



### **MEMORANDUM**

TO: City of Tucker

FROM: VHB and Gresham Smith

DATE: March 8, 2019

SUBJECT: PEDESTRIAN CROSSING IMPROVEMENTS

FIELD OBSERVATIONS AND RECOMMENDATIONS

#### INTRODUCTION

During the development of the City of Tucker's Strategic Transportation Master Plan (STMP), a need was identified to improve pedestrian crossings throughout the City. The STMP identified several potential locations that may be suitable for mid-block pedestrian crossing improvements based upon distance between existing signalized intersections and proximity to schools, parks, and public transportation. Building upon the needs identified in the STMP, VHB and Gresham Smith are tasked with additional desktop and field review of data and existing conditions, developing and refining recommendations, developing sketches and costs for potential projects, prioritizing plans, and developing construction plans.

This memo summarizes the findings and recommendations from the field and data review, as well as recommendation for improvements to viable candidate locations. Maps showing existing sidewalk, bus stops, and crash data are provided in Attachment A. Photographs taken during the field visit depicting existing conditions are included in Attachment B for Tier 1 projects and Attachment C for Tier 2 projects. Conceptual drawings and cost estimates are included as separate attachments.

Based upon the field observations and data assessment, the project team identified nine locations as most viable for short-term improvements. The locations recommended for crossing improvements have been grouped into two tiers representing recommended priority for implementation, as shown in <u>Figure 1</u>: Tier 1 projects are those of a higher priority while Tier 2 are of a lower priority.





#### Tier 1

- Brockett Elementary School
- Emory University Hospital/Orthopedic Clinic
- Idlewood Elementary School
- Tucker Middle School
- Midvale Elementary School (Midvale Circle)
- Henderson Road (Gleneagles Lane)

#### Tier 2

- Idlewood Road @ Elmdale Drive
- Main Street @ Lynburn Drive
- Main Street @ Railroad Avenue
- Main Street @ Village Burger Restaurant
- Midvale Elementary School (Midvale Court/Crestcliff Drive)

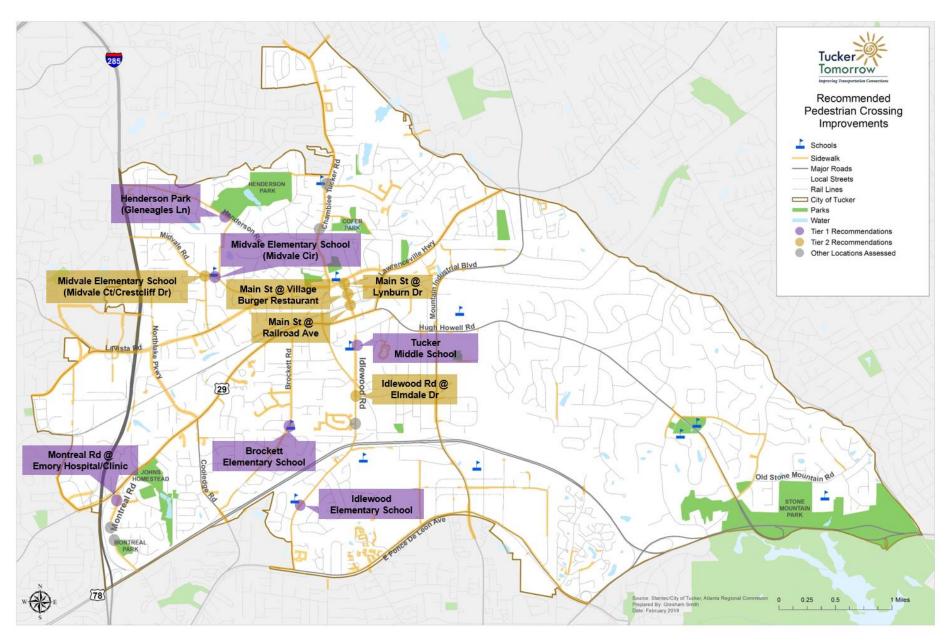


Figure 1: Locations Assessed and Recommended Pedestrian Crossing Improvements





#### **EXISTING CONDITIONS**

The project consultants reviewed and refined data collected during development of the STMP and worked with the City of Tucker, Metropolitan Atlanta Rapid Transit Authority (MARTA), and the Georgia Department of Transportation (GDOT) to gather additional relevant information, such as traffic counts, bus stop usage, and recent pedestrian crash history. The team conducted a field visit on January 28, 2019 to assess and document existing conditions. During the field visit, the project consultants assessed conditions at 13 existing and potential pedestrian crossings. Participants in this field study include Tommy Crochet (VHB), Erika Sutton (VHB), Erin Thoresen (Gresham Smith), and Megha Young (Gresham Smith). Observations made during the field visit pertain to general location characteristics, bus stop presence and placement, sidewalk presence and condition, speed limit, crosswalks, signage, and lane configuration, among other elements.

#### **Location Descriptions**

This section discusses existing conditions at the 13 candidate locations and explains the viability (or lack thereof) of implementing mid-block pedestrian crossing improvements at each location.

#### **Brockett Road**

The portion of Brockett Road of interest for this task is adjacent to Brockett Elementary School. The speed limit along Brockett Road is 40 MPH with a school zone speed limit of 25 MPH. The two active school zone periods are from 7:15 to 8:15 AM and 1:45 to 2:45 PM for morning drop-off and afternoon pick-up, respectively. The school is located along a curve on a two-lane roadway and contains two driveways – a one-way entrance and a one-way exit onto Brockett Road. The northern driveway includes a marked crosswalk that consists of two simple striped lines. There is limited sight distance for vehicles exiting the driveway onto Brockett Road, which may make turning difficult and pose a safety challenge. The southern driveway contains only school crossing signage and no marked crosswalks. School zone signage at this location is worn and faded. Sidewalks exist on both sides of the road, except along school property. These factors make this a viable location for a mid-block crossing.





#### Chamblee-Tucker Road

Two locations along Chamblee-Tucker Road were considered for pedestrian crossing improvements – at Livsey Elementary School near the intersection with Livsey Road, and between N. Park Drive and Deland Road/Brymond Drive. MARTA bus route 75 traverses through the Chamblee-Tucker Road corridor within the City of Tucker and has several bus stops that generate some pedestrian activity.<sup>1</sup>

Livsey Road just north of Livsey Elementary is a signalized intersection that provides access to Livsey Elementary and Henderson Park. The intersection contains a marked crosswalk across Livsey Road and across Chamblee-Tucker Road at the south leg of the intersection. Curves in the road are present on either side of the road to the north and south of the intersection, and the posted speed limit is 40 MPH. There are four lanes of traffic with vehicles traveling at higher speeds. Due to the proximity of the signalized intersection, where there is an existing crosswalk, and the likely need to widen the road to accommodate a pedestrian refuge island, this is not considered a viable location for an additional or mid-block crossing.

The second location on Chamblee-Tucker Road between N. Park Drive and Deland Road/Brymond Drive provides access to Cofer Park which contains ball fields, a community garden, and a swimming pool. The road in this area has four lanes of traffic, a posted speed limit of 40 MPH, and vehicles traveling at speeds equal to or sometimes exceeding the speed limit. It is the straightest stretch of Chamblee-Tucker Road within Tucker, but possibly may still present sight distance issues due to the presence of curves. In order to create a safe mid-block crossing at this location, the road would likely need to be widened to accommodate a pedestrian refuge median/island, and a full pedestrian hybrid signal (HAWK) may be needed to completely stop traffic for safe crossings. Thus, this location is an unlikely candidate for additional crossing(s) at this time.

-

<sup>&</sup>lt;sup>1</sup> MARTA boarding (people getting on) and alighting (people getting off) data used in this memorandum are weekday averages for the time period between August 18, 2018 and December 7, 2018.





#### **Idlewood Road**

Four locations along Idlewood Road were identified as potential candidates for pedestrian improvements: Elmdale Drive, Browning Chase Drive, Idlewood Elementary School, and Tucker Middle School.

The intersection with Elmdale Drive is located just south of the signalized intersection with Fellowship Road. The posted speed limit in this area is 35 MPH, and there are two MARTA bus stops (one each direction) near Elmdale Drive. There are no sidewalks on the west side of Idlewood Road south of this intersection, and there are no crosswalks across Elmdale Drive. Sidewalks along this portion of Idlewood Road are recommended as a long-term project in the draft Tucker STMP. The proximity to the signalized intersection at Fellowship Road and low-density, single-family homes in the area might make this seem like an unlikely location for a mid-block crossing placement; however, a substantial number of people get on and off buses at this location. This may be due to the presence of a nearby apartment complex. Approximately 12 people get off the bus at the northbound Elmdale Drive stop and 15 people get on at the southbound stop. This level of activity at these bus stops points to a need for a mid-block crossing at Elmdale Drive.

On Idlewood Road at Browning Chase Drive, the posted speed limit is 35 MPH and sidewalks exist only on the east side of Idlewood Road. A wide right-turn lane at this location presents an opportunity for some right-of-way to be used to install sidewalks on the west side of the road (a mid-term project in the draft Tucker STMP). There are two MARTA stops (one in each direction), but few people get on and off the bus at these stops based on weekday averages for these stops. Flat topography in the area provides road users good sight distance at the intersection. Nonetheless, the presence low-density, single-family homes and low transit activity in the area do not point to an immediate need for crossing improvements.

At Idlewood Elementary School, the posted speed limit on Idlewood Road is 35 MPH with a school zone speed limit of 25 MPH. School zone signage consists of two sets of flashing signals to indicate the school zone speed limit and two "Pedestrian Crossing Ahead" signs, some of which are faded and have mismatched colors. At the time of the field visit, Idlewood Road was freshly repaved adjacent to the school, and no crosswalk markings were present;





however, there were markings indicating that these are to be restriped in the near future. A "Reserved for Crossing Guard" sign is located at the southern school driveway. A walkway is present from the school entrance located in the middle of the school, between the two school driveways, likely to connect people entering and exiting the school building with the crosswalk. A continuous sidewalk exists on the east side of the road, while a sidewalk on the west side of the road is only in front of the school. There are missing curb ramps and drainage issues along the sidewalk in front of the school, near the southern driveway. The project team considers this a viable location for crossing improvements.

At Tucker Middle School, the posted speed limit on Idlewood Road is 35 MPH with a school zone speed limit of 25 MPH. School zone signage consists school zone speed limit signs located adjacent to the property line for the school on both sides, and two "Pedestrian Crossing Ahead" signs and crosswalks located at both driveways to the school. There is continuous sidewalk on the west side of the road adjacent to the school property. On the east side of the road, the sidewalk ends immediately after the pedestrian crossing signage and crosswalk at the school's southern driveway, and does not begin again until shortly before the school's northern driveway, where the second crosswalk and pedestrian crossing signage is located. The project team considers this a viable location for crossing improvements.

#### Main Street

In Downtown Tucker, existing crosswalks with signage and pavement markings are present at the unsignalized intersections of Main Street at Lynburn Drive, at Railroad Avenue, and at the alley adjacent to Village Burger Restaurant. The speed limit along Main Street is 25 MPH. While these crossings already exist, visibility of the crosswalk may be enhanced with refreshed pavement markings and supplemental signage with flashing lights or rectangular rapid flashing beacons (RRFB).

#### Henderson Road

Henderson Road near Henderson Park is a two-lane road with a speed limit of 35 MPH. The entrance to Henderson Park is located between Allsborough Drive and Gleneagles Lane. There are two existing "Pedestrian Crossing Ahead" signs located on either side of Gleneagles Lane and a crosswalk across Henderson Road at Gleneagles Lane. There is





continuous sidewalk on the north side of the road adjacent to the park property. On the south side of the road, there is no sidewalk across from the park property; the nearest sidewalk on the south side ends just south of Gleneagles Lane. The curvature and the topography of Henderson Road contribute to limited sight distance for drivers approaching Gleneagles Lane on both sides of the road, which may make it difficult to see pedestrians who cross there.

#### Midvale Road

Midvale Elementary School along Midvale Road is located between two curves in the road that present sight distance issues from both ends of the corridor. The speed limit along this stretch of Midvale Road is 35 MPH with a school zone speed limit of 25 MPH. School zone signage exists on either end of the school zone and two "Pedestrian Crossing Ahead" signs are located at Midvale Circle in front of the school and at Midvale Court west of the school. Two sets of existing crosswalks were in the process of being restriped during the field visit, including:

- Two striped crossings at Midvale Circle directly in front of the school: one connects to the sidewalk on the south side of Midvale Road and west side of Midvale Circle, while the other connects to the east side of Midvale Circle.
- A crossing at Midvale Court/Crestcliff Drive, at the end of the block to the northwest of the school.

During the field review, a bus driver informed the consultant team that crossing guards are typically stationed at both crossing locations to help both children and adults cross Midvale Road during school arrival and dismissal times. This supports the case for improvements to these crossings.

#### Montreal Road

Three locations evaluated along Montreal Road are at the Emory Clinic/Atlanta Heart Specialists, the intersection with Alcan Way, and at the intersection with Canadian Way. The speed limit along this stretch of Montreal Road is 35 MPH. The lane configuration varies throughout this span of the Montreal Road corridor.

Near the Emory Clinic/Atlanta Heart Specialists, there are two MARTA stops (one in each direction). According to the data provided by MARTA, four people get on while 19 people





get off the bus northbound stop. At the southbound stop, 15 people get on while two people get off the bus. In this segment of Montreal Road, sidewalks exist on both sides of the road, and there are two travel lanes (one in each direction) and a center turn lane. During the field visit, the consultant team observed multiple pedestrians crossing the road, walking along the sidewalk, and waiting for the bus.

At Alcan Way, no sidewalks exist on either side of the road, and the road narrows to a two-lane section, with one travel lane in each direction. This intersection is near the entrance to the Montreal Woods neighborhood, which primarily consists of single-family homes. A curve in the road at Alcan Way presents sight distance issues. Bus use activity is relatively low at the stops at Alcan Way: eight people get off at the northbound stop and six people get on at the southbound stop. Sight distance issues, somewhat low bus activity, and a lack of sidewalks at this intersection make this a less likely location for a pedestrian crossing.

At Canadian Way, there are two MARTA stops on Montreal Road (one on each side of the road). Average weekday boarding and alighting data show that six people board at the southbound stop and zero at the northbound stop, while five people get off at the northbound stop and none at the southbound stop. The intersection is located at a curve in the road that presents sight distance issues from both ends. Similar to Alcan Way, there are medical offices on the west side of the road and single-family homes on the east side of the road. Several driveways exist near the intersection, and there are no sidewalks on either side of the road, although desire paths are present. Due to the lack of sidewalks, sight distance issues, and only moderate activity at the MARTA bus stops, a crosswalk across Montreal Road is not a priority at this location.

#### **Roadway Details**

Characteristics of the roadways at candidate locations are shown in <u>Error! Reference</u> <u>source not found.</u> on the following page. All GDOT average annual daily traffic (AADT)





counts are from 2017<sup>2</sup>, and locations recorded are the closest count station to the candidate location.<sup>3</sup>

Table 1. Candidate Location Characteristics

		Road Details			
			Speed	AADT (2017	
		# of	Limit	GDOT station	
Corridor Name	Candidate Location	Lanes	(mph)	counts)	
Brockett Rd	Brockett Elementary	2	40	7190	
Chamblee-Tucker Rd	Livsey Elementary/Livsey Rd	2	40	26500	
	Between North Park Dr & Deland Rd /				
Chamblee-Tucker Rd	Brymond Dr	4	40	26500	
Henderson Rd	Adjacent to entrance to Henderson Park	2	35	8320	
Idlewood Rd	Browning Chase Dr	2	35	9510	
Idlewood Rd	Elmdale Dr	2	35	9510	
Idlewood Rd	Idlewood Elementary	2	35	9510	
Idlewood Rd	Tucker Middle School	3	35	9510	
Main St	Lynburn Dr	2	25	N/A	
Main St	Railroad Ave	2	25	N/A	
Main St	Village Burger Restaurant	2	25	N/A	
	Midvale Elementary				
Midvale Rd	(Midvale Circle)	2	35	2110	
	Midvale Elementary				
Midvale Rd	(Midvale Court)	2	35	2110	
Montreal Rd	Alcan Way	2	35	9420	
Montreal Rd	Canadian Way	2	35	9420	
Montreal Rd	Emory Hospital/Clinic	2	35	9420	

<sup>&</sup>lt;sup>2</sup> 2017 GDOT Traffic Counts source: <a href="https://gdottrafficdata.drakewell.com/publicmultinodemap.asp">https://gdottrafficdata.drakewell.com/publicmultinodemap.asp</a>

<sup>&</sup>lt;sup>3</sup> Brockett Elementary AADT recorded between Brockett Creek Drive and Foxglove Road immediately north of the school. Both Chamblee-Tucker Road AADT counts recorded south of the school near the intersection with Castle Pines Court. Henderson Road AADT recorded between park entrance and Gleneagles Lane. All Idlewood Road AADT locations recorded near the intersection with Sarr Parkway. No GDOT count stations were located along Main Street. Midvale Elementary AADT recorded between Oakvale Place and Landeau Circle northwest of the school. All Montreal Road AADTs recorded just north of the intersection with Clarkston Industrial Boulevard.





The identification of Tier 1 and Tier 2 candidate locations for mid-block crossings is consistent with information on recommended countermeasures by road configuration, speed limit, and AADT from the Federal Highway Administration (FHWA) as shown below in Figure 2.4

		Posted Speed Limit and AADT																									
		Vehicle AADT <9,000				Vehicle AADT 9,000–15,000						00	Vehicle AADT >15,000														
Roadway Configuration	≤3	≤30 mph   35 mph   ≥40 mph			≤3	≤30 mph   35 mph			ph	≥4	) m	ph	≤3	0 m	ph	35 mph		ph	≥40 mph		ıph						
2 lanes	0	2		0			0			0			0			0			0			0			0		
(1 lane in each direction)	4	5	6	7	5	6	0	5	6 <b>9</b>	4	5	6	7	5	6	0	5	6 <b>9</b>	7	5	6	7	5	6		5	6
	0	2	3	0		0	1000		8	0		3	Ó		0	0		8	Ó		97	Ō		-	0		0
3 lanes with raised median (1 lane in each direction)	4	5			5			5		4	5			5			5		4	5		_	5			5	
V 20000 (10000000000000000000000000000000		_	_	7		9	0		0	7	_	9	0		0	0		0	7		9	0		0	<u> </u>		0
3 lanes w/o raised median (1 lane in each direction with a	4	2	3	0	5	6	0	5	6	0	5	3	0	5	6	0	5	6	0	5	<b>⊙</b>	0	5	6	① 5	6	3
two-way left-turn lane)	7	J	9	7	J	9		,	Ø	7	•	9	0	9	Ø		9	Ø	7	,	9		9	Ø	9	Ü	Ø
	0		8	0		8	0		3	0		0	0		8	0		3	0		0	0		8	0		0
4+ lanes with raised median (2 or more lanes in each direction)		5			5			5			5			5			5			5			5			5	
(2 or more rance in each ancenery)	7	8	9	7	8	9		8	0	7	8	9	0	8	0		8	0	0	8	0		8	0	_	8	0
4+ lanes w/o raised median	0	_		0	-	0	0	_	0	0	_	0	0	_	0	0	_	8	0	_	0	0	_	0	0	_	0
(2 or more lanes in each direction)	7	5 8	6	7	5	0			6	7	5	9	0	5	0		5	0	a		0		5	0		5	0
Given the set of conditions in a c		_	,	,	-	-			U	1		-			-	CCIA		-				(ing			tion		00000
# Signifies that the counterme		e is	ac	anc	lida:	te				å	cro	SSW	valk	app	orod	ch,	ade	que				ne li					į.
treatment at a marked uncor							ion.			2		d cr		•		,	J Si	gns									
Signifies that the counterme										_	1141444 114441																
considered, but not mandate engineering judgment at a n							ıpon	1			and yield (stop) line																
crossing location.	crossing location.						5																				
O Signifies that crosswalk visibility enhancements should					6																						
always occur in conjunction with other identified countermeasures.*						7	7 Rectangular Rapid-Flashing Beacon (RRFB)**																				
The absence of a number signifies that the countermeasure is appropriate treatment, but executions may be executed by the property of the countermeasure and the countermeasure but executions may be executed by the countermeasure and the countermeasure are considered by the																											
is generally not an appropriate to be considered following enginee						ptic	ns r	may	1	9	re	ues	niur	ιΠу	mile	1 100	uco	111 (1	- HB	)							
Refer to Chapter 4, 'Using Table 1 and Table 2 to Se			•			more	in for	matic	n ah	out un	ina -	ordtin	In nov	ntoc	mode:	eroo											

\*Refer to Chapter 4, Using Table 1 and Table 2 to Select Countermeasures," for more information about using multiple countermeasures.

\*\*It should be noted that the PHB and RRFB are not both installed at the same crossing location.

This table was developed using information from: Zegeer, C. V., J.R. Stewart, H.H. Huang, P.A. Lagervey, J. Feaganes, and B.J. Campbell. (2005). Safety effects of marked versus unmarked crosswalks at uncontrolled locations: Find report and recommended guidelines. FHWA. No. FHWA-HBT-04-100, Washington, D.C.; FHWA. Manual on Uniform Traffic Control Devices, 2009 Edition. (revised 2012). Chapter 4F, Pedestrian Hybrid Beacons. FHWA, Washington, D.C.; FHWA. Crosh Modification Forcis (ORF) Cearinghouse. http://www.cnfolearinghouse.org/: FHWA. Pedestrian Safety Guide and Countermeasure Selection System (PEDSHF). http://www.pedtikesafe.org/PEDSHFE/ Zegeer, C., R. Strinvason, B. Lan, D. Carter, S. Smith. C. Sundstrom, N.J. Thirst, J. Zegeer, C. Lyon, E. Ferguson, and R. Von Houten. (2017). NCHRP Report 841: Development of Crossh Modification Factors for Uncontrolled Pedestrian Crossing Treatments. Transportation Research Board, Washington, D.C.; and personal interviews with selected pedestrian safety practitioners.

Figure 2: Application of pedestrian crash countermeasures by roadway feature

<sup>&</sup>lt;sup>4</sup> Federal Highway Administration (July 2018). Guide for Improving Pedestrian Safety at Uncontrolled Crossing Locations. https://www.fhwa.dot.gov/innovation/evervdavcounts/edc\_5/docs/STEP-guide-improving-ped-safety.pdf





#### **School Zone**

School zone characteristics at candidate locations are shown in <u>Table 2</u>. These were recorded through a combination of field study notes and examination of imagery from Google Street View. All school zones within the City of Tucker have speed limits of 25 MPH when active during morning drop-off and afternoon pick-up periods. These active periods vary by school.

Table 2: School Zone Characteristics

		School Zone		
Corridor Name	Candidate Location	Start Point	End Point	
Brockett Rd	Brockett Elementary	Carthage Rd	Oakcrest Rd	
		Hughes Lea /		
Chamblee-Tucker Rd	Livsey Elementary / Livsey Rd	Smithsonia Ct	Castle Pines Ct	
Idlewood Rd	Idlewood Elementary	Martha Jean Pl	Idlevale Dr	
		Just north of		
Idlewood Rd	Tucker Middle	Glynbrook Dr	Cowan Rd	
			Robert Nash Ct /	
Midvale Rd	Midvale Elementary	Norwich Way	Midvale Cir	

### **MARTA Ridership**

The City of Tucker is served by four MARTA bus routes – Routes 75, 121, 124, and 125. <u>Table 3</u> on the following page shows bus stop boarding and alighting data for the stations in closest proximity to each pedestrian crossing candidate location along with the route number and direction. These stops are mapped in Attachment A. All boarding (people getting on) and alighting (people getting off) data is courtesy of MARTA and are weekday averages from data recorded between August 2018 and December 2018. Five of the nine Tier 1 and Tier 2 locations are served by a MARTA bus route.





Table 3: MARTA Stops and Ridership at Candidate Locations

Corridor		MARTA Ridership					
Name	Candidate Location	Direction/Route	Stop Location	Boarding	Alighting		
Brockett Rd	Brockett Elementary	N/A	N/A	N/A	N/A		
	-	Westbound (Route	Chamblee-Tucker Rd				
		124)	@ Smithsonia Dr	2	0		
Chamblee-	Livsey Elementary/	Eastbound (Route	Chamblee-Tucker Rd				
Tucker Rd	Livsey Rd	124)	@ Smithsonia Dr	1	4		
	-	Westbound (Route	Chamblee-Tucker Rd				
	Btwn. North Park Dr	124)	@ N Park Dr	2	0		
Chamblee-	& Deland	Eastbound (Route	Chamblee-Tucker Rd				
Tucker Rd	Rd/Brymond Dr	124)	@ Britts Gate Ln	0	2		
	Gleneagles Ln (near						
	entrance to						
Henderson Rd	Henderson Park)	N/A	N/A	N/A	N/A		
		Northbound	Idlewood Rd @				
		(Route 121)	Browning Chase Dr	0	0		
		Southbound	Idlewood Rd @				
Idlewood Rd	Browning Chase Dr	(Route 121)	Browning Chase Dr	1	1		
		Northbound	Idlewood Rd @				
		(Route 121)	Elmdale Dr	1	12		
		Southbound	Idlewood Rd@				
Idlewood Rd	Elmdale Dr	(Route 121)	Elmdale Dr	15	2		
Idlewood Rd	Idlewood Elementary	N/A	N/A	N/A	N/A		
		Northbound					
		(Route 121)	2115 Idlewood Rd	2	16		
		Southbound					
Idlewood Rd	Tucker Middle	(Route 121)	2115 Idlewood Rd	17	1		
		Eastbound Only	Lavista Rd @				
Main St	Lynburn Dr	(Route 124)	Main St	1	8		
		Eastbound Only	Main St @				
Main St	Railroad Ave	(Route 124)	1st Ave	2	18		
	Village Burger	Eastbound Only	Main St @				
Main St	Restaurant	(Route 124)	1st Ave	2	18		
	Midvale Elementary						
Midvale Rd	(Midvale Cir)	N/A	N/A	N/A	N/A		
	Midvale Elementary						
Midvale Rd	(Midvale Ct)	N/A	N/A	N/A	N/A		
		Northbound	Montreal Rd @				
		(Route 125)	Alcan Way	1	8		
		Southbound	Montreal Rd @				
Montreal Rd	Alcan Way	(Route 125)	Alcan Way	6	1		





		Northbound	Montreal Rd @		1
		(Route 125)	Canadian Way	0	5
		Southbound	Montreal Rd @		
Montreal Rd	Canadian Way	(Route 125)	Canadian Way	6	0
		Northbound			
		(Route 125)	Montreal Rd @ 1475	4	19
	Emory Hospital/	Southbound			
Montreal Rd	Clinic	(Route 125)	Montreal Rd @ 1468	15	2

### **Multimodal Characteristics**

General multimodal characteristics for each candidate location were recorded during the field visit and are shown in <u>Table 4</u> below. A map showing existing sidewalk and bus stop locations is included in Attachment A as <u>Figure 3</u>.

Table 4: Multimodal Characteristics at Candidate Locations

		Multimodal Character	ristics
			Bike Lanes
Corridor Name	Candidate Location	Sidewalk (1 or 2 sides)	Present
Brockett Rd	Brockett Elementary	2 sides (gap in front of school)	No
Chamblee-Tucker Rd	Livsey Elementary/ Livsey Rd	2 sides	No
	Btwn. North Park Dr & Deland		
Chamblee-Tucker Rd	Rd/Brymond Dr	2 sides	No
	Gleneagles Ln (near entrance to		
Henderson Road	Henderson Park)	1 side	No
Idlewood Rd	Browning Chase Dr	1 side	No
		1 side south of intersection;	
		2 sides north towards	
Idlewood Rd	Elmdale Dr	Fellowship Rd.	No
		1 side continuous (2 only in	
Idlewood Rd	Idlewood Elementary	front of school)	No
		1 side continuous; east side has	
Idlewood Rd	Tucker Middle	gap in front of school	No
Main St	Lynburn Dr	2 sides	No
Main St	Railroad Ave	2 sides	No
Main St	Village Burger Restaurant	2 sides	No





   Midvale Rd	Midvale Elementary (Midvale Circle)	2 sides (south side has gaps)	No
Wildvale Nu	,	2 sides (south side has gaps)	INO
Midvale Rd	Midvale Elementary (Midvale Court)	2 sides (south side has gaps)	No
Montreal Rd	Alcan Way	Neither (sidewalk on west side starts south of intersection)	No
Montreal Rd	Canadian Way	Neither	No
Montreal Rd	Emory Hospital/ Clinic	2 sides	No

### **Bicycle & Pedestrian Crash Data**

According to the GDOT crash database, none of the thirteen candidate locations experienced bicycle and pedestrian crashes, injuries, or fatalities between 2013 and 2017. Bicycle and pedestrian crashes for the City of Tucker are shown in <u>Figure 4</u> within Attachment A.

#### RECOMMENDED LOCATIONS FOR IMPROVEMENTS

The project consultants identified 11 candidate locations that exhibit need and feasibility for the design, construction, and installation of additional pedestrian crossing features at Brockett Elementary School, Idlewood Elementary School, Midvale Elementary School at both Midvale Circle and Midvale Court/Crestcliff Drive, Tucker Middle School, Henderson Park, and the Emory Clinic along Montreal Road. The recommendations for each location are outlined below as Tier 1 and Tier 2 projects, with details on incremental steps for implementation.

#### Tier 1

#### **Brockett Elementary School (1855 Brockett Rd)**

At Brockett Elementary School, recommendations include:

- Install high-visibility marked crosswalks with flashing beacons.
- Install advanced signage on both ends of the school, prior to the crossing locations.





#### **Emory Hospital/Orthopedic Clinic (1475 Montreal Rd)**

At the Emory Hospital & Orthopedic Clinic, the high pedestrian activity observed, along with transit usage, make this a strong candidate for the placement of crossing infrastructure. The main challenge with this location is that turning movements from adjacent driveways and turn lanes could present an issue. The recommendation depicted in the conceptual drawing shows the following:

• Install a mid-block crossing just south of Woodlawn Circle. The crossing would include a crosswalk with a zig-zag alignment across Montreal Road, and a concrete pedestrian refuge island in the center to facilitate a two-phase crossing.

#### **Idlewood Elementary School (1484 Idlewood Rd)**

For Idlewood Elementary School, the consultant team recommends the following:

- Crossing improvements should be strongly considered at the school's southern driveway, or the one-way exit.
- Install a bump-out to improve visibility.
- Make appropriate drainage improvements.
- Install advanced signage on both ends of the school, prior to the crossing locations.
- Consider installing a structure to help convey stormwater in the event of heavy rainfall.

#### **Tucker Middle School**

- Replace the existing signs pedestrian signs with RRFBs (fluorescent yellow-green in color), double-sided on each sign post.
- Consider as a candidate location for a HAWK signal in the future.

#### Midvale Elementary School (Midvale Circle)

For Midvale Elementary School at Midvale Circle, the consultant team recommends the following:

- Consolidate the two crossings directly in front of the school at Midvale Circle.
- Install advanced signage prior to the crossing location.





#### **Henderson Road at Henderson Park**

- Relocate the pedestrian crossing signs farther back from Gleneagles Lane on both sides of Henderson Road.
- Replace the existing signs pedestrian signs with RRFBs (fluorescent yellow-green in color), double-sided on each sign post.
- Remove the older existing blue "Recreation Area" sign.

#### Tier 2

#### Idlewood Road @ Elmdale Drive

For the intersection of Idlewood at Elmdale Drive, the following should be considered to accommodate high MARTA ridership at the stations located here:

- Install curb cut ramps and a painted mid-block crossing north of the intersection.
- Install rectangular rapid flashing beacons (RRFB) at the crosswalk.
- Install advanced signage prior to the crossing location.

#### Main Street (At Lynburn Drive, Railroad Avenue and Village Burger Restaurant)

As noted in the location description of this memorandum, Main Street has existing midblock crossings at these locations, and this makes them a location for upgrades and improvements. Along this corridor, potential enhancements include the following:

- Refresh existing pavement markings.
- Install supplemental signage with flashing lights.
- Consider rectangular rapid flashing beacons (RRFB).
- Add an in-street pedestrian crossing sign at the crossing at Lynburn Drive.

#### Midvale Road (Midvale Court/Crestcliff Drive)

For Midvale Elementary School at Midvale Court/Crestcliff Drive, the consultant team recommends the following potential enhancements:

 The ramps and crosswalk at Midvale Court/Crestcliff Drive need to be updated and/or redesigned with supplemental signage.





These recommendations are not final and will be refined based on direction from the City. From there, VHB will proceed with construction plans and submit to the City for final review.

### **ATTACHMENTS**

- A. Existing Conditions Maps
- B. Photos of Existing Conditions Tier 1 Locations
- C. Photos of Existing Conditions Tier 2 Locations

## **ATTACHMENT A: Existing Conditions**

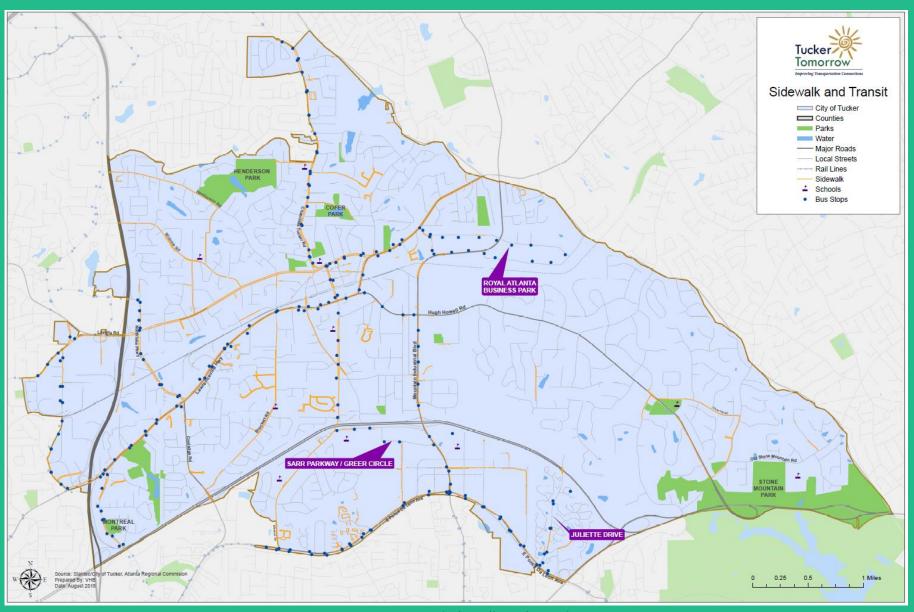


Figure 3: Existing Sidewalk and Bus Stops

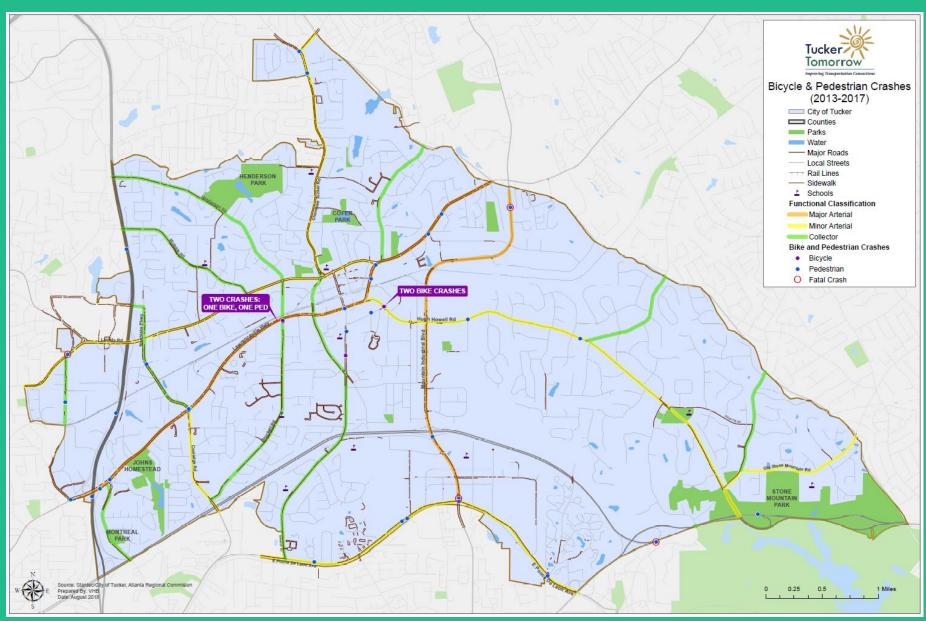


Figure 4: Bicycle and Pedestrian Crashes (2013-2017)

## **ATTACHMENT B: Photos of Existing Conditions - Tier 1 Locations**

### **Brockett Elementary School**



Figure 5: View of Brockett Elementary School and crossing lines in pavement looking southbound



Figure 6: View of desire path in front of school and sidewalk on opposite side of the road

### **Emory Hospital/Orthopedic Clinic**



Figure 7: Pedestrian crossing Montreal Road in front of Emory Clinic while another pedestrian waiting at MARTA bus stop observes



Figure 8: Cars passing down Montreal Road looking north towards Lawrenceville Hwy/US 29

### **Idlewood Elementary School**



Figure 9: View southward and of pedestrian crossing Idlewood Road in front of school's exit-only driveway



Figure 10: View northward with Idlewood Elementary School to the left; also includes freshly paved Idlewood Road

### **Midvale Elementary School (Midvale Circle)**



Figure 11: A line of cars in front of crosswalk at Midvale Elementary School that, at the time of the field visit, was not yet painted after the resurfacing of Midvale Road near Midvale Circle



Figure 12: View of a crosswalk from Midvale Elementary School

## **ATTACHMENT C: Photos of Existing Conditions - Tier 2 Locations**

### Idlewood Road @ Elmdale Drive



Figure 13: View of Idlewood looking south from sidewalk at Elmdale Drive intersection



Figure 14: View of existing MARTA bus stop looking north towards Fellowship Road intersection

## **Main Street at Lynburn Drive**



Figure 15: Existing crosswalk at Lynburn Drive intersection can be upgraded to improve safety

### **Main Street at Railroad Avenue**



Figure 16: Existing crosswalk at Railroad Avenue looking north on Main Street (Source: Google Street View)

## **Main Street at Village Burger Restaurant**



Figure 17: Crosswalk in front of Village Burger Restaurant

### Midvale Elementary School (Midvale Court/Crestcliff Drive)



Figure 18: View of a crosswalk at the intersection with Midvale Court



Figure 19: Damaged curb cut and pavement at intersection with Midvale Court/Crestcliff Drive