

Traffic Flow Supplemental Document

The following document highlights additional data and details behind the traffic analysis provided in the Green Hedges Improvement Plan Overview

Existing Conditions

Windover Avenue: Montessori

The following tables highlight the arrival and dismissal patterns for Montessori and two-year-old children.

Drop-off time: 7:55-8:20am

Arrival Time	Multi-day average	High
7:55-8:00am	5	10
8:00-8:05am	9	17
8:05-8:10am	10	13
8:10-8:15am	8	11
8:15-8:20am	1	2
Stroller/Walker	1	2
Total vehicles	34	

Dismissal time (full-day); 3:00-3:15pm

Dismissal Time	Multi-day average	High
2:55-3:00pm	6	8
3:00-3:05pm	3	4
3:05-3:10pm	5	6
3:10-3:15pm	3	4
3:15-3:20pm	1	1
Stroller	1	1
Total vehicles*	19	

*Note that we have half-day and extended day students, so the afternoon traffic burden is reduced by 44%. After-school dismissals range from 4:30pm to 6:00pm.

Drop-off and dismissal procedures are actively managed by multiple staff members to ensure safety and traffic flow. Processing time varies for this age group based on the number of children per vehicle and walk time to the classroom. On average, it takes 4.5-5 minutes/vehicle. Based on the current circulation, stacking (see image below), and processing time for the children, the Windover Avenue entrance can handle sixteen (16) vehicles at drop-off and fourteen (14) vehicles at afternoon dismissal per 5-minute interval. Based on the above charts, there was one morning where we had overflow onto Windover for approximately one minute. Overflow onto Windover during arrival and dismissal times is exceedingly infrequent, brief in duration, and quickly resolved.

Nutley Street: Lower School & Middle School

The following tables highlight the arrival and dismissal patterns for Lower School & Middle School:

Drop-off time: 7:45-8:20am

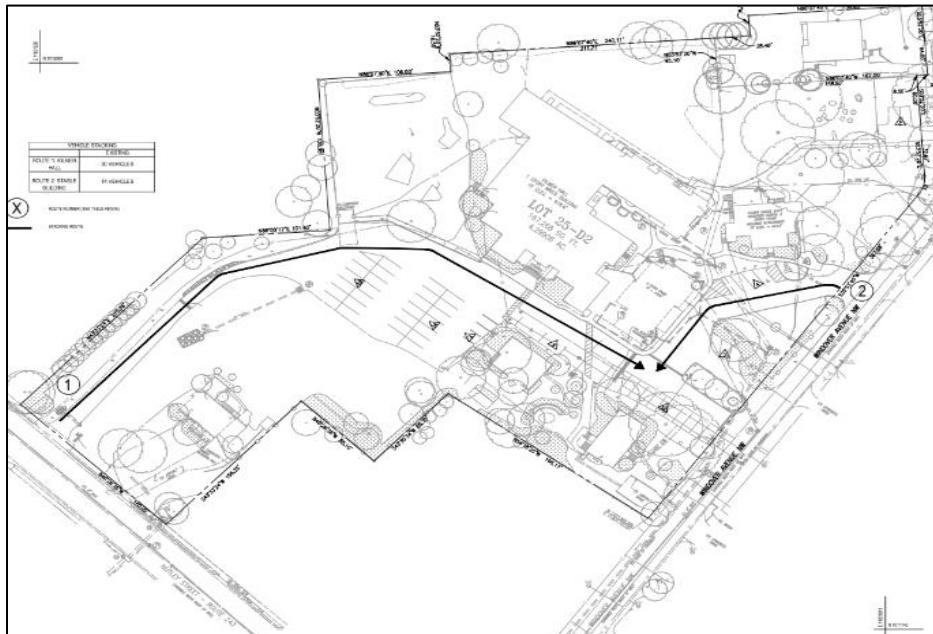
Dismissal time (full-day); 3:15-3:45pm

Arrival Time	Multi-day average	High
7:40-7:45am	3	5
7:45-7:50am	4	5
7:50-7:55am	7	10
7:55-8:00am	11	14
8:00-8:05am	12	15
8:05-8:10am	12	15
8:10-8:15am	11	12
8:15-8:20am	3	6
Walker/Biker	2	3
Faculty w/ children (park)	2	3
Total vehicles	65	

Dismissal Time	Multi-day average	High
3:05-3:10pm	2	5
3:10-3:15pm	5	10
3:15-3:20pm	7	9
3:20-3:25pm	7	8
3:25-3:30pm	8	10
3:30-3:35pm	6	10
3:35-3:40pm	5	7
3:40-3:45pm	4	6
Walker/Biker	2	2
Faculty w/children (park)	2	3
Total vehicles*	44	

*Note that there are extended day students, so the afternoon traffic burden is reduced by 32%. Furthermore, there are afternoon athletic practices and games, on average twice a week, which pull students out of dismissal activity. Participating students are dismissed from an alternate location (game-/sport-dependent).

Drop-off and dismissal procedures are actively managed by multiple staff members to ensure safety and traffic flow. Processing time varies for this group based on number of children per vehicle. On average, it takes three (3) minutes/vehicle at drop-off and five (5) minutes/vehicle at dismissal. Based on the current circulation, stacking (see image below), and processing time for the children, the Nutley Street entrance can handle fifty (50) vehicles per five-minute interval at drop-off and thirty (30) vehicles per five-minute interval at pick-up. With excess capacity, there were no instances of overflow onto Nutley Street during the data collection period.



Proposed Conditions

Windover Avenue: Montessori

Using the current vehicle arrival and dismissal patterns, we *projected* the following at our proposed enrollment of 62 in our Montessori & two-year-old program (at the proposed CUP enrollment of 210 for the entire school).

Drop-off time: 7:55-8:20am

Dismissal time (full-day); 3:00-3:15pm

Arrival Time	Multi-day average	High
7:55-8:00am	6	12
8:00-8:05am	11	20
8:05-8:10am	12	15
8:10-8:15am	9	13
8:15-8:20am	1	2
Stroller	1	2
Total vehicles	40	

Dismissal Time	Multi-day average	High
2:55-3:00pm	7	10
3:00-3:05pm	4	5
3:05-3:10pm	6	7
3:10-3:15pm	3	4
3:15-3:20pm	0	1
Stroller	1	1
Total vehicles*	21	

*Note that this assumes we have the same percentage of half-day and extended day students.

Under the proposed Campus Plan, the following changes will be made to improve traffic circulation and stacking (see new circulation and stacking below). In addition, the current plan to consolidate all of the Montessori classrooms in The Stable (which is immediately adjacent to the driveway) for educational purposes will have the effect of decreasing processing time per vehicle, as parents would no longer walk children to classrooms in Kilmer Hall each morning. The proposed site updates allow eighteen (18) cars to queue from Windover Avenue. Based on the proposed circulation, stacking, and processing time for the children, the Windover Avenue entrance will be able to handle twenty-six (26) vehicles at arrival and eighteen (18) vehicles at dismissal per five-minute interval. This increased capacity will make those already infrequent and transitory moments of overflow onto Windover exceedingly rare.

In summary, the table below shows a comparison of traffic management under the current vs. the proposed plan for Windover Avenue and Nutley Street.

	Windover Avenue		Nutley Street	
	Current	Proposed	Current	Proposed
Vehicle Stacking	14	18	30	54
Processing Time: Drop-off	4.5 mins	3.5 mins*	3 mins	3 mins
Processing time: Dismissal	5 mins	5 mins	5 mins	5 mins
Enrollment	54	62	113	148
Maximum number of vehicles per 5-minute interval: Drop-off	16	26	50	90
Maximum number of vehicles per 5-minute interval: Dismissal	14	18	30	54

*Note: reduced processing time driven by consolidation of Montessori classrooms into the Stable.

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