



Last year, the Planning Commission established a timetable for updating all seven town center master plans. As per section 3.05 of the Annotated code of Maryland, preparing and approving plans is a Planning Commission responsibility. **Adopting and implementing plans is under the purview of the Board of County Commissioners.**

To date, each town center zoning ordinance has been prepared by a separate consultant. For that reason, there is little consistency in format. In our earlier discussions with the Board, we recommended that the Ordinances be made more uniform.

The Town Center concept was approved April, 1984 after 4 years of “intense public scrutiny”.



Town center plans and zoning ordinances have been in place for many years. What has been accomplished?

The concept was approved in April, 1984 after four years of “intense public scrutiny” that had won strong county support.

## Achievements to Date



- Commercial development is concentrated in a few locations rather than scattered all up and down Rt 2/4.

The Town center concept was adopted 25 years ago. What has been accomplished? A great deal!

In most counties, highways have been developed with a strip of commercial.

In Calvert, commercial development is concentrated in a few locations rather than scattered all up and down Rt 2/4.

## Achievements to Date



New roads have been built to pull traffic off of Rt. 2/4.

Example: Prince Frederick Loop Road

New roads have been built to pull traffic off of Rt. 2/4. This is Prince Frederick Boulevard

## Achievements to Date



Water and sewerage treatment facilities have been built and/or expanded in Prince Frederick, Solomons, and Lusby. Private systems are being built in Dunkirk.

## Achievements to Date



Existing roads have been improved.

Example: St. Leonard Streetscape and round-about

Existing roads have been improved.

This is a streetscape project in St. Leonard, with sidewalks, lighting and a roundabout.

## Achievements to Date



Polling House, St. Leonard



Waterman's Park, Solomons



Courthouse Green, Prince Frederick

Town Center parks and amenities have been built.

We've seen many improvements in our Town Centers over the last 20 years

Some are capital improvement projects identified in our Master Plans

Some have been initiated by individual developers or business owners

Some have come about through the design review process

Some through volunteer citizen initiative.

They've all contributed to making our Town Centers more attractive, they all seem to benefit from each other and they all seem to serve as catalysts for each other.

## Achievements to Date



Housing choices have expanded for all ages and incomes in several of the town centers.

# Achievements to Date



**Service Station**



**Houses**

**Police Station**

Example: Along Rt 2/4, Prince Frederick



Example: Chapline Place, Prince Frederick

Example: Residence next to shops, Solomons

Mixed-use development has become or remained a reality.

## Achievement to Date



Signs are more attractive – and more effective – than they used to be.

Signs are much more attractive today than they were before architectural review. Yet they still maintain a lot of individuality – and legibility.

## Achievements to Date

Old buildings are being restored.



Dunkirk



Huntingtown



Huntingtown



Solomons



St. Leonard

Today, you see some thoughtful renovation of older buildings. Also, by requiring that new buildings near the old Penwick house maintain the style of the Penwick house, you've created a cohesive and traditional streetscape along part of Rt 2/4.

## Achievements to Date

Vision in Huntingtown Master Plan



Vision realized – distinctive façades break up a single building



Many newer buildings are designed to be compatible with their older neighboring buildings.

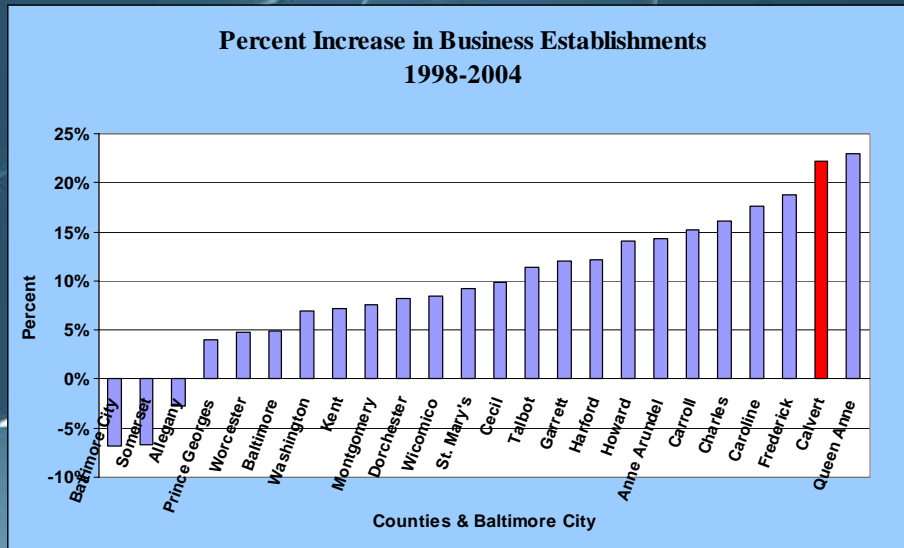
New growth to use material, scale and elements similar to existing development – this example from Huntingtown

## Achievements to Date



Commercial buildings are attractive and provide convenience goods and services.

## Achievements to Date

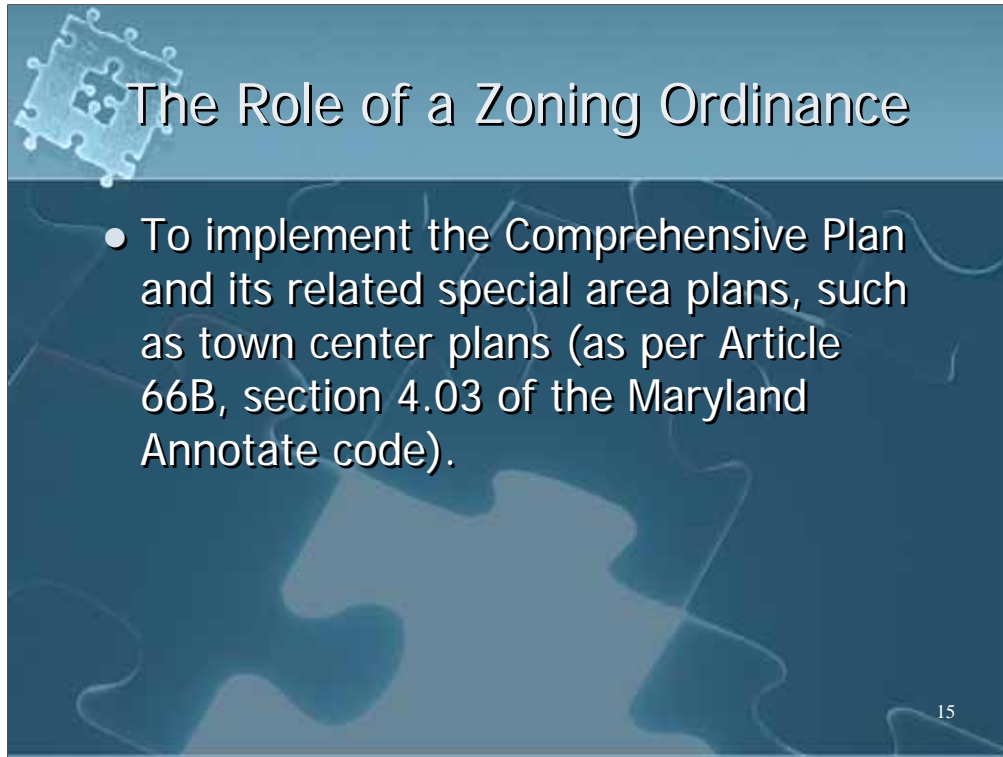


Town Centers are generating strong business growth.

Twenty years later, it's clear that the concept is doing what it was originally intended to do

Between 1998 and 2004, Calvert ranked 2nd in the State in % increase in businesses establishments.

And we are optimistic that with our town center plan updates we can make them even stronger, better places to live work and shop.



## The Role of a Zoning Ordinance

- To implement the Comprehensive Plan and its related special area plans, such as town center plans (as per Article 66B, section 4.03 of the Maryland Annotate code).

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But plans alone don't do it. They must be implemented.

State law calls for counties to adopt zoning ordinances to implement the plans.



## To promote health, safety, and welfare

- By promoting sustainable development, economic growth, and jobs
- By controlling traffic congestion by the planning and construction of new streets
- By securing public safety






## To promote health, safety, and welfare

- By promoting the conservation of natural resources
- By preventing environmental pollution
- By facilitating adequate transportation, water, sewerage, schools, recreation and parks





## Who Prepares and Approves a Zoning Ordinance?

- In a 'county commissioner' form of government, the Board of County Commissioners prepares the Ordinance.
- It is approved after a public hearing is held and after receiving a recommendation from the Planning Commission.

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Section 4.01 of the Annotated Code of Maryland gives the Board of County Commissioners the authority to prepare and adopt a zoning ordinance. Before the ordinance is adopted though a public hearing is held, and a recommendation must be obtained by the Planning Commission.

And in Calvert County, we make sure that there is extensive public participation.




## Town Center Ordinances – *General Principles*

- Zoning regulations should be designed to implement the goals of the master plans.
- The format should replicate the Calvert County Zoning Ordinance.
- Public safety and engineering standards should be consistent throughout the County.
- Environmental standards should be consistent for all town centers.
- Architectural standards may be tailored for each town Center.
- Parking regulations may be tailored for each town center depending on opportunities for public transit, cycling or walking and shared parking.

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Before we rewrote the Calvert County Zoning Ordinance, staff discussed with the Board some general principles of construction of the Ordinance. Staff wanted to do that again before beginning the Town Center Ordinance updates. Our suggestions are that:



## How Should Town Center Ordinances Be Different from the Calvert County Zoning Ordinance?

- Where the town center plans call for it, the ordinances should facilitate mixed use development.
- The ordinances should facilitate walking and cycling.
- At key locations and centers, the ordinances should give priority to commercial development.

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One might say that Town Center Zoning Ordinances should be the same as for lands outside the town centers. But we suggest that there should be a few differences in town centers since they are our growth and economic development centers. For example:

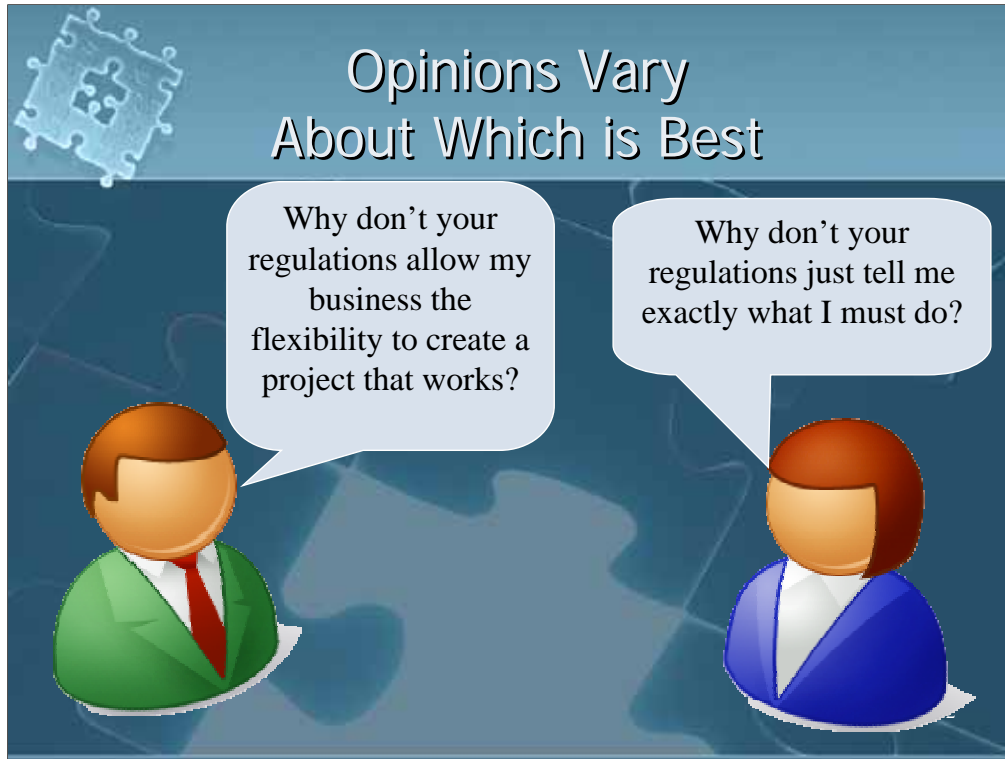
## Two Approaches to Ordinance Design

- Provide specific rules and apply them the same way in all cases (**certainty**) or
- Provide flexibility to give incentives for good design or to fit unusual circumstances (**flexibility**)

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If there is one common complaint about zoning ordinances, is that some say that they lack *certainty*, while others says that they lack *flexibility*. In fact, we've have developers register both complaints on the same project!

I'd like to take a couple of slides to explain the differences.



Each side though has a point. Some say “Why don’t your regulations allow my business the flexibility to create a project that works”, while others say “why don’t your regulations just tell me exactly what I must do?”

There are advantages to both points of view.

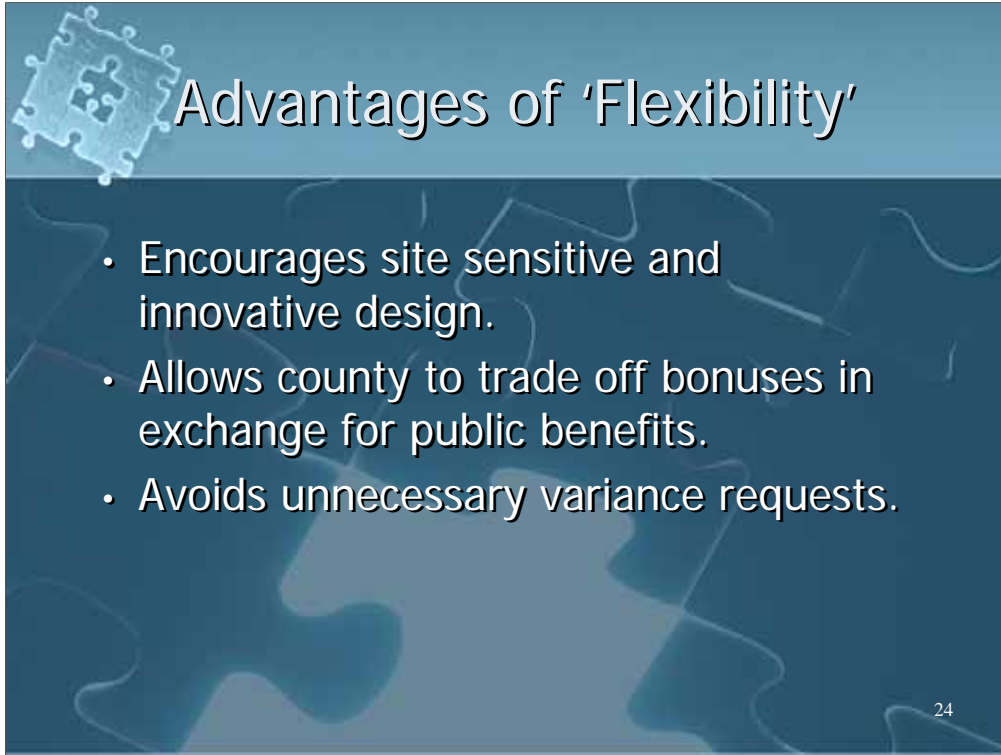
## Advantages Of 'Certainty'

- Creates uniformity
- Provides some assurance to the public and applicants that all applicants are treated the same way
- Simplifies and streamlines the development review process
- Gives applicants more confidence in evaluating costs before a project is submitted

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Certainty creates uniformity . . . .

Critics say it is a “cookie cutter” approach.



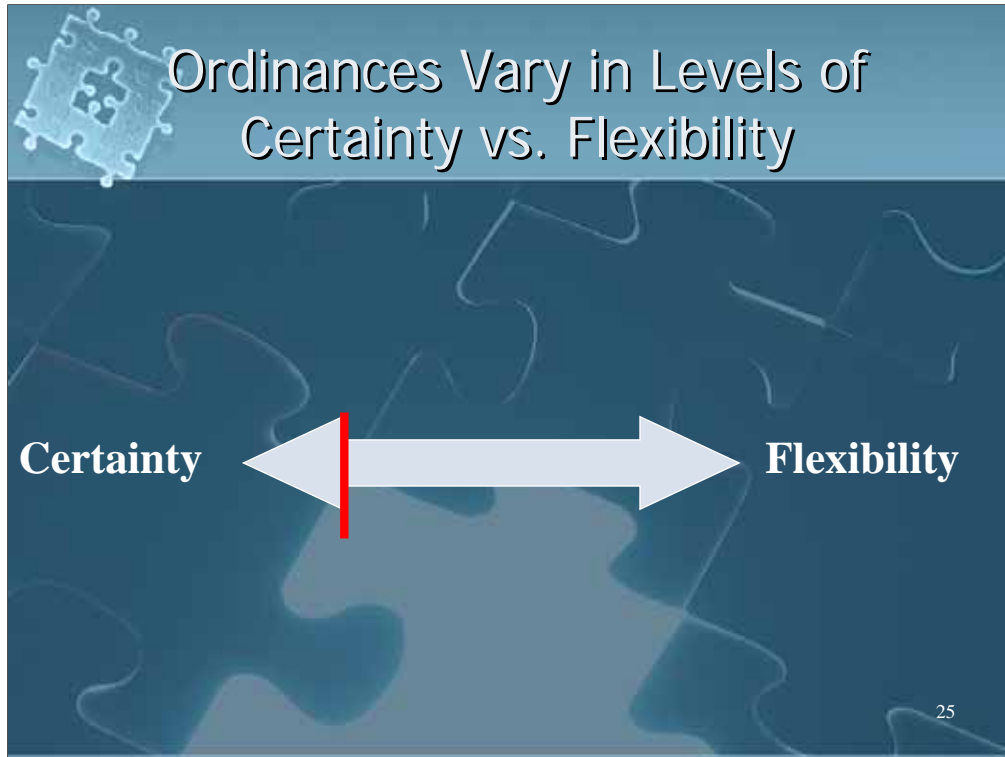
## Advantages of 'Flexibility'

- Encourages site sensitive and innovative design.
- Allows county to trade off bonuses in exchange for public benefits.
- Avoids unnecessary variance requests.

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On the other hand, Flexibility encourages . . .

But critics say this gives the county too much discretion.




Throughout the country, Ordinances vary in levels of “certainty vs. flexibility”.



## If There is Flexibility, Who Decides?

- The Planning Commission (or its designee) approves all site plans and subdivisions.
- The Zoning Officer approves all permits.

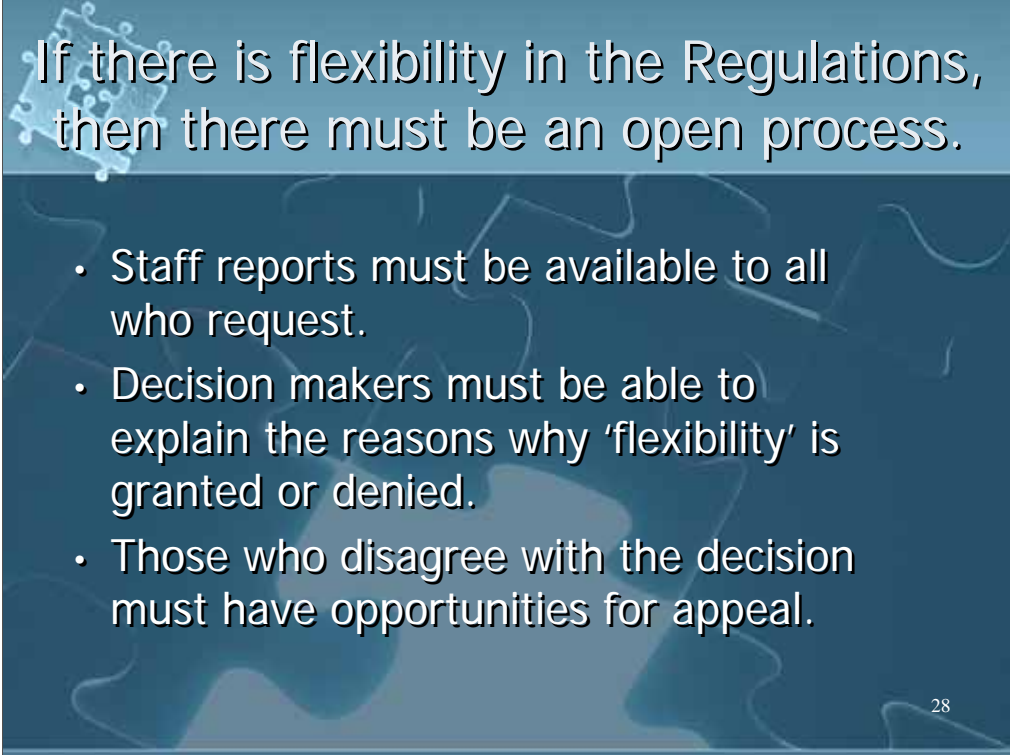


If there is flexibility in the Regulations,  
then guidelines are needed.

- What is the purpose of the regulation?
- Under what circumstances is flexibility appropriate?
- How much can the regulation be varied?
- Who has the authority to vary the regulations?

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Regulations with flexibility need more care in preparation. We believe that flexible standards are used, then the regulations need to state . . .



If there is flexibility in the Regulations,  
then there must be an open process.

- Staff reports must be available to all who request.
- Decision makers must be able to explain the reasons why 'flexibility' is granted or denied.
- Those who disagree with the decision must have opportunities for appeal.

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Also when there is discretion, . . . .



## Example Of Regulations Portraying 'Flexibility'

All non-residential developments shall provide a minimum of a 20-ft. landscaped buffer adjacent to an existing residentially used property. The Planning Commission may reduce the buffer to a minimum of 12 ft. through the use of a landscaped berm at least 3 ft. in height.

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Under what circumstances is flexibility appropriate? Berm

How much can the regulation be varied? To 12'

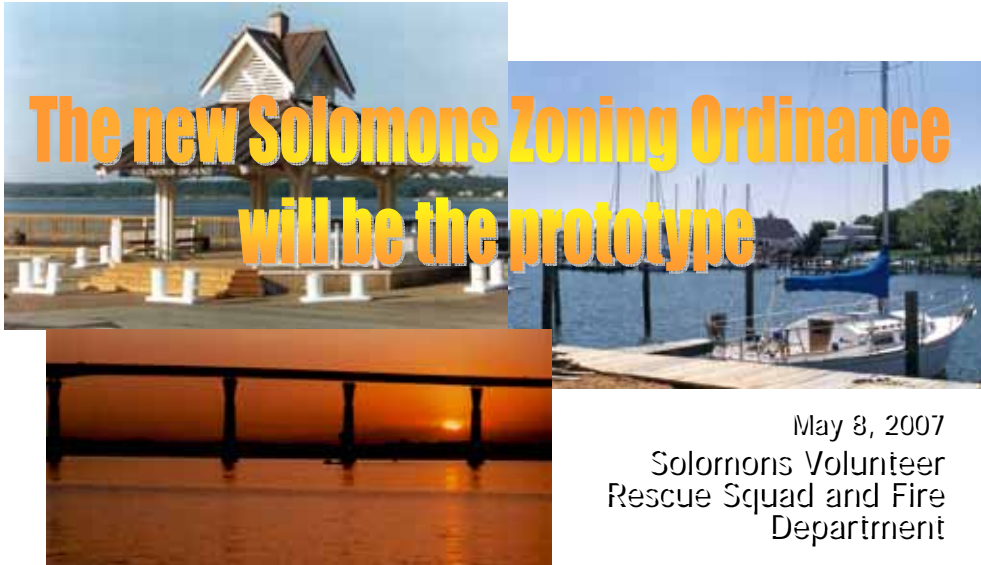
Who has the authority to vary the regulations? PC



## Examples of Regulations Portraying 'Certainty'

- 25' front setback
- 36' maximum building height
- A 100' roadway buffer for all new development on Rte. 4

# Solomons Master Plan Update



**The new Solomons Zoning Ordinance  
will be the prototype**

May 8, 2007  
Solomons Volunteer  
Rescue Squad and Fire  
Department

## Overall Themes

- **Dowell Road corridor is listed as a concern across all three exercises**
- **Concern was expressed about the tension between residential and commercial development**
- **General sense that Solomons' village atmosphere is under pressure.**

## Issue Identification Results

*Other notable issues raised:*

- Harbor and water resource management
- Transportation (sidewalks, access to and across MD 2/4)
- Environment (loss of tree cover and water quality)



# Solomons Island Commercial Core Design Workshop

November 7, 2007



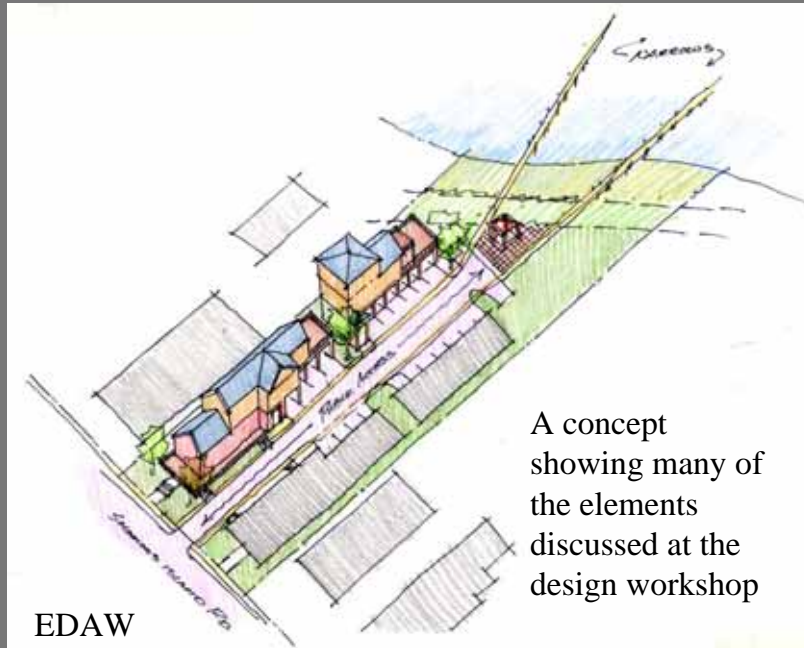
EDAW | AECOM

## Redevelopment Process/Uses

- Encourage a mix of uses
- Require ground-floor retail
- Establish a build-to line
- Promote vernacular architecture
- Offer density bonus for public benefit
- Tighten the design review process



## Physical Concept #4:



A concept showing many of the elements discussed at the design workshop

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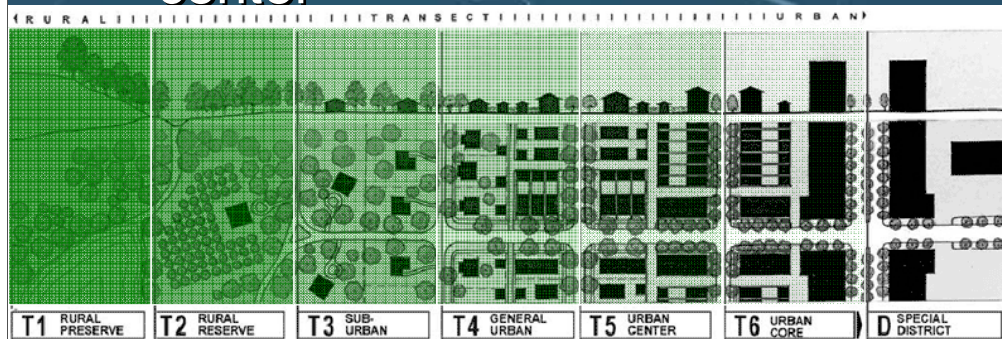


## Other zoning issues to be addressed in all town centers

1. Address environmental protection vs. walkable, concentrated development in town centers
2. Promote 'complete streets' to facilitate all modes of transportation
3. Promote green design
4. Develop consistent strategy for green infrastructure
5. Evaluate architectural design standards

1. Address environmental protection vs. walkable, concentrated development in town centers

← From the country to the town →  
center



Source: [www.planetizen.com](http://www.planetizen.com)

Urban Transect – a continuum of land uses

Should we address environmental Issues on-site or off-site?



The development of town centers runs square into the conflict between smart growth and environmental protection – between walkable communities and greenways. Town Center ordinances have to strike the balance between environmental protection and facilitating the development of town centers which are “interesting places to live, work, and shop.” No doubt, we need to address environmental impacts, but on-site or off-site?



## Sensitive Resources to be protected on-site

- Habitats of threatened and endangered species
- Undeveloped properties in the flood plain
- Green infrastructure identified by the County or State





## Sensitive Resources to be mitigated off-site

- Wetlands approved to be filled, on a 2 to 1 basis.
- Forested areas, beyond the minimum forest canopy required, on a 2 to 1 basis.



Sensitive resources to be developed  
subject to approval by Planning  
Commission, or its designee

- Wetland fills for roads and commercial development
- Slopes greater than 25%
- Wetland buffers may be reduced to 25 feet for commercial and public uses if adequate methods are formulated by the developer and approved by the Zoning Officer.
- Extended stream buffers (sec. 8-2.06 B.) may be reduced to 50 feet if adequate methods are formulated by the developer and approved by the Zoning Officer.

## 2. Promote 'complete streets' to facilitate all modes of transportation

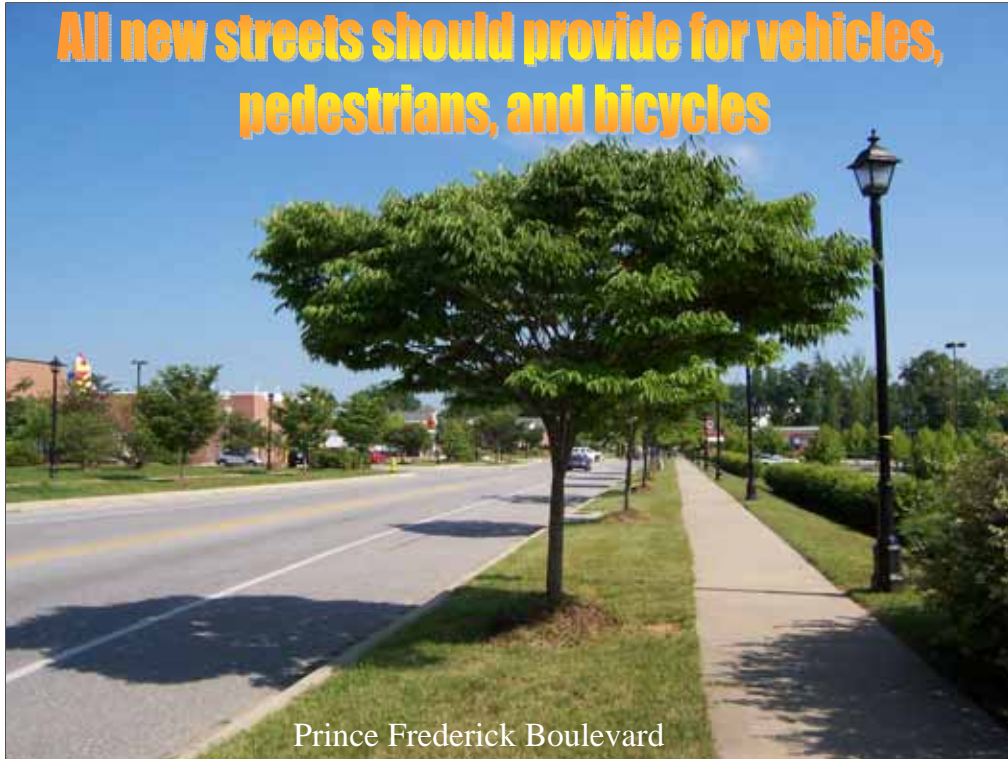


City of Colorado Springs

### **House Complete Streets Bill Introduced** REP. MATSUI LEADS HOUSE EFFORT

Earlier this month, Rep. Doris Matsui (D-Calif.) introduced the "Safe and Complete Streets Act of 2008." This bill would require states that receive federal funding for their road improvement projects to implement complete streets policies. These policies ensure that any new road construction or rehabilitation efforts would accommodate the safety and convenience of all users of the transportation system. In March, Sen. Tom Harkin (D-Iowa) introduced similar legislation (S. 2686). Both pieces of legislation ensure that future transportation investments create appropriate and safe transportation facilities for all those using the road: motorists, transit vehicles and riders, bicyclists, and pedestrians of all ages and abilities.

**All new streets should provide for vehicles,  
pedestrians, and bicycles**



Prince Frederick Boulevard

**All intersections should provide  
for safe pedestrian crossing**



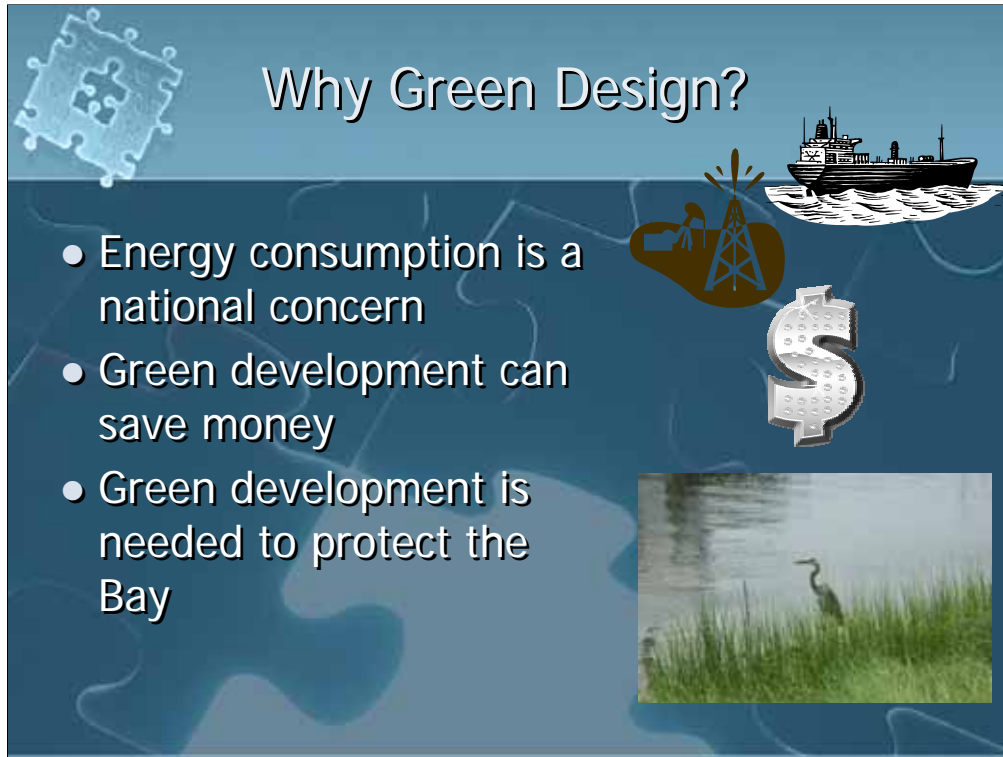


### 3. Promote green design

- Flat roofs for holding stormwater
- Lowered landscape areas for stormwater
- Building/roof orientation for solar panels

## Why Green Design?

- Energy consumption is a national concern
- Green development can save money
- Green development is needed to protect the Bay



Energy consumption is a national concern. . .our dependency on foreign oil or as President Bush calls it our addiction to oil

Green development can save money. An example, Green Buildings use on average 30% less than conventional buildings (according to Greg Kats, managing director of Good Energies, a venture fund **Urban Land, June, pag 40**) If energy costs run \$2 per sq. ft., this becomes a savings of 60 cents a sq. ft. For a 100,000 sq. ft. building, energy and water savings of \$60,000 annually. Over 20 years (at current costs, that would equate to \$1.2 million. The average premium for integrating green features range from \$3 to \$5 per square foot. For a 100,000 sq. ft. building, that would equate to \$300,000 to \$500,000 in added construction costs, which would be paid off in 5 to 8 years of use of the building.

Green development is needed to protect the Bay



## Green Roofs

In a recent study at MSU, a green roof intercepted 70% of the rain that fell on it over a 14 month period.

**Green Roof Stormwater Retention -**  
*Journal of Environmental Quality, May 2005.*



Sadik Artunc, Professor and Head of the Mississippi State University Dept. of Landscape Architecture



**Sadik Artunc, Professor and Head of the Mississippi State University Dept. of Landscape Architecture.**



## Swales and Basins

Sadik Artunc, Professor and Head of the Mississippi State University Dept. of Landscape Architecture.



Sadik Artunc, Professor and Head of the Mississippi State University Dept. of Landscape Architecture



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Habitat for Humanity partnered with National Renewable Energy Laboratory to build its first true net-zero-energy home in Wheatridge, Colo. (Photo by [Pete Beverly](#)) <http://www.wapa.gov/es/pubs/esb/2005/oct/oct052.htm>

## Solar Shingles

### By: Keith Pandolfi, This Old House magazine (Page 1 of 2)

NREL researchers developed focused on improving the efficiency in four areas:

Orientation and landscaping

Building envelope design, including construction details to support heavy insulation, strategically located low-e windows and an extra long roof overhang

Efficient lighting and appliances

Solar water heating system

These measures bring the house's average energy consumption down to 64 MBtu annually compared to 90 MBtu for the 2002 energy-efficient Habitat home. The standard benchmark is 160 MBtu. The house uses 40% of Colorado's average annual energy consumption. **The national average is 115 MBtu** ( see [eia.doe.gov](http://eia.doe.gov)) The grid-tied, 4-kW solar array is expected to produce enough electricity in the summer to offset energy use in the winter, earning the 2005 home its "zero-energy" status.

Imagine a struggling family whose dream of homeownership finally comes true only to learn that they cannot afford to heat and light their new home. [Habitat for Humanity](#) formed a partnership with the [National Renewable Energy Laboratory](#) and the U.S. Department of Energy's [Building America](#) program to make sure that doesn't happen in any of the houses the nonprofit organization builds and sells to low-income families.

"The houses should be affordable to live in as well as to buy," said Real Estate Developer [Andy Blackmun](#) of Habitat's [Metro Denver affiliate](#). "For that reason, all of the homes we have built since 1999 have been energy-efficient houses. What we are trying to do with NREL is bridge the gap between high-end technology and day-to-day measures that will help families save money now."

The partnership is building Habitat for Humanity's first true net-zero energy home in Wheatridge, Colo. "The advantage of working with Habitat is that it builds so many houses. It gives us the opportunity to get new technology out of the lab and into homes," said [Ron Judkoff](#), director of NREL's Center for Buildings and Thermal Systems. "Bringing energy use down makes sense with Habitat's mission, too, since reducing electric bills will really help Habitat families," he added.

#### Cost, easy installation considered

The house is the second the partnership has built. In 2002, Habitat Metro Denver asked the DOE to help it improve its design and construction process. The result was a highly efficient demonstration home in Westminster, Colo., that improved on standard home benchmark energy consumption by more than 40 percent.

The long-term goal of the collaboration is to make zero-energy housing cost-efficient by 2020. "We look for grants and in-kind donations to cover some of the increased expense of energy-efficient building," explained Blackmun. "When it comes to direct cost, though, we have to consider whether an incremental gain in efficiency is going to take resources away from building another house."

In addition to being cost-effective, the zero-energy Habitat house had to be volunteer-friendly to build, which ruled out certain types of technology. For example, "We looked at a recovery ventilation unit tied into the heating system, but it would have to be installed by highly trained contractors," said Blackmun. "Then, if the ventilator went down, the house would have no heat. We don't want to saddle homeowners with systems that require expensive upkeep."

The streamlined building process

**Orientation, design, systems equal efficiency**



## 4. Develop consistent strategy for green infrastructure



Trees and plantings are considered essential for quality of life in town centers. Trees provide shade. They improve air and water quality and help improve stormwater management. Plantings provide attractive visual relief from harsh asphalt and concrete.

Green infrastructure includes trees, vegetation, wetlands, and open space. To counteract the impacts of development in towns, green infrastructure can intercept precipitation and allow it to infiltrate rather than being collected on and conveyed from impervious surfaces (NRDC 'rooftops to rivers' v.)

### Planning for Urban and Community Forestry

The American Planning Association, in close collaboration with the [International Society of Arboriculture \(ISA\)](#) and [American Forests \(AF\)](#), will prepare a state-of-the-art best practices manual about how urban and community forestry can best be integrated into long-range and current municipal planning activities in the U.S.

### The Problem of Declining Urban Forests

Urban forests provide enormous environmental benefits — among them improving air and water quality and slowing stormwater runoff. Yet, tree canopy in many U.S. metropolitan areas has declined significantly over the last few decades. The national organization American Forests has analyzed tree cover in more than a dozen metropolitan areas and documented changes. Over the last 15 years, naturally forested areas of the country east of the Mississippi River and in the Pacific Northwest have lost 25 percent of their canopy cover while impervious surfaces increased about 20 percent. These changes have ecological and economic impacts on air and water systems. Communities can offset the ecological impact of land development by utilizing the urban forest's natural capacity to mitigate environmental impacts.

The physical framework of a community is called its infrastructure. These utilitarian workhorses of a city can be divided into two types: *green and gray*. Green infrastructure includes areas covered with trees, shrubs, and grass; gray infrastructure refers to areas of buildings, roads, utilities, and parking lots. A community can measure the size, shape, and location of its green infrastructure and accurately calculate the public utility functions these areas perform.

For local public policymakers responsible for decisions affecting urbanization, the problem is not solely about getting the city or the developer to plant more trees. It is far more complex, involving every aspect of the urbanization process and balancing gray and green infrastructure. While both gray and green infrastructure are important in a city, communities that foster green infrastructure wherever possible are more livable, produce fewer pollutants, and are more cost-effective to operate. However, balancing the gray with the green can be a serious challenge.

Up until now, there has been no guidebook or manual that provides a clear path to such an understanding. This project addresses the need for planners to adopt a green infrastructure approach and the technical means to incorporate trees into planning. Moreover, the creation of such an urban planning manual will help urban forestry professionals and advocates understand how they might best interface with the urban planning process to maximize green infrastructure and reduce gray infrastructure costs. Urban planners, and those in allied professions with whom they often work, are uniquely positioned to influence public policy affecting how the built (gray infrastructure) and natural environments (green infrastructure) are planned and designed to work together. Planners have an opportunity to advocate for maximizing green infrastructure in a number of ways. These strategic points of opportunity are best employed at two scales of land planning: **1. Adopt a Green Infrastructure Approach to Plan Making**

*Community Visioning*, or the development of long-range goals and objectives for the community, which all too often do not include reference to trees or green infrastructure.

*Long-range plan-making*, including preparation of:


- the comprehensive plan (known in some states as the general plan or master plan);
- sub-area plans, such as neighborhood plans, corridor plans, downtown or central business district plans, or redevelopment plans;
- functional plans, such as plans for parks and open space, transportation plans (highway, transit, bikeway, and pedestrian plans), community services, and facilities plans.

### 2. Implement Best Management Practices that Promote Green Infrastructure

*Preparation of ordinances, regulations, and incentives* affecting the siting of buildings, sidewalks, curbs and gutters, roadways, drainage,

# Value Of Trees And Other Plants

- Cleaner water and less erosion.
- Cleaner air that's free of pollutants.
- Processing of carbon dioxide.
- More habitat for wildlife.
- Cooler temperatures—and lower heating and cooling bills.



[www.rosevilletrees.org/](http://www.rosevilletrees.org/)

## The True Value of Forests

Trees and forests provide us with essential health, recreational, aesthetic, and other benefits, many of which we literally can't live without.

Unfortunately, forest management in this country and around the world has traditionally focused less on the services produced by trees and more on the timber that could be produced. Forest management has, quite literally, failed to see the forest for the trees. It's time for everyone who cares about trees and forests to demand that forest management protects and grows the total value of forests.

Look at the benefits that approach would provide:

- Cleaner drinking water and less erosion.
- Cleaner air that's free of pollutants
- Processing of harmful carbon dioxide, helping to slow global warming
- Better control of rain runoff and snow melt, resulting in fewer problems with flooding in rural areas and overflowing storm sewers in urban areas
- More habitat for wildlife.
- Cooler temperatures—and lower heating and cooling bills--thanks to increased tree canopy in urban areas.
- Improved quality of life in urban and rural areas alike.

## Designing For Urban Forestry

- Set tree canopy standards.
- Develop a consistent strategy for when to plant trees and how to bond for survival and maintenance.
- Make the place right for trees and then pick the right trees.
- Address invasive species control.

Plans should include invasive species control.

American Forests recommends an average 40% tree canopy, east of the Mississippi and in the Pacific Northwest. Refer to the chart below for tree cover percentages based on land use and geographic area. These goals are based on an evolution of thinking about how and why we quantify the urban forest. Three early surveys (1986, 1989 and 1991) focused on the health and condition of public street trees. Our understanding of the environmental benefits of urban forests grew at the same time as the technology improved to more accurately measure its extent. These two developments in tandem made it possible to measure actual landcover, quantify their environmental benefits, and for the first time link tree canopy cover goals to community-wide goals for clean air and water.

**For metropolitan areas east of the Mississippi and in the Pacific Northwest:**

Average tree cover counting all zones 40%  
 Suburban residential zones 50%  
 Urban residential zones 25%  
 Central business districts 15%

Canopy goals are most meaningful when tied to specific desired outcomes such as the protection of urban streams, reduced stormwater flows, improved water quality, reduced ozone concentrations or other air quality parameters.

As an example, recently published research conducted in Montgomery County, Maryland, determined that a stream health rating of “good” (as measured by both biological and



## 5. Evaluate architectural design standards

- a. Do the architectural review standards need work?
- b. Should sign regulations be revised?

## a. Architectural Review standards - Issues

- Sheds and other accessory structures
  - Do we regulate?
  - Must they meet roof pitch requirements?



[www.deanssheds.com/storage\\_sheds/vinyl\\_sheds.html](http://www.deanssheds.com/storage_sheds/vinyl_sheds.html)

## a. Architectural Review standards - Issues

- Commercial buildings
  - Must they meet roof pitch requirements if they are large?
  - May they use a lower pitch if they are large?
  - May they use a flat roof if they install a 'green roof?'



## a. Architectural Review standards - Issues

- Residential buildings
  - May they use a flat or shallow-pitched roof if they install a 'green roof' or photovoltaic panels/shingles?



## b. Should sign regulations be revised?

- Should the sign heights be more consistent – based on the speed and function of the roads?

Should there be more consistency about non-conforming signs?



- What about electronic signs?
- What about A-frame temporary signs and banners?



## The Process is Beginning!

**Staff will be working with citizens to develop a  
Solomons Zoning Ordinance that will  
implement the Solomons Master Plan.**