



Final Report of Washington Grove, MD Shared Use Pathway Task Force

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Submitted by:

Mary Blake
Kriss Grisham (Co-Chair)
Gretchen Horlacher
Andrew Hotaling
Jeff McCrehan
Eva Patrone
Oscar Ramos
Nicholas Suzich
Gary Temple (Co-Chair)

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Introduction

The Shared Use Pathway Task Force (TF) was formed on June 30, in response to a Washington Grove citizens' petition to the Town Council asking that it reconsider its endorsement of Brown St as the preferred connection to a Shared Use Pathway between Crabbs Branch Way and Washington Grove. The Council formed a nine-person Task Force, mandating that it investigate relevant, verifiable evidence for nine Evaluation Criteria for all proposed pathway options. The overall aim was to assist the Town Council to reach an informed decision on the most appropriate pathway option for the Town.

Over the past four months, the Task Force has conducted 17 meetings open to public view, including two open to Town questions and comments; received at least 55 comments and documents from Town residents; made more than 35 contacts with external specialists including MC DoT; conducted six pathway walks for interested residents through the Conservation (Upper) Meadow and Piedmont (Lower) Meadow; reached out to multiple bicycling groups in this area for their insights; analyzed nearly 100 documents from academic, government, and other sources related to bicycle pathway design and safety; and created a public database of its documents accessible to all.

The TF benefited from the assistance of Town residents who contributed numerous suggestions and documents to our investigations, and we much appreciated the engagement of residents who regularly attended our public meetings. Included in this report are selected comments from several residents.

Key Findings of the Task Force Analysis

- All 5 pathway options would increase access for cyclists and pedestrians in WG and nearby communities to Metro and commercial and recreational sites.
- All options would increase pedestrian and bicycle traffic on the WG roads that funnel traffic toward a pathway connection.
- *Railroad St* presents the most traffic safety concerns of the five options, joining Ridge Rd at a blind curve with oncoming auto traffic.
- *Meadow 2A* would result in significant environmental and historical disturbance, creating a 14-foot-wide pathway across the Conservation Meadow and potentially a 16-foot-wide pathway through the forested hedgerow containing archeologically sensitive areas.
- *Lower Brown St* would produce the least environmental disturbance. But it would introduce added pedestrian and bicycle traffic into a cul-de-sac environment. It is the only option funded by MC DoT for design and construction, with completion in FY2024. Construction from the end of Brown St to reach the Crabbs Branch Way connection would warrant close involvement of WG with MC DoT.
- *Meadow 2B* would create significant environmental and historical disturbance along two edges of the Conservation Meadow; it also would cross the Piedmont Meadow and its forested eastern border, with wetlands and archeologically sensitive sites.

- *Widening and Extending Railroad St to Grove Rd* would create traffic safety concerns, similar to those of the Railroad St option for pedestrians and bicyclists approaching the pathway connection at Ridge Rd. This option risks encouraging future County highway expansion along this route, which could result in increased traffic, noise pollution, and threaten the historic designation of the Town.
- Mitigation approaches are available to minimize negative effects of all pathway options, including working with MC DoT on the pathway design.
- The “no path” option avoids possible undesirable future impacts of a Shared Use Pathway on the Town, but forfeits multiple opportunities: to increase access to the Grove Shopping Center and Metro, to promote environmentally friendly travel and recreation, and to advance social equity with neighboring communities.
- If the Town approves a shared use path option, the TF recommends creating an official Shared Use Pathway Town Committee to monitor concerns, advocate for mitigations, promote education on bicycling safety, and maintain ongoing contact with MC DoT and nearby bicycling organizations.

I. Background

Montgomery County Shady Grove Sector Plans have sought for several decades to expand shared use pathways, suitable for cyclists and pedestrians, that could connect local communities with the Shady Grove Metro. The Montgomery County Shady Grove Master Plan, Minor Master Plan Amendment of Spring, 2020,¹ included the following:

- Link new parks and open spaces with existing and proposed bikeways and trails.
- Retain existing public parks as public open space.

The Montgomery County Department of Transportation (MC DoT) held two public meetings for Washington Grove (WG) residents to inform the Town of options for two different projects² that would connect the west end of Crabbs Branch Way with WG and neighboring communities.

Two Connector/Extension Projects

The first MC DoT meeting, held in person, on Feb 13, 2020,³ introduced the Town to the pathway options that MC DoT was evaluating for the two connector projects. One project was the **Washington Grove Connector Pathway**, that would connect WG to Crabbs Branch Way. A second project, the **Crabbs Branch Way to Amity Drive Extension**, would connect Crabbs Branch Way to Amity Drive. This presentation concluded with an informal survey of Town resident pathway preferences for the Washington Grove Connector. The survey suggested a preference for the Railroad St option, one of the three options described below.⁴

MC DoT’s second presentation, held virtually, on Feb 17, 2021, provided greater detail about both connector projects, focusing mainly on the **Washington Grove Connector**. The presentation included descriptions of the pathway options (variously referred to as “alignments” or “alternatives” by MC DoT) being considered by MC DoT, as well as estimates of the environmental impact and cost of each option for the County.⁵

The Washington Grove Connector Project included three major pathway options that would connect Crabbs Branch Way to WG.⁶

- Option 1 - Railroad St
- Option 2 - Meadow 2A (also called Ridge Rd Option by MC DoT)
- Option 3 - Lower Brown St

The Washington Grove Connector Project was funded for planning, but only one option was to be funded for design and construction, with projected completion of the chosen option in FY2024. A short connection pathway between Picea View Ct and Ridge Rd was also included with all three options.

A second project, the **Crabbs Branch Way Extension Project (to Amity Drive)**, would connect Crabbs Branch Way to the south end of Amity Drive.⁷ This project is currently funded only for planning purposes, for evaluation of feasibility.

Both projects would improve connectivity to the Shady Grove Metro as well as to retail and recreational areas south of MD-200/I-370. More details of the proposed shared use pathways between WG and Crabbs Branch Way are given in Section II.

Online Polling of WG Residents

Following the second MC DoT presentation, in March 2021, MC DoT polled the shared use pathway preferences of WG residents in an online survey.⁸ Fifty-four WG residents participated in this poll, ranking Lower Brown St highest as their preferred option. The results of this survey are summarized⁹ and full details (with resident comments) are available.¹⁰

WG Town Council Endorses Lower Brown St

A Special WG Town Meeting, scheduled for March 2021, to consider the shared use pathway options to connect with WG was cancelled due to the worsening Covid-19 pandemic. At the March 8 WG Town Council meeting (attended by approximately 56 (non-voting) Town residents, in addition to the Mayor and 6 Council members), the Council discussed the three MC DoT bikeway options and voted 4 to 2 in favor of a motion to endorse Lower Brown St as the preferred pathway connection.¹¹

On March 24, 2021, the Mayor notified MC DoT that the Town Council had endorsed the Lower Brown Street pathway option. The letter added: “We want to emphasize that Washington Grove residents and the Town Council remain very concerned over the environmental impacts, safety, “gateway” design, potential placement of bike racks, as well as specifics of the route at the Metro “end”, Gaithersburg’s connection plans, and more. *In adopting this recommendation, the Town Council has charged me to ensure that the Town be involved in detailed planning decisions during construction of the connector.* Residents and the Town Council wish to ensure the design of the pathway minimizes adverse effects on the residents of Brown Street, the woodlands and the wetlands (decisions including width, type and exact path through wetlands, aesthetics, tree loss and replacement, etc.)”¹²

Montgomery County Planning Board Recommends Lower Brown Street Option

On April 22, 2021, MC DoT presented to the Montgomery County Planning Board features of the pathway options, including the results of its Feb 2021 WG poll on pathway options.⁸ On April 29, the County Planning Board voted 5-0 to recommend that MC DoT proceed with the design and construction of the Lower Brown St option.¹³

WG Residents' Petition and Formation of Task Force

In the absence of wider Town involvement and more extensive evaluation of pathway options, some Town residents believed the process of selecting a pathway option deserved reconsideration. In early June, 50 WG residents signed a petition, invoking Section 15(c) of the Town Charter, to request that the Town Council reconsider its choice of the preferred bike pathway option, create a task force to evaluate the pathway options, and rescind its preferred option communication with MC DoT.¹⁴

The Shared Use Bike Path Task Force (later renamed to Shared Use Pathway Task Force) was created by the Town Council on June 30, 2021.¹⁵ On July 12, 2021, the Mayor proposed, and the Council voted 4 to 2, to accept the nomination of nine WG residents to serve on the Task Force.¹⁶

On July 20, 2021, Washington Grove Mayor John Compton wrote to Montgomery County's Division of Transportation Engineering, noting that "...the Washington Grove Town Council approved plans to review potential impacts on the Town of a new shared use path connection to the Montgomery County bikeway system." He added, "This review will begin with the preparation of a Task Force report on this subject for residents and the Town Council, presentation and discussion of the report's findings at a Special Town Meeting of residents, and subsequent action by the Town Council on proceeding with a specific shared use path connection."¹⁷

Task Force Mandate

The Task Force was charged with researching and providing relevant, verifiable evidence regarding the pathway options, assisting the Town to make an informed choice of its preferred pathway option. The Task Force was asked not to make recommendations to the Town for a specific shared use path. The Task Force membership and its mission are summarized in the Evaluation Plan.¹⁸

II. Overview of Task Force Analysis and Assumptions

Terminology Used in This Report

- Conservation Meadow (also called the Upper Meadow) is a natural meadow adjoining Ridge Rd, owned by the Town, but managed by Montgomery County Park and Planning (MC P&P). It contains several grass walking paths used by residents of Washington Grove and neighboring communities.

- Piedmont Meadow (also called the Lower Meadow) is a natural area owned and maintained by the MC P&P. It contains walking paths, wetlands, forest, and a stream that contributes to the headwaters of Mill Creek.
- Hedgerow: A band of medium- and old-growth trees separating the Conservation and Piedmont meadows.
- MC DoT: Montgomery County Department of Transportation. The Town's main MC DoT contact is Kyle Lukacs.
- MC P&P is an agency within the Maryland-National Capital Park and Planning Commission (MNCPPC).
- Washington Grove Connector Project: the MC DoT name for a shared use pathway between the west end of Crabbs Branch Way and Washington Grove.¹⁹
- Crabbs Branch Way Extension Project: the MC DoT name for a shared use pathway or pathway plus road joining Amity Drive to Crabbs Branch Way.²⁰
- Salt Barn: Informal name of the Montgomery County Equipment Maintenance and Operations Center (EMOC) facility adjoining WG.

Categories of Evidence

The Task Force analysis relies on evidence with different levels of objectivity and verification. In our evaluations, we note the following categories of evidence used (and, where available, we provide links to our sources).*

Type 1: Evidence obtained from expert opinion, established sources, verifiable observation, or physical measurement

Type 2: Direct observations or judgments by Task Force members or other reliable (non-expert) sources

Type 3: Opinions of other sources, including residents

Five Shared Use Pathway Options

MC DoT initially proposed three options for a shared use pathway for the Crabbs Branch to Washington Grove Connection:

- Option 1 - Railroad St
- Option 2 - Meadow 2A (also called Ridge Rd Option by MC DoT)
- Option 3 - Lower Brown St

(The above options included a short connection from Picea View Ct to lower Ridge Rd).

* [A Task Force bibliography of all documents obtained, comments received, and other relevant resources is available at: https://docs.google.com/document/d/13ccxMORY-8XUa2SKzGYRxF8kZAIDj4D/edit?usp=sharing&ouid=110203488435064833030&rtpof=true&sd=true](https://docs.google.com/document/d/13ccxMORY-8XUa2SKzGYRxF8kZAIDj4D/edit?usp=sharing&ouid=110203488435064833030&rtpof=true&sd=true)

Subsequently, WG residents suggested two additional options:

- Option 4 - Meadow 2B
- Option 5 - Railroad St Widening and Extension.

A **map** of these five pathway options is shown here.²¹

All the pathways would be constructed entirely by MC DoT using MC DoT funding. Each pathway would create a connection between WG roads and Crabbs Branch Way for cyclists and pedestrians, providing more direct access to the Grove Shopping Center, to the Shady Grove Metro station, and to points beyond. Currently cyclists and pedestrians must travel along Oakmont Ave and Shady Grove Rd to reach these locations.

Bicycle and Pedestrian Traffic Flow To Shared Use Pathways

Bicycle and pedestrian traffic will likely increase on *most* WG roads because of a pathway connection from WG to Crabbs Branch Way. *Type 2 Evidence*

Some bike and pedestrian traffic approaching pathway entrances will originate from within WG; whereas other bike and pedestrian traffic will originate from surrounding communities, entering WG at principally four locations (A detailed TF analysis of WG traffic flow is available.²²)

- The southern end of Ridge Rd, at Railroad St, from Oakmont Ave
- The northern end of Ridge Rd, from Amity Drive and surrounding communities
- The west end of Brown St, at Hickory Road, from the Commercial Corner and Gaithersburg (via Diamond Ave)
- The junction of McCauley and Washington Grove Lane, from Emory Grove and beyond

Picea View Ct Pathway to Ridge Road. All three of the pathway options considered by MC DoT to connect WG to Crabbs Branch Way include expansion of a short existing trail connection between Picea View Ct and the lower (northern) end of Ridge Rd.²³ Regardless of which pathway option is eventually chosen, this short connection would provide access for residents in the Amity Drive and neighboring communities to reach Crabbs Branch Way and the Metro, by traveling along Ridge Rd to enter the pathway constructed from WG.

Crabbs Branch Way Extension. A shared use pathway (as either a pathway or a pathway plus roadway) between the end of Amity Drive and Crabbs Branch Way, through the Lower Meadow, is currently funded for planning purposes *only* by MC DoT.²⁴ *Consideration of whether this pathway should be constructed is outside the domain of this Task Force.* Whether either pathway or pathway plus road is constructed in the future will depend on the results of ongoing planning and available funding. Note: If either connection is constructed in the future, it would divert most bike and pedestrian traffic, which would *otherwise enter Ridge Road* from the Amity Drive area, toward the more direct Amity Drive-Crabbs Branch Way connection.

Evaluation Criteria That Distinguish the Five Pathway Options

Of the nine Evaluation Criteria (ECs) - later expanded to twelve - that the Town Council mandated for the Task Force to consider, four of these ECs are especially useful for distinguishing between the five proposed pathway options. Wherever other ECs provide distinguishing information, we note their significance. Included here are brief descriptions of TF interpretations of these ECs.

- **EC1 - Overall Safety.** The TF considered safety issues related to increases in bike and pedestrian traffic on Town roads, safety at the future intersection of the pathway and the Town road, and safety considerations stemming from the path itself, including the potential for increases in crime. For sources, we examined County documents and data, as well as government websites and peer-reviewed academic journals.
- **EC2 - Impacts on Specific Areas of Town.** In the absence of reliable predictions of possible increased bicycle and pedestrian traffic through Town, the TF performed a detailed analysis that modeled likely patterns of increased traffic flow through Town related to each pathway connector.^{22*}
- **EC3 - Environmental and Historical Impact.** The TF evaluated potential disturbance of parkland, forest, wetland, and existing natural viewscape resulting from pathway construction, with particular focus on the Upper (Conservation) and Lower (Piedmont) meadows and intervening forested hedgerow. The TF also evaluated the likely impact on designated Town historic sites and archeologically sensitive areas. For sources, we examined County documents and data, survey maps, as well as government and WG websites.
- **EC10 - Planning and Construction Timeline and Funding.** Only one of the five pathway options, Option 3 – Lower Brown St, is currently funded by the County for construction, with a timeline for completion of FY2024.

Evaluation Criteria That Apply Generally to All Options

- **EC4 - Legal Implications of the Town’s Responsibilities Regarding Maintenance and Liabilities.** The TF focused on what is needed for the Town to minimize additional liability resulting from a Shared Use Pathway connection to the Town.
- **EC5 - Ease of Access to the Shady Grove Metro Station and Nearby Communities.** All five options would offer similar access to the Metro and beyond.
- **EC6 - Recreational Use.** The TF considered how a shared use pathway could enhance access to nearby shopping centers, the Shady Grove Metro, Ride-On and MTA buses, Lake Needwood, and nearby biking pathway networks.

* Only the first instance of a reference number in the text actively directs the reader to the Reference page. Subsequent uses of the same reference number (referring to the same source) are inactive, but still provide the correct reference.

- **EC7 - Social Equity Implications.** The TF focused on the implications of providing fair, equitable, and reliable access to pathways for pedestrians and bicyclists that meets the needs of all community members, particularly traditionally underserved populations.
- **EC8 - Potential Mitigations for the Various Connections.** The TF identified pathway impact mitigation strategies that, if needed, could enhance safety, the environment, and deterioration in viewscape.
- **EC9 - Projections of 10-year Use from MC DoT or Other Sources.** The TF is unable to provide reliable estimates this far into the future for bike and pedestrian traffic on a shared use pathway.
- **EC11 - Other Town-wide Impacts.** The TF considered other possible effects of a shared use pathway, including changes in WG property values, encouraging a low-carbon footprint lifestyle, and attracting families with children to the Town.
- **EC12 - Such other criteria suggested by public input or Task Force discussion as may be agreed to be relevant.**

III. Evaluation of Five Pathway Options Using Distinguishing ECs

(Key features of Options #1, #2, and #3 are also described in the MC DoT 2-17-21 presentation.²⁵)

Option #1. Railroad St

This pathway starts at the corner of Railroad St and Ridge Rd and proceeds eastward between Washington Grove and Roberts Oxygen, approaching Crabbs Branch Way from the east end of the Salt Barn.²⁶

EC1 - Overall Safety. This option presents safety challenges for cyclists and pedestrians attempting to cross Ridge Road to reach the pathway entrance, as they could face oncoming auto traffic entering Ridge Rd from Railroad St, whether from Oakmont Ave (crossing the railroad tracks) or from the Humpback Bridge.²⁷ No stop sign currently exists to slow traffic from Oakmont Ave at this entry to Ridge Rd. *Type 2 Evidence.*

EC2 - Impacts on Specific Areas of Town. Bike and pedestrian traffic approaching this connection from WG would be funneled into the south end of Ridge Rd, where Ridge Road turns sharply, with limited visibility, to meet Railroad St. The likely concentration of bike and pedestrian traffic at this pathway entrance/exit to WG accentuates the EC1- Overall Safety concerns, noted above. *Type 2 Evidence.*

EC3 - Environmental and Historic Impacts. Option 1 would require removal of a thicket of mostly young trees (between entrance to the pathway and where the pathway emerges along the north side of the Salt Barn). These trees provide a partial visual barrier between houses bordering this proposed pathway and Roberts Oxygen. MC DoT representative Kyle Lukacs noted that the County is required to replace existing trees 6” or more (at breast height) that are removed by the pathway construction, to a location nearby, if possible.²⁸ *Type 1 Evidence.*

Option 1 would require the MC DoT to acquire land, from Roberts Oxygen (through sale or eminent domain), to provide the space for a 10-foot pathway with 2-foot shoulders. This 14-foot pathway potentially could include fencing or other visual buffers between WG houses bordering the pathway and Roberts Oxygen and the Salt Barn.²⁹ *Type 1 Evidence*

To reach Crabbs Branch Way, Option 1 would overlap its entire length with a WSSC sewer right of way. Repairs on this sewer line could interrupt the use of the pathway.²⁷ *Type 1 Evidence*

Option 1 avoids archeologically sensitive sites along the forested hedgerow between the Upper and Lower Meadows. Disruption of wetlands is minimized, as this option runs closest to already developed County property and distant from known wetlands that include headwaters of Mill Creek.³⁰ *Type 1 Evidence*

EC8 - Potential Mitigation. Drivers entering WG from Railroad St leave a two-lane street with high levels of traffic to enter a narrower road, with a sharp curve and limited visibility of pedestrians and bicyclists entering and leaving the Pathway connection. Signage for pedestrians and bicyclists approaching this pathway from Brown St could warn of possible oncoming traffic approaching around the curve from Railroad St. Signage to cars and trucks entering from both directions of Railroad St could warn of pedestrian and bicyclist traffic crossing Ridge Rd on the curve ahead. *Type 2 Evidence.*

Installing a stop sign on Railroad St at the entrance to Ridge Rd is problematic, as it could potentially cause traffic from Oakmont Ave to back up across the railroad tracks. *Type 2 Evidence.*

Crosswalks and additional sidewalks on Ridge Rd and Railroad St could increase safety here. But crosswalks require sidewalks on both sides of streets, and many obstacles prevent placing sidewalks on both sides of Railroad St, making this an unlikely solution. *Type 2 Evidence.*

EC10 - Planning and Construction Timeline and Funding. Option 1 is the most expensive of the three main pathway options initially considered by MC DoT. It is unfunded by MC DoT for further analysis or construction. The likelihood and timing of its construction by MC DoT in the future is unknown.^{13, 31} *Type 1 Evidence*

EC12 – Other Criteria Suggested by Public Input or TF Discussion. Construction of this pathway could set the stage for later construction to widen and extend Railroad St as a road with a shared use pathway³² (Option 5, discussed below). *Type 3 Evidence*

Option #2. Meadow 2A

This pathway leaves Ridge Rd at the south end of the Conservation Meadow, approximately opposite 106 Ridge Rd, traverses the Conservation Meadow, crosses the forested hedgerow, and connects to the Crabbs Branch Way extension just below the Salt Barn.³³

EC1 - Overall Safety. This path would not connect to Ridge Rd at an intersection, and visibility at its junction to Ridge Rd is good in both directions. *Type 2 Evidence*

EC2 - Impacts on Specific Areas of Town. Bike and pedestrian traffic funneling to this connection between Ridge Rd and the Conservation Meadow pathway is not expected to create traffic bottlenecks. *Type 2 Evidence*

EC3 - Environmental and Historic Impacts. This connection would create a 14-foot-wide pathway traversing Conservation Meadow, and possibly headwaters of Mill Creek, then cross areas of potential archeological significance within the forested hedgerow, possibly as a 16-foot-wide pathway. It would skirt below the sand-pit drainage area located at the base of Brown Street (see map³³) *Type 1 Evidence*

Montgomery County Parks and Planning is concerned about placing a path anywhere in the Conservation Meadow. MC P&P considers the Meadow of “Tier 1” importance for conservation in Montgomery County, as it supports “...some of the most unique plant communities in the piedmont region....The natural setting of this National Register district is defined on its southern edge by Washington Grove Conservation Park.”³⁴ A path through the meadow could also impact WG’s national register-listed historic resources.³⁵ *Type 1 Evidence*

Both the Upper and Lower meadow have “the potential to encompass known and/or high potential prehistoric archaeological sites, including a steatite quarry, a source of stone used by Native American peoples (18MO621, Washington Grove Steatite Quarry)...No ground disturbance should be undertaken in this area without an archaeological treatment plan being in place, including any staging of construction machines or materials. Any project will need to be evaluated as an undertaking in the context of Section 106 of the 1966 National Historic Preservation Act should any federal and/or state licenses and/or permits be anticipated for the project.”³⁴ *Type 1 Evidence*

Additional features of Option #2 are described in the 2-17-21 MC DoT Presentation.³⁶

EC8 - Potential Mitigation. Additional signage/road markings may be necessary to warn approaching drivers of a pathway crossing ahead. *Type 2 Evidence*

EC10 - Planning and Construction Timeline and Funding. Option 2A is not funded by MC DoT for analysis or construction. The likelihood and timing of its future construction by MC DoT is unknown.^{13, 31} *Type 1 Evidence*

Option #3. Lower Brown Street

This pathway starts at the lower (east) end of Brown St, turns sharply toward the Salt Barn for about 30 feet across WG land containing mature trees, then proceeds in parallel to the Salt Barn, eventually joining Crabbs Branch Way.³⁷

EC1 - Overall Safety. Residents on lower Brown Street have voiced concerns that cars backing out of driveways and commercial vehicles backing up the street would risk colliding with the likely increased numbers of cyclists and pedestrians traveling on the street, to and from the Brown Street pathway connection.³⁸ *Type 3 Evidence*

A pathway connection at lower Brown St. would introduce increased pedestrian and bicycle traffic into a cul-de-sac environment. This change would require greater vigilance by drivers exiting driveways. *Type 2 Evidence*

MC DoT determined that the maximum slope reached along the route is 4.5%,³⁹ which is within the range of safe slopes for cyclists and ADA slope requirements.⁴⁰ *Type 1 Evidence*

EC2 - Impacts on Specific Areas of Town. Cyclists and pedestrians arriving from other areas of WG would funnel into the entrance of Brown St where it meets Ridge Rd, at a 4-way stop. Because lower Brown St ends in a cul-de-sac, few bicycles and pedestrians currently use Brown St. A pathway connection at the lower end of Brown St would likely raise bike and pedestrian traffic along this street. *Type 2 Evidence*

EC3 - Environmental and Historic Impacts. The pathway connection from the end of Brown St would require removal of a small stand of mature trees. MC DoT ranked the Brown St option, overall, as covering the least surface area and having the lowest forest and meadow impact among its three proposed options.⁴¹ *Type 1 Evidence*

According to M-NCPPC Archeologist Heather Bouslog, "...compared to the other [three DoT] proposed routes, the Brown Street option has the smallest impact on parkland and archaeological resources."⁴² *Type 1 Evidence*

EC8 - Potential Mitigation. To minimize the visual impact of the pathway on this forested area, WG and the Historic Preservation Commission should be closely involved in the planning of how the pathway crosses the 25' x 33' plot of land at the end of Brown St (which belongs to WG),⁴³ to approach the pathway connection next to the Salt Barn. *Type 2 Evidence*

EC10 - Planning and Construction Timeline and Funding. Option #3 is the only pathway option funded by MC DoT for analysis and construction (Bikeway Program Minor Projects program), with projected completion by FY2024.⁴⁴ *Type 1 Evidence*

EC12 - Other Criteria Suggested by Public Input. In March 2021, MC DoT conducted a systematic survey of Town preferences for three pathway options the DoT had initially proposed. Among fifty-three WG residents responding to the survey, the Lower Brown St option was the preferred option.^{9, 10} *Type 1 Evidence*

The Lower Brown St neighborhood, east of Ridge Rd, arose within 2.9 acres of land annexed by WG from the Ward Corporation in January 1994. The 94-04 resolution for annexation

anticipated, among other things, construction of eight homes along lower Brown St, each with off-street parking for at least four vehicles, and construction of "... a bike path connecting Brown St and future Amity Drive." ⁴⁵ *Type 1 Evidence*

Option #4. Meadow 2B (Proposed by WG Residents)

This pathway connects to Ridge Rd (approximately opposite 204 Ridge Rd), traverses the south end of the Conservation Meadow, parallels the forested hedgerow, crossing it at an existing service road. The pathway then traverses the Lower Meadow, a stand of semi-mature forest, wetlands, and a small creek, before it connects to Crabbs Branch Way.²¹

EC1 - Overall Safety. Where the path would connect to Ridge Rd is well separated from an intersection, and visibility in both directions would be good. Traffic safety here should not be a concern. *Type 2 Evidence*

EC2 - Impacts on Specific Areas of Town. As Option 4 courses along the northern border of the Conservation Meadow, it would pass close to the Picea View Ct cul-de-sac. This proximity would allow for a short connection between Picea View Ct and the Option 4 pathway leading to Crabbs Branch Way. Creating this connection would allow pedestrian and bicycling traffic arising from Amity Drive to reach Crabbs Branch Way more directly, without relying on Ridge Road to reach the trailhead. A connection to Picea View Ct could provide a *pathway* alternative⁴⁶ to the Amity Drive Connection to Crabbs Branch Way, across the Lower Meadow, which is currently being considered by MC DoT.⁴⁷ *Type 2 Evidence*

EC3 - Environmental and Historic Impacts. Montgomery County Parks and Planning is extremely concerned about placing a pathway anywhere in the Conservation Meadow. They consider the Meadow of “Tier 1” importance for conservation; it supports “some of the most unique plant communities in the piedmont region.”⁴⁸ Compared to pathway Option 2A, this option would disrupt an even larger portion of the Conservation Meadow, but it would avoid disrupting potentially sensitive archeological sites in the forested hedgerow by crossing to the Lower (Piedmont) Meadow via an existing service road. The pathway would proceed through the lower Meadow, cross forested wetlands at its east end, and traverse a tributary to Mill Creek to reach Crabbs Branch Way.²¹ *Type 1 Evidence*

Whether other archeologically significant sites in the Lower Meadow would be potentially impacted by Option 2B, awaits the County’s archeological evaluation that is required prior to MC DoT proceeding with any pathway construction.³⁴ *Type 1 Evidence*

EC10 - Planning and Construction Timeline and Funding. Neither Option 4 nor a connection between Option 4 and the Picea View Ct cul-de-sac is currently funded by MC DoT either for planning, nor for analysis and construction. The likelihood and timing of its construction by MC DoT is unknown.³¹ *Type 1 Evidence*

Option #5. Widening and Extending Railroad St (Proposed by WG Residents)

To connect with Crabbs Branch Way, Option 5 would extend Option 1 Railroad St, from its pathway junction with Ridge Rd, and widen Railroad St to accommodate a parallel shared use pathway that extends from Ridge Rd to either Grove Rd or Chestnut Rd.²¹

EC1 - Overall Safety. A widened Railroad St, extended from its pathway junction with Ridge Road, would allow additional space for an adjacent shared use pathway. Cyclists and pedestrians

traveling east along Railroad St to approach the trailhead would still need to cross Ridge Road to enter the pathway, located between WG and Roberts Oxygen, where they would face the same safety challenges of oncoming traffic as with Option 1, Railroad St. *Type 2 Evidence*

EC2 - Impacts on Specific Areas of Town. Widening and extending the Railroad St pathway to Grove Street would divert bicycle and pedestrian traffic entering WG from upper Brown St (from Old Town Gaithersburg) and from McCauley (from Washington Grove Lane) which might otherwise use Brown St to reach pathway connections at or near Ridge Rd. Instead this traffic could follow the expanded Railroad St pathway to reach Ridge Rd, reducing bike and pedestrian traffic along Brown St between Grove Rd and Ridge Rd. *Type 2 Evidence*

EC3 - Environmental and Historic Impacts. Option 5 could have serious unintended consequences on the Town by impacting the historic designation⁴⁹ of Washington Grove and the Humpback Bridge. Some residents would applaud expansion of Railroad St as a long-needed improvement;³² while others believe it would risk encouraging future County highway expansion along this route. Such construction could result in increases of traffic and noise pollution and threaten the historic designation of the Town⁵⁰ *Type 3 Evidence*

EC10 - Planning and Construction Timeline and Funding. Option 5 is not funded by MC DoT for analysis or construction. The likelihood and timing of its construction by MC DoT is unknown.³¹ *Type 1 Evidence*

EC12 – Other Relevant Criteria. Extending and expanding a shared use pathway along Railroad St assumes the existence of Option 1-Railroad St pathway.

IV. Evaluation Criteria that Apply to All Five Pathway Options

EC1 - Overall Safety (non-traffic).

Would any of the shared use pathway options raise the rate of crime for WG, due to an influx of non-residents passing through Town? The following evidence is taken from *Sidewalks and Shared-Use Paths: Safety, Security, and Maintenance*.⁵¹

“In their article, *Rail-Trails and Safe Communities: The Experience on 372 Trails (1998)*, Tammy Tracy and Hugh Morris address many misconceptions of trail security. Their research revealed that crime rates are lower on trail networks than the overall crime rate for the region in which they are located, whether urban, suburban, or rural.

“The authors [Tracy and Morris] also discovered that in many cases the trail networks reduced minor crimes such as graffiti and vandalism. Worth noting, however, was that although there were differences among urban, suburban, and rural trails in terms of graffiti (26 percent reported in urban areas compared to 17 percent in suburban and 12 percent in rural areas) there was virtually no difference between urban, suburban, and rural areas, related to incidents of littering and sign damage.”⁵²

“Another important component of security is “eyes,” in other words, the more people present, the less likelihood of criminal activity. To that end, the design of sidewalks and multi-use paths should create a pleasant environment where people want to spend time. Interviewees found that heavily used facilities experience less crime.”⁵³ *Type 1 Evidence*

Would a shared use pathway between WG and Crabbs Branch Way result in an increase in crime due to the homeless men’s shelter currently located near the end of Crabbs Branch Way? A review of the literature on homeless shelters and crime suggests that developing a connection from Washington Grove to Crabbs Branch Way, and to the Men’s Homeless Shelter would not lead to increased crime in WG.⁵⁴ While the research on the impact of homeless shelters on crime in the surrounding community is not robust, the literature that does exist fails to demonstrate a direct correlation. One article, in the *Journal of Experimental Criminology*,⁵⁵ finds an increase in property crime within 100 meters of shelters, but this decreases to no impact beyond 400 meters. This is the only study the TF found that shows an increase in crime in the vicinity of emergency homeless shelters. *Type 1 Evidence*

EC4 - Legal Implications for the Town’s Responsibilities Regarding Maintenance and Liabilities. The key evidence regarding the Town’s liability and road maintenance is stated in the email from WG’s Local Government Insurance Trust (LGIT⁵⁶) Underwriter, sent on 6/28/21, to Mary Challstrom. This email states: “My only recommendation is for the Town to make sure that the portion of the Town streets that connect to the bike path are well maintained and maintenance and complaint logs are implemented, so that the Town has documentation in case a Claim is filed against the Town. The Town’s liability policy provides coverage for bodily injury and property damage only if it is due to negligence.”⁵⁷ *Type 1 Evidence*

EC5 - Ease of Access to Metro by Town and Neighboring Communities. Access to Metro is similar for all five options, although both Option 1- Railroad St and Option 5 - Widening and Extending Railroad St would require crossing Ridge Rd in the face of oncoming traffic. Option 4 - Meadow 2B would impose a slightly longer distance than the other options from its entrance on Ridge Rd to reach Crabbs Branch Way. *Type 2 Evidence*

Starting from Ridge Rd, near 114 Ridge Rd, if one were to walk on any of the proposed shared use paths to the Grove Shopping Center, it would take less than 20 minutes. Walking further, to the Shady Grove Metro, would take an additional 20 minutes.⁵⁸ *Type 2 Evidence*

EC6 - Recreational Value of Shared Use Pathways. Similar access and benefits could derive from all five pathway options. These include:⁵⁹

- The newly built Westside complex near Shady Grove Rd. and Crabbs Branch Way, less than 2 miles away, will feature retail and dining options to which Town residents will have access.
- WG residents would have access to Shady Grove Metro’s 20 Ride-On and MTA buses.
- Lake Needwood is 3 miles from the Crabbs Branch Way Giant.
- Bicyclists using a Shared Use Pathway from WG would have access to Needwood Road and a connection to the Rock Creek Trail, extending into Washington, DC.
- Residents would have access to the ICC trail, reaching Layhill Rd. in Northeastern Montgomery County.
- Montgomery Community College is 4 miles from the Crabbs Branch Way Giant. Residents would have increased bicycle access through lighter traveled roads to the restaurants near

Montgomery Community College and the nearby King Farm area, as well as to central Rockville.

- Residents would have access to the Carl Henn Millennium Trail at Gude Drive, near Montgomery Community College.

Type 3 Evidence

EC7 - Social Equity Implications. All five paths provide *physical* access to residents and neighbors, including underserved populations (low-income and minority persons, older adults, people with limited English skills, persons with disabilities, and persons without cars).

Studies on transportation equity demonstrate the importance of providing access to safe options for nonmotorized travel.^{60, 61} Numerous studies demonstrate that paths also provide *social access* through opportunities to build relationships with neighboring communities.^{62, 63, 64}

Type 1 Evidence

Given the historical racial segregation in Washington Grove, WG's RASEC has noted that a shared use path would demonstrate that all are welcome to pass through our Town. The choice of a no-path option (See Section V, below) would, however, echo the exclusionary tradition of our past, forfeiting an opportunity to promote equitable transportation for those without cars or unable to access motorized options⁶⁵. *Type 3 Evidence*

EC8 – Potential Mitigations for the Various Connections. Regardless of which pathway option is chosen, WG can choose to implement effective traffic and safety mitigation measures for roads receiving increased traffic. These include speed humps, road markings, increased lighting, and signage, to increase safety for both cyclists and drivers. These decisions would be made, as needed, by the Town Council.

Type 2 Evidence

Kyle Lukacs has emphasized that the MC DoT desires to work with the Town to achieve a satisfying shared use pathway solution for both parties. The Town will have an opportunity to influence the construction and appearance of the landing site where the pathway meets a WG road, as well as the choice of pathway surface.²⁹ *Type 1 Evidence*

Where construction of the pathway removes trees six inches or more in diameter (at breast height) the MC DoT will replace these with comparable trees, nearby, if possible.²⁸

Type 1 Evidence

A shared use pathway connection from WG to Crabbs Branch Way will increase bike and pedestrian traffic on most WG roads, especially all along Brown St, Ridge Rd, and Grove Rd. Residents living on all WG roads should be encouraged to back their cars into their driveways, to improve their visibility to see cyclists and pedestrians passing their driveways. *Type 2 Evidence*

EC9 - Projections of 10-year Use. Accurate 10-year forecasts of bike path use are unavailable for all the proposed pathways. A key factor influencing 10-year use of the WG shared use pathway will be whether Gaithersburg and other surrounding communities in the future adopt pathways that connect directly to WG. *Type 2 Evidence*

According to Kyle Lukacs, “The WG connector will be the first shared use path in mid-county north of the ICC, so it is not possible to project [traffic flow] by looking at down-county trails.” Despite the difficulty of estimating future traffic flows on a trail in WG, the experience of a recently completed pathway in this area, the Lake Needwood Rd-ICC pathway that connects to the actively used Rock Creek pathway, can provide maximum estimates. On Oct 30-Nov1, 2020, MC DoT measured 7.5-11.75 bicyclists *per hour* during weekday peaks and 5 – 22 bicyclists *per hour* during weekend peak periods.⁶⁶ *Type 1 Evidence*

EC10 - Other Town-wide Impacts of a Shared Use Pathway. All WG roads could see an increase in pedestrian and bicycle traffic. Roads that funnel bicycle and pedestrian traffic toward the pathway connection, especially Ridge Rd, Brown St, and Grove Rd, would be likely to see the greatest increases. Increased vigilance by all WG residents for passing pedestrians and bicycles will be needed. *Type 2 Evidence*

Accommodating increases in bicycle traffic on WG roads. Roads in WG range in width from 11.5 feet to 21 feet. Although most sections of WG roads average 15 ft-16 ft in width, many also contain narrower regions.⁶⁷ *Type 1 Evidence*

No road in WG is sufficiently wide to accommodate two lanes of automobile traffic, but most provide sufficient width for bicycles passing single lanes of automobile and truck traffic. If WG experiences an increase of bicycle and pedestrian traffic from the Shared Use Pathway, bicyclists, passenger cars, and truck drivers will need to exercise care to pass safely on our Town roads. *Type 2 Evidence*

Increasing the Attractiveness of Town. “Several studies show that homeowners are willing to pay a premium to live near recreational outdoor space. Trails are viewed as active transportation routes and safe spaces for walking and biking that increase the overall value of housing stock for their neighboring communities.” Multiple studies have shown that homes located within 0.25 miles of a trail have a 5% greater property value, while those located within 0.5 miles have a 2% greater value.⁶⁸ *Type 1 Evidence.*

EC12 - Other Criteria Suggested by Public Input or Task Force Discussion As May Be Agreed to be Relevant.

Value of Pathway for Aging in Place. One WG resident commented: “The path has quality of life advantages which have been alluded to by many other people under multiple criteria. One aspect I have not seen mentioned is the impact it will have on those of us who are aging in place. Being able to do errands without using a car can make staying in one’s home feasible for years longer than otherwise.”⁶⁹ *Type 3 Evidence*

Reducing Carbon Footprint. Bicycling promotes a healthy lifestyle. By reducing automobile use, bicycling reduces fossil fuel emissions.

V. Choosing No Pathway

The Town Council’s mandate to the Task Force to examine evidence for the proposed pathway options did not include a “no pathway option.” Yet comments to the TF from some Town residents implied concerns for the unintended consequences of *any* pathway option.⁷⁰ For this reason, a “no pathway option” deserves a brief discussion.

Potential Gains for WG

- Avoids the uncertainty of future impacts of a shared use pathway on the Town, especially the effects of pathways connecting bicycle and pedestrian traffic from other communities to WG
- Maintains the Town’s safety, traffic, and environment as close as possible to its present state

Potential Losses for WG

- No improved access to Metro by Town and neighboring communities
- Lost recreational value of pathway
- Missed opportunity for social equity advancements within Town and with neighboring communities
- Lost opportunity to promote environmentally friendly travel by residents and neighbors, and to reduce the Town’s carbon footprint.
- Possible lost opportunity for County funding and construction of any pathway in near future
- Lost opportunity for potential increase in property values associated with having a shared use pathway
- Lost benefit for younger and older residents (“aging in place”) to have access to Metro and Shady Grove Shopping Center without relying on auto transport

Even without a pathway connecting WG to Crabbs Branch Way, if the County eventually constructs a pathway from the end of Amity Drive to Crabbs Branch Way, bike traffic from several outside communities, including Gaithersburg (from E. Diamond Ave, E. Deer Park Dr., Central Ave) *will still traverse WG to reach the Amity Drive connection.*

Residents of Amity Drive, Emory Grove, and other communities to the north of WG, however, would likely prefer the more direct route to Crabbs Branch Way provided by an Amity Drive-Crabbs Branch Way connection.

VI. A Task Force Recommendation

If the Town adopts a shared use pathway, an official Town Shared Use Pathway Advisory Committee should be established to monitor traffic and the need for additional mitigations in future years. This committee would:

- Monitor needs for additional mitigation methods along WG roads and access points to Pathway entrances
- Encourage Town residents to pursue pedestrian and biking use of the pathway

- Teach residents (young and older) biking safety and bike maintenance practices
- Communicate and coordinate activities with MC DoT and other local biking groups from nearby communities. Two active local bicycling groups include:
 - Rockville Bike Advisory Committee⁷¹
 - Washington Area Bicyclist Association⁷²

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