Welcome to An Introduction to the Howard County Complete Streets Design Manual

October 14, 2021

The presentation will begin at 7:00pm

THIS PRESENTATION WILL BE RECORDED
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Virtual Workshop Logistics

• Today’s presentation **will be recorded** and made available to the public at [www.howardcountymd.gov/DM-updates](http://www.howardcountymd.gov/DM-updates)

• You can listen via your computer speakers or by calling in on your phone. To listen to the audio via phone, please call:
  – Phone number: 1-650-479-3207
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Virtual Workshop Logistics

- Members of the public cannot be seen or heard during this workshop.
- If you wish to submit a question or comment, please use the chat feature on Webex or send them to transportation@howardcountymd.gov.
- Presenters will do their best to respond to questions and comments during the Q&A session at the end of the event.
Howard County Complete Streets Policy
Council Resolution 120-2019, Adopted October 7, 2019

Vision:

To ensure that Howard County is a place for individuals of all backgrounds to live and travel freely, safely, and comfortably, public and private roadways in Howard County shall be safe and convenient for residents of all ages and abilities who travel by foot, bicycle, public transportation or automobile, ensuring sustainable communities Countywide.
Today’s Speakers

Amah Binde, PE, PMP, Engineering Bureau Chief
Howard County Department of Public Works

Bruce Gartner, Administrator
Howard County Office of Transportation

Leah Kacanda, AICP, Senior Project Planner
Whitman, Requardt and Associates

Chris Eatough, Bicycle and Pedestrian Coordinator
Howard County Office of Transportation

Bryan Townsend, PE, Vice President
Whitman, Requardt and Associates
Agenda

- Introduction
- What are Complete Streets?
- What are the benefits?
- Howard County Complete Streets Policy
- Overview of Design Manual Updates
- Q&A
WHAT ARE COMPLETE STREETS?
Howard County Complete Streets Policy - Passed by Council Resolution 120-2019 on 10/7/19

What is a complete street?
Complete streets are safe streets for all. They vary in different places and contexts, but they often include some or all the elements below.

- **Sidewalks**: Facilitate travel for all users, including people in wheelchairs, with level, unobstructed, and wide walkways.
- **Curb ramps**: Accommodate wheelchairs, baby strollers, and bicycles with smooth transitions between sidewalks and roadways.
- **Roadway**: Manage travel speed, enhance safety, and provide predictability.
- **Crosswalks**: Direct pedestrians to preferred, clearly marked street crossing locations and increase driver awareness.
- **Grass buffer**: Separate the street and sidewalk and provide space for trees, light posts, and signs.
Context is important
Rural roads

...with shared use paths

...or paved shoulders
Residential streets

... can be shared if they are low traffic

... or narrower with sidewalks
Commercial streets

... can accommodate all road users in small towns

... and urban centers
Separated bike facilities

... can accommodate all road users in mixed-use

... and suburban contexts
WHAT ARE THE BENEFITS?

Communities across the country have benefited from Complete Streets in many ways.
Benefits of Complete Streets

- Safety
- Children & Older Adults
- Economy
- Environment
- Connectivity
- Equity
- Quality of Life
Benefits of Complete Streets

- Safety
- Children & Older Adults
- Economy
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Benefits of Complete Streets

Safety

Economy

Environment

Connectivity

Equity

Health

Children & Older Adults

Quality of Life
Benefits of Complete Streets

- Safety
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Benefits of Complete Streets

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Howard County’s Complete Streets Policy

- Requires updating the County’s practices to ensure that our streets are designed and built with everyone in mind
  - Biannual status memos to County Council (ongoing)
  - Community Engagement Plan
    - 1 year
  - Design Manual Updates (Volume III, Roads & Bridges)
    - 2 years
  - Subdivision and Land Development Regulations
    - 3 years, following adoption of General Plan update
Howard County’s Complete Streets Policy

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  - Design Manual Updates (Volume III, Roads & Bridges) 2 years
  - Subdivision and Land Development Regulations 3 years, following adoption of General Plan update
Design Manual, Volume III

- Chapter 1, Introduction
- Chapter 2, Street Design
- Chapter 3, Structures
- Chapter 4, Adequate Public Facilities Test Evaluation Requirements
- Chapter 5, Multimodal Traffic Studies
Design Manual, Volume III

• Chapter 1, Introduction – today’s focus
• Chapter 2, Street Design
• Chapter 3, Structures
• Chapter 4, Adequate Public Facilities Test Evaluation Requirements
• Chapter 5, Multimodal Traffic Studies
Design Manual, Volume III

• Chapter 1, Introduction – today’s focus
• Chapter 2, Street Design – 9/21
• Chapter 3, Structures – 9/21
• Chapter 4, Adequate Public Facilities Test Evaluation Requirements
• Chapter 5, Traffic Studies – 9/21

Visit [www.howardcountymd.gov/DM-updates](http://www.howardcountymd.gov/DM-updates) or scan to sign up for the 9/21 2pm workshop and review the draft
Design Manual, Volume III

Revisions based on established design guidance and best practices including:

- American Association of State Highway and Transportation Officials (AASHTO)
- Federal Highway Administration (FHWA)
- Maryland State Highway Administration (MDOT SHA)
- National Cooperative Highway Research Program (NCHRP)
- Institute of Transportation Engineers (ITE)
- National Association of City Transportation Officials (NACTO)
Chapter 1, Introduction

- Equity Emphasis Areas
- Capital projects vs. land development projects
- Community Engagement Plan
- Pedestrian and Bicycle Master Plans
- New Street Types for new construction
- Retrofit guidance
Equity Emphasis Areas

This map shows the location of priority populations in Howard County according to the Baltimore Metropolitan Council methodology.

This is one of several factors that will be used to prioritize projects under the Complete Streets Policy.

Other factors include:
- Safety/public health
- Place (connections to important destinations)
- Access
- Economy

Equity Emphasis Area Categories (Bar Charts Show Status per Census Tract)
- Households in poverty
- Non-car-owning households
- Non-Hispanic minority population
- Low English Proficiency individuals
- Hispanic or Latino population
- Individuals 75+
- Disabled individuals

Number of Priority Categories
- 0 - 1 (12 Tracts)
- 2 (9 Tracts)
- 3 (12 Tracts)
- 4 - 5 (9 Tracts)
- 6 - 11 (13 Tracts)

Map Produced by Howard County Office of Transportation July 22, 2021
Capital Projects

- Project ideas are often generated by transportation master plans and studies, such as WalkHoward and BikeHoward
- Planning and potential funding strategies are evaluated by the Howard County Office of Transportation, Department of Public Works, and Department of Planning and Zoning
- Project delivery (engineering and construction) is by the Howard County Department of Public Works
Land Development Projects

- Transportation improvements are planned, funded, designed, and constructed by a private entity as part of a residential or commercial development.
- Developers must design transportation improvements based on guidance provided in the Design Manual.
- The provision of off-site improvements is largely dictated by the Subdivision and Land Development Regulations, which are required to CR 120-2019 to be updated for Complete Streets 6 months after the Design Manual update.
Community Engagement Plan

Section 1.2.D

INCLUSIVE
Identify all user groups and engage them around what they care about.

TRANSPARENT
Communicate early and often, making sure to set clear expectations.

ADAPTABLE
Modify engagement techniques if they aren’t working.

EQUITY
Cultivate fairness and justice.

RECEPTIVE
Willing to listen and consider alternate options.

COLLABORATIVE
Build a relationship, and partner with the community.

BALANCED
Use a variety of techniques, including online and in-person tactics.
Bicycle & Pedestrian Master Plans

Howard County Bicycle Master Plan 2015

Howard County Pedestrian Master Plan | County Council Version December 2019
## New Street Types

<table>
<thead>
<tr>
<th>Mixed Use</th>
<th>Suburban</th>
</tr>
</thead>
<tbody>
<tr>
<td>Boulevard</td>
<td>Parkway</td>
</tr>
<tr>
<td>Town Center Connector</td>
<td>Neighborhood Connector</td>
</tr>
<tr>
<td>Town Center Street</td>
<td>Neighborhood Street 1</td>
</tr>
<tr>
<td></td>
<td>Neighborhood Street 2</td>
</tr>
</tbody>
</table>

**Local (applies to mixed use and suburban contexts)**

- Neighborhood Yield Street
- Alley

<table>
<thead>
<tr>
<th>Rural</th>
<th>Other</th>
</tr>
</thead>
<tbody>
<tr>
<td>Country Road</td>
<td>Industrial</td>
</tr>
<tr>
<td>Rural Development Street</td>
<td></td>
</tr>
</tbody>
</table>
Boulevard

Features:
- Mixed-use/higher density areas
- Four-lane divided street
- Grass or landscaped median/center turn lane
- Separated bikeways
- Sidewalks
- Privately owned frontage zone for additional street furniture and restaurant seating
- Options with and without parking
Town Center Connector

Features:
- Mixed-use/higher density areas
- Three-lane street
- Center turn lane
- Separated bikeways
- Sidewalks
- Privately owned frontage zone for additional street furniture and restaurant seating
- Options with and without parking
Town Center Street

Features:
- Mixed-use/higher density areas
- Two-lane street
- Separated bikeways
- Sidewalks
- Privately owned frontage zone for additional street furniture and restaurant seating
- Options with and without parking
Parkway

Features:
- Suburban/lower density areas
- Four or six-lane divided street
- Grass or landscaped median/center turn lane
- Shared use paths
- No parking
Neighborhood Connector

Features:
- Suburban/lower density areas
- Three-lane street
- Grass or landscaped median/center turn lane
- Shared use paths
- No sidewalks
- Options with and without parking
Neighborhood Street 1

Features:
- Suburban/lower density areas
- Two-lane street
- On-road buffered bike lanes
- Sidewalks
- Options with and without parking
Features:
- Suburban/lower density areas
- Two-lane street
- Shared use path on one side of the street
- Sidewalk on the other side of the street
- Options with and without parking
Neighborhood Yield Street

Features:
- Residential areas
- Low volume two-way traffic
- Shared lane
- Sidewalks
- On-street parking
- Curb-to-curb width based on density
  - 24' in low density areas
  - 26' in low-moderate density areas
  - 28' in moderate density areas
Alley

Features:
- Countywide
- 1-lane driveway/garage access
- Shared lane
- No sidewalks
- No on-street parking
- Privately owned
Industrial Street

Features:
- Industrial areas
- Marked centerline
- Shared use path
- Sidewalk
- Flexible configuration
  - 40' curb to curb
  - Could be striped as two lanes with outside used for parking (shown)
  - Could be striped as three lanes if needed
Country Road

Features:
- Rural/low density areas
- Collector
- Two-lane street
- On-road bike lanes
- No sidewalks
- No on-street parking
Rural Development Street

Features:
- Rural/low-density residential areas
- Low volume two-way traffic
- Shared lane
- No on-street parking
Retrofit Projects

1. Identify preferred cross section based on new street types in Section 1.3.C
2. If enough right of way is not available, County or developer is required to make a good faith effort to acquire additional right of way to construct preferred cross section
3. If right of way cannot be obtained, or there are physical constraints (steep slopes, wetlands, proximity to buildings, etc.), trade-offs must be considered
Trade-Offs

- Reduce median width
- Reduce width of motor vehicle lanes
- Eliminate on-street parking
- Reduce width of the tree zone
- Combine sidewalk-level separated bike lane with sidewalk to create a shared use path
- Reduce number of motor vehicle lanes
- Locate some elements of section outside of right of way in an easement (i.e. sidewalk or shared use path)
- Reduce shared use path width
- Eliminate sidewalk or shared use path on one side of the street
- Downgrade bicycle facility type
- Provide lower-stress bicycle facility on parallel route
Retrofit Case Studies

- Whiteacre Road
- Oakland Mills
- Rogers Ave
- Savage
Whiteacre Road
Oakland Mills

Before
Oakland Mills

Existing

Preferred and Selected Configuration
Rogers Avenue

View standing 400’ away from US 40 - looking south

Rendering for informational purposes. Final design may be different.
Savage Complete Streets
Savage Complete Streets
Next workshop

- Reviewing Speed Management tools
  - Designing streets for the speed we want
  - Managing speeds to improve safety for all road users
- Right-sizing our intersections
  - Accommodating appropriate vehicles
  - Managing turning speeds
  - Reducing pedestrian crossing distance
- Improving safety at pedestrian crossings
  - Lead Pedestrian Intervals
  - Rectangular Rapid Flashing Beacons
- Establishing bicycle facility design standards
  - Level of Traffic Stress analysis
  - Bicycle Facility Types
  - Bicycle Facility Selection
Any questions for us?

If you wish to submit a question or comment, please use the chat feature on Webex or send them to transportation@howardcountymd.gov
Thank you for participating!

Interested in more details?

Visit [www.howardcountymd.gov/DM-updates](http://www.howardcountymd.gov/DM-updates) or scan here to:

- Register for the next public workshop on Thursday, October 21
- Read the draft Design Manual
- Take the survey

Or search “Howard County Complete Streets Design Manual”