Agenda

- Overview
- Pilot Project
- Regional Bicycle and Pedestrian Count Program (Proposal in Development)
- Cost Estimate
- Next Steps
Overview

• Traffic Count Contract
  – Three year contract with AMT Consulting
  – BMC has historically conducted traffic counts
  – Contract includes ability to conduct bicycle and pedestrian counts

• Pilot Project
  – Fall 2021
  – One count site in each jurisdiction (total eight)

• Proposed Full Count Program
  – Estimated to start spring 2022
  – Present to Technical Committee in early 2022
  – Informed by pilot project
  – Developed in coordination with BPAG members, member jurisdictions, and planning partners
Why Count?

• Quantitative data for bicycle and pedestrian planning is increasingly important to support performance-based approaches

• Assist in understanding the role bicyclists and pedestrians play in transportation network

• Support regional, local, and state planning activities:
  – Inform the public and decision makers about actual usage and travel patterns
  – Track and analyze travel trends
  – Plan for new or improved facilities
  – Measure impacts of specific projects (before and after)
  – Support funding applications
  – Increase understanding of safety concerns and exposure rates
# Timeline

<table>
<thead>
<tr>
<th>Date</th>
<th>Event</th>
</tr>
</thead>
<tbody>
<tr>
<td>October 2021</td>
<td>Consultant collect Pilot Project counts (8 locations)</td>
</tr>
<tr>
<td>January 14</td>
<td>Bicycle and Pedestrian Count Work Group meeting</td>
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<tr>
<td>January 19</td>
<td>BPAG meeting</td>
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<tr>
<td>February</td>
<td>Bicycle and Pedestrian Count Work Group meeting</td>
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<td>March 16</td>
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<td>April 5</td>
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Regional Count Program Goals

- Inform prioritization of bike/ped improvements
- Begin process to determine baseline bike/ped volumes
- Track before/after volumes in locations with improvements
- Determine user type (commuter, recreational, mix)
- Assist in the selection of continuous count locations
- Contribute to statewide bike/ped count database
- Document increase/decrease of users on a facility over time
- Leverage the use of emerging technologies
Pilot Project: Bicycle and Pedestrian Counts

- Weeklong counts conducted in October 2021
- One count site in each jurisdiction (eight total)
- Located on a variety of facilities
- Selected through input by BPAG members
Pilot Project: Bicycle and Pedestrian Counts

- **Outcomes**
  - Screenline Counts
    - Directional volumes
  - Intersection Counts
    - Turning movement counts
  - Count data submitted to MDOT by consultant
  - RAW video files (potential use in safety assessments)
  - Exploration of any challenges with implementation, technology, data
  - Coordination with jurisdictions on data analysis and documentation of needed resources
  - Lessons learned to guide recommendations for regional program
Pilot Project: Lessons Learned

• General
  – Reemphasize screenline vs turning movement count requirements to consultant
  – Ensure screenline count locations are at pinch points
  – Clearly defined goals set for each count location

• Equipment Deployment
  – Notify BMC in advance of deployment date for a count location
  – Place equipment on ROW on non-residential property as first choice
  – Notify BMC if count location needs to be moved

• Deliverables
  – Consistent ID numbers for directional/turning movement approaches
  – 15-min internal volume summary spreadsheet for screenline counts
Anne Arundel County
Patuxent Road at WB&A Trail

• **Screenline count**
  – October 26 – November 1

• **Lessons learned**
  – Additional data
    o Two screenline counts
    o Turning movement count
  – Consistent IDs
    o Consultant format data to have consist IDs for turning movements to assist in analysis
  – 15-min interval summary
    o Count volumes in 15-min intervals (daily only currently)
Anne Arundel County
Patuxent Road at WB&A Trail
Anne Arundel County
Patuxent Road at WB&A Trail

Bar chart showing the number of pedestrians and bicyclists by day:
- Monday: 38 pedestrians, 4 bicyclists
- Tuesday: 20 pedestrians, 0 bicyclists
- Wednesday: 14 pedestrians, 2 bicyclists
- Thursday: 17 pedestrians, 6 bicyclists
- Friday: 2 pedestrians, 0 bicyclists
- Saturday: 16 pedestrians, 4 bicyclists
- Sunday: 15 pedestrians, 3 bicyclists

Legend:
- Blue: Pedestrians
- Green: Bicyclists
Anne Arundel County
Patuxent Road at WB&A Trail
Harford County
MA & PA Heritage Trail

• Screenline count
  – October 13 – 19

• Lessons learned
  – Adjust count location
    o To a pinch point and away from parking lot
    o Screenline count currently excludes pedestrians and bicyclists entering/exiting parking lot
  – Location moved
    o Count location moved west of chosen location
    o Consultant verify change from chosen lat/long in future
Harford County
MA & PA Heritage Trail
Queen Anne’s County
Cross Island Trail

- **Screenline count**
  - October 26 – November 1

- **Lesson learned**
  - Location moved
    - Count location moved west of chosen location
    - Consultant verify change from chosen lat/long in future
Queen Anne’s County Cross Island Trail

• **Screenline count**
  – October 26 – November 1

• **Lesson learned**
  – Location moved
    ◦ Count location west of chosen location
    ◦ Consultant verify change from chosen lat/long in future
Queen Anne’s County
Cross Island Trail
Queen Anne’s County
Cross Island Trail

<table>
<thead>
<tr>
<th>Day</th>
<th>Pedestrians</th>
<th>Bicyclists</th>
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<tbody>
<tr>
<td>Mon</td>
<td>237</td>
<td>152</td>
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<tr>
<td>Tue</td>
<td>196</td>
<td>60</td>
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<tr>
<td>Wed</td>
<td>188</td>
<td>246</td>
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<td>Thurs</td>
<td>211</td>
<td>257</td>
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<tr>
<td>Fri</td>
<td>261</td>
<td>185</td>
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<tr>
<td>Sat</td>
<td>308</td>
<td>207</td>
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<tr>
<td>Sun</td>
<td>224</td>
<td>286</td>
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</table>
Howard County
Stevens Forest Road

• **Screenline count**
  - October 26 – November 1

• **Lessons learned**
  - Data collected as turning movement count
  - Reemphasize screenline vs turning movement count with consultant
Regional Bicycle and Pedestrian Count Program (Proposal in Development)

• Weeklong counts conducted throughout the region on a repeating and project specific basis
  – Repeating counts: measure and track over time bicycle and pedestrian volumes
  – Project specific counts: measure impact (before and after)

• Development of program
  – Propose a 5 – 10 year plan
  – Refine list of count locations
  – Determine achievable program goals
  – Create data management and sharing plan
  – Explore resources required for data analysis and use
Cost Estimate

- **Regional Count Program Scenarios**
  - Cyclical counts repeated every three years
  - Targeted counts (before/after) every year

<table>
<thead>
<tr>
<th>Scenario</th>
<th>Avg. Annual Cost</th>
<th>Avg. Count Locations per Year</th>
<th>Total Count Locations (9 Years)</th>
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<tbody>
<tr>
<td>Scenario 1</td>
<td>$15,000</td>
<td>6 repeating, 2 project specific</td>
<td>18 repeating, 18 project specific</td>
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<tr>
<td>Scenario 2</td>
<td>$23,000</td>
<td>10 repeating, 3 project specific</td>
<td>28 repeating, 27 project specific</td>
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<tr>
<td>Scenario 3</td>
<td>$48,500</td>
<td>20 repeating, 6 project specific</td>
<td>62 repeating, 54 project specific</td>
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Recommended Goals

- Inform prioritization of bike/ped improvements
- Begin process to determine baseline bike/ped volumes
- Track before/after volumes in locations with improvements
- Determine user type (commuter, recreational, mix)
- Assist in the selection of continuous count locations
- Contribute to statewide bike/ped count database
- Document increase/decrease of users on a facility over time
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Recommended Goals

Inform prioritization of bike/ped improvements

Begin process to determine baseline bike/ped volumes

Track before/after volumes in locations with improvements

Determine user type (commuter, recreational, mix)

Assist in the selection of continuous count locations

Contribute to statewide bike/ped count database

Document increase/decrease of users on a facility over time

Leverage the use of emerging technologies
# Next Steps

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<tr>
<td>June</td>
<td>Consultant processes data</td>
</tr>
<tr>
<td>July 20</td>
<td>BMC staff present count data to BPAG</td>
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<td>September - October</td>
<td>Potential months for fall counts</td>
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For More Information

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