

Regional Bicycle and Pedestrian Counts

BPAG

January 19, 2022





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

| October 2021 | Consultant collect Pilot Project counts (8 locations) | |
|--------------|---|--|
| January 14 | Bicycle and Pedestrian Count Work Group meeting | |
| January 19 | BPAG meeting | |
| February | Bicycle and Pedestrian Count Work Group meeting | |
| March 16 | BPAG meeting | |
| April 5 | Technical Committee meeting | |
| Мау | Consultant conduct first round of regional counts | |

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





Screenline count

October 26 –
 November 1

Lessons learned

- Additional data
 - Two screenline counts
 - Turning movement count
- Consistent IDs
 - Consultant format data to have consist IDs for turning movements to assist in analysis
- 15-min interval summary
 - Count volumes in 15-min intervals (daily only currently)

























Harford County MA & PA Heritage Trail

- Screenline count
 - October 13 19

Lessons learned

- Adjust count location
 - To a pinch point and away from parking lot
 - Screenline count currently excludes pedestrians and bicyclists entering/ exiting parking lot
- Location moved
 - Count location moved west of chosen location
 - Consultant verify change from chosen lat/long in future







Harford County MA & PA Heritage Trail







Harford County MA & PA Heritage 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







- 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



S BMC













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

| | Avg. Annual Cost | Avg. Count Locations per Year | Total Count Locations (9 Years) |
|------------|---------------------|-------------------------------------|--------------------------------------|
| Scenario 1 | \$15,000 | 6 repeating, 2 project specific | 18 repeating, 18 project specific |
| Scenario 2 | \$23,000 | 10 repeating, 3 project specific | 28 repeating, 27 project specific |
| Scenario 3 | \$48,500 | 20 repeating, 6 project specific | 62 repeating, 54 project specific |



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





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

| February | Bicycle and Pedestrian Count Work Group meeting | |
|------------------------|---|--|
| March 16 | BPAG meeting | |
| April 5 | Technical Committee meeting | |
| Мау | Consultant conduct first round of regional counts | |
| June | Consultant processes data | |
| July 20 | BMC staff present count data to BPAG | |
| September - October | Potential months for fall counts | |

For More Information

Charlene Mingus | Active Transportation Planner 410.732.0500 x1008 | cmingus@baltometro.org | www.baltometro.org



@BALTOMETROCOUNCIL



