda
2. Which three (3) performance areas are the most important ones for us to focus on for the next 20 year.
3. Identify the strategies for each performance area
4. Create your **“vision”** for Bethesda!!!



Section 4

Performance Areas: Images:

Comments:

Section 1

Performance Areas: Images:



Comments:

Section 2

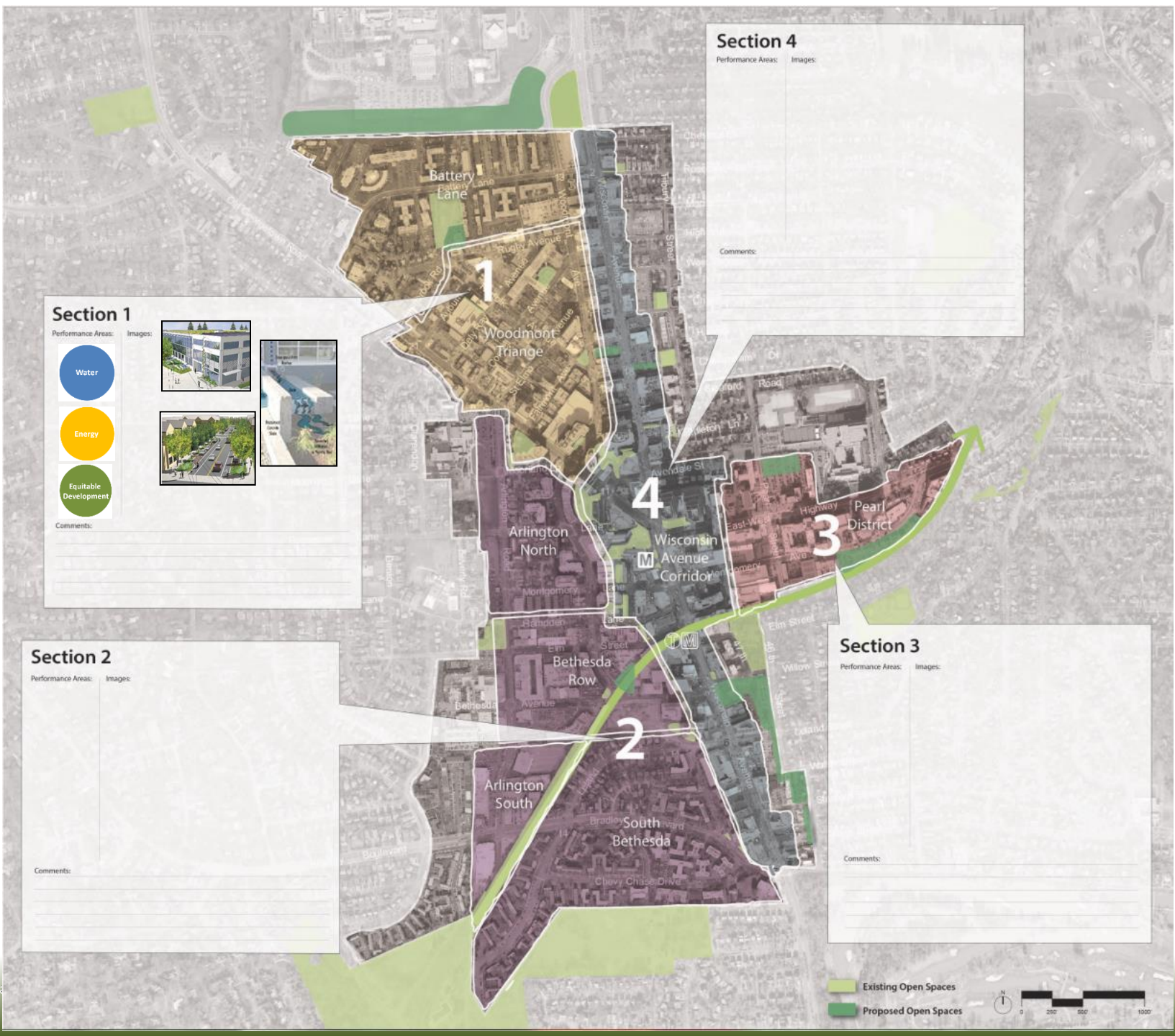
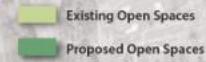
Performance Areas: Images:

Comments:

Section 3

Performance Areas: Images:

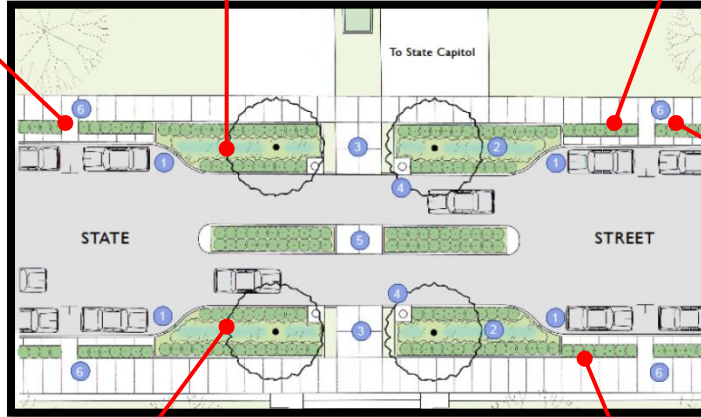
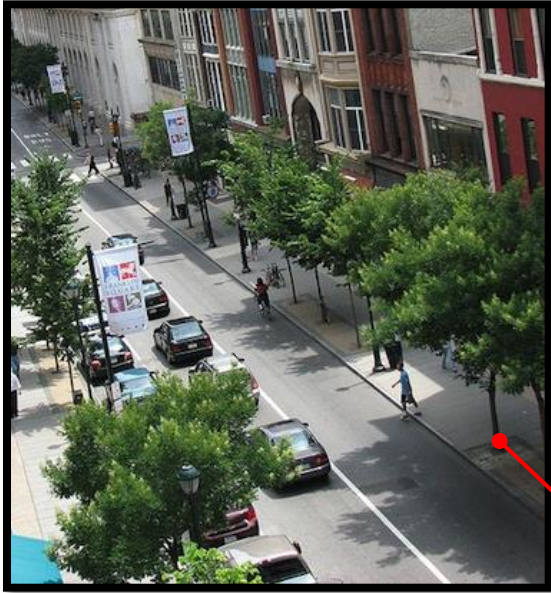
Comments:



Water

Strategy Sheets





Imagine the Future of Bethesda



~Have FUN~

