

Howard County Department of Planning and Zoning

# Downtown Columbia

## Patuxent Branch Trail Extension Feasibility Study

Howard County, Maryland

FINAL-October 2014

**Capital Project ID:** T7107

**Submitted to:** Howard County – Department of Planning and Zoning

**Prepared by:** Toole Design Group, LLC.

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- Preliminary Opinion of Probable Cost

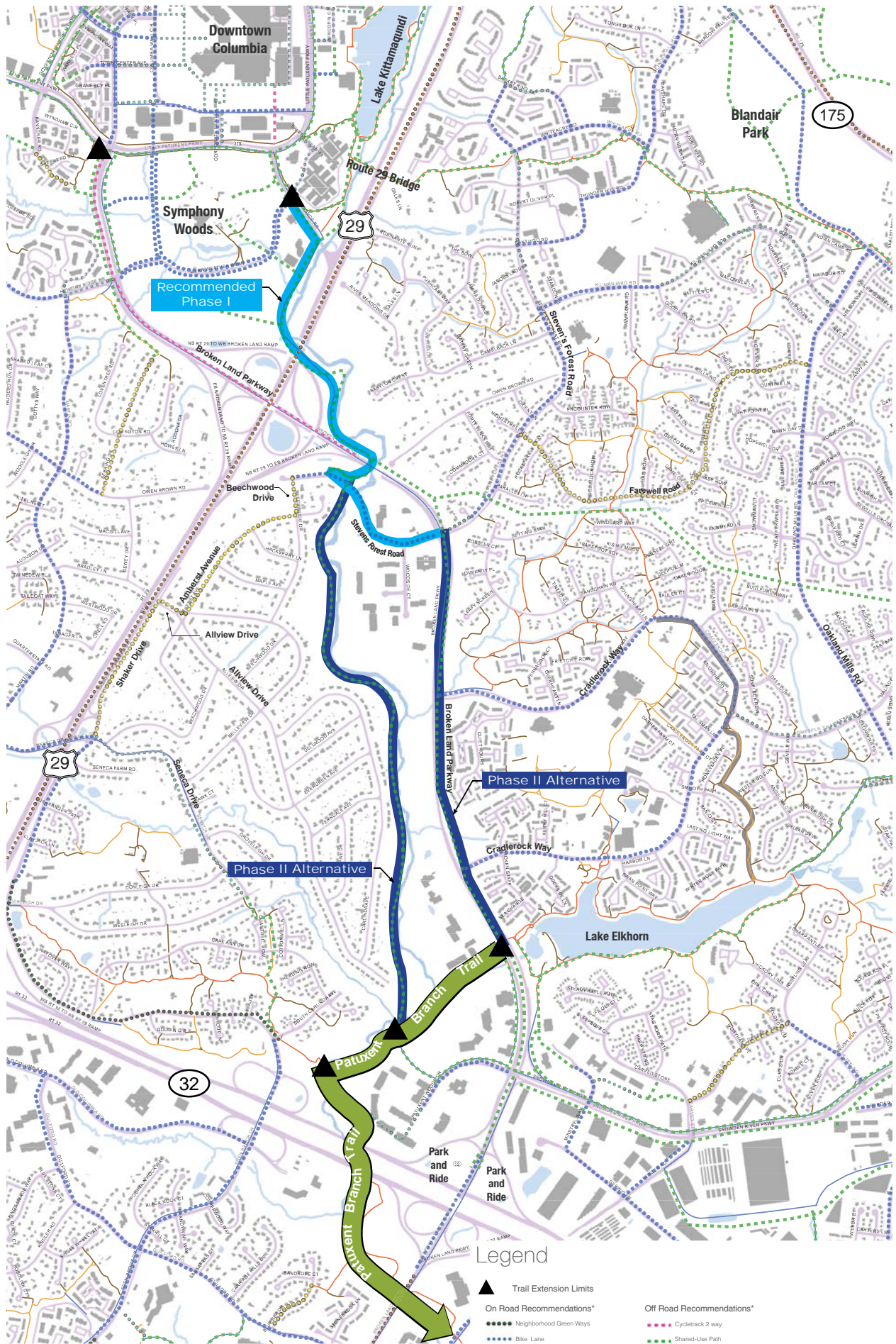
## Executive Summary

In December of 2013, the Howard County Department of Planning and Zoning initiated a study to assess the feasibility of linking Downtown Columbia to the Patuxent Branch Trail by exploring and evaluating both existing and potential on and off road pathways to develop a direct connection. The study was initiated in response to direction contained in Howard County Capital Project T7107 that called for a study to evaluate connections and routes to link Downtown Columbia and the Patuxent Branch Trail in relation to their community and environmental impacts and relationship to the Oakland Mills Bridge capital project.

### Method

The study reviewed and evaluated a wide range of segments between Downtown Columbia and the Patuxent Branch Trail to develop the direct connection and makes recommendations for a preferred alternative and future actions. The study identified 19 segments to connect Downtown Columbia to the Patuxent Branch Trail, organizing the 19 segments into five categories based on geographic location and their physical, connectivity and environmental constraints. Seven segments were determined not to be feasible because of their topographic and connectivity constraints and twelve were determined to be feasible. The study then refined the evaluation of the feasible segments based on environmental impacts, directness, comfort for uses, desirability, engineering and geographic feasibility and order-of-magnitude costs.

Recommends Segments C1 and A2 as a Phase 1 Route			
Segment Description	Primary Selection Criteria	Length	Preliminary Cost
Segment C1 is shared-use pathway along the existing sewer line corridor between Downtown Columbia and Stevens Forest Road; west of the Little Patuxent River	Is feasible and provides direct routing, relatively flat topography and minimal intersection crossings and connects to the Multi Use Pathway that will run from the hospital to Blandair Park.	0.87	\$749,000
Segment A2 is on-road bikeway connection along Stevens Forest Road from Broken Land Parkway to the intersection with the existing sewer line corridor	Is feasible and provides a key connection to the bike lanes on Stevens Forest Road, low cost, uses low volume street and improves access and connects to an existing bike lane.	0.40	\$40,000
Recommends Additional Actions on Segments B2 and C2 as part of a Phase 2 Route			
Segment Description	Primary Selection Criteria	Length	Preliminary Cost
Segment B2 is a shared-use pathway along Broken Land Parkway from Stevens Forest Road to the Patuxent Branch Trail	The segment provides a direct route, however could require significant reconfiguration of Broken Land Parkway. Traffic analysis needed.	1.10	\$1,782,000
Segment C2 is a shared-use pathway along the sewer line corridor from Stevens Forest Road to the Patuxent Branch Trail; west of the Little Patuxent River	The segment provides a direct, flat route, has no roadway crossings, provides a direct, car-free route and connects to the Patuxent Branch Trail, However since the alignment is near to existing homes, more discussion with stakeholders in the community is recommended.	1.53	\$1,621,000



Patuxent Branch Trail Extension Study  
Segment Alternatives



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