

4800 Ashford Dunwoody Road Dunwoody, Georgia 30338 dunwoodyga.gov | 678.382.6700

## **MEMORANDUM**

To: Mayor and City Council

From: Michael Smith, Public Works Director

**Date:** February 8, 2021

Subject: Presentation of Conceptual Design for Improvements on Mount

**Vernon Road between Corners Drive and Mount Vernon Place** 

#### **BACKGROUND**

The City's transportation plan recommends sidewalk, bike facilities and turn lanes on Mount Vernon Road. The City has completed improvements in the vicinity of the Vermack intersection and is completing the final design for improvements at Tilly Mill Road. Preliminary concepts have recently been developed for the segment from Corners Drive to Mount Vernon Place which is situated between the two adjacent intersection projects.

Most of this segment currently has one through lane in each direction with a westbound auxiliary lane that becomes a right turn lane onto Forest Springs Drive. There is an older 4-foot wide sidewalk with a 2-foot landscape buffer on the north side of the road. The south side of the road does not have sidewalk and there are no bicycle facilities on either side of the roadway. The transportation plan update in 2017 included a proof of concept report that confirmed that left turn lanes were justified for the side streets on this section of Mount Vernon Road based on the overall volume of traffic and the number of turning vehicles at each intersection.

### **CONCEPUTAL DESIGN**

The city contracted with Atlas to develop the preliminary concepts for the corridor. Three alternatives have been developed with all three concepts including a 12-foot wide, shared use path on the north side of the road and a 5-foot sidewalk. An on street bike lane has been added in the eastbound direction based on public input and to provide continuity with the adjacent intersection projects. The differences in the three concepts are in how the roadway lanes are configured for vehicle traffic.

Alternative 1 provides left turn lanes at Vernon Lake Drive, Stratham Drive, and Meadowlake Drive. A short center turn lane and pedestrian refuge island would be added between Vernon Lake Drive and Forest Springs Drive. The existing extra westbound lane approaching Forest Springs would be reduced to a shorter right turn lane.

Alternative 2 is similar to Alternative 1 with the primary difference being that the two existing westbound lanes between Forest Springs Drive and Mount Vernon Place are converted to a through lane and center turn lane with landscaped median. In addition to providing left turn lanes for the side streets, this alternative also provides space for vehicles turning left into the residences along Mount Vernon Road.



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Alternative 3 keeps the existing lane configuration as is. The shoulder on the north and south side of the road would be widened to accommodate the path and sidewalk. In keeping the existing lane configuration, this alternative does not allow for enhanced pedestrian refuge island crossings.

#### **PUBLIC INVOLVEMENT**

In October, the City publicized a virtual public meeting hosted on the City's website at: <a href="https://dunwoodyga.gov/index.php?section=projects&projectsection=8&project=67">https://dunwoodyga.gov/index.php?section=projects&projectsection=8&project=67</a>. The project received over 300 comments with 230 of those expressing support for improving safety and accommodating all roadway users. When asked to rank the priority of improvements for this corridor, turn lanes received the highest number of responses as the top priority followed by sidewalk on the south side of the road. Over 75% of respondents indicated that the safety and accommodation of all road users should be the primary consideration for the project. Among the proposed concepts, Alternative 2 received the most favorable responses with Alternative 1 also receiving strong support. Finally, over half of respondents indicated that someone in their household would be more likely to bike on Mount Vernon Road if there was a path separated from the roadway.

### **NEXT STEPS**

Based on direction from the City Council, the next phase of the project would be to advertise a request for proposals to complete the final design, which is funded in the 2021 budget. The current five-year capital work plan targets 2024 to 2025 for construction. The current schedule is as follows:

2021-2022 Complete design plans 2022-2023 Acquire easements/right of way 2023-2024 Relocate utilities 2024-2025 Construction













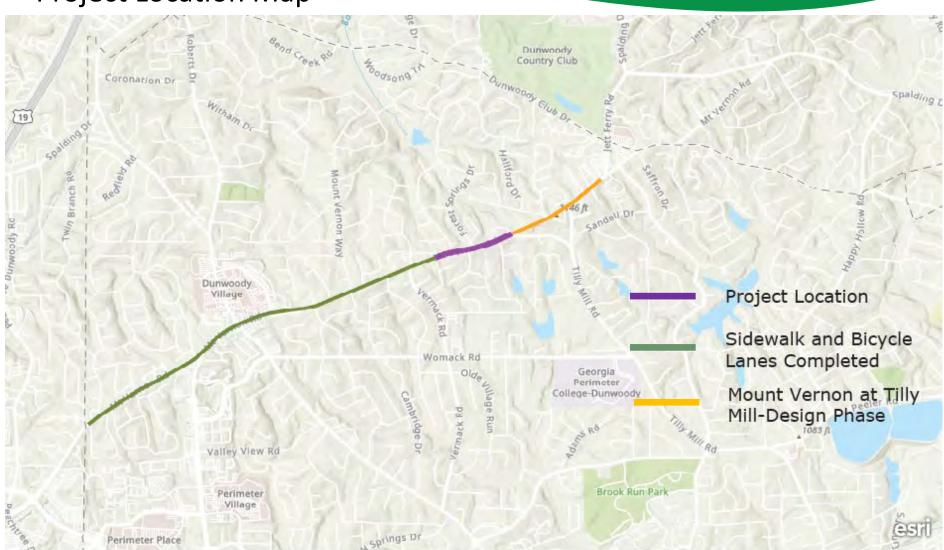
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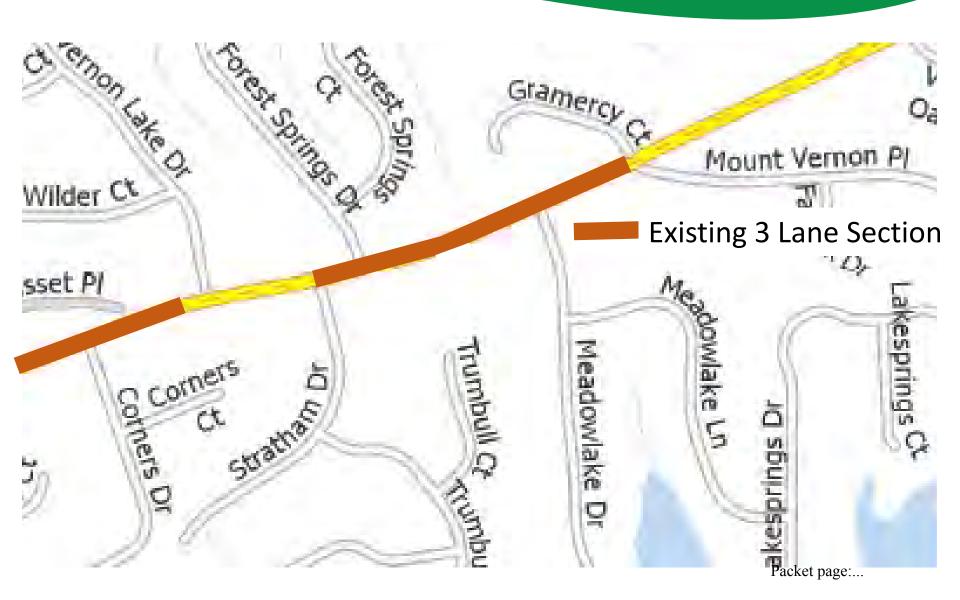
MT. VERNON ROAD IMPROVEMENTS FROM CORNERS DRIVE TO MOUNT VERNON PLACE

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# **Project Location Map**







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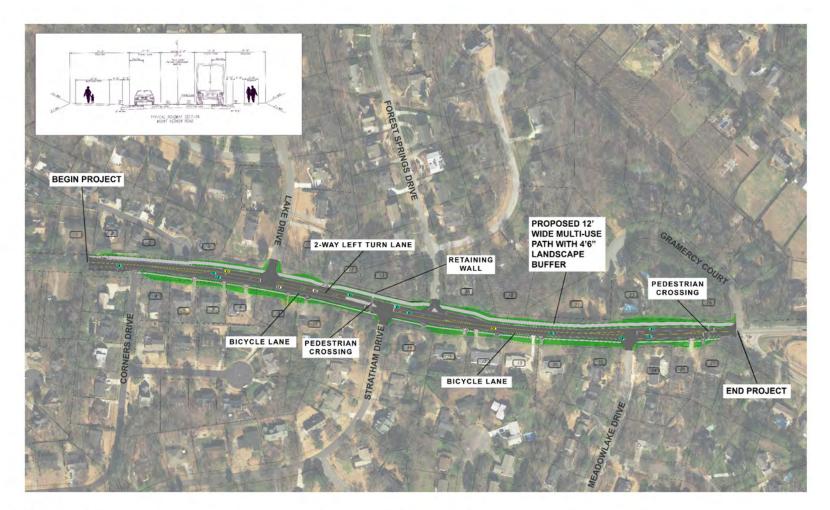
Table 4: GDOT LTV Thresholds for Left Turn Bays, and Estimated Daily Left Turn Volumes at Side Streets

Side Street	Max AM Peak Hr. LTV	Max PM Peak Hr. LTV	Calc. Daily LTV	Meets GDOT 200 LTV?
Wickford Way/Ashmont Court	5	7	67	N
	7	27	189	N
	2	4	33	N
	21	0	117	N
Corners Driv	e to Mount	Vernon Pla	ace 💻	IN
Vernon Lake Drive	15	67	456	Υ
Stratham Drive	78	20	544	Υ
Forest Springs Drive	36	41	428	Υ
Meadowlake Drive	97	25	678	Υ
Gramercy Court/Mt. Vernon Place	3	6	50	N



Table 5: 2012-Jan 2015 Crash Frequency, Injury Rate, and Observations at Side Streets

Side Street	No. of Crashes	No. of Injuries	Crashes/ Injury	Crash Notes and Observations		
Wickford Way/Ashmont Court	11	2	5.50	Mt. Vernon rear end risk (5 total) and side street angle crash risk (3 total) could likely be reduced w/ a center turn lane/turn bay		
Vernon Ridge Drive	6	1	6.00	A center left turn lane/turn bay would likely reduce eastbound rear end crashes (5 total)		
Mt. Vernon Way			2.67	signalized - crash information is only used to determine the average crash rate per intersection on the corridor		
Wellshire Place	7	3	2.33	A center left turn lane/turn bay would likely reduce eastbound rear end crashes (5 total)		
Vernon Oaks Drive		4	2.00	A center left turn lane/turn bay would likely reduce westbound rear end crashes (3 total)		
	Cor	ners D	rive to	Mount Vernon Places		
Corners Drive	1	0	-	Corners Dr. is one way (southbound) and only right turns in are allowed		
Vernon Lake Drive	9	6	1.50	Mt. Vernon rear end risk (3 total) and angle crash risk (2 total) could likely be reduced w/ an EB left turn/center lane		
Stratham Drive	2	0		High traffic due to school - consider eastbound RT decel lane and westbound left turn lane – this would require moving the mid-block crosswalk to west side of Stratham Drive and adding a refuge island		
Forest Springs Drive	6	1	6.00	resurface 3-lane section to include center left turn lane - remove right turn only lane		
Meadowlake Drive	2	2	1.00	High traffic due to school - dedicated WB left turn lane here instead of generic center turn lane		
Gramercy Court/Mt. Vernon Place	7	1	7.00	A right turn decel lane may provide the most benefit to crash reduction, given the volume of eastbound right turns that take place here		





ALTERNATIVE 1B: LEFT TURN LANES ADDED

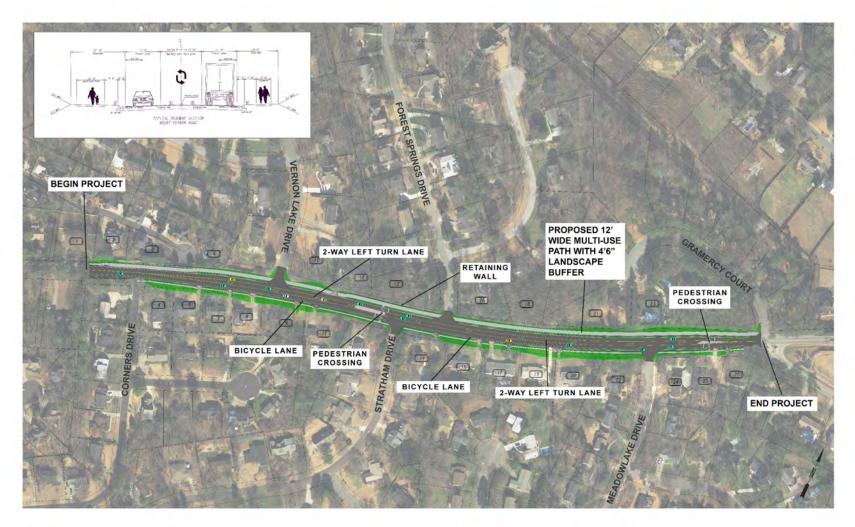


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**ALTERNATIVE 1B** 









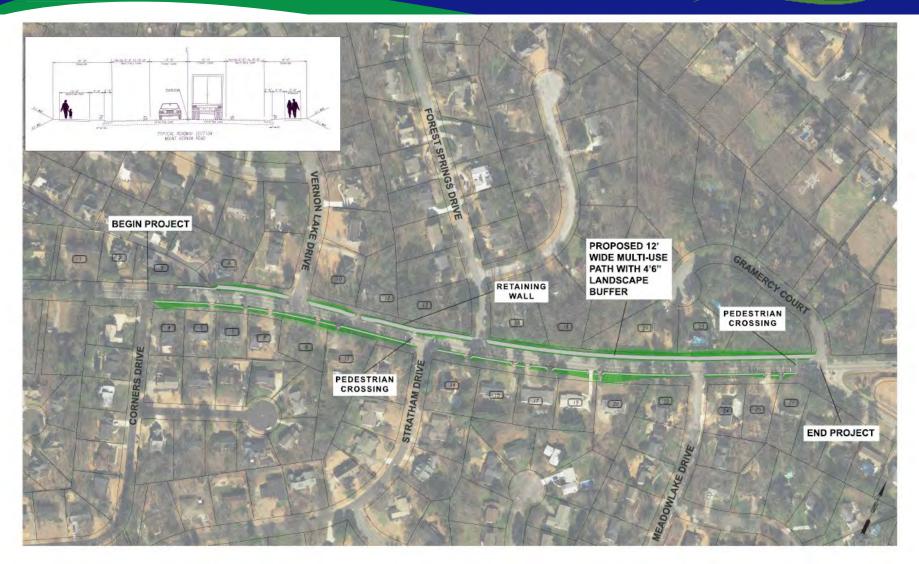


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**ALTERNATIVE 2B** 







**ALTERNATIVE 3: MULTI-USE PATH ONLY** 



