Improving the Model
Community: New Concepts for Columbia

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National Center for Smart Growth
University of Maryland

Rail-Volution
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Background

History

Columbia as Icon

Strengths

Weaknesses

Quid Pro Quo

My Role
Ownership and Recent Development

COLUMBIA TOWN CENTER
COLUMBIA, MARYLAND
EXISTING DEVELOPMENT (CORE)
COMMERCIAL: 4,000,000 (Includes 1,400,000 SF Retail)
RESIDENTIAL: 1547 UNITS (2006 Total Town Center)

PIPELINE DEVELOPMENT (CORE)
COMMERCIAL: 400,000 SF (Office and Retail)
RESIDENTIAL: 252 UNITS

PROPOSED DEVELOPMENT (CORE)
COMMERCIAL: 600,000 SF (OFFICE AND RETAIL)
RESIDENTIAL: 1600 UNITS

Total Residential: 5,098,500 SF
Total Commercial: 5,000,000 SF

Open Space: 171 Acres - Core (30%)
268.5 Acres – Center (30%)

Existing and Proposed Development
COLUMBIA TOWN CENTER
COLUMBIA, MARYLAND
EXISTING CRITICAL LANE VOLUME

COLUMBIA TOWN CENTER
COLUMBIA, MARYLAND

LEGEND

- Up to 1,450 CLV
- 1,451 – 1,599 CLV
- 1,600 – 1,799 CLV
- 1,800 CLV

Sout
South Entrance Road

Hickory Road

Little Patuxent Parkway

Governor Warfield Parkway

Broken Land Parkway

ROUTE 39
PROPOSED DEVELOPMENT:
CRITICAL LANE VOLUME

LEGEND

- Up to 1,450 CLV
- 1,451 – 1,599 CLV
- 1,600 – 1,799 CLV
- 1,800 CLV

COLUMBIA TOWN CENTER
COLUMBIA, MARYLAND
Town Center is one of the most vibrant places in the Baltimore-Washington Corridor. The character of Town Center is interesting, both day and night and the spaces are enjoyed by Columbia residents and visitors alike.

It is composed of several districts that have somewhat differing characters but share some common attributes. Columbia’s Town Center is a model for the live, work, play, learn and wellness concept.

People of all ages and diverse backgrounds choose to live here because of the interesting variety of housing offered. The types of residential units are not all the same in each district providing a blend of options.

People really like the fact they are able to walk from their homes to their jobs in nearby buildings. The ground floors of the existing and new office buildings continue to add commercial tenants that serve the public in addition to the building’s tenants.
July Meeting Outline

Why we are here

Master Plan Review

Themes from Town Hall Meeting

Focus on:

1. Walkability
2. Traffic Capacity

Expanding on ideas

Introduction

What was presented in May
Columbia Town Center Vision

“City in a Garden”
In One Minute

Bethesda Town Center

Columbia Town Center
Columbia Town Center’s Commute

- Car: 95%
- Transit: 5%
- Walk: 0%
- Other: 0%
- Work at home: 0%

- Works in community: 29%
- Works outside community: 71%
Bethesda Town Center’s Commute

- Car: 45%
- Transit: 36%
- Walk: 15%
- Other: 2%
- Work at home: 2%

- Works in community: 20%
- Works outside community: 80%
Clarendon Town Center’s Commute

- **Car**: 34%
- **Transit**: 12%
- **Walk**: 0%
- **Other**: 4%
- **Work at Home**: 50%

- **Works in Community**: 37%
- **Works Outside Community**: 63%
Different Physical Environments

Columbia Town Center

Bethesda Town Center
Walkability Audit Instruments

PEDESTRIAN- AND TRANSIT-FRIENDLY DESIGN:
A Primer for Smart Growth

by Reid Ewing

Based on a manual prepared for the Florida Department of Transportation and published by the American Planning Association

www.epa.gov/smartgrowth/pdf/ptfd_primer.pdf
Most Important Features for Walkable Communities
Most Important Features

(1) Medium-to-High Densities
(2) Mix of Land Uses
(3) Short-to-Medium Length Blocks
(4) Street-Oriented Buildings
(5) Two- or Four-Lane Streets (with Rare Exceptions)
(6) Continuous Sidewalks Appropriately Scaled
(7) Safe Crossings
(8) Appropriate Buffering from Traffic
(9) Nearby Parks and Other Public Spaces
1. Medium-to-High Densities
1. Medium-to-High Densities

Minimum Densities for Walkability

<table>
<thead>
<tr>
<th>Name</th>
<th>Densities</th>
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<tbody>
<tr>
<td>J. Jacobs</td>
<td>100 units/acre</td>
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<tr>
<td>K. Lynch</td>
<td>12-20 unit/acre</td>
</tr>
<tr>
<td>A. Jacobs and D. Appleyard</td>
<td>15 units/acre</td>
</tr>
<tr>
<td>P. Calthorpe</td>
<td>10-15 units/acre</td>
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</tbody>
</table>
1. Medium-to-High Densities

Columbia: Moderate Densities within Walking Distance

2.71 Units/Acre Gross (Town Center Core)
1. Medium-to-High Densities

Bethesda: 30 Years of Concentrated Development

33 Units/Acre Gross (Core)
1. Medium-to-High Densities

Clarendon: Area in Transition

8.0 Units/Acre Gross
EXISTING DEVELOPMENT (CORE)
COMMERCIAL: 4,000,000 SF / .16 FAR Gross
RESIDENTIAL: 2.71 Units/AC Gross

WITH PROPOSED DEVELOPMENT (CORE)
COMMERCIAL: 5,000,000 SF / .20 FAR Gross
RESIDENTIAL: 5.96 Units/AC Gross

Total Residential: 5,098,500 SF
Total Commercial: 5,000,000 SF

Open Space: 171 Acres - Core (30%)
268.5 Acres – Center (30%)

Town Center Core Area: +/- 570 Acres Gross
Development / Redevelopment Area: + / - 87 Acres

1. Medium-to-High Densities
2. Mix of Land Uses
2. **Mix of Land Uses**

**Walking / Bicycling vs. Trip Distance**

![Graph showing the percentage of trips by walking/bicycling based on trip distance. The graph includes categories for different types of trips: Work, Shopping, and Social/Recreation. The percentage decreases as the distance increases, with the highest percentage at < 1/2 Mile and the lowest at > 1 Mile.](image-url)
2. Mix of Land Uses

Psychological Distance
2. Mix of Land Uses

Columbia: Beginnings of Mixed Use
2. Mix of Land Uses

Bethesda’s Seamless Pattern
2. Mix of Land Uses

Clarendon’s Emerging Mix
2. Mix of Land Uses

COLUMBIA TOWN CENTER
COLUMBIA, MARYLAND
3. Short-to-Medium Length Blocks
3. **Short-to-Medium Length Blocks**

Why Short Blocks?

- Limited Choices
- More Choices

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**Limited Choices**

**More Choices**
3. **Short-to-Medium Length Blocks**

**Short Old Blocks**
3. **Short-to-Medium Length Blocks**

**Short New Blocks**
3. **Short-to-Medium Length Blocks**

Mid Block Pass-Throughs.....
3. **Short-to-Medium Length Blocks**

...Applicable to Long Blocks
3. Short-to-Medium Length Blocks

Street Networks

- Columbia
- Bethesda
- Clarendon
3. **Short-to-Medium Length Blocks**

Columbia: Spacing of Controlled Intersections
3. Short-to-Medium Length Blocks

Bethesda: Super Block with Pass-Throughs...
3. **Short-to-Medium Length Blocks**

...With Short Blocks Around It
3. *Short-to-Medium Length Blocks*

*Bethesda: Mid Block Pass-Through*
3. Short-to-Medium Length Blocks

Clarendon: Few Blocks More Than 800’
3. Short-to-Medium Length Blocks
4. Street-Oriented Buildings
4. **Street-Oriented Buildings**

25-Foot Rule for Urban Streets
4. **Street-Oriented Buildings**

Columbia: Buildings Often Turn Their Backs on the Street
4. Street-Oriented Buildings

Columbia: Beginning to See Positive Street Frontage
4. Street-Oriented Buildings

A Study in Contrasts

Bethesda Library

Columbia Library
4. Street-Oriented Buildings

Clarendon: Beginning to Get a Continuous Street Wall
4. Street-Oriented Buildings
5. Two-to-Four Lane Streets (with Rare Exceptions)
5. Two-to-Four Lane Streets

Columbia: One Six-Lane But Mostly Four Lanes or Less
5. Two-to-Four Lane Streets

Bethesda: One Six-Lane But Mostly Four or Less
5. **Two-to-Four Lane Streets**

Clarendon: Four Lanes But Less Comfortable
5. Two-to-Four Lane Streets
6. Continuous Sidewalks Appropriately Scaled
6. Continuous Sidewalks Appropriately Scaled

Columbia: Many Five-Foot Sidewalks, But…
6. Continuous Sidewalks Appropriately Scaled

Columbia: Some One-Sided Sidewalks
6. Continuous Sidewalks Appropriately Scaled

Columbia: Great Trails, but no Substitute for Sidewalks
6. Continuous Sidewalks Appropriately Scaled

Bethesda: Generous Sidewalk Space
6. Continuous Sidewalks Appropriately Scaled

Clarendon: Oversized for Now
6. Continuous Sidewalks Appropriately Scaled
Pattern “A”

6. Continuous Sidewalks Appropriately Scaled
7. Safe Crossings
7. Safe Crossings

High Visibility Markings on Public and Private Streets
### 7. Safe Crossings

#### Mid Block Crossings (300’ Spacing)

<table>
<thead>
<tr>
<th>Lanes</th>
<th>ADT</th>
<th>Median</th>
<th>Marked Crossing</th>
<th>Unmarked Crossing</th>
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<tbody>
<tr>
<td>1-2</td>
<td>all</td>
<td>—</td>
<td>equal</td>
<td></td>
</tr>
<tr>
<td>3+</td>
<td>&lt;12,000</td>
<td>—</td>
<td>equal</td>
<td></td>
</tr>
<tr>
<td>3+</td>
<td>12,000 - 15,000</td>
<td>yes</td>
<td>safer</td>
<td></td>
</tr>
<tr>
<td>3+</td>
<td>12,000 - 15,000</td>
<td>no</td>
<td>safer</td>
<td></td>
</tr>
<tr>
<td>3+</td>
<td>&gt;15,000</td>
<td>—</td>
<td>safer</td>
<td></td>
</tr>
</tbody>
</table>
7. Safe Crossings

Variety of Crossing Enhancements
7. Safe Crossings

Effects of Tight Corners

Crossing Distance vs. Corner Radius

Turning Speed vs. Corner Radius
7. Safe Crossings

Columbia: Unmarked or Nothing
7. Safe Crossings

Columbia: Often Poorly Marked
7. Safe Crossings

Columbia: Pedestrians Often Directed into Center of Intersection
7. Safe Crossings

Columbia: High Speed Corners…
7. Safe Crossings

...But With Good Refuges
7. Safe Crossings

Columbia: Limitations of the Bridge
7. Safe Crossings

Bethesda: Crosswalks on (Almost) All Approaches
7. Safe Crossings

Bethesda: Crossings Well Signed and Well Marked
7. Safe Crossings

Bethesda: Other Crossing Aids
7. Safe Crossings

Clarendon: Uneven Quality of Crossings
7. Safe Crossings
8. Appropriate Buffering from Traffic
8. Appropriate Buffering from Traffic

New Jersey Main Streets: Highest Rated in Survey

Washington Street, Hoboken
Main Street Score: 2.22
8. Appropriate Buffering from Traffic

New Jersey Main Streets: Didn’t Qualify in Survey

Morris Avenue, Union Township
Main Street Score: -0.11
8. Appropriate Buffering from Traffic

Columbia: Sidewalk Setback is Sometimes the Only Buffering
8. Appropriate Buffering from Traffic

Bethesda: Consistent use of Trees, Street Furniture and Parking
8. Appropriate Buffering from Traffic

Columbia: Beginning to Happen
8. Appropriate Buffering from Traffic
9. Nearby Parks and Other Public Spaces
9. Nearby Parks and Other Public Spaces

Public Spaces as a “String of Pearls”
9. Nearby Parks and Other Public Spaces

Public Space Complements Mixed Use
9. Nearby Parks and Other Public Spaces

Open Space is an Offset to Density
9. Nearby Parks and Other Public Spaces

Physical and Visual Connections are Important
9. Nearby Parks and Other Public Spaces

Columbia: Several Great Public Spaces...
9. Nearby Parks and Other Public Spaces

...But Many Isolated and Underutilized
9. Nearby Parks and Other Public Spaces

Bethesda: Interconnected and Varied Spaces
Simple Spaces and Fewer of Them

Clarendon: Simple Spaces and Fewer of Them
9. Nearby Parks and Other Public Spaces
Highly Desirable Features for Walkable Communities
**Highly Desirable Features**

(1) Closely Spaced Shade Trees  
(2) Minimal "Dead" Space (or Visible Parking)  
(3) Human-Scale Buildings, Including Articulated Larger Ones  
(4) Traffic Calming Along Access Routes  
(5) Functional Street Furniture  
(6) Coherent, Small-Scale Signage  
(7) Special Pavement  
(8) Lovable Objects, Especially Public Art
1. Closely Spaced Shade Trees Along Access Routes
1. Closely Spaced Shade Trees

The Right Kind of Trees...

Deciduous Shade Trees
1. Closely Spaced Shade Trees

...In the Right Location

Yes

No
1. Closely Spaced Shade Trees

...With the Right Spacing
1. Closely Spaced Shade Trees

Columbia: So Many Trees...
1. Closely Spaced Shade Trees

...So Little Tree Cover Along Walkways
1. Closely Spaced Shade Trees

Columbia: Some Good Exceptions
1. Closely Spaced Shade Trees

Bethesda: Good But Uneven Coverage Today
1. Closely Spaced Shade Trees
2. Minimal “Dead” Space (or Visible Parking)
2. Minimal “Dead” Space

Columbia: A Sea of Parking Today (Land-Banked)
2. Minimal “Dead” Space

Bethesda: Almost No Surface Parking
2. Minimal “Dead” Space

Clarendon: Too Much Surface Parking...But Decreasing
2. Minimal Dead Space
3. Human-Scale Buildings, Including Articulated Larger Ones
3. Human-Scale Buildings

Columbia: Auto-Scaled Buildings
3. Human-Scale Buildings

Bethesda: Human-Scale Buildings
3. Human-Scale Buildings

Clarendon: Buildings Step Back as They Rise Up
3. Human-Scale Buildings
4. Traffic Calming Along Access Routes
4. Traffic Calming Along Access Routes

European Impacts on Bicycling and Walking
4. Traffic Calming Along Access Routes

Raised Crosswalks
4. Traffic Calming Along Access Routes

Raised Intersections
4. Traffic Calming Along Access Routes

Center Island Narrowings
4. Traffic Calming Along Access Routes

Chokers and Neckdowns
4. Traffic Calming Along Access Routes

Roundabouts

Towson

Addison
4. Traffic Calming Along Access Routes

Columbia: Absence of Traffic Calming
4. Traffic Calming Along Access Routes

Bethesda: Tacit Traffic Calming
4. Traffic Calming Along Access Routes

Clarendon: Active Traffic Calming
4. Traffic Calming Along Access Routes
5. Functional Street Furniture
5. Functional Street Furniture

It Comes Down to a Comfortable Place to Sit
5. *Functional Street Furniture*

Pedestrian-Scaled Lighting
5. Functional Street Furniture

Columbia: Limited Street Furniture
5. Functional Street Furniture

Bethesda: Street Furniture Everywhere
5. Functional Street Furniture

Clarendon: Street Furniture in Limited Areas
5. Functional Street Furniture in Gathering Places
6. Coherent, Small-Scale Signage
6. Coherent, Small-Scale Signage

Signage for Autos vs. Signage for People
6. Coherent, Small-Scale Signage

Good Signage Adds to a Sense of Place
6. Coherent, Small-Scale Signage

Columbia: Minimal Signage
6. Coherent, Small-Scale Signage

Bethesda: Signage is Important Part of Wayfinding
6. Coherent, Small-Scale Signage
7. Special Pavement
7. Special Pavement

Problem with Things Horizontal
7. Special Pavement

Doesn’t Enclose Space
7. Special Pavement

But Selective Beautification
7. Special Pavement

Selective Separation
7. Special Pavement

Columbia: Largely Asphalt and Concrete...
7. Special Pavement

...With Specific Use of Special Paving
7. Special Pavement

Bethesda: Tying Together the Pedestrian Realm
7. Special Pavement

Clarendon: Used to Delineate Pedestrian Space
7. Special Pavement
8. Lovable Objects, Especially Public Art
8. Lovable Objects

Add Humor and Whimsy
8. Lovable Objects

Give Space a Center
8. Lovable Objects

Provide “End Points” to a Street
8. Lovable Objects

Columbia: A Few Examples of Public Art
8. Lovable Objects

Bethesda: Objects Somewhat Hidden
8. Lovable Objects
and ½ Mile Walking Distance

1/2 Mile Walkability

Loop District

Crescent District

Lakefront District

LL Bean Plaza

Founders Park