HOWARD COUNTY
MARYLAND

Complete Streets Implementation Team Implementation Phase: Meeting #2

February 5, 2020

WRA

Agenda

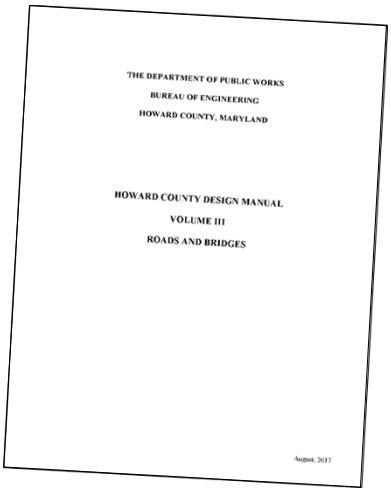
- Introduction
- Current design process and resources
- Public outreach
  - Current processes
  - Discussion about what constitutes successful, effective public outreach
- Introduction to project prioritization
- Next steps

DESIGN PROCESS AND RESOURCES

Current Resources

Design Manual

- Volume III covers most transportation-related elements
- Volume IV includes standard details
- Supplemental resources are used for design elements that are not addressed in the Design Manual

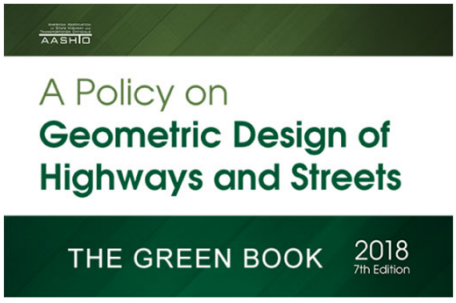

THE DEPARTMENT OF PUBLIC WORKS
BUREAU OF ENGINEERING
HOWARD COUNTY, MARYLAND

HOWARD COUNTY DESIGN MANUAL
VOLUME III
ROADS AND BRIDGES

August, 2017

Supplemental Resources

- AASHTO "Green Book"
  - Foundation of US geometric design policy
  - Basis for much of the County's Design Manual



Supplemental Resources

- AASHTO/FHWA: Numerous design resources in addition to the Green Book
- Other national guidelines and best practices
- MDOT SHA standards and guidelines

Supplemental Resources

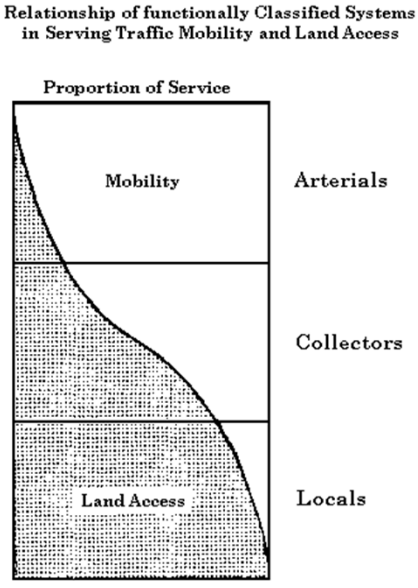
Design Manual Updates: General Direction

Guiding Principles

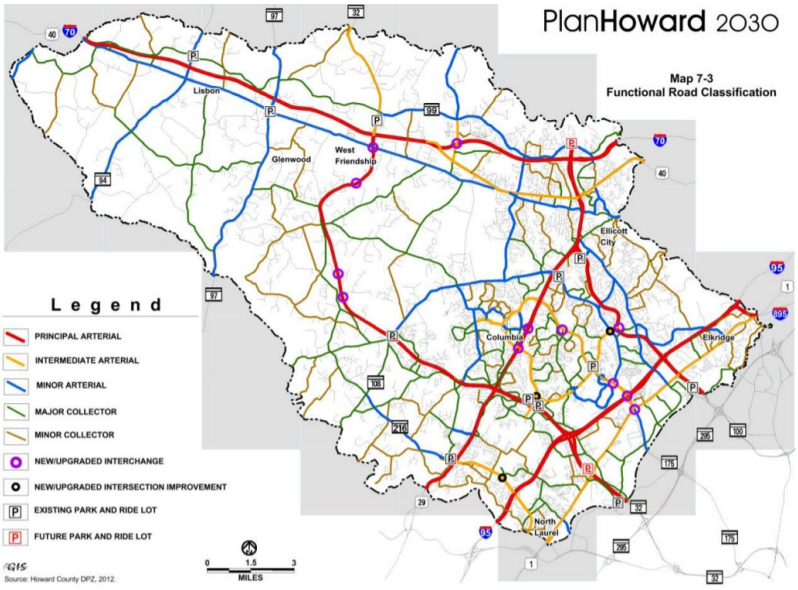
- Complete Streets are safe, comfortable, and convenient for people of all ages and abilities, whether they are walking, bicycling, riding transit, or driving
- Our goal is to ensure the Design Manual fully addresses all of these modes of travel
  - Street design based on national best practices
  - **Street types based on both function and land use context ("typology")**
  - Trade-offs due to limited available right of way
  - Overlays for bike routes and scenic roadways

- Streets are currently designed based on their transportation function.

Functional Classification



Howard County
Highway Classification System



Howard County
Highway Classification System

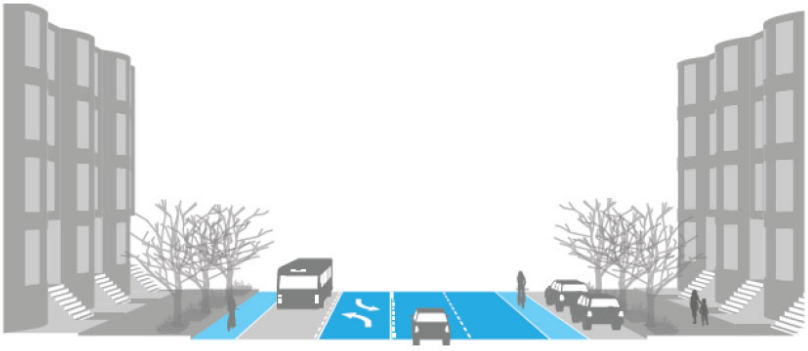
- Principal arterial highway (freeway)
- Intermediate arterial
  (multi-lane divided or undivided highway; limits type and number of access points from adjacent land uses)
- Minor arterial
- Major collector
- Minor collector
- Local road
  (includes access place and access street)
- Scenic roadway


US-4
Should street design be based on traditional functional classification?


NORTH
7
US-1
Should street design be based on traditional functional classification?

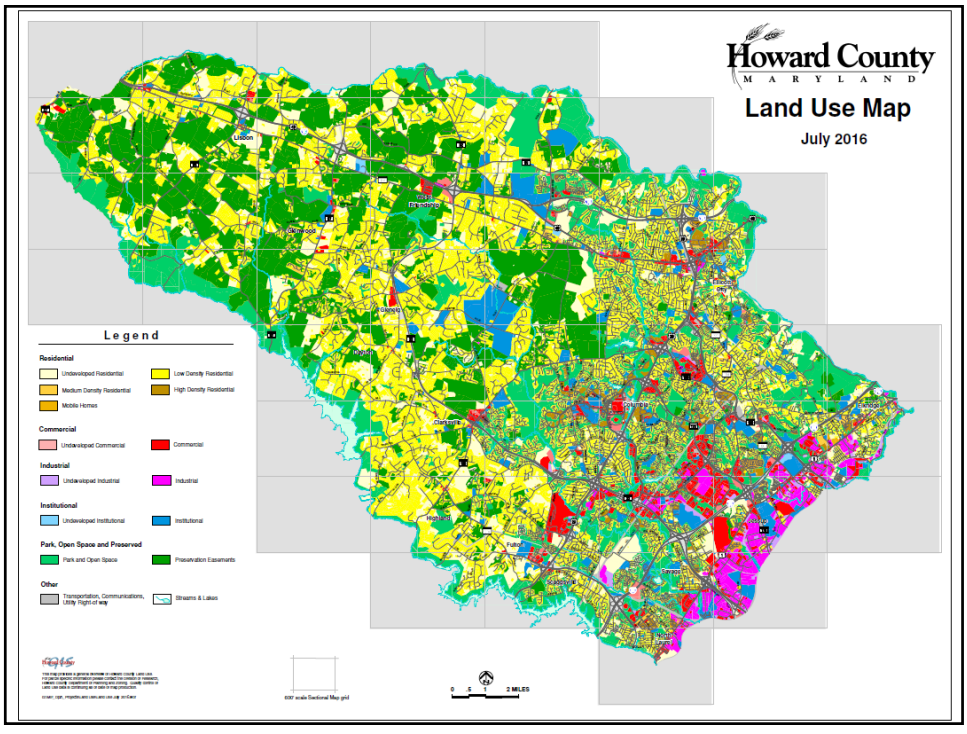
Should street design be based on traditional functional classification?

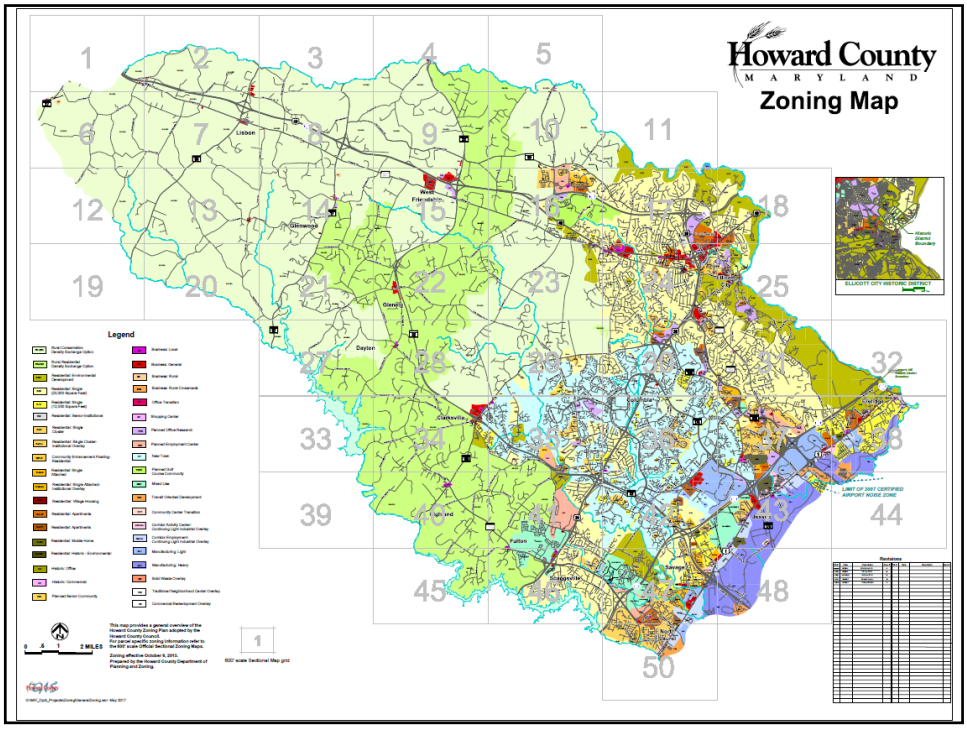
- Complete Streets are designed based on the land use context **AND** on their transportation function.

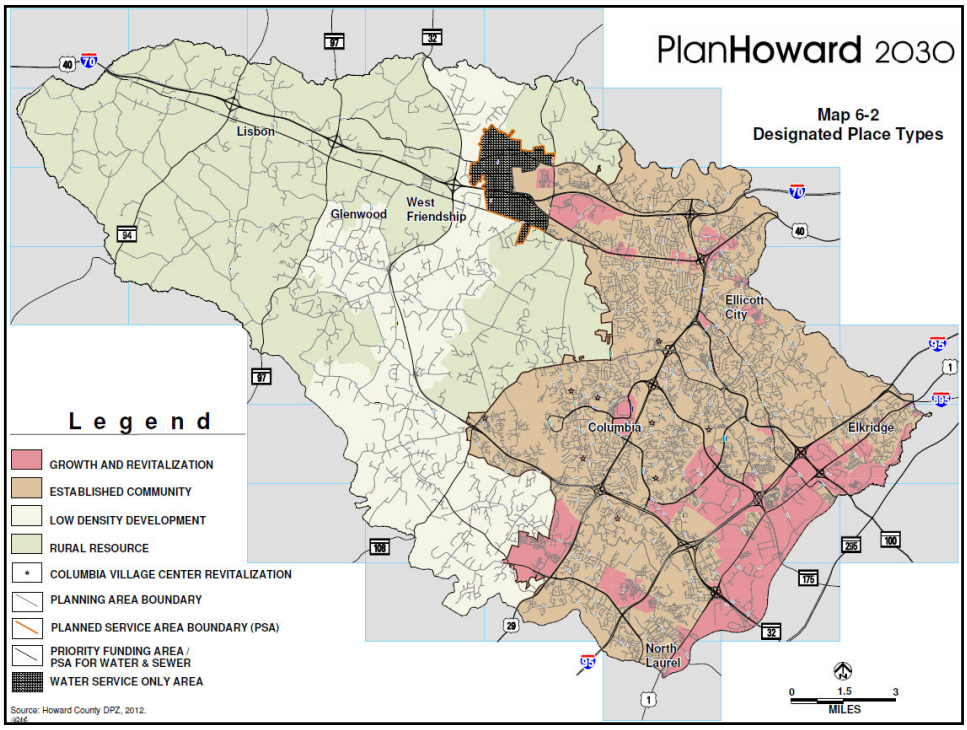


Land Use Contexts

- Initial list under consideration
  - Mixed use
  - Higher-density residential
  - Lower-density residential
  - Commercial
  - Industrial
  - Rural
  - (plus overlays for special uses)




Howard County
MARYLAND
Zoning Map
Legend
Lisbon
West Friendship
Glenwood
Dayton
Clarksville
Ellicott City
Columbia
Elkridge
North Laurel
LIMIT OF 2007 CERTIFIED AIRPORT NOISE ZONE
ELLICOTT CITY HISTORIC DISTRICT
Revisions
0 .5 1 2 MILES


PlanHoward 2030
Map 6-2
Designated Place Types
Lisbon
Glenwood
West Friendship
Ellicott City
Columbia
Elkridge
North Laurel
Legend
GROWTH AND REVITALIZATION
ESTABLISHED COMMUNITY
LOW DENSITY DEVELOPMENT
RURAL RESOURCE
COLUMBIA VILLAGE CENTER REVITALIZATION
PLANNING AREA BOUNDARY
PLANNED SERVICE AREA BOUNDARY (PSA)
PRIORITY FUNDING AREA / PSA FOR WATER & SEWER
WATER SERVICE ONLY AREA
Source: Howard County DPZ, 2012.
0 1.5 3
MILES

Future vs Existing Land Use

E 14th Corridor, San Leandro, CA - Source: Community, Design + Architecture

Future vs Existing Land Use

E 14th Corridor, San Leandro, CA - Source: Community, Design + Architecture

Future vs Existing Land Use

E 14th Corridor, San Leandro, CA - Source: Community, Design + Architecture

Sample Street Typology: Prince George's County

Prince George's County

Only urban street types have been developed so far

- Mixed-Use Boulevard
  - 2, 3, or 4 lanes
- Neighborhood Connector
- Neighborhood Residential
- Industrial Road
- Shared Street
- Alley

This is just an example of a similar typology; Howard County will choose its own design criteria

Prince George's County

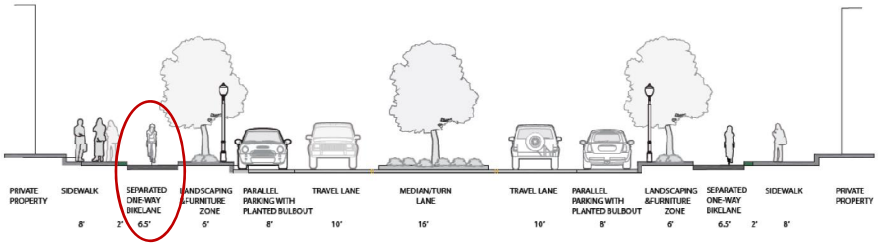
Criteria for Urban Street Types

Urban Street Type*	Minimum Right of Way	Design Speed**	Total # of Travel Lanes	Minimum Lane Width	Median	Minimum Buffer	Minimum Turning Radius	On Street Parking	Minimum Sidewalk	Bike Facility
Mixed Use Boulevard (A) -2 Travel Lanes	99'	25 mph	2	10' (11' if bus route)	16'	6'	15'	8'	8'	6.5' separated bike lane
Mixed Use Boulevard (B) - 2 Travel Lanes	92'	25 mph	2	10' (11' if bus route)	16	6'	15'	8'	8'	5' bike lane
Mixed Use Boulevard (A) - 4 Travel Lanes	119'	25 mph	4	10' (11' if bus route)	16'	6'	15'	8'	8'	6.5' separated bike lane
Mixed Use Boulevard (B) - 4 Travel Lanes	116'	25 mph	4	10' (11' if bus route)	16	6'	15'	8'	8'	5' bike lane with 2' painted buffer
Mixed Use Boulevard (A) - Center Turn Lane	93'	25 mph	2	10' (11' if bus route)	none	6'	15'	8'	8'	6.5' separated bike lane
Mixed Use Boulevard (B) - Center Turn Lane	86'	25 mph	2	10' (11' if bus route)	none	6'	15'	8'	8'	5' bike lane
Neighborhood Connector (A)***	83' (75')	20-25 mph	2	10'	none	6'	15'	8'	8'	6.5' separated bike lane
Neighborhood Connector (B)***	66' (58')	20-25 mph	2	10	none	6'	15'	8'	8'	Option to add 5' bike lane
Neighborhood Residential***	60' (53')	20 mph	2	10'	none	6'	15'	7'	6'	Option to add 5' bike lane
Industrial Street***	48' (57')	20 mph	2	11'	none	6'	15'	(9')	6'	none
Shared Street	50'	10 mph	2	10'	none	6'	15'	none	8'	none
Alley	20'	10 mph	1	10'	none	none	15'	none	none	none

* Streets in Regional Transit Districts and Local Centers
** For additional horizontal and vertical design constraints relavant to these designs speeds, refer to AASHTO: A Policy on Geometric Design of Highways and Streets.
*** Figures in parenthesis indicate alternative configurations related to optional on-street parking shown in the standard details.

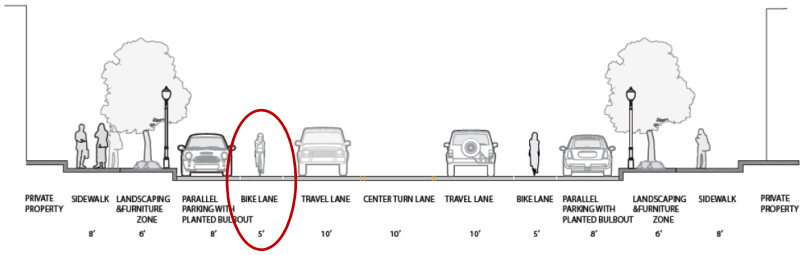
Prince George's County
(URBAN STREET TYPES ONLY)

New Street Type	Description	Features
Mixed Use Boulevard	• Buildings close to street • Mix of land uses • Medium to high density land use • High volumes of vehicles and transit • Medium to heavy ped/bike activity • Reduced vehicular speeds	• 2-4 travel lanes • Median • Sidewalks & bike facilities • Street furniture & enhanced lighting • On-street parking



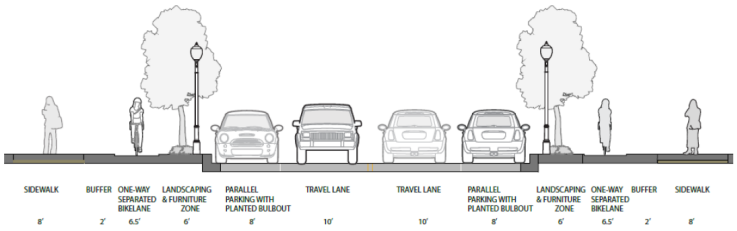
Prince George's County
(URBAN STREET TYPES ONLY)

New Street Type	Description	Features
Mixed Use Boulevard	• Buildings close to street • Mix of land uses • Medium to high density land use • High volumes of vehicles and transit • Medium to heavy ped/bike activity • Reduced vehicular speeds	• 2-4 travel lanes • Median • Sidewalks & bike facilities • Street furniture & enhanced lighting • On-street parking



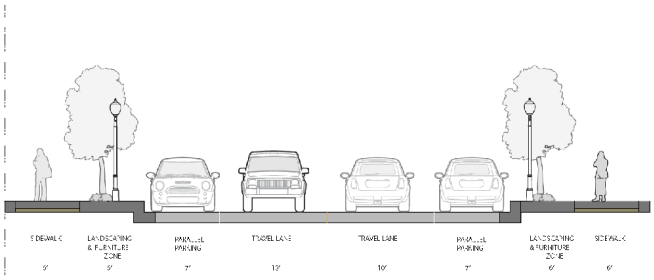
Prince George's County
(URBAN STREET TYPES ONLY)

New Street Type	Description	Features
Neighborhood Connector	• Connect multiple neighborhoods • Medium density land uses, Buildings close to street • May feature mixed land uses or mostly residential w/ occasional businesses • Heavy pedestrian/bike activity; Provide continuous walking and bicycling routes • Some are major bus routes; Slow speeds (20-25 mph)	• 2 travel lanes • Bike facilities, Sidewalks, Lighting • Enhanced streetscape • In mixed-use/retail areas, space for street furniture, outdoor events & dining • On-street parking



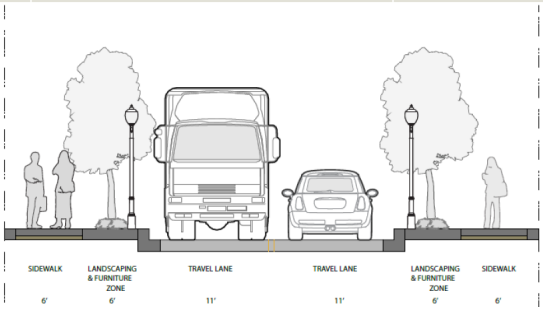
Prince George's County
(URBAN STREET TYPES ONLY)

New Street Type	Description	Features
Neighborhood Residential	• Provide immediate access to single-family and multi-family residences • Focus on pedestrian safety, space for children to play, and well defined bicycling and walking paths • Slow speeds	• 2 travel lanes • Sidewalks • Street trees • Lighting



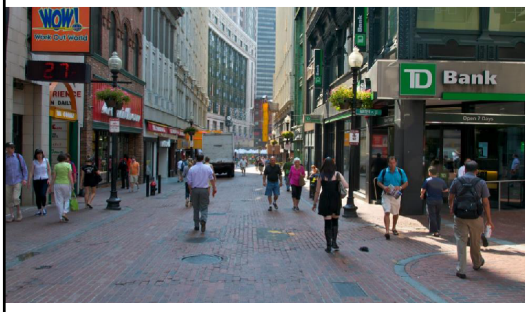
Prince George's County
(URBAN STREET TYPES ONLY)

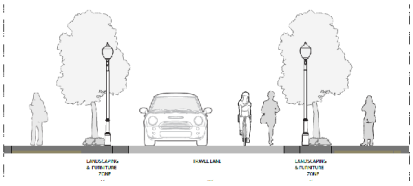
New Street Type	Description	Features
Industrial Street	• Serve industrial areas • Carry moderate to high volumes of trucks of all sizes • Fewer bicyclists and pedestrians, but often they must pass through	• 2 Travel lanes • Adequate street width and turning radii to accommodate trucks • Lighting



Prince George's County
(URBAN STREET TYPES ONLY)

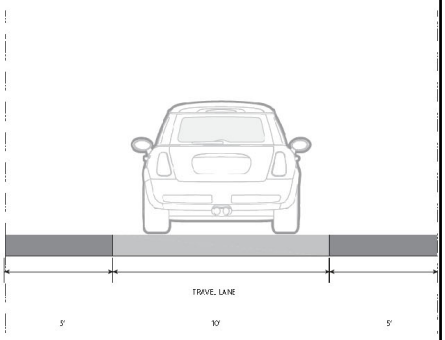
New Street Type	Description	Features
Shared Street	• Multiple land uses • Single grade or surface shared by all modes • Extremely low speeds	• Unique paving • Street furniture • Lighting





Prince George's County
(URBAN STREET TYPES ONLY)

Urban Street Type*	Description	Features	Design Speed	Total # of Travel Lanes	Minimum Lane Width
Alley	Extremely low speeds	One travel lane	10 mph	1	10



Another Example: Downtown Columbia Street Classifications

- Also an urban context
- Pedestrian-oriented, mixed use community design
- "Streets will vary from the current standards in the Howard County Design Manual."
- Boulevard
  - Multi-lane highway with median
  - No parking
- Parkway
  - Four lanes with median
  - Parking on both sides
  - Buildings on both sides
  - Promenade on one side

Potential Howard County Typology
(SUBJECT TO CHANGE)

- Land use classification
  - Mixed use
  - Higher-density residential
  - Lower-density residential
  - Commercial
  - Industrial
  - Rural
- Transportation classification
  - Intermediate Arterial
  - Minor Arterial
  - Collector
  - Local
  - Overlays for Bike Howard routes and scenic roadways

When trade-offs are needed, design features for people traveling by various modes are prioritized according to land use context and transportation classification

Potential Howard County Typology
(SUBJECT TO CHANGE)

- How this compares with the current Highway Classification System:
  - Principal Arterials are generally State maintained and are not addressed by the Complete Streets policy
  - Two types of Collectors are combined into one
  - Scenic Roadways are addressed as an overlay
- Overlays for special categories
  - Bike routes
  - Scenic routes

Potential Howard County Typology
(SUBJECT TO CHANGE)

	LAND USE CONTEXT					
TRANSPORTATION CLASSIFICATION	Mixed-use	Higher-density residential	Lower-density residential	Commercial	Industrial	Rural (everything outside PSA)
Intermediate arterial						
Minor arterial						
Collector						
Local						

PUBLIC OUTREACH

Public outreach process

- **Office of Transportation**
- **Department of Public Works (DPW)**
- **Department of Planning and Zoning (DPZ)**

Office of Transportation

Type of Project

- Annual BikeHoward and Complete Streets Open House
- Community meetings for planning projects (generally 3 meetings):
  - Concept or pre concept
  - Mid stage of design
  - Final design
- Community meetings for bike lane additions through resurfacing
  - Usually at existing HOA or Village Board meeting
- Annual priority letter to the State
- Tabling at health fairs and other community events

Office of Transportation

Outreach formats:

- Posting on project webpage
- Social media (OOT Facebook and Twitter)
- Email list (Constant Contact)
- Posting on County events calendar and OOT calendar
- County press release
- Boards and Commissions
  - ✓Multimodal Transportation Board
  - ✓Central Maryland Transportation and Mobility Commission
  - ✓Bicycle Advisory Group
  - ✓Transit and Pedestrian Advisory Group
- Outreach to Village Boards or HOAs
- Outreach through Council Members
- Outreach through advocacy groups

Department of Public Works

Public outreach for capital projects

- Based on Howard County Code sec. 18.211
- All bridge, road construction or reconstruction
- Public hearings at preliminary and final design phase

Department of Public Works

Preliminary phase public hearing

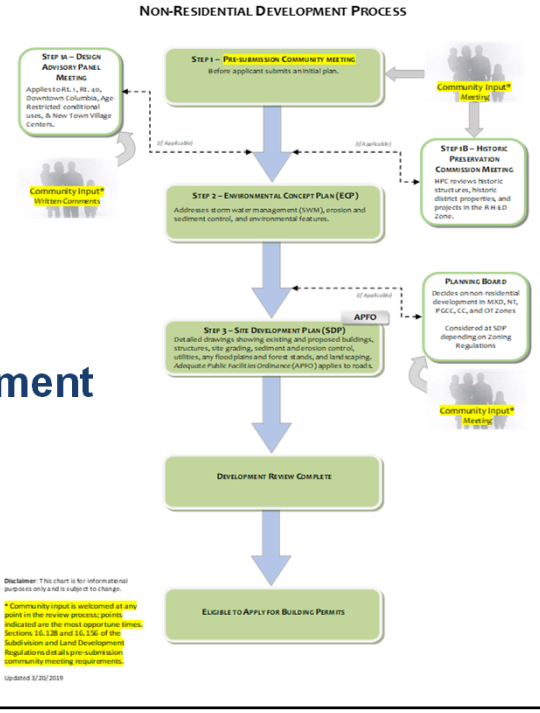
- Posting notices four weeks before the meeting at the site of the project. The notice includes purpose of meeting, project number, date and place and time of public meeting
- Posted on Howard County web site four weeks prior to meeting
- Written notice by first-class mail at least four weeks before the meeting to all adjacent property owners

Department of Public Works

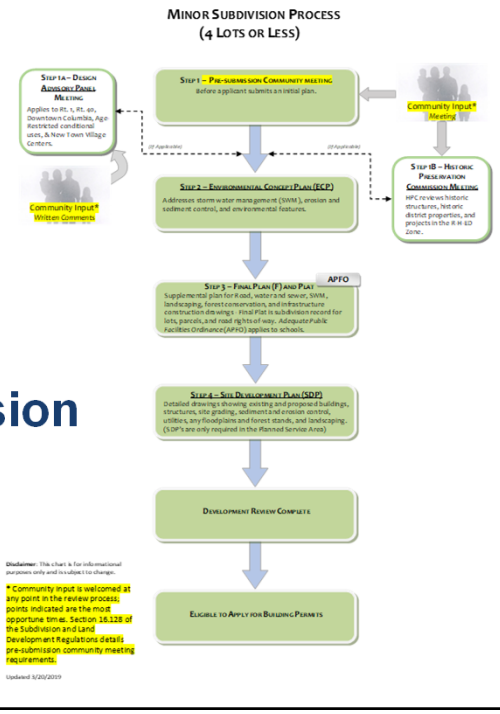
Final phase public hearing

- Posting notices minimum two weeks before the meeting at the site of the project. The notice includes purpose of meeting, project number, date and place and time of public meeting
- Posted on Howard County web site minimum weeks prior to meeting
- Written notice by first-class mail at least two weeks before the meeting to all attendees at the preliminary design meeting and citizens who have sent written comments to the Department of Public Works on the project

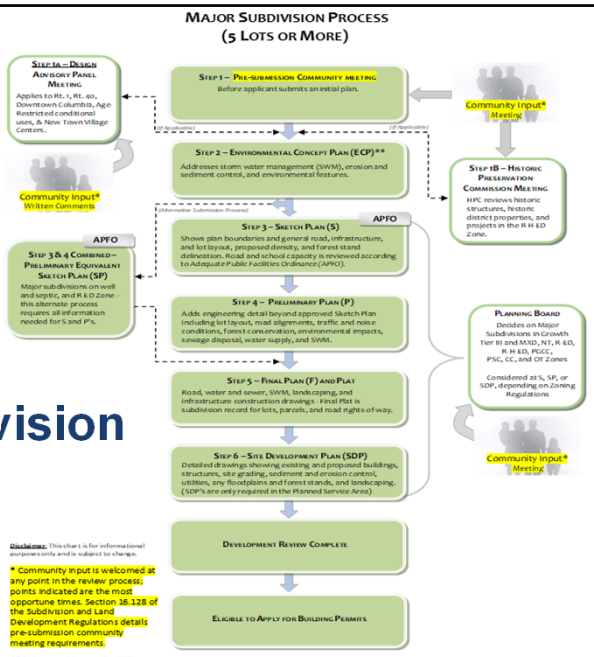
DPZ: Site Development Plan



DPZ: Minor Subdivision



DPZ: Major Subdivision

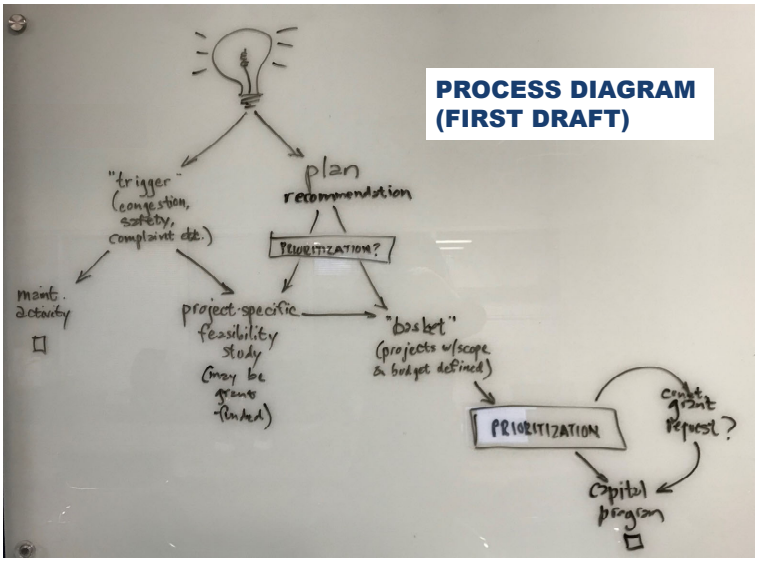


Public outreach – your thoughts

- In your opinion, what is working well now?
- What types of outreach improvements would be beneficial?
- How do we measure the effectiveness of public outreach?

PROJECT PRIORITIZATION

Project prioritization



Project prioritization
(FIRST DRAFT)

Performance Measures (from Complete Streets Policy)	Project Selection Criteria	Points (TBD)	Project Prioritization Criteria	Points (TBD)
Safety/Public Health: Number and location of fatalities by road type and mode of travel, and by age and gender as data are available	Project addresses demonstrated transportation safety issues		Project addresses demonstrated transportation safety issues	
Safety/Public Health: Number and location of serious injuries by road type and mode of travel, and by age and gender as data are available				
Equity: Percentage of new roadway projects or roadway repairs in priority communities	Project is in a priority community as defined by CS policy		Project is in a priority community as defined by CS policy	
Access/Place: Connections to important destinations, including schools, libraries, parks, community centers, village centers, social service centers, significant health care facilities, and government centers	Project area includes important destinations including schools, libraries, parks, community centers, village centers, social service centers, significant health care facilities, and government centers		Project provides connections to important destinations, including schools, libraries, parks, community centers, village centers, social service centers, significant health care facilities, and government centers (points per destination connected)	
Access/Economy: Connections to employment centers	Project area includes employment center		Project provides connections to employment centers (points per employment center connected)	
NO FUNDING PERFORMANCE MEASURE	Project feasibility study received outside funding (Federal, State, and/or private) to reduce cost to County taxpayers		Project construction leverages non-County funds (Federal, State, and/or private) to reduce cost to County taxpayers	
Access: Miles of sidewalk, trail, and bicycle infrastructure installed or repaired	Project increases the miles of sidewalk, trail, and bicycle infrastructure available		Project installs or repairs sidewalk, trail, and bicycle infrastructure (points per mile of infrastructure)	
Access: Number of curb ramps installed or repaired	Project addresses pedestrian accessibility		Project installs or repairs curb ramps (points per curb ramp)	
Access: Number of crosswalks installed or repaired			Project installs or repairs crosswalks (points per crosswalk)	
Access: Number of transit stops with sidewalk access installed or repaired	Project area includes transit stops		Project provides transit stop with sidewalk access installed or repaired (points per stop)	
Access: Percentage of transit stops with marked crosswalks within 150 feet			Project completes crosswalk within 150 feet of a transit stop (points per crosswalk)	
Access: Percent of Bike Howard short term network completed	Project completes part of Bike Howard short term network		Project completes part of Bike Howard Short term network	
Access: Percent of Walk Howard network completed	Project completes part of Walk Howard network		Project completes part of Walk Howard network	
Access: Percent of the population with direct access to a low-stress bike network	Project increases access to the low-stress bicycle network		Percent of the population provided access to the low-stress bicycle network (percent ranked and scored against other projects)	

NEXT STEPS

Next steps

- Next meeting
  - Wednesday, March 4, 3:00 pm
- Action items from this meeting