ATTACHMENT 6

Synchro, SimTraffic

Simulated Fall Demonstration Project Results

ATTACHMENT 6: Synchro/SimTraffic Simulation Comparisons - Peak 15 Minute Periods

Simulation Findings for AM Start (7:15-7:30) and PM Dismissal (2:00-2:15)

Table 1 compares the Fall Demonstration traffic control plan results to existing conditions (Table 1). Data was simulated for the highest peak 15 minutes in the morning and peak afternoon time periods. Changes in traffic control, lane configurations, user group destinations, and turning movements were simulated. Three scenarios were modeled, both AM and PM, for a total of six simulations. Each scenario was modeled 5 times with randomly seeded traffic arrivals, in order to produce average results for each scenario.

- **Existing conditions** turning movement counts were modeled for AM and PM performance.
- The **Fall Demonstration project predictions** for a traffic control plan was proposed for October 14-18, 2024 involved the relocation of user groups. This was modeled to predict potential performance.
- The **Fall Demonstration project implementation** in October 2024 provided actual results. Predicted traffic changes were adjusted based on field observations during the demonstration and modeled again for actual performance.

The main goal of this traffic simulation was to predict beneficial changes to traffic under the Fall Demonstration project by using the existing space available on campus. No new construction or reconstruction was possible. Instead, short term, temporary traffic control allows testing how much it is possible to optimize the campus layout without significant costs or reconstruction. Simulations show what can work and what may not work, as measured by delays, queues, and volume-to-capacity (v/c) ratios.

Three main indications of concern are used in evaluating traffic simulation for the most problematic intersections.

1. **V/C ratio.** Where the volume-to-capacity ratio of intersections meets or exceed 0.8 or 80% of ability to serve a turning movement, these are noted as a “v/c” ratio of concern in Table 1
2. **Queues**. Queuing of more than 10 vehicles (more than 200 feet) is a sign of one of the more congested intersections on or near campus.
3. **Delays.** Delays of 45 seconds per vehicle or more approaches Level of Service E/F or what may be less tolerable conditions for most users.

West Valley High School

Simulation findings show the following areas of WVHS are most affected under the Fall Demonstration project traffic control changes:

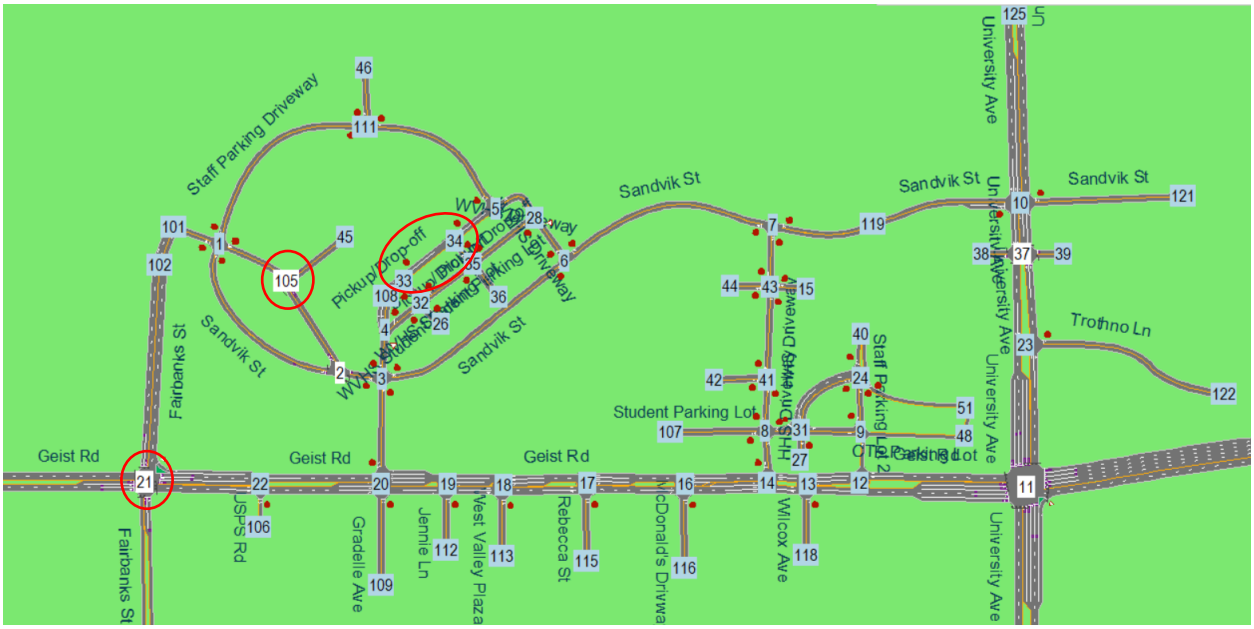


Figure A6-1: FNSB High School Network – WVHS Intersection #'s most affected in simulation

WVHS #33,#34 Existing Drop-off and Pick-up lanes

- **Existing Concern:** #33, #34 Drop-off and pick-up lanes at WVHS experience significant onsite congestion and pedestrian safety conflicts at v/c exceeding 0.8 in both the AM and at PM Dismissal. Delays are 3 minutes or longer per motorist. Queues average 16 vehicles per lane but can range from 10 vehicles up to 30 vehicles in length in various simulation runs.

- **Fall Demonstration Benefit**: At #105, the new West Loop Drop-off, Pick-up zone has been modeled to show it had the potential to reduce delays and queues on the East side of the school by half or more. The concept "doubles" the available drop-off, pickup curbside frontage. Delays and queues were reduced, but not as much as predicted. Even with changes, Volume-to-capacity ratios still exceeded 0.8 in front of the main entrance. While the AM period saw greater benefits, the PM Dismissal period saw less improvement. Traffic counts during the demonstration showed the West Loop pick-up zone was not well utilized in the PM Peak period during the weeklong demonstration.

WVHS #111 Back Lot Temporary Bus Loading Zone
WVHS #105 West Loop Drop-off, Pick-up Curbside

- **Existing Concern:** #111 Back Lot School Entrance had no existing concerns. All bus loading was moved to the back lot during the Fall Demonstration project to open the west front side of WVHS to additional drop-off and pick-up capacity. This also required moving nearly all staff parking to the front of WVHS's other parking lots. The back lot was difficult to maneuver for busing, however, significant assistance from the WVHS staff directed about 150 student bus

riders to access doorways, and Durham Services staff directed bus staging to line up around existing plug-in pedestals.

- **Fall Demonstration Benefit:** Back lot congestion was increased; however, delays, queues and v/c ratios did not rise to levels of concern listed above. Bus loading at the rear entrance was accomplished with staging buses away from conflict with other traffic. The benefit of moving buses to the rear of the school included not introducing conflicts with other vehicles and opening other areas of the school to expanded drop-off and pick-up use.

WVHS #21 Fairbanks St and Geist Rd

- **Existing Concern**: No significant existing concerns. This is a higher volume, higher use signal. Southbound left turns occasionally model at or near LOS E in some simulations, but on average are functioning well at LOS C or better.

- **Fall Demonstration Benefit:** Simulation changes showed southbound left turns were improved to fall below a volume-to-capacity ratio of less than 0.8 or less than 80 percent. Simulation was based on maximum green times being available for peak traffic movements, especially eastbound buses turning left at the traffic signal to enter the campus in the AM peak period.

Hutchison High School

Simulation findings show the following areas of HHS are most affected by fall demonstration project traffic control changes:

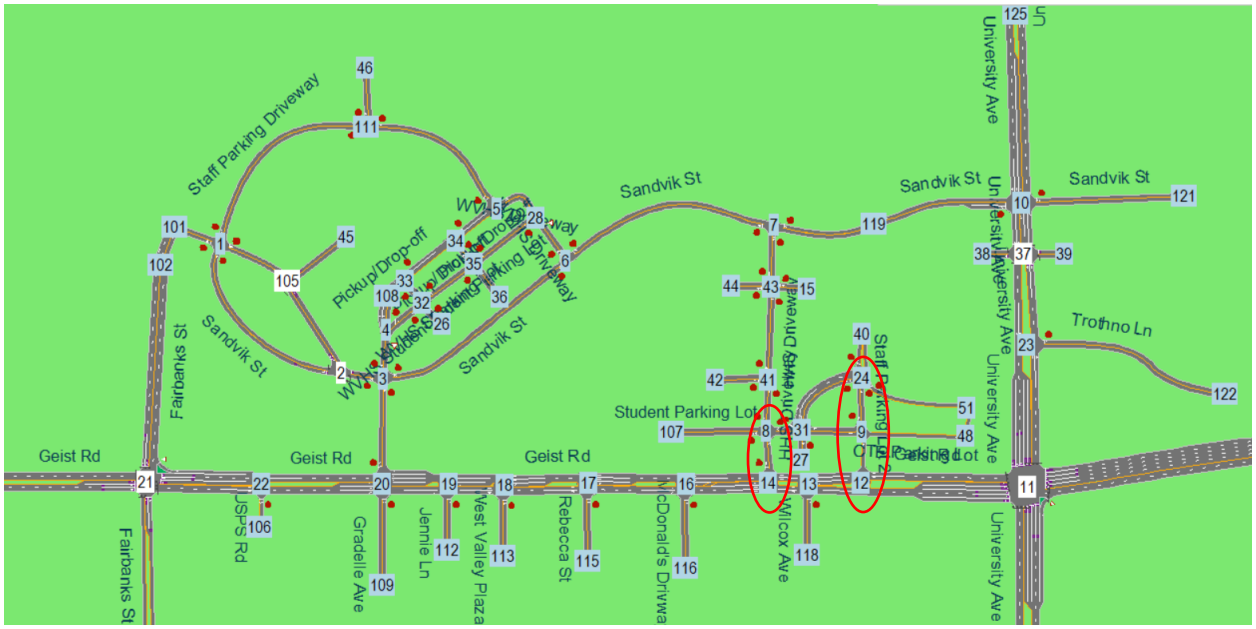


Figure A6-2: FNSB High School Network – HHS Front Intersection #'s in simulation

HHS Front of School
HHS #14 West Driveway onto Geist Road
HHS #8 West Driveway and Front Parking Lot access
HHS #12, #24, #31 East Driveway and Drop-off, Pick-up access

- **Existing Concern**: #14 HHS West Driveway at Geist Road. V/C ratios are above 0.8 for existing conditions for southbound traffic to turn left or right onto Giest Road in both the AM and PM Dismissal peak periods. Delays are at LOS F due to heavy school departure volumes.

- **Existing Concern:** #8 HHS West Driveway and Front Parking Lot. Parking lot turning traffic conflicts with drop-off and pick-up traffic creating internal congestion in the PM Dismissal hour, just off Geist Road. Trying to exit the front parking lots onto the HHS West Drive is LOS F or worse in the PM Dismissal peak period with delays of 3 minutes or longer. Southbound traffic from the back of HHS also experiences LOS F with average delays of 60 seconds or more per user trying to reach Geist Road.

- **Existing Concern:** Pick-up queues back onto Geist Road at the HHS East Driveway on some days, intersections #31, #24, and #12. This showed up on some simulation model runs, but not commonly across an average of all runs.

- **Fall Demonstration Benefit**: In the Traffic Control Plans (TCP's), the Fall Demonstration project a) restricted left turns onto Geist Road, and b) closed internal southbound traffic from the back of the school. Senior parking was moved to the back and west parking lots of HHS. This

left visitors, staff, and drop-off and pick-up as the only remaining traffic to be served with access back to Geist Road. Removing the back parking lot demand reduced the v/c ratio and congestion for all traffic in front of the school to less than 0.8 in the PM Dismissal peak period. Because PM Dismissal parking lot traffic had to go north to exit, the front of the HHS school congestion at the Pickup lanes and access to Geist Road was reduced by two-thirds (2/3). Simulation in front of the school shows pickup in the PM Dismissal period experienced less than half the delays of existing conditions when exiting towards Geist Road. No traffic came close to backing onto Geist Road at the HHS East Driveway #12.

Fall Demonstration Disbenefit: As noted in the next section below, congestion benefits at the front of the school translated to disbenefits to the rear of the school.

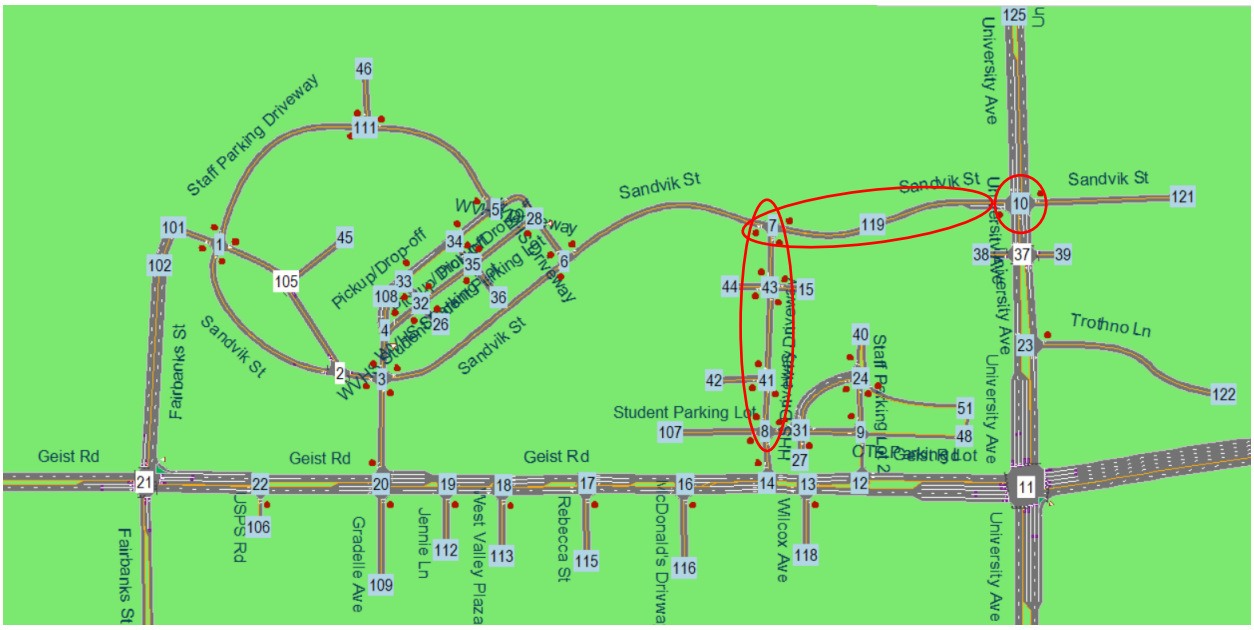


Figure A6-3 : FNSB High School Network – HHS Back Intersection #'s in simulation

HHS Back of School
University and Sandvik Street #10
Sandvik & HHS West Driveway #7
HHS Back Lot Parking #43

- **Existing Concerns:** Both high schools arrive and exit through the University Avenue and Sandvik Street intersection. Existing conditions simulation shows delays of less than 45 seconds per user, and queues of 11 vehicles or less. These are not LOS F conditions.

- **Fall Demonstration Disbenefit:** During the Fall Demonstration project, all HHS parking lot traffic was forced to exit via Sandvik Street. This tripled traffic loads northbound from HHS to the back of the school in the PM Dismissal peak period. The simulation results reflect this as worsening of delay to more than 85 seconds per vehicle, or LOS F eastbound on Sandvik Street trying to get to the STOP sign and make a left turn. Simulation queues tripled to nearly 30 vehicles or 600 feet in length, which is not quite to HHS or intersection #7.

- **Fall Demonstration Benefit:** This simulation was able to predict north side delays of LOS F heading to Sandvik Street and to University Avenue. Unfortunately, no traffic control plan solution was found to mitigate existing Sandvik Street congestion and did make congestion to University Avenue two to three times worse.

  By not finding a workable temporary traffic control plan option, this demonstration indicates a solution is needed not only for HHS at Geist Road, but also on Sandvik Street. More access options will need to be explored beyond existing routes currently available.

No other changes to the area network were noted to experience significant changes in delay or queueing.

University and Geist Road #11

University Avenue and Geist Road regularly experiences left turn delays exceeding 45 seconds per vehicle in peak hour conditions. Queues of more than 10 vehicles in any lanes are common.

No significant congestion or queuing changes were simulated when comparing existing conditions to fall demonstration project changes. This large, high-volume intersection has the capacity to serve minor rerouting of High School traffic. V/C ratios remain less than 0.8 in all simulations.

Figure A6-4: AM Peak Period Congestion Simulation (Run 4) Existing Conditions, Queues onto Geist Road, along Sandvik Street

Figure A6-5: PM Peak Period Congestion Simulation (Run 4) Existing Conditions, Queues onto Geist Road, along Sandvik Street

Table 1 Summary of Network Performance Measures for Fall Demonstration Project and at More Congested Intersections 1/3/2025

	Intx #	Network Performance Measure		v/c of concern EX AM	Existing	TCP3 Prediction	Fall Demo Project	v/c if improved	v/c of concern EX DISM	Existing	TCP3 Prediction	Fall Demo Project	v/c if improved	Notes
					AM Arrival					PM Dismissal				
Network Total		Total Travel Time (hrs)	TTT		48.6	49.7	48.5			53.9	57.7	56.4		No significant
		Vehicle Miles of Travel (mi)	VMT		691	742	714			768	797	794		changes in total
		Total Delay (hr)			24.1	23.3	22.9			27.5	29.7	28.5		network performance
		Avg Delay per Vehicles (sec)			68.1	63.4	61.7			63.0	58.8	58.3		when reassigning user
		Total Vehicle STOPS			2656	2791	2749			2667	2848	2924		groups internally
		Fuel Used (gal)			34.1	36.1	34.9			38.7	40.5	40.1		
		Hydrocarbons (g)	HC		596	590	561			680	466	488		Average delays per vehicle
		Carbon Monoxide (g)	CO		20637	21072	20320			23755	20896	21250		decreased in network
		Nitrous Oxides (g)	NO x		1825	1841	1758			2086	1616	1672		
Delays	#6	Sandvik & WVHS Parking E	EB LT		21.3	5.3	5.0			11.3	4.2	4.8		
			WB TR		27.4	5.2	4.7			13.7	5.7	5.4		
	#8	HHS Spine & Front Pkg	EB RT		14.5					152.0				HHS Parking Exit 3 min delays, removed by closure
			WB LT		9.2	20.1	44.2			56.1	102.9	37.0		
			WB RT		4.3	19.8	59.3			17.9	129.2	62.4		Delays to NB Spine Exit increased 3 X
			SB		12.0					54.2				
	#10	University & Sandvik	EB LT		23.4	80.5	45.0		>=0.8	28.5	55.5	84.8	>=0.8	Demo inreased STOP delays
			EB RT		11.1	11.0	11.8		>=0.8	11.7	28.2	43.6	>=0.8	by 2 to 4 times
			WB LT		33.4	55.0	43.2			23.8	14.9	20.8		
	#11	University & Geist	EB LT		*46.7*	*50.6*	*47.8*			*47.2*	*48.5*	*44.6*		No significant
			EB TH		*35.1*	*38.6*	*41.7*			*31.1*	*32.9*	*28.8*		change
			EB RT		*9.8*	*11.0*	*11.6*			*7.9*	*8.7*	*8.2*		at major external
			WB LT		*56.2*	*55.0*	*52.1*			*58.3*	*50.2*	*49.3*		intersection
			WB TH		*53.5*	*32.3*	*27.5*			*34.6*	*39.5*	*34.7*		
			NB LT		*56.4*	*51.8*	*48.1*			*58.0*	*59.3*	*60.9*		
			SB LT		*48.3*	*48.4*	*50.2*			*16.5*	*52.4*	*47.2*		
	#14	HHS W Spine & Geist	SB LT	>=0.8	28.9		25.4	< 0.8	>=0.8	66.9		50.5	< 0.8	Fall Demo resolved v/c ratio
			SB RT	>=0.8	13.2	4.8	13.0	< 0.8	>=0.8	42.4	7.1	13.2	< 0.8	concerns at Geist and HHS
	#16	McDonalds & Geist	NB LT		29.7	52.2	41.7			26.1	49.8	46.0		Midblock turns more difficult
	#17	Rebecca & Geist	NB LT		32.2	42.7	30.0		>=0.8	40.8	44.1	51.5	>=0.8	Midblock turns remain difficult
	#21	Fairbanks & Geist	EB LT		35.4	49.2	35.7			43.5	32.5	25.5		No significant change
			EB TH		*32.6*	*37.1*	*27.4*			*43.2*	*29.6*	*29.4*		
			WB TH		*23.2*	*23.6*	*22.7*			*22.7*	*28.3*	*27.4*		
			SB LT		23.7	27.4	25.4		>=0.8	25.3	24.6	21.0	< 0.8	Fall Demo helped SB LT v/c ratio
	#24,#31	HHS Staff Pkg Main Entr	NB LT+SB RT		36.5	27.6	81.0			195.9	196.9	67.6		Delays at HHS Main Entrance subject to downstream queues
	#33,#34	WVHS Main W Ped Xing	SW TH	>=0.8	205.2	54.8	51.6	>=0.8	>=0.8	169.8	44.2	70.9	>=0.8	WVHS Main Entrance much improved when West Loop is used to distribute demand, especially AM, but v/c > 0.8
	#32,#35	WVHS Student Pkg WB	SW TH		47.9	22.6	17.8			23.7	9.9	22.3		Student parking in AM improved with West Loop option
	#43	HHS Spine & CTC Back Lot	NB		8.0	10.9	16.1			8.8	20.4	36.8		More delay with bus loads
Queues	#6	Sandvik & WVHS Parking E	EB LT		12	3	3			5	2	3		
			WB TR		17	3	4			6	3	3		
	#8	HHS Spine & Front Pkg	EB RT		1					14				Fall Demo stored queues
			WB LT, RT		3	6	7			3	6	7		prevented backing onto Geist Rd
			SB		2					4				
	#10	University & Sandvik	EB LT		6	12	4		>=0.8	9	22	27	>=0.8	Falll Demo parking restrictions
			EB RT		6	7	6		>=0.8	7	7	8	>=0.8	increased PM Dismissal
			WB LT		3	8	3			1	1	1		STOP queues by 2 to 3 times
	#11	University & Geist	EB LT		*9*	*6*	***12***			*6*	*7*	*6*		No significant
			EB TH		***15***	***18***	***20***			*8*	***13***	***10***		change
			EB RT		***11***	***13***	***12***			*7*	*7*	*5*		at major external
			WB LT		*7*	*8*	*7*			*7*	*7*	*7*		intersection
			WB TH		***11***	***11***	***10***			***13***	***14***	***13***		
			NB LT		*7*	*8*	*6*			***11***	***10***	***10***		
			SB LT		***10***	***10***	***10***			*9*	***11***	*7*		
	#14	HHS W Spine & Geist	SB LT	>=0.8	5		3	< 0.8	>=0.8	5			< 0.8	Fall Demo resolved v/c ratio
			SB RT	>=0.8	5	3	5	< 0.8	>=0.8	5	2	4	< 0.8	concerns at Geist and HHS
	#16	McDonalds & Geist	NB LT		5	9	6			4	6	5		
	#17	Rebecca & Geist	NB LT		5	5	4		>=0.8	6	8	8	>=0.8	Midblock turns remain difficult
	#21	Fairbanks & Geist	EB LT		11	11	11			11	10	8		
			EB TH		***22***	***27***	***13***			***22***	***15***	***14***		
			WB TH		*8*	*9*	*8*			***14***	***14***	***14***		
			SB LT		11	17	17		>=0.8	14	13	10	< 0.8	Fall Demo helped SB LT v/c ratio
	#24,#31	HHS Staff Pkg Main Entr	NB LT+SB RT		10	11	14			14	22	12		Queues at HHS Main Entrance subject to downstream queues
	#33,#34	WVHS Drop-off, Pick-up	SW TH	>=0.8	16	11	11	>=0.8	>=0.8	16	9	12	>=0.8	WVHS Main Entrance queues somewhat improved, but v/c > 0.8
	#32,#35	WVHS Student Pkg E Ped Xing	SW TH		8	6	8			3	2	3		
	#43	HHS Spine & CTC Back Lot	NB		5	6	5			5	10	12		More queues with bus loads

PEDESTRIANS "PER HOUR" used for calibration of crosswalks at conflicdt areas

1/3/2025

Existing Conditions

		Current		Capacity	
	WVHS	900	Students	1000	Students

		0			Conflicting pph Xing for SimTraffic
AM and PM	Dropoff, PU	0			
	SPED Bus Students	30			Buses staged ahead of peds
		WVHS Back Lot			
			3600	pph equivalent	
		WVHS West	WVHS Main (2/3)	WVHS East (1/3)	
	Bus Students	150	0	0	Buses staged ahead of peds
		0			Conflicting pph Xing for SimTraffic
AM and PM	Non-bused Students		720		
	Peds in 15 min	0	480	240	
	Dropoff/PU 1 HR	0	**1920**	**960**	pph Xing/Loading for SimTraffic
AM Arrival	Dropoff AM in 15 min peak	0	183		vehicles
	Remaind er to Parking (pph)	0	**1432**	**716**	pph Xing/Loading for SimTraffic (Use same for PM Dismissal)
PM Dismissal	Pickup PM in 15 min peak		149		vehicles
	Remaind er to Parking (pph)		1523	761	pph Xing/Loading for SimTraffic

	Current		Capacity	
HHS	400 (rounded from 378)	Students	500	Students

PM Dismissal	AM Arrival			
Remainder, Pickup or to Parking (pph)	Remainder, Dropoff or to Parking (pph) (round up)			
467	**373**	HHS Back Lot (1/3)		
			1600	pph equivalent
933	**747**	HHS West (2/3)		HHS Main
		Non-bused students	**480**	pph Xing/Loading for SimTraffic
	AM Arrival	Dropoff AM in 15 min peak	120	vehicles
		Remainder to Parking (pph)	0	
	PM Dismissal	Pickup PM in 15 min peak Remainder to Parking (pph)	50	vehicles

PEDESTRIANS "PER HOUR" used for calibration of crosswalks at conflict areas

1/3/2025

Fall Demo TCP

		Current		Capacity	
	WVHS	900	Students	1000	Students
		0			Conflicting pph Xing for SimTraffic
AM and PM	Bus Students	150			
	SPED Bus Students	30			Buses staged ahead of peds
		WVHS Back Lot			
			3600	pph equivalent	
		WVHS West	WVHS Main (2/3)	WVHS East (1/3)	
	Bus Students	**0**	0	0	No busing pph
		0			Conflicting pph Xing for SimTraffic
AM and PM	Non-bused Students	200	520		720
	Peds in 15 min	0	347	173	
	Dropoff/PU 1 HR	**800**	**1350**	**700**	pph Xing/Loading for SimTraffic
AM Arrival	Dropoff AM in 15 min peak	0	130		vehicles
	Remainder to Parking (pph)	0	**1000**	**500**	pph Xing/Loading for SimTraffic (Use same for PM Dismissal)
PM Dismissal	Pickup PM in 15 min peak		150		vehicles
	Remainder to Parking (pph)		987	493	pph Xing/Loading for SimTraffic

		Current		Capacity	
	HHS	400 (rounded from 378)	Students	500	Students
PM Dismissal	AM Arrival				
Remainder, Pickup or to Parking (pph)	Remainder, Dropoff or to Parking (pph)				
467	**375**	HHS Back Lot (1/3)			
			1600	pph equivalent	
933	**750**	HHS West (2/3)		HHS Main	
			Non-bused students	**480**	pph Xing/Loading for SimTraffic
		AM Arrival	Dropoff AM in 15 min peak	120	vehicles
			Remainder to Parking (pph)	0	
		PM Dismissal	Pickup PM in 15 min peak Remainder to Parking (pph)	50	vehicles

1/3/2025 INTX Existing AM, PM Dismissal

WVHS 33 Main Entrance

VOLUME SETTINGS	NWL	NWR	NET	NER	SWL	SWT
Lanes and Sharing (#RL)						
Traffic Volume (vph)	0	0	0	0	0	183
Development Volume (vph)	0	0	0	0	0	0
Combined Volume (vph)	0	0	0	0	0	183
Future Volume (vph)	0	0	0	0	0	183
Conflicting Peds. (#/hr)	0	1920	—	1920	1920	—
Conflicting Bicycles (#/hr)	—	0	—	0	—	—
Peak Hour Factor	0.55	0.55	0.55	0.55	0.55	0.55
Growth Factor	1.00	1.00	1.00	1.00	1.00	1.00

WVHS 34 East Entranc

VOLUME SETTINGS	NWL	NWR	NET	NER	SWL	SWT
Lanes and Sharing (#RL)						
Traffic Volume (vph)	0	0	0	0	0	183
Development Volume (vph)	0	0	0	0	0	0
Combined Volume (vph)	0	0	0	0	0	183
Future Volume (vph)	0	0	0	0	0	183
Conflicting Peds. (#/hr)	0	960	—	960	960	—
Conflicting Bicycles (#/hr)	—	0	—	0	—	—
Peak Hour Factor	0.55	0.55	0.55	0.55	0.55	0.55
Growth Factor	1.00	1.00	1.00	1.00	1.00	1.00

WVHS 32 Main Pkg Xing

VOLUME SETTINGS	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Lanes and Sharing (#RL)												
Traffic Volume (vph)	0	0	0	0	0	0	0	57	23	0	25	0
Development Volume (vph)	0	0	0	0	0	0	0	0	0	0	0	0
Combined Volume (vph)	0	0	0	0	0	0	0	57	23	0	25	0
Future Volume (vph)	0	0	0	0	0	0	0	57	23	0	25	0
Conflicting Peds. (#/hr)	1432	—	0	0	—	1432	0	—	0	0	—	1432
Conflicting Bicycles (#/hr)						0	—	—	0	—	—	0
Peak Hour Factor						0.55	0.55	0.55	0.55	0.55	0.55	0.55
Growth Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

# of Pedestrians per hour conflicting with turns

WVHS 35 E Pkg Xing

VOLUME SETTINGS	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Lanes and Sharing (#RL)												
Traffic Volume (vph)	0	0	0	0	0	0	0	57	0	78	25	0
Development Volume (vph)	0	0	0	0	0	0	0	0	0	0	0	0
Combined Volume (vph)	0	0	0	0	0	0	0	57	0	78	25	0
Future Volume (vph)	0	0	0	0	0	0	0	57	0	78	25	0
Conflicting Peds. (#/hr)	736	—	0	0	—	736	0	—	0	0	—	736
Conflicting Bicycles (#/hr)	—	—	0	—	—	0	—	—	0	—	—	0
Peak Hour Factor	0.55	0.55	0.55	0.55	0.55	0.55	0.55	0.55	0.55	0.55	0.55	0.55
Growth Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

HHS 43 CTC Back Lot

VOLUME SETTINGS	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lanes and Sharing (#RL)												
Traffic Volume (vph)	6	0	0	0	0	0	0	91	12	7	35	16
Development Volume (vph)	0	0	0	0	0	0	0	0	0	0	0	0
Combined Volume (vph)	6	0	0	0	0	0	0	91	12	7	35	16
Future Volume (vph)	6	0	0	0	0	0	0	91	12	7	35	16
Conflicting Peds. (#/hr)	0	—	0	375	—	0	375	—	375	375	—	375
Conflicting Bicycles (#/hr)	—	—	0	—	—	0	—	—	0	—	—	0
Peak Hour Factor	0.55	0.55	0.55	0.55	0.55	0.55	0.55	0.55	0.55	0.55	0.55	0.55
Growth Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

HHS 41 E-W Culinary Parking Xing

VOLUME SETTINGS	EBL	EBR	NBL	NBT	SBT	SBR
Lanes and Sharing (#RL)						
Traffic Volume (vph)	2	0	0	101	23	12
Development Volume (vph)	0	0	0	0	0	0
Combined Volume (vph)	2	0	0	101	23	12
Future Volume (vph)	2	0	0	101	23	12
Conflicting Peds. (#/hr)	750	0	750	—	—	750
Conflicting Bicycles (#/hr)	—	0	—	—	—	0
Peak Hour Factor	0.55	0.55	0.55	0.55	0.55	0.55
Growth Factor	1.00	1.00	1.00	1.00	1.00	1.00

1/3/2025 INTX Existing AM, PM Dismissal

HHS 24 Main Entrance

VOLUME SETTINGS	WBL	WBR	NBT	NBR	SBL	SBT
Lanes and Sharing (#RL)						
Traffic Volume (vph)	119	0	0	0	0	0
Development Volume (vph)	0	0	0	0	0	0
Combined Volume (vph)	119	0	0	0	0	0
Future Volume (vph)	119	0	0	0	0	0
Conflicting Peds. (#/hr)	480	480	—	480	480	—
Conflicting Bicycles (#/hr)	—	0	—	0	—	—
Peak Hour Factor	0.55	0.55	0.55	0.55	0.55	0.55
Growth Factor	1.00	1.00	1.00	1.00	1.00	1.00

WVHS 105 West Loop Entrance

Zero
Buses staged ahead of conflict and multipled to 4X per hour

WVHS 111 SPED Back Lot

Zero
Buses staged ahead of conflict and multipled to 4X per hour
Staff arrives/leaves in off-peak

1/3/2025 INTX TCP Fall Demo AM, PM Dismissal (rounded)

WVHS 33 Main Entrance

VOLUME SETTINGS	NWL	NWR	NET	NER	SWL	SWT
Lanes and Sharing (#RL)						
Traffic Volume (vph)	0	0	0	0	0	132
Development Volume (vph)	0	0	0	0	0	0
Combined Volume (vph)	0	0	0	0	0	132
Future Volume (vph)	0	0	0	0	0	132
Conflicting Peds. (#/hr)	0	1350	—	1350	1350	—
Conflicting Bicycles (#/hr)	—	0	—	0	—	—
Peak Hour Factor	0.55	0.55	0.55	0.55	0.55	0.55
Growth Factor	1.00	1.00	1.00	1.00	1.00	1.00

WVHS 34 East Entranc

VOLUME SETTINGS	NWL	NWR	NET	NER	SWL	SWT
Lanes and Sharing (#RL)						
Traffic Volume (vph)	0	0	0	0	0	132
Development Volume (vph)	0	0	0	0	0	0
Combined Volume (vph)	0	0	0	0	0	132
Future Volume (vph)	0	0	0	0	0	132
Conflicting Peds. (#/hr)	0	700	—	700	700	—
Conflicting Bicycles (#/hr)	—	0	—	0	—	—
Peak Hour Factor	0.55	0.55	0.55	0.55	0.55	0.55
Growth Factor	1.00	1.00	1.00	1.00	1.00	1.00

WVHS 32 Main Pkg Xing

VOLUME SETTINGS	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Lanes and Sharing (#RL)												
Traffic Volume (vph)	0	0	0	12	0	0	0	43	58	8	11	0
Development Volume (vph)	0	0	0	0	0	0	0	0	0	0	0	0
Combined Volume (vph)	0	0	0	12	0	0	0	43	58	8	11	0
Future Volume (vph)	0	0	0	12	0	0	0	43	58	8	11	0
Conflicting Peds. (#/hr)	1000	—	0	0	—	1000	0	—	0	0	—	1000
Conflicting Bicycles (#/hr)	—	—	0	—	—	0	—	—	0	—	—	0
Peak Hour Factor	0.55	0.55	0.55	0.55	0.55	0.55	0.55	0.55	0.55	0.55	0.55	0.55
Growth Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

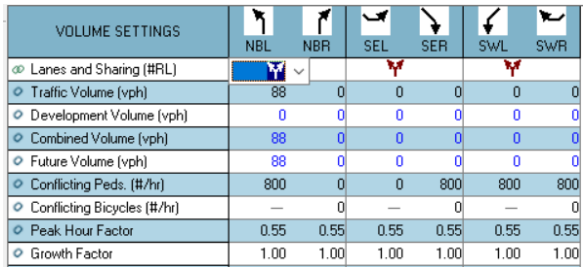
WVHS 35 E Pkg Xing

VOLUME SETTINGS	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Lanes and Sharing (#RL)												
Traffic Volume (vph)	0	0	0	11	0	0	0	19	24	76	19	0
Development Volume (vph)	0	0	0	0	0	0	0	0	0	0	0	0
Combined Volume (vph)	0	0	0	11	0	0	0	19	24	76	19	0
Future Volume (vph)	0	0	0	11	0	0	0	19	24	76	19	0
Conflicting Peds. (#/hr)	500	—	0	0	—	500	0	—	0	0	—	500
Conflicting Bicycles (#/hr)	—	—	0	—	—	0	—	—	0	—	—	0
Peak Hour Factor	0.55	0.55	0.55	0.55	0.55	0.55	0.55	0.55	0.55	0.55	0.55	0.55
Growth Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

HHS 43 CTC Back Lot Same

HHS 41 E-W Culinary Parking Xing Same

1/3/2025 INTX TCP Fall Demo AM, PM Dismissal (rounded)

HHS	24 Main Entrance	Same
WVHS	105 West Loop Entrance	
WVHS	111 SPED Back Lot	Zero Buses staged ahead of conflict and multipled to 4X per hour Staff arrives/leaves in off-peak

VOLUME SETTINGS	NBL	NBR	SEL	SER	SWL	SWR
Lanes and Sharing (#RL)						
Traffic Volume (vph)	88	0	0	0	0	0
Development Volume (vph)	0	0	0	0	0	0
Combined Volume (vph)	88	0	0	0	0	0
Future Volume (vph)	88	0	0	0	0	0
Conflicting Peds. (#/hr)	800	0	0	800	800	800
Conflicting Bicycles (#/hr)	—	0	—	0	—	0
Peak Hour Factor	0.55	0.55	0.55	0.55	0.55	0.55
Growth Factor	1.00	1.00	1.00	1.00	1.00	1.00