

INTERSECTION: Van Buren Boulevard & Wood Road

QuicNet
System
Parameters

Group Assignment:
Field Master Assignment:
System Reference Number:
Commications Channel:
Drop Address:
Area Number:
Area Address:

N/S Street Name: Wood Rd
E/W Street Name: Van Buren Blvd

Last QuicNet Database Change:

Notes:

Field Change Record					
Change	By	Date	Change	By	Date

Excl Ped Assignment

Exclusive Walk

Exclusive FDW

All Red Clear

0

0

0.0

Note: Set the Exclusive Ped Outputs on the "Outputs / General" page

Walk Output

0

Don't Walk Output

0

Exclusive Ped Phase

		Phase							
		1	2	3	4	5	6	7	8
Basic Phase Timing	Min Green	5	5	5	5	5	5	5	5
	Extension	2.0	3.0	2.0	3.0	2.0	3.0	2.0	3.0
	Max	30	50	40	30	20	50	20	40
	Max 2	30	70	30	70	30	70	30	70
	Cond Serve Check	0	0	0	0	0	0	0	0
Clear	Yellow Change	4.0	5.2	3.0	4.8	4.5	5.2	4.5	4.8
	Red Clear	1.0	2.0	1.0	1.0	1.0	2.0	1.0	1.0
Pedestrian Timing	Walk	0	7	0	0	0	7	0	7
	Ped Clear - FDW	0	20	0	0	0	21	0	31
	Adv / Delay Walk	0	0	0	0	0	0	0	0
	PE Min Ped FDW	0	20	0	0	0	21	0	31
Volume Density	Type 3 Disconnect	0	0	0	0	0	0	0	0
	Added per Vehicle	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Max Added Initial	0	0	0	0	0	0	0	0
	Min Gap	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
	Max Gap	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
	Reduce Every	0.0	5.0	0.0	3.0	0.0	5.0	0.0	4.0
Phase Timing - Bank 1									

Alternate Walk

Alternate Ped Clear

Alternate Minimum

Alternate Extension

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Alternate Timing - Bank 1

Red Lock

Yellow Lock

Simultaneous Gap

Rest In Walk

Advance Walk

Flashing Walk

Max Extension

Phase Functions - Page 1

Red Rest

Dual Entry

Sequential Timing

Inhibit Ped Reservice

Semi-Actuated

Guaranteed Passage

Conditional Service

Phase Functions - Page 2

Minimum Recall

Ped Recall

Maximum Recall

Green Flash

Overlap Green Flash

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Phase Functions - Page 2

Soft Recall

External Recall

Manual Control Calls

Fast Green Flash

Fast Overlap G. Flash

[illegible]

Exclusive Ped Phase

Alternate Timing - Bank 1

Phase Functions - Page 1Phase Functions - Page 2

INTERSECTION: Trautwein Road & Mission Grove Parkway South

QuicNet
System
Parameters

Group Assignment: N/S Street Name: Trautwein Rd
Field Master Assignment: E/W Street Name: Mission Grove Pkwy S
System Reference Number:
Commications Channel:
Drop Address:
Area Number:
Area Address:

Last QuicNet Database Change:

Notes:

Field Change Record					
Change	By	Date	Change	By	Date

Excl Ped Assignment	
Exclusive Walk	0
Exclusive FDW	0
All Red Clear	0.0

Walk Output	0
Don't Walk Output	0

Note: Set the Exclusive Ped Outputs on the "Outputs / General" page

Exclusive Ped Phase

		Phase							
		1	2	3	4	5	6	7	8
Basic Phase Timing	Min Green	5	5	5	5	5	5	5	5
	Extension	2.0	3.0	2.0	3.0	2.0	3.0	2.0	3.0
	Max	25	40	20	30	25	40	20	25
	Max 2	30	70	30	70	30	70	30	70
	Cond Serve Check	0	0	0	0	0	0	0	0
Clear	Yellow Change	3.5	5.2	3.0	4.8	3.5	5.2	4.5	3.6
	Red Clear	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Pedestrian Timing	Walk	0	7	0	7	0	7	0	7
	Ped Clear - FDW	0	12	0	25	0	23	0	28
	Adv / Delay Walk	0	0	0	0	0	0	0	0
	PE Min Ped FDW	0	12	0	25	0	23	0	28
Volume Density	Type 3 Disconnect	0	0	0	0	0	0	0	0
	Added per Vehicle	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Max Added Initial	0	0	0	0	0	0	0	0
	Min Gap	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
	Max Gap	2.0	3.0	2.0	3.0	2.0	3.0	2.0	3.0
	Reduce Every	0.0	4.0	0.0	3.0	0.0	4.0	0.0	0.0
Phase Timing - Bank 1									

	Phase							
	1	2	3	4	5	6	7	8
Alternate Walk	0	0	0	0	0	0	0	0
Alternate Ped Clear	0	0	0	0	0	0	0	0
Alternate Minimum	0	0	0	0	0	0	0	0
Alternate Extension	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Alternate Timing - Bank 1

Red Lock	
Yellow Lock	
Simultaneous Gap	
Rest In Walk	
Advance Walk	
Flashing Walk	
Max Extension	

Phase Functions - Page 1

Red Rest	
Dual Entry	
Sequential Timing	
Inhibit Ped Reservice	
Semi-Actuated	
Guaranteed Passage	
Conditional Service	

Phase Functions - Page 2

Minimum Recall	26
Ped Recall	
Maximum Recall	
Green Flash	
Overlap Green Flash	

Phase Functions - Page 2

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INTERSECTION: Trautwein Road & John F Kennedy Drive

QuicNet
System
Parameters

Group Assignment:
Field Master Assignment:
System Reference Number:
Commications Channel:
Drop Address:
Area Number:
Area Address:

N/S Street Name: Trautwein Rd
E/W Street Name: John F Kennedy Dr

Last QuicNet Database Change:

Notes:

Field Change Record					
Change	By	Date	Change	By	Date

Excl Ped Assignment

Exclusive Walk

Exclusive FDW

All Red Clear

0

0

0.0

Note: Set the Exclusive Ped Outputs on the "Outputs / General" page

Walk Output

0

Don't Walk Output

0

Exclusive Ped Phase

		Phase							
		1	2	3	4	5	6	7	8
Basic Phase Timing	Min Green	5	5	5	5	5	5	5	5
	Extension	2.0	3.0	2.5	3.0	2.0	3.0	2.0	3.0
	Max	25	50	30	30	20	50	20	30
	Max 2	30	70	30	70	30	70	30	70
	Cond Serve Check	0	0	0	0	0	0	0	0
Clear	Yellow Change	3.0	5.2	4.0	3.6	3.0	5.2	3.0	4.4
	Red Clear	1.0	2.0	1.0	1.0	1.0	2.0	1.0	1.0
Pedestrian Timing	Walk	0	7	0	7	0	7	0	7
	Ped Clear - FDW	0	18	0	27	0	13	0	26
	Adv / Delay Walk	0	0	0	0	0	0	0	0
	PE Min Ped FDW	0	18	0	27	0	13	0	26
Volume Density	Type 3 Disconnect	0	0	0	0	0	0	0	0
	Added per Vehicle	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Max Added Initial	0	0	0	0	0	0	0	0
	Min Gap	2.0	2.0	2.5	3.0	2.0	2.0	2.0	2.0
	Max Gap	2.0	3.0	2.5	3.0	2.0	3.0	2.0	3.0
	Reduce Every	0.0	5.0	0.0	0.0	0.0	5.0	0.0	3.0
Phase Timing - Bank 1									

Alternate Walk

Alternate Ped Clear

Alternate Minimum

Alternate Extension

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Alternate Timing - Bank 1

Red Lock

Yellow Lock

Simultaneous Gap

Rest In Walk

Advance Walk

Flashing Walk

Max Extension

Phase Functions - Page 1

Minimum Recall

Ped Recall

Maximum Recall

Green Flash

Overlap Green Flash

2

6

Phase Functions - Page 2

Red Rest

Dual Entry

Sequential Timing

Inhibit Ped Reservice

Semi-Actuated

Guaranteed Passage

Conditional Service

INTERSECTION: Trautwein Road & Grove Community Drive

QuicNet
System
Parameters

Group Assignment:
Field Master Assignment:
System Reference Number:
Commications Channel:
Drop Address:
Area Number:
Area Address:

N/S Street Name: Trautwein Rd
E/W Street Name: Grove Community Dr

Last QuicNet Database Change:

Notes:

Field Change Record					
Change	By	Date	Change	By	Date

Excl Ped Assignment

Exclusive Walk

Exclusive FDW

All Red Clear

0

0

0.0

Note: Set the Exclusive Ped Outputs on the "Outputs / General" page

Walk Output

0

Don't Walk Output

0

Exclusive Ped Phase

		Phase							
		1	2	3	4	5	6	7	8
Basic Phase Timing	Min Green	5	5	0	0	0	5	0	5
	Extension	3.0	3.0	0.0	0.0	0.0	3.0	0.0	3.0
	Max	25	50	0	0	0	50	0	30
	Max 2	30	70	0	0	0	70	0	70
	Cond Serve Check	0	0	0	0	0	0	0	0
Clear	Yellow Change	4.5	5.2	0.0	3.0	0.0	5.2	0.0	4.1
	Red Clear	1.0	1.0	0.0	1.0	0.0	1.0	0.0	1.0
Pedestrian Timing	Walk	0	7	0	7	0	0	0	0
	Ped Clear - FDW	0	17	0	23	0	0	0	0
	Adv / Delay Walk	0	0	0	0	0	0	0	0
	PE Min Ped FDW	0	17	0	23	0	0	0	0
Volume Density	Type 3 Disconnect	0	0	0	0	0	0	0	0
	Added per Vehicle	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Max Added Initial	0	0	0	0	0	0	0	0
	Min Gap	2.0	2.0	0.0	0.0	0.0	2.0	0.0	2.0
	Max Gap	3.0	3.0	0.0	0.0	0.0	3.0	0.0	3.0
	Reduce Every	0.0	4.0	0.0	0.0	0.0	4.0	0.0	3.0
Phase Timing - Bank 1									

Alternate Walk

Alternate Ped Clear

Alternate Minimum

Alternate Extension

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Alternate Timing - Bank 1

Red Lock

Yellow Lock

Simultaneous Gap

Rest In Walk

Advance Walk

Flashing Walk

Max Extension

Red Rest

Dual Entry

Sequential Timing

Inhibit Ped Reservice

Semi-Actuated

Guaranteed Passage

Conditional Service

Phase Functions - Page 1

Minimum Recall

Ped Recall

Maximum Recall

Green Flash

Overlap Green Flash

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Soft Recall

External Recall

Manual Control Calls

Fast Green Flash

Fast Overlap G. Flash

Phase Functions - Page 2

INTERSECTION: Trautwein Road & Orange Terrace Parkway

QuicNet
System
Parameters

Group Assignment:
Field Master Assignment:
System Reference Number:
Commications Channel:
Drop Address:
Area Number:
Area Address:

N/S Street Name: Trautwein Rd
E/W Street Name: Orange Terrace Pkwy

Last QuicNet Database Change:

Notes:

Field Change Record					
Change	By	Date	Change	By	Date

Excl Ped Assignment

Exclusive Walk

Exclusive FDW

All Red Clear

0

0

0.0

Note: Set the Exclusive Ped Outputs on the "Outputs / General" page

Walk Output

0

Don't Walk Output

0

Exclusive Ped Phase

		Phase							
		1	2	3	4	5	6	7	8
Basic Phase Timing	Min Green	5	5	5	5	5	5	5	5
	Extension	2.0	3.0	2.0	3.0	2.0	3.0	2.0	3.0
	Max	30	50	20	30	30	30	30	25
	Max 2	30	70	30	70	30	50	30	70
	Cond Serve Check	0	0	0	0	0	0	0	0
Clear	Yellow Change	3.0	5.2	3.0	4.8	4.0	5.2	3.0	3.6
	Red Clear	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Pedestrian Timing	Walk	0	7	0	7	0	7	0	7
	Ped Clear - FDW	0	14	0	26	0	25	0	30
	Adv / Delay Walk	0	0	0	0	0	0	0	0
	PE Min Ped FDW	0	14	0	26	0	25	0	30
Volume Density	Type 3 Disconnect	0	0	0	0	0	0	0	0
	Added per Vehicle	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Max Added Initial	0	0	0	0	0	0	0	0
	Min Gap	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
	Max Gap	2.0	3.0	2.0	3.0	2.5	3.0	2.0	3.0
	Reduce Every	0.0	5.0	0.0	3.0	3.0	5.0	0.0	0.0
Phase Timing - Bank 1									

Alternate Walk

Alternate Ped Clear

Alternate Minimum

Alternate Extension

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Alternate Timing - Bank 1

Red Lock

Yellow Lock

Simultaneous Gap

Rest In Walk

Advance Walk

Flashing Walk

Max Extension

Phase Functions - Page 1

Red Rest

Dual Entry

Sequential Timing

Inhibit Ped Reservice

Semi-Actuated

Guaranteed Passage

Conditional Service

Phase Functions - Page 2

Minimum Recall

Ped Recall

Maximum Recall

Green Flash

Overlap Green Flash

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Phase Functions - Page 2

Soft Recall

External Recall

Manual Control Calls

Fast Green Flash

Fast Overlap G. Flash

Phase Functions - Page 2

INTERSECTION: Trautwein Road & Shopping Center

QuicNet
System
Parameters

Group Assignment:
Field Master Assignment:
System Reference Number:
Commications Channel:
Drop Address:
Area Number:
Area Address:

N/S Street Name: Trautwein Rd
E/W Street Name: Shopping Center

Last QuicNet Database Change:

Notes:

Field Change Record					
Change	By	Date	Change	By	Date

Excl Ped Assignment

Exclusive Walk

Exclusive FDW

All Red Clear

0

0

0.0

Note: Set the Exclusive Ped Outputs on the "Outputs / General" page

Walk Output

0

Don't Walk Output

0

Exclusive Ped Phase

		Phase							
		1	2	3	4	5	6	7	8
Basic Phase Timing	Min Green	5	5	0	5	5	5	0	5
	Extension	2.0	3.0	0.0	3.0	2.0	3.0	0.0	3.0
	Max	20	40	0	30	20	40	0	30
	Max 2	30	70	0	70	30	70	0	70
	Cond Serve Check	0	0	0	0	0	0	0	0
Clear	Yellow Change	3.5	5.2	0.0	3.6	3.5	5.2	0.0	3.6
	Red Clear	1.0	2.0	0.0	1.0	1.0	2.0	0.0	1.0
Pedestrian Timing	Walk	0	7	0	7	0	7	0	7
	Ped Clear - FDW	0	15	0	26	0	18	0	27
	Adv / Delay Walk	0	0	0	0	0	0	0	0
	PE Min Ped FDW	0	15	0	26	0	18	0	27
Volume Density	Type 3 Disconnect	0	0	0	0	0	0	0	0
	Added per Vehicle	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Max Added Initial	0	0	0	0	0	0	0	0
	Min Gap	2.0	2.0	0.0	2.0	2.0	2.0	0.0	2.0
	Max Gap	2.0	3.0	0.0	3.0	2.0	3.0	0.0	3.0
	Reduce Every	0.0	4.0	0.0	0.0	0.0	4.0	0.0	0.0
Phase Timing - Bank 1									

Alternate Walk

Alternate Ped Clear

Alternate Minimum

Alternate Extension

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Alternate Timing - Bank 1

Red Lock

Yellow Lock

Simultaneous Gap

Rest In Walk

Advance Walk

Flashing Walk

Max Extension

Phase Functions - Page 1

Minimum Recall

Ped Recall

Maximum Recall

Green Flash

Overlap Green Flash

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Phase Functions - Page 2

Red Rest

Dual Entry

Sequential Timing

Inhibit Ped Reservice

Semi-Actuated

Guaranteed Passage

Conditional Service

INTERSECTION: Trautwein Road & Van Buren Boulevard

QuicNet
System
Parameters

Group Assignment:
Field Master Assignment:
System Reference Number:
Commications Channel:
Drop Address:
Area Number:
Area Address:

N/S Street Name: Trautwein Rd
E/W Street Name: Van Buren Blvd

Last QuicNet Database Change:

Notes:

Field Change Record					
Change	By	Date	Change	By	Date

Excl Ped Assignment

Exclusive Walk

Exclusive FDW

All Red Clear

0

0

0.0

Note: Set the Exclusive Ped Outputs on the "Outputs / General" page

Walk Output

0

Don't Walk Output

0

Exclusive Ped Phase

		Phase							
		1	2	3	4	5	6	7	8
Basic Phase Timing	Min Green	5	5	5	5	5	5	5	5
	Extension	2.0	3.0	2.0	3.0	2.0	3.0	2.0	3.0
	Max	20	50	20	25	25	50	20	25
	Max 2	30	70	30	70	30	70	30	70
	Cond Serve Check	0	0	0	0	0	0	0	0
Clear	Yellow Change	3.0	5.2	4.0	5.2	4.0	5.2	4.0	4.4
	Red Clear	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Pedestrian Timing	Walk	0	7	0	7	0	7	0	7
	Ped Clear - FDW	0	17	0	29	0	23	0	33
	Adv / Delay Walk	0	0	0	0	0	0	0	0
	PE Min Ped FDW	0	17	0	29	0	23	0	33
Volume Density	Type 3 Disconnect	0	0	0	0	0	0	0	0
	Added per Vehicle	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Max Added Initial	0	0	0	0	0	0	0	0
	Min Gap	3.0	2.0	3.0	2.0	3.0	2.0	3.0	2.0
	Max Gap	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
	Reduce Every	0.0	5.0	0.0	2.5	0.0	5.0	0.0	2.5
Phase Timing - Bank 1									

Alternate Walk

Alternate Ped Clear

Alternate Minimum

Alternate Extension

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Alternate Timing - Bank 1

Red Lock

Yellow Lock

Simultaneous Gap

Rest In Walk

Advance Walk

Flashing Walk

Max Extension

Phase Functions - Page 1

Red Rest

Dual Entry

Sequential Timing

Inhibit Ped Reservice

Semi-Actuated

Guaranteed Passage

Conditional Service

Phase Functions - Page 2

Minimum Recall

Ped Recall

Maximum Recall

Green Flash

Overlap Green Flash

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Phase Functions - Page 2

Soft Recall

External Recall

Manual Control Calls

Fast Green Flash

Fast Overlap G. Flash

Phase Functions - Page 2

INTERSECTION: Van Buren Boulevard & Shopping Center

QuicNet
System
Parameters

Group Assignment:
Field Master Assignment:
System Reference Number:
Commications Channel:
Drop Address:
Area Number:
Area Address:

N/S Street Name: Shopping Center
E/W Street Name: Van Buren Blvd

Last QuicNet Database Change:

Notes:

Field Change Record					
Change	By	Date	Change	By	Date

Excl Ped Assignment

Exclusive Walk

Exclusive FDW

All Red Clear

0

0

0.0

Note: Set the Exclusive Ped Outputs on the "Outputs / General" page

Walk Output

0

Don't Walk Output

0

Exclusive Ped Phase

		Phase							
		1	2	3	4	5	6	7	8
Basic Phase Timing	Min Green	0	5	0	5	5	5	0	0
	Extension	0.0	3.0	0.0	3.0	2.0	3.0	0.0	0.0
	Max	0	40	0	30	20	40	0	0
	Max 2	0	70	0	60	30	60	0	0
	Cond Serve Check	0	0	0	0	0	0	0	0
Clear	Yellow Change	0.0	5.2	0.0	3.0	3.5	5.2	0.0	0.0
	Red Clear	0.0	2.0	0.0	1.0	1.0	2.0	0.0	0.0
Pedestrian Timing	Walk	0	0	0	7	0	7	0	0
	Ped Clear - FDW	0	0	0	28	0	15	0	0
	Adv / Delay Walk	0	0	0	0	0	0	0	0
	PE Min Ped FDW	0	0	0	28	0	15	0	0
Volume Density	Type 3 Disconnect	0	0	0	0	0	0	0	0
	Added per Vehicle	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Max Added Initial	0	0	0	0	0	0	0	0
	Min Gap	0.0	2.0	0.0	2.0	2.0	2.0	0.0	0.0
	Max Gap	0.0	3.0	0.0	3.0	2.0	3.0	0.0	0.0
	Reduce Every	0.0	4.0	0.0	0.0	0.0	4.0	0.0	0.0
Phase Timing - Bank 1									

Alternate Walk

Alternate Ped Clear

Alternate Minimum

Alternate Extension

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Alternate Timing - Bank 1

Red Lock

Yellow Lock

Simultaneous Gap

Rest In Walk

Advance Walk

Flashing Walk

Max Extension

Phase Functions - Page 1

Red Rest

Dual Entry

Sequential Timing

Inhibit Ped Reservice

Semi-Actuated

Guaranteed Passage

Conditional Service

Phase Functions - Page 2

Minimum Recall

Ped Recall

Maximum Recall

Green Flash

Overlap Green Flash

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Phase Functions - Page 2

Soft Recall

External Recall

Manual Control Calls

Fast Green Flash

Fast Overlap G. Flash

Phase Functions - Page 2

INTERSECTION: Van Buren Boulevard & Barton Street

QuicNet
System
Parameters

Group Assignment:
Field Master Assignment:
System Reference Number:
Commications Channel:
Drop Address:
Area Number:
Area Address:

N/S Street Name: Barton St
E/W Street Name: Van Buren Blvd

Last QuicNet Database Change:

Notes:

Field Change Record					
Change	By	Date	Change	By	Date

Excl Ped Assignment

Exclusive Walk

Exclusive FDW

All Red Clear

0

0

0.0

Note: Set the Exclusive Ped Outputs on the "Outputs / General" page

Walk Output

0

Don't Walk Output

0

Exclusive Ped Phase

		Phase							
		1	2	3	4	5	6	7	8
Basic Phase Timing	Min Green	5	5	5	5	5	5	5	5
	Extension	2.0	3.0	2.0	3.0	2.0	3.0	2.0	3.0
	Max	30	50	20	30	30	50	20	30
	Max 2	40	70	30	70	40	70	30	70
	Cond Serve Check	0	0	0	0	0	0	0	0
Clear	Yellow Change	3.5	5.2	4.0	3.6	4.0	5.2	3.0	4.8
	Red Clear	1.0	2.0	1.0	1.0	1.0	2.0	1.0	1.0
Pedestrian Timing	Walk	0	7	0	0	0	7	0	7
	Ped Clear - FDW	0	18	0	0	0	15	0	36
	Adv / Delay Walk	0	0	0	0	0	0	0	0
	PE Min Ped FDW	0	18	0	0	0	15	0	36
Volume Density	Type 3 Disconnect	0	0	0	0	0	0	0	0
	Added per Vehicle	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Max Added Initial	0	0	0	0	0	0	0	0
	Min Gap	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
	Max Gap	2.0	3.0	2.0	3.0	2.0	3.0	2.0	3.0
	Reduce Every	0.0	5.0	0.0	3.0	0.0	5.0	0.0	3.0
Phase Timing - Bank 1									

Alternate Walk

Alternate Ped Clear

Alternate Minimum

Alternate Extension

0

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Alternate Timing - Bank 1

Red Lock

Yellow Lock

Simultaneous Gap

Rest In Walk

Advance Walk

Flashing Walk

Max Extension

Phase Functions - Page 1

Red Rest

Dual Entry

Sequential Timing

Inhibit Ped Reservice

Semi-Actuated

Guaranteed Passage

Conditional Service

Phase Functions - Page 2

Minimum Recall

Ped Recall

Maximum Recall

Green Flash

Overlap Green Flash

_2_6_

Phase Functions - Page 2

Soft Recall

External Recall

Manual Control Calls

Fast Green Flash

Fast Overlap G. Flash

Phase Functions - Page 2

APPENDIX C

VOLUME DEVELOPMENT WORKSHEETS

Table C-1 - Existing Peak Hour PCE Volume Summary

AM Peak Hour							Afternoon Peak Hour						
	Historical Counts	Growth Historical Yr to 2021	Historical + Growth (2021)	Existing COVID-19 Volumes	Adjusted Existing Volumes	Balanced 2021 Volumes	Historical Counts	Growth Historical Yr to 2021	Historical + Growth (2021)	Existing COVID-19 Volumes	Adjusted Growth for COVID-19	Adjusted Existing Volumes	Balanced 2021 Volumes
1 Washington Street/Van Buren Boulevard													
Historical Count Year: 2018													
NBL	138	8	146	145	146	146	0	0	0	93	7	100	100
NBT	503	30	533	437	533	533	0	0	0	273	21	294	294
NBR	91	5	96	125	125	125	0	0	0	97	7	104	104
SBL	291	17	308	266	308	308	0	0	0	412	31	443	443
SBT	131	8	139	147	147	147	0	0	0	256	19	275	275
SBR	61	4	65	76	76	76	0	0	0	95	7	102	102
EBL	126	8	134	124	134	134	0	0	0	120	9	129	129
EBT	851	51	902	900	902	902	0	0	0	1,097	84	1,181	1,181
EBR	70	4	74	120	120	120	0	0	0	73	6	79	79
WBL	47	3	50	81	81	81	0	0	0	108	8	116	116
WBT	1,218	73	1,291	1,119	1,291	1,291	0	0	0	1,133	86	1,219	1,219
WBR	573	34	607	461	607	607	0	0	0	334	25	359	359
North Leg													
Approach	483	29	512	489	531	531	0	0	0	763	57	820	820
Departure	1,202	72	1,274	1,022	1,274	1,274	0	0	0	727	55	782	782
Total	1,685	101	1,786	1,511	1,805	1,805	0	0	0	1,490	112	1,602	1,602
South Leg													
Approach	732	43	775	707	804	804	0	0	0	463	35	498	498
Departure	248	15	263	348	348	348	0	0	0	437	33	470	470
Total	980	58	1,038	1,055	1,152	1,152	0	0	0	900	68	968	968
East Leg													
Approach	1,838	110	1,948	1,661	1,979	1,979	0	0	0	1,575	119	1,694	1,694
Departure	1,233	73	1,306	1,291	1,335	1,335	0	0	0	1,606	122	1,728	1,728
Total	3,071	183	3,254	2,952	3,314	3,314	0	0	0	3,181	241	3,422	3,422
West Leg													
Approach	1,047	63	1,110	1,144	1,156	1,156	0	0	0	1,290	99	1,389	1,389
Departure	1,417	85	1,502	1,340	1,513	1,513	0	0	0	1,321	100	1,421	1,421
Total	2,464	148	2,612	2,484	2,669	2,669	0	0	0	2,611	199	2,810	2,810
Total Approaches													
Approach	4,100	245	4,345	4,001	4,470	4,470	0	0	0	4,091	310	4,401	4,401
Departure	4,100	245	4,345	4,001	4,470	4,470	0	0	0	4,091	310	4,401	4,401
Total	8,200	490	8,690	8,002	8,940	8,940	0	0	0	8,182	620	8,802	8,802

Table C-1 - Existing Peak Hour PCE Volume Summary

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Historical Counts	Growth Historical Yr to 2021	Historical + Growth (2021)	Existing COVID-19 Volumes	Adjusted Existing Volumes	Balanced 2021 Volumes		Historical Counts	Growth Historical Yr to 2021	Historical + Growth (2021)	Existing COVID-19 Volumes	Adjusted Growth for COVID-19	Adjusted Existing Volumes	Balanced 2021 Volumes
2 Chicago Avenue - Alta Cresta Avenue/Van Buren Boulevard													
Historical Count Year: 2018													
NBL	121	7	128	104	128	128	0	0	0	55	4	59	59
NBT	2	0	2	1	2	2	0	0	0	2	0	2	2
NBR	84	5	89	61	89	89	0	0	0	18	1	19	19
SBL	1	0	1	3	3	3	0	0	0	19	1	20	20
SBT	2	0	2	1	2	2	0	0	0	2	0	2	2
SBR	5	0	5	4	5	5	0	0	0	6	0	6	6
EBL	24	1	25	7	25	25	0	0	0	20	2	22	22
EBT	1,162	70	1,232	1,252	1,252	1,252	0	0	0	1,527	116	1,643	1,643
EBR	55	3	58	54	58	58	0	0	0	125	10	135	135
WBL	57	3	60	69	69	69	0	0	0	36	3	39	39
WBT	1,719	103	1,822	1,560	1,822	1,822	0	0	0	1,562	119	1,681	1,681
WBR	7	0	7	5	7	7	0	0	0	17	1	18	18
North Leg													
Approach	8	0	8	8	10	10	0	0	0	27	1	28	28
Departure	33	1	34	13	34	34	0	0	0	39	3	42	42
Total	41	1	42	21	44	44	0	0	0	66	4	70	70
South Leg													
Approach	207	12	219	166	219	219	0	0	0	75	5	80	80
Departure	114	6	120	124	129	129	0	0	0	163	13	176	176
Total	321	18	339	290	348	348	0	0	0	238	18	256	256
East Leg													
Approach	1,783	106	1,889	1,634	1,898	1,898	0	0	0	1,615	123	1,738	1,738
Departure	1,247	75	1,322	1,316	1,344	1,344	0	0	0	1,564	118	1,682	1,682
Total	3,030	181	3,211	2,950	3,242	3,242	0	0	0	3,179	241	3,420	3,420
West Leg													
Approach	1,241	74	1,315	1,313	1,335	1,335	0	0	0	1,672	128	1,800	1,800
Departure	1,845	110	1,955	1,668	1,955	1,955	0	0	0	1,623	123	1,746	1,746
Total	3,086	184	3,270	2,981	3,290	3,290	0	0	0	3,295	251	3,546	3,546
Total Approaches													
Approach	3,239	192	3,431	3,121	3,462	3,462	0	0	0	3,389	257	3,646	3,646
Departure	3,239	192	3,431	3,121	3,462	3,462	0	0	0	3,389	257	3,646	3,646
Total	6,478	384	6,862	6,242	6,924	6,924	0	0	0	6,778	514	7,292	7,292

Table C-1 - Existing Peak Hour PCE Volume Summary

AM Peak Hour						Afternoon Peak Hour						
Historical Counts	Growth Historical Yr to 2021	Historical + Growth (2021)	Existing COVID-19 Volumes	Adjusted Existing Volumes	Balanced 2021 Volumes	Historical Counts	Growth Historical Yr to 2021	Historical + Growth (2021)	Existing COVID-19 Volumes	Adjusted Growth for COVID-19	Adjusted Existing Volumes	Balanced 2021 Volumes

3 Van Buren Village Driveway/Van Buren Boulevard

Intersection does not exist under Existing Conditions.

Table C-1 - Existing Peak Hour PCE Volume Summary

AM Peak Hour							Afternoon Peak Hour						
Historical Counts	Growth Historical Yr to 2021	Historical + Growth (2021)	Existing COVID-19 Volumes	Adjusted Existing Volumes	Balanced 2021 Volumes		Historical Counts	Growth Historical Yr to 2021	Historical + Growth (2021)	Existing COVID-19 Volumes	Adjusted Growth for COVID-19	Adjusted Existing Volumes	Balanced 2021 Volumes
4 Little Court/Van Buren Boulevard													
Historical Count Year: N/A													
NBL	0	0	0	0	0	0	0	0	0	0	0	0	0
NBT	0	0	0	0	0	0	0	0	0	0	0	0	0
NBR	0	0	0	7	7	7	0	0	0	2	0	2	2
SBL	0	0	0	0	0	0	0	0	0	0	0	0	0
SBT	0	0	0	0	0	0	0	0	0	0	0	0	0
SBR	0	0	0	0	0	0	0	0	0	0	0	0	0
EBL	0	0	0	0	0	0	0	0	0	0	0	0	0
EBT	0	0	0	1,265	1,265	1,343	0	0	0	1,499	114	1,613	1,678
EBR	0	0	0	1	1	1	0	0	0	4	0	4	4
WBL	0	0	0	0	0	0	0	0	0	0	0	0	0
WBT	0	0	0	1,589	1,589	1,898	0	0	0	1,552	118	1,670	1,738
WBR	0	0	0	0	0	0	0	0	0	0	0	0	0
North Leg													
Approach	0	0	0	0	0	0	0	0	0	0	0	0	0
Departure	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	0	0
South Leg													
Approach	0	0	0	7	7	7	0	0	0	2	0	2	2
Departure	0	0	0	1	1	1	0	0	0	4	0	4	4
Total	0	0	0	8	8	8	0	0	0	6	0	6	6
East Leg													
Approach	0	0	0	1,589	1,589	1,898	0	0	0	1,552	118	1,670	1,738
Departure	0	0	0	1,272	1,272	1,350	0	0	0	1,501	114	1,615	1,680
Total	0	0	0	2,861	2,861	3,248	0	0	0	3,053	232	3,285	3,418
West Leg													
Approach	0	0	0	1,266	1,266	1,344	0	0	0	1,503	114	1,617	1,682
Departure	0	0	0	1,589	1,589	1,898	0	0	0	1,552	118	1,670	1,738
Total	0	0	0	2,855	2,855	3,242	0	0	0	3,055	232	3,287	3,420
Total Approaches													
Approach	0	0	0	2,862	2,862	3,249	0	0	0	3,057	232	3,289	3,422
Departure	0	0	0	2,862	2,862	3,249	0	0	0	3,057	232	3,289	3,422
Total	0	0	0	5,724	5,724	6,498	0	0	0	6,114	464	6,578	6,844

Table C-1 - Existing Peak Hour PCE Volume Summary

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Historical Counts	Growth Historical Yr to 2021	Historical + Growth (2021)	Existing COVID-19 Volumes	Adjusted Existing Volumes	Balanced 2021 Volumes		Historical Counts	Growth Historical Yr to 2021	Historical + Growth (2021)	Existing COVID-19 Volumes	Adjusted Growth for COVID-19	Adjusted Existing Volumes	Balanced 2021 Volumes
5 Ridgeway Avenue/Van Buren Boulevard													
Historical Count Year: N/A													
NBL	0	0	0	0	0	0	0	0	0	0	0	0	0
NBT	0	0	0	0	0	0	0	0	0	0	0	0	0
NBR	0	0	0	0	0	0	0	0	0	0	0	0	0
SBL	0	0	0	1	1	1	0	0	0	1	0	1	1
SBT	0	0	0	0	0	0	0	0	0	0	0	0	0
SBR	0	0	0	100	100	119	0	0	0	50	4	54	56
EBL	0	0	0	34	34	36	0	0	0	88	7	95	99
EBT	0	0	0	1,233	1,233	1,314	0	0	0	1,411	107	1,518	1,581
EBR	0	0	0	0	0	0	0	0	0	0	0	0	0
WBL	0	0	0	0	0	0	0	0	0	0	0	0	0
WBT	0	0	0	1,489	1,489	1,779	0	0	0	1,495	114	1,609	1,682
WBR	0	0	0	8	8	8	0	0	0	16	1	17	17
North Leg													
Approach	0	0	0	101	101	120	0	0	0	51	4	55	57
Departure	0	0	0	42	42	44	0	0	0	104	8	112	116
Total	0	0	0	143	143	164	0	0	0	155	12	167	173
South Leg													
Approach	0	0	0	0	0	0	0	0	0	0	0	0	0
Departure	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	0	0
East Leg													
Approach	0	0	0	1,497	1,497	1,787	0	0	0	1,511	115	1,626	1,699
Departure	0	0	0	1,234	1,234	1,315	0	0	0	1,412	107	1,519	1,582
Total	0	0	0	2,731	2,731	3,102	0	0	0	2,923	222	3,145	3,281
West Leg													
Approach	0	0	0	1,267	1,267	1,350	0	0	0	1,499	114	1,613	1,680
Departure	0	0	0	1,589	1,589	1,898	0	0	0	1,545	118	1,663	1,738
Total	0	0	0	2,856	2,856	3,248	0	0	0	3,044	232	3,276	3,418
Total Approaches													
Approach	0	0	0	2,865	2,865	3,257	0	0	0	3,061	233	3,294	3,436
Departure	0	0	0	2,865	2,865	3,257	0	0	0	3,061	233	3,294	3,436
Total	0	0	0	5,730	5,730	6,514	0	0	0	6,122	466	6,588	6,872

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Historical Counts	Growth Historical Yr to 2021	Historical + Growth (2021)	Existing COVID-19 Volumes	Adjusted Existing Volumes	Balanced 2021 Volumes		Historical Counts	Growth Historical Yr to 2021	Historical + Growth (2021)	Existing COVID-19 Volumes	Adjusted Growth for COVID-19	Adjusted Existing Volumes	Balanced 2021 Volumes
6 Dauchy Avenue/Van Buren Boulevard													
Historical Count Year: 2018													
NBL	228	14	242	234	242	239	0	0	0	180	14	194	194
NBT	28	2	30	35	35	35	0	0	0	60	5	65	65
NBR	119	7	126	145	145	145	0	0	0	105	8	113	113
SBL	35	2	37	29	37	37	0	0	0	58	4	62	62
SBT	25	2	27	45	45	45	0	0	0	26	2	28	28
SBR	17	1	18	23	23	23	0	0	0	41	3	44	44
EBL	18	1	19	19	19	19	0	0	0	57	4	61	66
EBT	999	60	1,059	954	1,059	1,073	0	0	0	1,135	86	1,221	1,326
EBR	164	10	174	220	220	223	0	0	0	163	12	175	190
WBL	110	7	117	156	156	156	0	0	0	96	7	103	103
WBT	1,464	88	1,552	1,308	1,552	1,532	0	0	0	1,366	104	1,470	1,472
WBR	11	1	12	15	15	15	0	0	0	25	2	27	27
North Leg													
Approach	77	5	82	97	105	105	0	0	0	125	9	134	134
Departure	57	4	61	69	69	69	0	0	0	142	11	153	158
Total	134	9	143	166	174	174	0	0	0	267	20	287	292
South Leg													
Approach	375	23	398	414	422	419	0	0	0	345	27	372	372
Departure	299	19	318	421	421	424	0	0	0	285	21	306	321
Total	674	42	716	835	843	843	0	0	0	630	48	678	693
East Leg													
Approach	1,585	96	1,681	1,479	1,723	1,703	0	0	0	1,487	113	1,600	1,602
Departure	1,153	69	1,222	1,128	1,241	1,255	0	0	0	1,298	98	1,396	1,501
Total	2,738	165	2,903	2,607	2,964	2,958	0	0	0	2,785	211	2,996	3,103
West Leg													
Approach	1,181	71	1,252	1,193	1,298	1,315	0	0	0	1,355	102	1,457	1,582
Departure	1,709	103	1,812	1,565	1,817	1,794	0	0	0	1,587	121	1,708	1,710
Total	2,890	174	3,064	2,758	3,115	3,109	0	0	0	2,942	223	3,165	3,292
Total Approaches													
Approach	3,218	195	3,413	3,183	3,548	3,542	0	0	0	3,312	251	3,563	3,690
Departure	3,218	195	3,413	3,183	3,548	3,542	0	0	0	3,312	251	3,563	3,690
Total	6,436	390	6,826	6,366	7,096	7,084	0	0	0	6,624	502	7,126	7,380

Table C-1 - Existing Peak Hour PCE Volume Summary

AM Peak Hour							Afternoon Peak Hour						
Historical Counts	Growth Historical Yr to 2021	Historical + Growth (2021)	Existing COVID-19 Volumes	Adjusted Existing Volumes	Balanced 2021 Volumes		Historical Counts	Growth Historical Yr to 2021	Historical + Growth (2021)	Existing COVID-19 Volumes	Adjusted Growth for COVID-19	Adjusted Existing Volumes	Balanced 2021 Volumes
7 Dauchy Avenue/Project Driveway 2 - Ardenwood Lane													
Historical Count Year: N/A													
NBL	0	0	0	34	34	34	0	0	0	14	0	14	14
NBT	0	0	0	284	284	295	0	0	0	188	14	202	199
NBR	0	0	0	4	4	4	0	0	0	7	1	8	8
SBL	0	0	0	8	8	8	0	0	0	7	1	8	8
SBT	0	0	0	258	258	247	0	0	0	205	16	221	226
SBR	0	0	0	143	143	143	0	0	0	62	0	62	62
EBL	0	0	0	112	112	112	0	0	0	119	0	119	119
EBT	0	0	0	0	0	0	0	0	0	1	0	1	1
EBR	0	0	0	27	27	27	0	0	0	29	0	29	29
WBL	0	0	0	4	4	4	0	0	0	5	0	5	5
WBT	0	0	0	0	0	0	0	0	0	0	0	0	0
WBR	0	0	0	37	37	37	0	0	0	13	1	14	14
North Leg													
Approach	0	0	0	409	409	398	0	0	0	274	17	291	296
Departure	0	0	0	433	433	444	0	0	0	320	15	335	332
Total	0	0	0	842	842	842	0	0	0	594	32	626	628
South Leg													
Approach	0	0	0	322	322	333	0	0	0	209	15	224	221
Departure	0	0	0	289	289	278	0	0	0	239	16	255	260
Total	0	0	0	611	611	611	0	0	0	448	31	479	481
East Leg													
Approach	0	0	0	41	41	41	0	0	0	18	1	19	19
Departure	0	0	0	12	12	12	0	0	0	15	2	17	17
Total	0	0	0	53	53	53	0	0	0	33	3	36	36
West Leg													
Approach	0	0	0	139	139	139	0	0	0	149	0	149	149
Departure	0	0	0	177	177	177	0	0	0	76	0	76	76
Total	0	0	0	316	316	316	0	0	0	225	0	225	225
Total Approaches													
Approach	0	0	0	911	911	911	0	0	0	650	33	683	685
Departure	0	0	0	911	911	911	0	0	0	650	33	683	685
Total	0	0	0	1,822	1,822	1,822	0	0	0	1,300	66	1,366	1,370

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AM Peak Hour							Afternoon Peak Hour						
Historical Counts	Growth Historical Yr to 2021	Historical + Growth (2021)	Existing COVID-19 Volumes	Adjusted Existing Volumes	Balanced 2021 Volumes		Historical Counts	Growth Historical Yr to 2021	Historical + Growth (2021)	Existing COVID-19 Volumes	Adjusted Growth for COVID-19	Adjusted Existing Volumes	Balanced 2021 Volumes
8 Dauchy Avenue - Taft Street/Krameria Avenue													
Historical Count Year: N/A													
NBL	0	0	0	14	14	14	0	0	0	10	1	11	11
NBT	0	0	0	15	15	15	0	0	0	16	1	17	17
NBR	0	0	0	8	8	8	0	0	0	7	1	8	8
SBL	0	0	0	76	76	76	0	0	0	126	10	136	136
SBT	0	0	0	6	6	6	0	0	0	19	1	20	20
SBR	0	0	0	33	33	33	0	0	0	58	4	62	62
EBL	0	0	0	39	39	39	0	0	0	31	2	33	33
EBT	0	0	0	339	339	339	0	0	0	281	21	302	302
EBR	0	0	0	2	2	2	0	0	0	21	2	23	23
WBL	0	0	0	1	1	1	0	0	0	6	0	6	6
WBT	0	0	0	383	383	383	0	0	0	228	17	245	245
WBR	0	0	0	86	86	86	0	0	0	44	3	47	47
North Leg													
Approach	0	0	0	115	115	115	0	0	0	203	15	218	218
Departure	0	0	0	140	140	140	0	0	0	91	6	97	97
Total	0	0	0	255	255	255	0	0	0	294	21	315	315
South Leg													
Approach	0	0	0	37	37	37	0	0	0	33	3	36	36
Departure	0	0	0	9	9	9	0	0	0	46	3	49	49
Total	0	0	0	46	46	46	0	0	0	79	6	85	85
East Leg													
Approach	0	0	0	470	470	470	0	0	0	278	20	298	298
Departure	0	0	0	423	423	423	0	0	0	414	32	446	446
Total	0	0	0	893	893	893	0	0	0	692	52	744	744
West Leg													
Approach	0	0	0	380	380	380	0	0	0	333	25	358	358
Departure	0	0	0	430	430	430	0	0	0	296	22	318	318
Total	0	0	0	810	810	810	0	0	0	629	47	676	676
Total Approaches													
Approach	0	0	0	1,002	1,002	1,002	0	0	0	847	63	910	910
Departure	0	0	0	1,002	1,002	1,002	0	0	0	847	63	910	910
Total	0	0	0	2,004	2,004	2,004	0	0	0	1,694	126	1,820	1,820

Table C-1 - Existing Peak Hour PCE Volume Summary

AM Peak Hour							Afternoon Peak Hour						
Historical Counts	Growth Historical Yr to 2021	Historical + Growth (2021)	Existing COVID-19 Volumes	Adjusted Existing Volumes	Balanced 2021 Volumes		Historical Counts	Growth Historical Yr to 2021	Historical + Growth (2021)	Existing COVID-19 Volumes	Adjusted Growth for COVID-19	Adjusted Existing Volumes	Balanced 2021 Volumes
9 Wood Road/Van Buren Boulevard													
Historical Count Year: 2019													
NBL	332	13	345	360	360	360	0	0	0	248	19	267	267
NBT	466	19	485	423	485	485	0	0	0	329	25	354	354
NBR	276	11	287	258	287	287	0	0	0	195	15	210	210
SBL	79	3	82	82	82	82	0	0	0	96	7	103	103
SBT	391	16	407	401	407	407	0	0	0	263	20	283	283
SBR	127	5	132	163	163	163	0	0	0	191	15	206	206
EBL	120	5	125	133	133	133	0	0	0	144	11	155	155
EBT	819	33	852	778	852	852	0	0	0	1,003	76	1,079	1,079
EBR	304	12	316	265	316	316	0	0	0	185	14	199	199
WBL	371	15	386	415	415	415	0	0	0	191	15	206	206
WBT	1,143	46	1,189	937	1,189	1,189	0	0	0	1,106	84	1,190	1,190
WBR	143	6	149	86	149	149	0	0	0	82	6	88	88
North Leg													
Approach	597	24	621	646	652	652	0	0	0	550	42	592	592
Departure	729	30	759	642	767	767	0	0	0	555	42	597	597
Total	1,326	54	1,380	1,288	1,419	1,419	0	0	0	1,105	84	1,189	1,189
South Leg													
Approach	1,074	43	1,117	1,041	1,132	1,132	0	0	0	772	59	831	831
Departure	1,066	43	1,109	1,081	1,138	1,138	0	0	0	639	49	688	688
Total	2,140	86	2,226	2,122	2,270	2,270	0	0	0	1,411	108	1,519	1,519
East Leg													
Approach	1,657	67	1,724	1,438	1,753	1,753	0	0	0	1,379	105	1,484	1,484
Departure	1,174	47	1,221	1,118	1,221	1,221	0	0	0	1,294	98	1,392	1,392
Total	2,831	114	2,945	2,556	2,974	2,974	0	0	0	2,673	203	2,876	2,876
West Leg													
Approach	1,243	50	1,293	1,176	1,301	1,301	0	0	0	1,332	101	1,433	1,433
Departure	1,602	64	1,666	1,460	1,712	1,712	0	0	0	1,545	118	1,663	1,663
Total	2,845	114	2,959	2,636	3,013	3,013	0	0	0	2,877	219	3,096	3,096
Total Approaches													
Approach	4,571	184	4,755	4,301	4,838	4,838	0	0	0	4,033	307	4,340	4,340
Departure	4,571	184	4,755	4,301	4,838	4,838	0	0	0	4,033	307	4,340	4,340
Total	9,142	368	9,510	8,602	9,676	9,676	0	0	0	8,066	614	8,680	8,680

Table C-1 - Existing Peak Hour PCE Volume Summary

AM Peak Hour							Afternoon Peak Hour						
Historical Counts	Growth Historical Yr to 2021	Historical + Growth (2021)	Existing COVID-19 Volumes	Adjusted Existing Volumes	Balanced 2021 Volumes		Historical Counts	Growth Historical Yr to 2021	Historical + Growth (2021)	Existing COVID-19 Volumes	Adjusted Growth for COVID-19	Adjusted Existing Volumes	Balanced 2021 Volumes
10 Bountiful Street/Van Buren Boulevard													
Historical Count Year: N/A													
NBL	0	0	0	0	0		0	0	0	0	0	0	0
NBT	0	0	0	0	0		0	0	0	0	0	0	0
NBR	0	0	0	0	0		0	0	0	0	0	0	0
SBL	0	0	0	41	41	47	0	0	0	14	1	15	15
SBT	0	0	0	0	0	0	0	0	0	0	0	0	0
SBR	0	0	0	170	170	170	0	0	0	126	10	136	136
EBL	0	0	0	89	89	89	0	0	0	166	13	179	179
EBT	0	0	0	1,036	1,036	1,181	0	0	0	1,269	97	1,366	1,370
EBR	0	0	0	0	0	0	0	0	0	0	0	0	0
WBL	0	0	0	0	0	0	0	0	0	0	0	0	0
WBT	0	0	0	1,332	1,332	1,332	0	0	0	1,265	96	1,361	1,361
WBR	0	0	0	31	31	31	0	0	0	22	2	24	24
North Leg													
Approach	0	0	0	211	211	217	0	0	0	140	11	151	151
Departure	0	0	0	120	120	120	0	0	0	188	15	203	203
Total	0	0	0	331	331	337	0	0	0	328	26	354	354
South Leg													
Approach	0	0	0	0	0	0	0	0	0	0	0	0	0
Departure	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	0	0
East Leg													
Approach	0	0	0	1,363	1,363	1,363	0	0	0	1,287	98	1,385	1,385
Departure	0	0	0	1,077	1,077	1,228	0	0	0	1,283	98	1,381	1,385
Total	0	0	0	2,440	2,440	2,591	0	0	0	2,570	196	2,766	2,770
West Leg													
Approach	0	0	0	1,125	1,125	1,270	0	0	0	1,435	110	1,545	1,549
Departure	0	0	0	1,502	1,502	1,502	0	0	0	1,391	106	1,497	1,497
Total	0	0	0	2,627	2,627	2,772	0	0	0	2,826	216	3,042	3,046
Total Approaches													
Approach	0	0	0	2,699	2,699	2,850	0	0	0	2,862	219	3,081	3,085
Departure	0	0	0	2,699	2,699	2,850	0	0	0	2,862	219	3,081	3,085
Total	0	0	0	5,398	5,398	5,700	0	0	0	5,724	438	6,162	6,170

Table C-1 - Existing Peak Hour PCE Volume Summary

	AM Peak Hour						Afternoon Peak Hour						
	Historical Counts	Growth Historical Yr to 2021	Historical + Growth (2021)	Existing COVID-19 Volumes	Adjusted Existing Volumes	Balanced 2021 Volumes	Historical Counts	Growth Historical Yr to 2021	Historical + Growth (2021)	Existing COVID-19 Volumes	Adjusted Growth for COVID-19	Adjusted Existing Volumes	Balanced 2021 Volumes
11 Trautwein Road/Mission Grove Parkway													
Historical Count Year: 2019													
NBL	3	0	3	1	3	3	0	0	0	5	0	5	5
NBT	1,580	63	1,643	1,647	1,647	1,647	0	0	0	1,206	92	1,298	1,298
NBR	480	19	499	247	499	499	0	0	0	401	31	432	432
SBL	172	7	179	101	179	179	0	0	0	121	9	130	130
SBT	770	31	801	865	865	865	0	0	0	1,328	101	1,429	1,429
SBR	15	1	16	12	16	16	0	0	0	32	2	34	34
EBL	55	2	57	58	58	58	0	0	0	34	3	37	37
EBT	29	1	30	32	32	32	0	0	0	9	1	10	10
EBR	9	0	9	8	9	9	0	0	0	12	1	13	13
WBL	562	22	584	542	584	584	0	0	0	490	37	527	527
WBT	30	1	31	12	31	31	0	0	0	15	1	16	16
WBR	43	2	45	50	50	50	0	0	0	34	3	37	37
North Leg													
Approach	957	39	996	978	1,060	1,060	0	0	0	1,481	112	1,593	1,593
Departure	1,678	67	1,745	1,755	1,755	1,755	0	0	0	1,274	98	1,372	1,372
Total	2,635	106	2,741	2,733	2,815	2,815	0	0	0	2,755	210	2,965	2,965
South Leg													
Approach	2,063	82	2,145	1,895	2,149	2,149	0	0	0	1,612	123	1,735	1,735
Departure	1,341	53	1,394	1,415	1,458	1,458	0	0	0	1,830	139	1,969	1,969
Total	3,404	135	3,539	3,310	3,607	3,607	0	0	0	3,442	262	3,704	3,704
East Leg													
Approach	635	25	660	604	665	665	0	0	0	539	41	580	580
Departure	681	27	708	380	710	710	0	0	0	531	41	572	572
Total	1,316	52	1,368	984	1,375	1,375	0	0	0	1,070	82	1,152	1,152
West Leg													
Approach	93	3	96	98	99	99	0	0	0	55	5	60	60
Departure	48	2	50	25	50	50	0	0	0	52	3	55	55
Total	141	5	146	123	149	149	0	0	0	107	8	115	115
Total Approaches													
Approach	3,748	149	3,897	3,575	3,973	3,973	0	0	0	3,687	281	3,968	3,968
Departure	3,748	149	3,897	3,575	3,973	3,973	0	0	0	3,687	281	3,968	3,968
Total	7,496	298	7,794	7,150	7,946	7,946	0	0	0	7,374	562	7,936	7,936

Table C-1 - Existing Peak Hour PCE Volume Summary

	AM Peak Hour						Afternoon Peak Hour						
	Historical Counts	Growth Historical Yr to 2021	Historical + Growth (2021)	Existing COVID-19 Volumes	Adjusted Existing Volumes	Balanced 2021 Volumes	Historical Counts	Growth Historical Yr to 2021	Historical + Growth (2021)	Existing COVID-19 Volumes	Adjusted Growth for COVID-19	Adjusted Existing Volumes	Balanced 2021 Volumes
12 Trautwein Road/John F Kennedy Drive													
Historical Count Year: 2019													
NBL	181	7	188	138	188	199	0	0	0	77	6	83	75
NBT	1,680	67	1,747	1,536	1,747	1,846	0	0	0	1,176	90	1,266	1,148
NBR	68	3	71	64	71	75	0	0	0	58	4	62	56
SBL	9	0	9	9	9	9	0	0	0	10	1	11	11
SBT	789	32	821	816	821	761	0	0	0	1,125	86	1,211	1,436
SBR	563	23	586	579	586	586	0	0	0	552	42	594	594
EBL	525	21	546	455	546	546	0	0	0	499	38	537	537
EBT	47	2	49	42	49	49	0	0	0	45	3	48	48
EBR	74	3	77	58	77	71	0	0	0	71	5	76	90
WBL	104	4	108	82	108	100	0	0	0	24	2	26	31
WBT	53	2	55	52	55	55	0	0	0	17	1	18	18
WBR	39	2	41	37	41	41	0	0	0	24	2	26	26
North Leg													
Approach	1,361	55	1,416	1,404	1,416	1,356	0	0	0	1,687	129	1,816	2,041
Departure	2,244	90	2,334	2,028	2,334	2,433	0	0	0	1,699	130	1,829	1,711
Total	3,605	145	3,750	3,432	3,750	3,789	0	0	0	3,386	259	3,645	3,752
South Leg													
Approach	1,929	77	2,006	1,738	2,006	2,120	0	0	0	1,311	100	1,411	1,279
Departure	967	39	1,006	956	1,006	932	0	0	0	1,220	93	1,313	1,557
Total	2,896	116	3,012	2,694	3,012	3,052	0	0	0	2,531	193	2,724	2,836
East Leg													
Approach	196	8	204	171	204	196	0	0	0	65	5	70	75
Departure	124	5	129	115	129	133	0	0	0	113	8	121	115
Total	320	13	333	286	333	329	0	0	0	178	13	191	190
West Leg													
Approach	646	26	672	555	672	666	0	0	0	615	46	661	675
Departure	797	32	829	769	829	840	0	0	0	646	49	695	687
Total	1,443	58	1,501	1,324	1,501	1,506	0	0	0	1,261	95	1,356	1,362
Total Approaches													
Approach	4,132	166	4,298	3,868	4,298	4,338	0	0	0	3,678	280	3,958	4,070
Departure	4,132	166	4,298	3,868	4,298	4,338	0	0	0	3,678	280	3,958	4,070
Total	8,264	332	8,596	7,736	8,596	8,676	0	0	0	7,356	560	7,916	8,140

Table C-1 - Existing Peak Hour PCE Volume Summary

AM Peak Hour							Afternoon Peak Hour						
Historical Counts	Growth Historical Yr to 2021	Historical + Growth (2021)	Existing COVID-19 Volumes	Adjusted Existing Volumes	Balanced 2021 Volumes		Historical Counts	Growth Historical Yr to 2021	Historical + Growth (2021)	Existing COVID-19 Volumes	Adjusted Growth for COVID-19	Adjusted Existing Volumes	Balanced 2021 Volumes
13 Trautwein Road/Grove Community Drive													
Historical Count Year: N/A													
NBL	0	0	0	0	0		0	0	0	0	0	0	0
NBT	0	0	0	1,216	1,216	1,596	0	0	0	980	75	1,055	1,055
NBR	0	0	0	31	31	41	0	0	0	54	4	58	58
SBL	0	0	0	161	161	161	0	0	0	299	23	322	322
SBT	0	0	0	771	771	771	0	0	0	1,148	87	1,235	1,235
SBR	0	0	0	0	0	0	0	0	0	0	0	0	0
EBL	0	0	0	0	0	0	0	0	0	0	0	0	0
EBT	0	0	0	0	0	0	0	0	0	0	0	0	0
EBR	0	0	0	0	0	0	0	0	0	0	0	0	0
WBL	0	0	0	77	77	77	0	0	0	50	4	54	54
WBT	0	0	0	0	0	0	0	0	0	0	0	0	0
WBR	0	0	0	524	524	524	0	0	0	208	16	224	224
North Leg													
Approach	0	0	0	932	932	932	0	0	0	1,447	110	1,557	1,557
Departure	0	0	0	1,740	1,740	2,120	0	0	0	1,188	91	1,279	1,279
Total	0	0	0	2,672	2,672	3,052	0	0	0	2,635	201	2,836	2,836
South Leg													
Approach	0	0	0	1,247	1,247	1,637	0	0	0	1,034	79	1,113	1,113
Departure	0	0	0	848	848	848	0	0	0	1,198	91	1,289	1,289
Total	0	0	0	2,095	2,095	2,485	0	0	0	2,232	170	2,402	2,402
East Leg													
Approach	0	0	0	601	601	601	0	0	0	258	20	278	278
Departure	0	0	0	192	192	202	0	0	0	353	27	380	380
Total	0	0	0	793	793	803	0	0	0	611	47	658	658
West Leg													
Approach	0	0	0	0	0	0	0	0	0	0	0	0	0
Departure	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Approaches													
Approach	0	0	0	2,780	2,780	3,170	0	0	0	2,739	209	2,948	2,948
Departure	0	0	0	2,780	2,780	3,170	0	0	0	2,739	209	2,948	2,948
Total	0	0	0	5,560	5,560	6,340	0	0	0	5,478	418	5,896	5,896

Table C-1 - Existing Peak Hour PCE Volume Summary

AM Peak Hour							Afternoon Peak Hour						
Historical Counts	Growth Historical Yr to 2021	Historical + Growth (2021)	Existing COVID-19 Volumes	Adjusted Existing Volumes	Balanced 2021 Volumes		Historical Counts	Growth Historical Yr to 2021	Historical + Growth (2021)	Existing COVID-19 Volumes	Adjusted Growth for COVID-19	Adjusted Existing Volumes	Balanced 2021 Volumes
14 Trautwein Road/Orange Terrace Parkway													
Historical Count Year: 2019													
NBL	47	2	49	11	49	49	0	0	0	9	1	10	10
NBT	1,002	40	1,042	795	1,042	1,042	0	0	0	762	58	820	821
NBR	205	8	213	180	213	213	0	0	0	197	15	212	212
SBL	290	12	302	287	302	302	0	0	0	251	19	270	270
SBT	546	22	568	534	568	568	0	0	0	906	69	975	975
SBR	26	1	27	16	27	27	0	0	0	19	1	20	20
EBL	81	3	84	45	84	84	0	0	0	41	3	44	44
EBT	56	2	58	58	58	58	0	0	0	33	3	36	36
EBR	12	0	12	18	18	18	0	0	0	7	1	8	8
WBL	290	12	302	233	302	302	0	0	0	138	11	149	149
WBT	134	5	139	86	139	139	0	0	0	11	1	12	12
WBR	491	20	511	415	511	511	0	0	0	230	18	248	248
North Leg													
Approach	862	35	897	837	897	897	0	0	0	1,176	89	1,265	1,265
Departure	1,574	63	1,637	1,255	1,637	1,637	0	0	0	1,033	79	1,112	1,113
Total	2,436	98	2,534	2,092	2,534	2,534	0	0	0	2,209	168	2,377	2,378
South Leg													
Approach	1,254	50	1,304	986	1,304	1,304	0	0	0	968	74	1,042	1,043
Departure	848	34	882	785	888	888	0	0	0	1,051	81	1,132	1,132
Total	2,102	84	2,186	1,771	2,192	2,192	0	0	0	2,019	155	2,174	2,175
East Leg													
Approach	915	37	952	734	952	952	0	0	0	379	30	409	409
Departure	551	22	573	525	573	573	0	0	0	481	37	518	518
Total	1,466	59	1,525	1,259	1,525	1,525	0	0	0	860	67	927	927
West Leg													
Approach	149	5	154	121	160	160	0	0	0	81	7	88	88
Departure	207	8	215	113	215	215	0	0	0	39	3	42	42
Total	356	13	369	234	375	375	0	0	0	120	10	130	130
Total Approaches													
Approach	3,180	127	3,307	2,678	3,313	3,313	0	0	0	2,604	200	2,804	2,805
Departure	3,180	127	3,307	2,678	3,313	3,313	0	0	0	2,604	200	2,804	2,805
Total	6,360	254	6,614	5,356	6,626	6,626	0	0	0	5,208	400	5,608	5,610

Table C-1 - Existing Peak Hour PCE Volume Summary

AM Peak Hour							Afternoon Peak Hour						
Historical Counts	Growth Historical Yr to 2021	Historical + Growth (2021)	Existing COVID-19 Volumes	Adjusted Existing Volumes	Balanced 2021 Volumes		Historical Counts	Growth Historical Yr to 2021	Historical + Growth (2021)	Existing COVID-19 Volumes	Adjusted Growth for COVID-19	Adjusted Existing Volumes	Balanced 2021 Volumes
15 Trautwein Road/Shopping Center Driveway 1													
Historical Count Year: N/A													
NBL	0	0	0	44	44	44	0	0	0	113	9	122	122
NBT	0	0	0	913	913	913	0	0	0	750	57	807	807
NBR	0	0	0	6	6	6	0	0	0	13	1	14	14
SBL	0	0	0	68	68	68	0	0	0	161	12	173	173
SBT	0	0	0	633	633	633	0	0	0	715	54	769	769
SBR	0	0	0	15	15	15	0	0	0	111	8	119	119
EBL	0	0	0	32	32	32	0	0	0	113	9	122	122
EBT	0	0	0	9	9	9	0	0	0	36	3	39	39
EBR	0	0	0	23	23	23	0	0	0	79	6	85	85
WBL	0	0	0	23	23	23	0	0	0	64	5	69	69
WBT	0	0	0	7	7	7	0	0	0	26	2	28	28
WBR	0	0	0	48	48	48	0	0	0	73	6	79	79
North Leg													
Approach	0	0	0	716	716	716	0	0	0	987	74	1,061	1,061
Departure	0	0	0	993	993	993	0	0	0	936	72	1,008	1,008
Total	0	0	0	1,709	1,709	1,709	0	0	0	1,923	146	2,069	2,069
South Leg													
Approach	0	0	0	963	963	963	0	0	0	876	67	943	943
Departure	0	0	0	679	679	679	0	0	0	858	65	923	923
Total	0	0	0	1,642	1,642	1,642	0	0	0	1,734	132	1,866	1,866
East Leg													
Approach	0	0	0	78	78	78	0	0	0	163	13	176	176
Departure	0	0	0	83	83	83	0	0	0	210	16	226	226
Total	0	0	0	161	161	161	0	0	0	373	29	402	402
West Leg													
Approach	0	0	0	64	64	64	0	0	0	228	18	246	246
Departure	0	0	0	66	66	66	0	0	0	250	19	269	269
Total	0	0	0	130	130	130	0	0	0	478	37	515	515
Total Approaches													
Approach	0	0	0	1,821	1,821	1,821	0	0	0	2,254	172	2,426	2,426
Departure	0	0	0	1,821	1,821	1,821	0	0	0	2,254	172	2,426	2,426
Total	0	0	0	3,642	3,642	3,642	0	0	0	4,508	344	4,852	4,852

Table C-1 - Existing Peak Hour PCE Volume Summary

AM Peak Hour							Afternoon Peak Hour						
Historical Counts	Growth Historical Yr to 2021	Historical + Growth (2021)	Existing COVID-19 Volumes	Adjusted Existing Volumes	Balanced 2021 Volumes		Historical Counts	Growth Historical Yr to 2021	Historical + Growth (2021)	Existing COVID-19 Volumes	Adjusted Growth for COVID-19	Adjusted Existing Volumes	Balanced 2021 Volumes
16 Trautwein Road/Van Buren Boulevard													
Historical Count Year: 2018													
NBL	130	8	138	115	138	138	0	0	0	98	7	105	105
NBT	598	36	634	486	634	634	0	0	0	364	28	392	392
NBR	102	6	108	93	108	108	0	0	0	72	5	77	80
SBL	169	10	179	173	179	179	0	0	0	248	19	267	276
SBT	356	21	377	313	377	377	0	0	0	408	31	439	439
SBR	253	15	268	225	268	268	0	0	0	220	17	237	237
EBL	285	17	302	226	302	302	0	0	0	351	27	378	378
EBT	810	49	859	824	859	859	0	0	0	796	61	857	886
EBR	63	4	67	64	67	67	0	0	0	112	9	121	121
WBL	151	9	160	146	160	160	0	0	0	124	9	133	133
WBT	1,248	75	1,323	1,078	1,323	1,323	0	0	0	1,021	78	1,099	1,099
WBR	321	19	340	294	340	340	0	0	0	272	21	293	293
North Leg													
Approach	778	46	824	711	824	824	0	0	0	876	67	943	952
Departure	1,204	72	1,276	1,006	1,276	1,276	0	0	0	987	76	1,063	1,063
Total	1,982	118	2,100	1,717	2,100	2,100	0	0	0	1,863	143	2,006	2,015
South Leg													
Approach	830	50	880	694	880	880	0	0	0	534	40	574	577
Departure	570	34	604	523	604	604	0	0	0	644	49	693	693
Total	1,400	84	1,484	1,217	1,484	1,484	0	0	0	1,178	89	1,267	1,270
East Leg													
Approach	1,720	103	1,823	1,518	1,823	1,823	0	0	0	1,417	108	1,525	1,525
Departure	1,081	65	1,146	1,090	1,146	1,146	0	0	0	1,116	85	1,201	1,242
Total	2,801	168	2,969	2,608	2,969	2,969	0	0	0	2,533	193	2,726	2,767
West Leg													
Approach	1,158	70	1,228	1,114	1,228	1,228	0	0	0	1,259	97	1,356	1,385
Departure	1,631	98	1,729	1,418	1,729	1,729	0	0	0	1,339	102	1,441	1,441
Total	2,789	168	2,957	2,532	2,957	2,957	0	0	0	2,598	199	2,797	2,826
Total Approaches													
Approach	4,486	269	4,755	4,037	4,755	4,755	0	0	0	4,086	312	4,398	4,439
Departure	4,486	269	4,755	4,037	4,755	4,755	0	0	0	4,086	312	4,398	4,439
Total	8,972	538	9,510	8,074	9,510	9,510	0	0	0	8,172	624	8,796	8,878

Table C-1 - Existing Peak Hour PCE Volume Summary

AM Peak Hour							Afternoon Peak Hour						
Historical Counts	Growth Historical Yr to 2021	Historical + Growth (2021)	Existing COVID-19 Volumes	Adjusted Existing Volumes	Balanced 2021 Volumes		Historical Counts	Growth Historical Yr to 2021	Historical + Growth (2021)	Existing COVID-19 Volumes	Adjusted Growth for COVID-19	Adjusted Existing Volumes	Balanced 2021 Volumes
17 Shopping Center Driveway 2/Van Buren Boulevard													
Historical Count Year: N/A													
NBL	0	0	0	0	0		0	0	0	0	0	0	0
NBT	0	0	0	0	0		0	0	0	0	0	0	0
NBR	0	0	0	0	0		0	0	0	0	0	0	0
SBL	0	0	0	71	71	71	0	0	0	159	12	171	171
SBT	0	0	0	0	0	0	0	0	0	0	0	0	0
SBR	0	0	0	29	29	29	0	0	0	43	3	46	46
EBL	0	0	0	27	27	29	0	0	0	70	5	75	75
EBT	0	0	0	1,037	1,037	1,117	0	0	0	1,084	83	1,167	1,167
EBR	0	0	0	0	0	0	0	0	0	0	0	0	0
WBL	0	0	0	0	0	0	0	0	0	0	0	0	0
WBT	0	0	0	1,474	1,474	1,474	0	0	0	1,273	97	1,370	1,370
WBR	0	0	0	84	84	84	0	0	0	82	6	88	88
North Leg													
Approach	0	0	0	100	100	100	0	0	0	202	15	217	217
Departure	0	0	0	111	111	113	0	0	0	152	11	163	163
Total	0	0	0	211	211	213	0	0	0	354	26	380	380
South Leg													
Approach	0	0	0	0	0	0	0	0	0	0	0	0	0
Departure	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	0	0
East Leg													
Approach	0	0	0	1,558	1,558	1,558	0	0	0	1,355	103	1,458	1,458
Departure	0	0	0	1,108	1,108	1,188	0	0	0	1,243	95	1,338	1,338
Total	0	0	0	2,666	2,666	2,746	0	0	0	2,598	198	2,796	2,796
West Leg													
Approach	0	0	0	1,064	1,064	1,146	0	0	0	1,154	88	1,242	1,242
Departure	0	0	0	1,503	1,503	1,503	0	0	0	1,316	100	1,416	1,416
Total	0	0	0	2,567	2,567	2,649	0	0	0	2,470	188	2,658	2,658
Total Approaches													
Approach	0	0	0	2,722	2,722	2,804	0	0	0	2,711	206	2,917	2,917
Departure	0	0	0	2,722	2,722	2,804	0	0	0	2,711	206	2,917	2,917
Total	0	0	0	5,444	5,444	5,608	0	0	0	5,422	412	5,834	5,834

Table C-1 - Existing Peak Hour PCE Volume Summary

AM Peak Hour							Afternoon Peak Hour						
Historical Counts	Growth Historical Yr to 2021	Historical + Growth (2021)	Existing COVID-19 Volumes	Adjusted Existing Volumes	Balanced 2021 Volumes		Historical Counts	Growth Historical Yr to 2021	Historical + Growth (2021)	Existing COVID-19 Volumes	Adjusted Growth for COVID-19	Adjusted Existing Volumes	Balanced 2021 Volumes
18 Barton Street/Van Buren Boulevard													
Historical Count Year: 2019													
NBL	140	6	146	300	300	300	0	0	0	216	16	232	232
NBT	90	5	95	68	95	95	0	0	0	61	5	66	66
NBR	369	22	391	336	391	391	0	0	0	255	19	274	274
SBL	42	3	45	36	45	45	0	0	0	24	2	26	26
SBT	133	8	141	86	141	141	0	0	0	31	2	33	33
SBR	267	16	283	231	283	283	0	0	0	133	10	143	143
EBL	147	9	156	103	156	156	0	0	0	97	7	104	104
EBT	942	57	999	934	999	999	0	0	0	923	70	993	993
EBR	74	4	78	105	105	105	0	0	0	187	14	201	201
WBL	303	18	321	220	321	321	0	0	0	273	21	294	294
WBT	1,358	81	1,439	1,071	1,439	1,439	0	0	0	1,123	85	1,208	1,208
WBR	19	1	20	13	20	20	0	0	0	38	3	41	41
North Leg													
Approach	442	27	469	353	469	469	0	0	0	188	14	202	202
Departure	256	15	271	184	271	271	0	0	0	196	15	211	211
Total	698	42	740	537	740	740	0	0	0	384	29	413	413
South Leg													
Approach	599	33	632	704	786	786	0	0	0	532	40	572	572
Departure	510	30	540	411	567	567	0	0	0	491	37	528	528
Total	1,109	63	1,172	1,115	1,353	1,353	0	0	0	1,023	77	1,100	1,100
East Leg													
Approach	1,680	100	1,780	1,304	1,780	1,780	0	0	0	1,434	109	1,543	1,543
Departure	1,353	82	1,435	1,306	1,435	1,435	0	0	0	1,202	91	1,293	1,293
Total	3,033	182	3,215	2,610	3,215	3,215	0	0	0	2,636	200	2,836	2,836
West Leg													
Approach	1,163	70	1,233	1,142	1,260	1,260	0	0	0	1,207	91	1,298	1,298
Departure	1,765	103	1,868	1,602	2,022	2,022	0	0	0	1,472	111	1,583	1,583
Total	2,928	173	3,101	2,744	3,282	3,282	0	0	0	2,679	202	2,881	2,881
Total Approaches													
Approach	3,884	230	4,114	3,503	4,295	4,295	0	0	0	3,361	254	3,615	3,615
Departure	3,884	230	4,114	3,503	4,295	4,295	0	0	0	3,361	254	3,615	3,615
Total	7,768	460	8,228	7,006	8,590	8,590	0	0	0	6,722	508	7,230	7,230

Table C-1 - Existing Peak Hour PCE Volume Summary

AM Peak Hour							Afternoon Peak Hour						
Historical Counts	Growth Historical Yr to 2021	Historical + Growth (2021)	Existing COVID-19 Volumes	Adjusted Existing Volumes	Balanced 2021 Volumes		Historical Counts	Growth Historical Yr to 2021	Historical + Growth (2021)	Existing COVID-19 Volumes	Adjusted Growth for COVID-19	Adjusted Existing Volumes	Balanced 2021 Volumes
19 Project Driveway 1/Van Buren Boulevard													
Historical Count Year: N/A													
NBL	0	0	0	0	0		0	0	0	0	0	0	0
NBT	0	0	0	0	0		0	0	0	0	0	0	0
NBR	0	0	0	0	0		0	0	0	0	0	0	0
SBL	0	0	0	0	0		0	0	0	0	0	0	0
SBT	0	0	0	0	0		0	0	0	0	0	0	0
SBR	0	0	0	0	0		0	0	0	2	0	2	2
EBL	0	0	0	0	0		0	0	0	0	0	0	0
EBT	0	0	0	1,207	1,207	1,315	0	0	0	1,333	101	1,434	1,582
EBR	0	0	0	0	0	0	0	0	0	0	0	0	0
WBL	0	0	0	0	0	0	0	0	0	0	0	0	0
WBT	0	0	0	1,461	1,461	1,787	0	0	0	1,415	108	1,523	1,697
WBR	0	0	0	7	7	7	0	0	0	12	1	13	13
North Leg													
Approach	0	0	0	0	0	0	0	0	0	2	0	2	2
Departure	0	0	0	7	7	7	0	0	0	12	1	13	13
Total	0	0	0	7	7	7	0	0	0	14	1	15	15
South Leg													
Approach	0	0	0	0	0	0	0	0	0	0	0	0	0
Departure	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	0	0
East Leg													
Approach	0	0	0	1,468	1,468	1,794	0	0	0	1,427	109	1,536	1,710
Departure	0	0	0	1,207	1,207	1,315	0	0	0	1,333	101	1,434	1,582
Total	0	0	0	2,675	2,675	3,109	0	0	0	2,760	210	2,970	3,292
West Leg													
Approach	0	0	0	1,207	1,207	1,315	0	0	0	1,333	101	1,434	1,582
Departure	0	0	0	1,461	1,461	1,787	0	0	0	1,417	108	1,525	1,699
Total	0	0	0	2,668	2,668	3,102	0	0	0	2,750	209	2,959	3,281
Total Approaches													
Approach	0	0	0	2,675	2,675	3,109	0	0	0	2,762	210	2,972	3,294
Departure	0	0	0	2,675	2,675	3,109	0	0	0	2,762	210	2,972	3,294
Total	0	0	0	5,350	5,350	6,218	0	0	0	5,524	420	5,944	6,588

Table C-1 - Existing Peak Hour PCE Volume Summary

AM Peak Hour							Afternoon Peak Hour						
Historical Counts	Growth Historical Yr to 2021	Historical + Growth (2021)	Existing COVID-19 Volumes	Adjusted Existing Volumes	Balanced 2021 Volumes		Historical Counts	Growth Historical Yr to 2021	Historical + Growth (2021)	Existing COVID-19 Volumes	Adjusted Growth for COVID-19	Adjusted Existing Volumes	Balanced 2021 Volumes
20 Dauchy Avenue/Project Driveway 3													
Historical Count Year: N/A													
NBL	0	0	0	15	15	15	0	0	0	11	0	11	11
NBT	0	0	0	320	320	334	0	0	0	205	16	221	221
NBR	0	0	0	0	0	0	0	0	0	0	0	0	0
SBL	0	0	0	0	0	0	0	0	0	0	0	0	0
SBT	0	0	0	170	170	163	0	0	0	181	14	195	195
SBR	0	0	0	114	114	114	0	0	0	66	0	66	66
EBL	0	0	0	0	0	0	0	0	0	0	0	0	0
EBT	0	0	0	0	0	0	0	0	0	0	0	0	0
EBR	0	0	0	0	0	0	0	0	0	0	0	0	0
WBL	0	0	0	0	0	0	0	0	0	0	0	0	0
WBT	0	0	0	0	0	0	0	0	0	0	0	0	0
WBR	0	0	0	0	0	0	0	0	0	0	0	0	0
North Leg													
Approach	0	0	0	284	284	277	0	0	0	247	14	261	261
Departure	0	0	0	320	320	334	0	0	0	205	16	221	221
Total	0	0	0	604	604	611	0	0	0	452	30	482	482
South Leg													
Approach	0	0	0	335	335	349	0	0	0	216	16	232	232
Departure	0	0	0	170	170	163	0	0	0	181	14	195	195
Total	0	0	0	505	505	512	0	0	0	397	30	427	427
East Leg													
Approach	0	0	0	0	0	0	0	0	0	0	0	0	0
Departure	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	0	0
West Leg													
Approach	0	0	0	0	0	0	0	0	0	0	0	0	0
Departure	0	0	0	129	129	129	0	0	0	77	0	77	77
Total	0	0	0	129	129	129	0	0	0	77	0	77	77
Total Approaches													
Approach	0	0	0	619	619	626	0	0	0	463	30	493	493
Departure	0	0	0	619	619	626	0	0	0	463	30	493	493
Total	0	0	0	1,238	1,238	1,252	0	0	0	926	60	986	986

Table C-1 - Existing Peak Hour PCE Volume Summary

AM Peak Hour							Afternoon Peak Hour						
Historical Counts	Growth Historical Yr to 2021	Historical + Growth (2021)	Existing COVID-19 Volumes	Adjusted Existing Volumes	Balanced 2021 Volumes		Historical Counts	Growth Historical Yr to 2021	Historical + Growth (2021)	Existing COVID-19 Volumes	Adjusted Growth for COVID-19	Adjusted Existing Volumes	Balanced 2021 Volumes
21 Dauchy Avenue/Project Driveway 4													
Historical Count Year: N/A													
NBL	0	0	0	38	38	38	0	0	0	14	0	14	14
NBT	0	0	0	206	206	225	0	0	0	104	8	112	119
NBR	0	0	0	0	0	0	0	0	0	0	0	0	0
SBL	0	0	0	0	0	0	0	0	0	0	0	0	0
SBT	0	0	0	120	120	117	0	0	0	166	13	179	182
SBR	0	0	0	46	46	46	0	0	0	13	0	13	13
EBL	0	0	0	125	125	125	0	0	0	106	0	106	106
EBT	0	0	0	0	0	0	0	0	0	0	0	0	0
EBR	0	0	0	41	41	41	0	0	0	42	0	42	42
WBL	0	0	0	0	0	0	0	0	0	0	0	0	0
WBT	0	0	0	0	0	0	0	0	0	0	0	0	0
WBR	0	0	0	0	0	0	0	0	0	0	0	0	0
North Leg													
Approach	0	0	0	166	166	163	0	0	0	179	13	192	195
Departure	0	0	0	331	331	350	0	0	0	210	8	218	225
Total	0	0	0	497	497	513	0	0	0	389	21	410	420
South Leg													
Approach	0	0	0	244	244	263	0	0	0	118	8	126	133
Departure	0	0	0	161	161	158	0	0	0	208	13	221	224
Total	0	0	0	405	405	421	0	0	0	326	21	347	357
East Leg													
Approach	0	0	0	0	0	0	0	0	0	0	0	0	0
Departure	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	0	0
West Leg													
Approach	0	0	0	166	166	166	0	0	0	148	0	148	148
Departure	0	0	0	84	84	84	0	0	0	27	0	27	27
Total	0	0	0	250	250	250	0	0	0	175	0	175	175
Total Approaches													
Approach	0	0	0	576	576	592	0	0	0	445	21	466	476
Departure	0	0	0	576	576	592	0	0	0	445	21	466	476
Total	0	0	0	1,152	1,152	1,184	0	0	0	890	42	932	952

Table C-1 - Existing Peak Hour PCE Volume Summary

AM Peak Hour							Afternoon Peak Hour						
Historical Counts	Growth Historical Yr to 2021	Historical + Growth (2021)	Existing COVID-19 Volumes	Adjusted Existing Volumes	Balanced 2021 Volumes		Historical Counts	Growth Historical Yr to 2021	Historical + Growth (2021)	Existing COVID-19 Volumes	Adjusted Growth for COVID-19	Adjusted Existing Volumes	Balanced 2021 Volumes
22 Dauchy Avenue/Project Driveway 5													
Historical Count Year: N/A													
NBL	0	0	0	0	0	0	0	0	0	1	0	1	1
NBT	0	0	0	265	265	265	0	0	0	113	9	122	130
NBR	0	0	0	0	0	0	0	0	0	0	0	0	0
SBL	0	0	0	0	0	0	0	0	0	0	0	0	0
SBT	0	0	0	156	156	156	0	0	0	205	16	221	224
SBR	0	0	0	1	1	1	0	0	0	0	0	0	0
EBL	0	0	0	1	1	1	0	0	0	3	0	3	3
EBT	0	0	0	0	0	0	0	0	0	0	0	0	0
EBR	0	0	0	0	0	0	0	0	0	0	0	0	0
WBL	0	0	0	0	0	0	0	0	0	0	0	0	0
WBT	0	0	0	0	0	0	0	0	0	0	0	0	0
WBR	0	0	0	0	0	0	0	0	0	0	0	0	0
North Leg													
Approach	0	0	0	157	157	157	0	0	0	205	16	221	224
Departure	0	0	0	266	266	266	0	0	0	116	9	125	133
Total	0	0	0	423	423	423	0	0	0	321	25	346	357
South Leg													
Approach	0	0	0	265	265	265	0	0	0	114	9	123	131
Departure	0	0	0	156	156	156	0	0	0	205	16	221	224
Total	0	0	0	421	421	421	0	0	0	319	25	344	355
East Leg													
Approach	0	0	0	0	0	0	0	0	0	0	0	0	0
Departure	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	0	0
West Leg													
Approach	0	0	0	1	1	1	0	0	0	3	0	3	3
Departure	0	0	0	1	1	1	0	0	0	1	0	1	1
Total	0	0	0	2	2	2	0	0	0	4	0	4	4
Total Approaches													
Approach	0	0	0	423	423	423	0	0	0	322	25	347	358
Departure	0	0	0	423	423	423	0	0	0	322	25	347	358
Total	0	0	0	846	846	846	0	0	0	644	50	694	716

Table C-2 - Opening Year (2029) Peak Hour PCE Volume Summary

	AM Peak Hour						
	Existing (2021) PCE	2021- 2029 Growth	Project Completion 2029	Cumulative Project Trips	OY Without Project	Project Trips	OY With Project
1 Washington Street/Van Buren Boulevard							
NBL	146	23	169	21	190	0	190
NBT	533	85	618	19	637	0	637
NBR	125	20	145	73	218	14	232
SBL	308	49	357	208	565	12	577
SBT	147	24	171	6	177	0	177
SBR	76	12	88	0	88	0	88
EBL	134	21	155	0	155	0	155
EBT	902	144	1,046	190	1,236	19	1,255
EBR	120	19	139	12	151	0	151
WBL	81	13	94	45	139	10	149
WBT	1,291	207	1,498	139	1,637	14	1,651
WBR	607	97	704	172	876	9	885
North Leg							
Approach	531	85	616	214	830	12	842
Departure	1,274	203	1,477	191	1,668	9	1,677
Total	1,805	288	2,093	405	2,498	21	2,519
South Leg							
Approach	804	128	932	113	1,045	14	1,059
Departure	348	56	404	63	467	10	477
Total	1,152	184	1,336	176	1,512	24	1,536
East Leg							
Approach	1,979	317	2,296	356	2,652	33	2,685
Departure	1,335	213	1,548	471	2,019	45	2,064
Total	3,314	530	3,844	827	4,671	78	4,749
West Leg							
Approach	1,156	184	1,340	202	1,542	19	1,561
Departure	1,513	242	1,755	160	1,915	14	1,929
Total	2,669	426	3,095	362	3,457	33	3,490
Total Approaches							
Approach	4,470	714	5,184	885	6,069	78	6,147
Departure	4,470	714	5,184	885	6,069	78	6,147
Total	8,940	1,428	10,368	1,770	12,138	156	12,294

Table C-2 - Opening Year (2029) Peak Hour PCE Volume Summary

	AM Peak Hour						
	Existing (2021) PCE	2021- 2029 Growth	Project Completion 2029	Cumulative Project Trips	OY Without Project	Project Trips	OY With Project
2 Chicago Avenue - Alta Cresta Avenue/Van Buren Boulevard							
NBL	128	20	148	22	170	0	170
NBT	2	0	2	21	23	0	23
NBR	89	14	103	7	110	3	113
SBL	3	0	3	107	110	0	110
SBT	2	0	2	26	28	0	28
SBR	5	1	6	76	82	0	82
EBL	25	4	29	56	85	0	85
EBT	1,252	200	1,452	417	1,869	52	1,921
EBR	58	9	67	20	87	0	87
WBL	69	11	80	4	84	3	87
WBT	1,822	292	2,114	293	2,407	39	2,446
WBR	7	1	8	25	33	0	33
North Leg							
Approach	10	1	11	209	220	0	220
Departure	34	5	39	102	141	0	141
Total	44	6	50	311	361	0	361
South Leg							
Approach	219	34	253	50	303	3	306
Departure	129	20	149	50	199	3	202
Total	348	54	402	100	502	6	508
East Leg							
Approach	1,898	304	2,202	322	2,524	42	2,566
Departure	1,344	214	1,558	531	2,089	55	2,144
Total	3,242	518	3,760	853	4,613	97	4,710
West Leg							
Approach	1,335	213	1,548	493	2,041	52	2,093
Departure	1,955	313	2,268	391	2,659	39	2,698
Total	3,290	526	3,816	884	4,700	91	4,791
Total Approaches							
Approach	3,462	552	4,014	1,074	5,088	97	5,185
Departure	3,462	552	4,014	1,074	5,088	97	5,185
Total	6,924	1,104	8,028	2,148	10,176	194	10,370

Table C-2 - Opening Year (2029) Peak Hour PCE Volume Summary

	AM Peak Hour						
	Existing (2021) PCE	2021- 2029 Growth	Project Completion 2029	Cumulative Project Trips	OY Without Project	Project Trips	OY With Project
3 Van Buren Village Driveway/Van Buren Boulevard							
NBL	0	0	0	38	38	0	38
NBT	0	0	0	0	0	0	0
NBR	0	0	0	114	114	0	114
SBL	0	0	0	0	0	0	0
SBT	0	0	0	0	0	0	0
SBR	0	0	0	0	0	0	0
EBL	0	0	0	0	0	0	0
EBT	1,344	215	1,559	485	2,044	55	2,099
EBR	0	0	0	46	46	0	46
WBL	0	0	0	138	138	0	138
WBT	1,898	304	2,202	297	2,499	42	2,541
WBR	0	0	0	0	0	0	0
North Leg							
Approach	0	0	0	0	0	0	0
Departure	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0
South Leg							
Approach	0	0	0	152	152	0	152
Departure	0	0	0	184	184	0	184
Total	0	0	0	336	336	0	336
East Leg							
Approach	1,898	304	2,202	435	2,637	42	2,679
Departure	1,344	215	1,559	599	2,158	55	2,213
Total	3,242	519	3,761	1,034	4,795	97	4,892
West Leg							
Approach	1,344	215	1,559	531	2,090	55	2,145
Departure	1,898	304	2,202	335	2,537	42	2,579
Total	3,242	519	3,761	866	4,627	97	4,724
Total Approaches							
Approach	3,242	519	3,761	1,118	4,879	97	4,976
Departure	3,242	519	3,761	1,118	4,879	97	4,976
Total	6,484	1,038	7,522	2,236	9,758	194	9,952

Table C-2 - Opening Year (2029) Peak Hour PCE Volume Summary

	AM Peak Hour						
	Existing (2021) PCE	2021- 2029 Growth	Project Completion 2029	Cumulative Project Trips	OY Without Project	Project Trips	OY With Project
4 Little Court/Van Buren Boulevard							
NBL	0	0	0	0	0	0	0
NBT	0	0	0	0	0	0	0
NBR	7	1	8	0	8	0	8
SBL	0	0	0	0	0	0	0
SBT	0	0	0	0	0	0	0
SBR	0	0	0	0	0	0	0
EBL	0	0	0	0	0	0	0
EBT	1,343	215	1,558	599	2,157	55	2,212
EBR	1	0	1	0	1	0	1
WBL	0	0	0	0	0	0	0
WBT	1,898	304	2,202	435	2,637	42	2,679
WBR	0	0	0	0	0	0	0
North Leg							
Approach	0	0	0	0	0	0	0
Departure	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0
South Leg							
Approach	7	1	8	0	8	0	8
Departure	1	0	1	0	1	0	1
Total	8	1	9	0	9	0	9
East Leg							
Approach	1,898	304	2,202	435	2,637	42	2,679
Departure	1,350	216	1,566	599	2,165	55	2,220
Total	3,248	520	3,768	1,034	4,802	97	4,899
West Leg							
Approach	1,344	215	1,559	599	2,158	55	2,213
Departure	1,898	304	2,202	435	2,637	42	2,679
Total	3,242	519	3,761	1,034	4,795	97	4,892
Total Approaches							
Approach	3,249	520	3,769	1,034	4,803	97	4,900
Departure	3,249	520	3,769	1,034	4,803	97	4,900
Total	6,498	1,040	7,538	2,068	9,606	194	9,800

Table C-2 - Opening Year (2029) Peak Hour PCE Volume Summary

	AM Peak Hour						
	Existing (2021) PCE	2021- 2029 Growth	Project Completion 2029	Cumulative Project Trips	OY Without Project	Project Trips	OY With Project
5 Ridgeway Avenue/Van Buren Boulevard							
NBL	0	0	0	0	0	0	0
NBT	0	0	0	0	0	0	0
NBR	0	0	0	0	0	0	0
SBL	1	0	1	1	2	0	2
SBT	0	0	0	0	0	0	0
SBR	119	19	138	7	145	0	145
EBL	36	6	42	7	49	0	49
EBT	1,314	210	1,524	592	2,116	55	2,171
EBR	0	0	0	0	0	0	0
WBL	0	0	0	0	0	0	0
WBT	1,779	285	2,064	427	2,491	42	2,533
WBR	8	1	9	0	9	0	9
North Leg							
Approach	120	19	139	8	147	0	147
Departure	44	7	51	7	58	0	58
Total	164	26	190	15	205	0	205
South Leg							
Approach	0	0	0	0	0	0	0
Departure	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0
East Leg							
Approach	1,787	286	2,073	427	2,500	42	2,542
Departure	1,315	210	1,525	593	2,118	55	2,173
Total	3,102	496	3,598	1,020	4,618	97	4,715
West Leg							
Approach	1,350	216	1,566	599	2,165	55	2,220
Departure	1,898	304	2,202	434	2,636	42	2,678
Total	3,248	520	3,768	1,033	4,801	97	4,898
Total Approaches							
Approach	3,257	521	3,778	1,034	4,812	97	4,909
Departure	3,257	521	3,778	1,034	4,812	97	4,909
Total	6,514	1,042	7,556	2,068	9,624	194	9,818

Table C-2 - Opening Year (2029) Peak Hour PCE Volume Summary

	AM Peak Hour						
	Existing (2021) PCE	2021- 2029 Growth	Project Completion 2029	Cumulative Project Trips	OY Without Project	Project Trips	OY With Project
6 Dauchy Avenue/Van Buren Boulevard							
NBL	239	38	277	46	323	42	365
NBT	35	6	41	7	48	1	49
NBR	145	23	168	13	181	73	254
SBL	37	6	43	48	91	0	91
SBT	45	7	52	9	61	2	63
SBR	23	4	27	12	39	0	39
EBL	19	3	22	12	34	0	34
EBT	1,073	172	1,245	540	1,785	0	1,785
EBR	223	36	259	44	303	55	358
WBL	156	25	181	10	191	97	288
WBT	1,532	245	1,777	378	2,155	0	2,155
WBR	15	2	17	36	53	0	53
North Leg							
Approach	105	17	122	69	191	2	193
Departure	69	11	80	55	135	1	136
Total	174	28	202	124	326	3	329
South Leg							
Approach	419	67	486	66	552	116	668
Departure	424	68	492	63	555	154	709
Total	843	135	978	129	1,107	270	1,377
East Leg							
Approach	1,703	272	1,975	424	2,399	97	2,496
Departure	1,255	201	1,456	601	2,057	73	2,130
Total	2,958	473	3,431	1,025	4,456	170	4,626
West Leg							
Approach	1,315	211	1,526	596	2,122	55	2,177
Departure	1,794	287	2,081	436	2,517	42	2,559
Total	3,109	498	3,607	1,032	4,639	97	4,736
Total Approaches							
Approach	3,542	567	4,109	1,155	5,264	270	5,534
Departure	3,542	567	4,109	1,155	5,264	270	5,534
Total	7,084	1,134	8,218	2,310	10,528	540	11,068

Table C-2 - Opening Year (2029) Peak Hour PCE Volume Summary

	AM Peak Hour						
	Existing (2021) PCE	2021- 2029 Growth	Project Completion 2029	Cumulative Project Trips	OY Without Project	Project Trips	OY With Project
7 Dauchy Avenue/Project Driveway 2 - Ardenwood Lane							
NBL	34	0	34	0	34	9	43
NBT	295	47	342	54	396	63	459
NBR	4	1	5	0	5	0	5
SBL	8	1	9	8	17	0	17
SBT	247	40	287	44	331	83	414
SBR	143	0	143	0	143	71	214
EBL	112	0	112	0	112	54	166
EBT	0	0	0	0	0	0	0
EBR	27	0	27	0	27	7	34
WBL	4	1	5	0	5	0	5
WBT	0	0	0	0	0	0	0
WBR	37	6	43	10	53	0	53
North Leg							
Approach	398	41	439	52	491	154	645
Departure	444	53	497	64	561	117	678
Total	842	94	936	116	1,052	271	1,323
South Leg							
Approach	333	48	381	54	435	72	507
Departure	278	41	319	44	363	90	453
Total	611	89	700	98	798	162	960
East Leg							
Approach	41	7	48	10	58	0	58
Departure	12	2	14	8	22	0	22
Total	53	9	62	18	80	0	80
West Leg							
Approach	139	0	139	0	139	61	200
Departure	177	0	177	0	177	80	257
Total	316	0	316	0	316	141	457
Total Approaches							
Approach	911	96	1,007	116	1,123	287	1,410
Departure	911	96	1,007	116	1,123	287	1,410
Total	1,822	192	2,014	232	2,246	574	2,820

Table C-2 - Opening Year (2029) Peak Hour PCE Volume Summary

	AM Peak Hour						
	Existing (2021) PCE	2021- 2029 Growth	Project Completion 2029	Cumulative Project Trips	OY Without Project	Project Trips	OY With Project
8 Dauchy Avenue - Taft Street/Krameria Avenue							
NBL	14	2	16	0	16	0	16
NBT	15	2	17	15	32	3	35
NBR	8	1	9	0	9	0	9
SBL	76	12	88	10	98	12	110
SBT	6	1	7	8	15	3	18
SBR	33	5	38	1	39	0	39
EBL	39	6	45	1	46	0	46
EBT	339	54	393	0	393	0	393
EBR	2	0	2	0	2	0	2
WBL	1	0	1	0	1	0	1
WBT	383	61	444	0	444	0	444
WBR	86	14	100	10	110	15	125
North Leg							
Approach	115	18	133	19	152	15	167
Departure	140	22	162	26	188	18	206
Total	255	40	295	45	340	33	373
South Leg							
Approach	37	5	42	15	57	3	60
Departure	9	1	10	8	18	3	21
Total	46	6	52	23	75	6	81
East Leg							
Approach	470	75	545	10	555	15	570
Departure	423	67	490	10	500	12	512
Total	893	142	1,035	20	1,055	27	1,082
West Leg							
Approach	380	60	440	1	441	0	441
Departure	430	68	498	1	499	0	499
Total	810	128	938	2	940	0	940
Total Approaches							
Approach	1,002	158	1,160	45	1,205	33	1,238
Departure	1,002	158	1,160	45	1,205	33	1,238
Total	2,004	316	2,320	90	2,410	66	2,476

Table C-2 - Opening Year (2029) Peak Hour PCE Volume Summary

	AM Peak Hour						
	Existing (2021) PCE	2021- 2029 Growth	Project Completion 2029	Cumulative Project Trips	OY Without Project	Project Trips	OY With Project
9 Wood Road/Van Buren Boulevard							
NBL	360	58	418	84	502	14	516
NBT	485	78	563	1	564	0	564
NBR	287	46	333	32	365	0	365
SBL	82	13	95	18	113	0	113
SBT	407	65	472	0	472	0	472
SBR	163	26	189	23	212	2	214
EBL	133	21	154	19	173	1	174
EBT	852	136	988	493	1,481	62	1,543
EBR	316	51	367	74	441	10	451
WBL	415	66	481	16	497	0	497
WBT	1,189	190	1,379	339	1,718	81	1,799
WBR	149	24	173	6	179	0	179
North Leg							
Approach	652	104	756	41	797	2	799
Departure	767	123	890	26	916	1	917
Total	1,419	227	1,646	67	1,713	3	1,716
South Leg							
Approach	1,132	182	1,314	117	1,431	14	1,445
Departure	1,138	182	1,320	90	1,410	10	1,420
Total	2,270	364	2,634	207	2,841	24	2,865
East Leg							
Approach	1,753	280	2,033	361	2,394	81	2,475
Departure	1,221	195	1,416	543	1,959	62	2,021
Total	2,974	475	3,449	904	4,353	143	4,496
West Leg							
Approach	1,301	208	1,509	586	2,095	73	2,168
Departure	1,712	274	1,986	446	2,432	97	2,529
Total	3,013	482	3,495	1,032	4,527	170	4,697
Total Approaches							
Approach	4,838	774	5,612	1,105	6,717	170	6,887
Departure	4,838	774	5,612	1,105	6,717	170	6,887
Total	9,676	1,548	11,224	2,210	13,434	340	13,774

Table C-2 - Opening Year (2029) Peak Hour PCE Volume Summary

	AM Peak Hour						
	Existing (2021) PCE	2021- 2029 Growth	Project Completion 2029	Cumulative Project Trips	OY Without Project	Project Trips	OY With Project
10 Bountiful Street/Van Buren Boulevard							
NBL	0	0	0	0	0	0	0
NBT	0	0	0	0	0	0	0
NBR	0	0	0	1	1	0	1
SBL	47	8	55	0	55	0	55
SBT	0	0	0	0	0	0	0
SBR	170	27	197	55	252	2	254
EBL	89	14	103	59	162	1	163
EBT	1,181	189	1,370	486	1,856	60	1,916
EBR	0	0	0	0	0	0	0
WBL	0	0	0	0	0	0	0
WBT	1,332	213	1,545	302	1,847	79	1,926
WBR	31	5	36	0	36	0	36
North Leg							
Approach	217	35	252	55	307	2	309
Departure	120	19	139	59	198	1	199
Total	337	54	391	114	505	3	508
South Leg							
Approach	0	0	0	1	1	0	1
Departure	0	0	0	0	0	0	0
Total	0	0	0	1	1	0	1
East Leg							
Approach	1,363	218	1,581	302	1,883	79	1,962
Departure	1,228	197	1,425	487	1,912	60	1,972
Total	2,591	415	3,006	789	3,795	139	3,934
West Leg							
Approach	1,270	203	1,473	545	2,018	61	2,079
Departure	1,502	240	1,742	357	2,099	81	2,180
Total	2,772	443	3,215	902	4,117	142	4,259
Total Approaches							
Approach	2,850	456	3,306	903	4,209	142	4,351
Departure	2,850	456	3,306	903	4,209	142	4,351
Total	5,700	912	6,612	1,806	8,418	284	8,702

Table C-2 - Opening Year (2029) Peak Hour PCE Volume Summary

	AM Peak Hour						
	Existing (2021) PCE	2021- 2029 Growth	Project Completion 2029	Cumulative Project Trips	OY Without Project	Project Trips	OY With Project
11 Trautwein Road/Mission Grove Parkway							
NBL	3	0	3	0	3	0	3
NBT	1,647	264	1,911	77	1,988	12	2,000
NBR	499	80	579	25	604	12	616
SBL	179	29	208	0	208	0	208
SBT	865	138	1,003	201	1,204	15	1,219
SBR	16	3	19	0	19	0	19
EBL	58	9	67	0	67	0	67
EBT	32	5	37	0	37	0	37
EBR	9	1	10	0	10	0	10
WBL	584	93	677	28	705	15	720
WBT	31	5	36	0	36	0	36
WBR	50	8	58	0	58	0	58
North Leg							
Approach	1,060	170	1,230	201	1,431	15	1,446
Departure	1,755	281	2,036	77	2,113	12	2,125
Total	2,815	451	3,266	278	3,544	27	3,571
South Leg							
Approach	2,149	344	2,493	102	2,595	24	2,619
Departure	1,458	232	1,690	229	1,919	30	1,949
Total	3,607	576	4,183	331	4,514	54	4,568
East Leg							
Approach	665	106	771	28	799	15	814
Departure	710	114	824	25	849	12	861
Total	1,375	220	1,595	53	1,648	27	1,675
West Leg							
Approach	99	15	114	0	114	0	114
Departure	50	8	58	0	58	0	58
Total	149	23	172	0	172	0	172
Total Approaches							
Approach	3,973	635	4,608	331	4,939	54	4,993
Departure	3,973	635	4,608	331	4,939	54	4,993
Total	7,946	1,270	9,216	662	9,878	108	9,986

Table C-2 - Opening Year (2029) Peak Hour PCE Volume Summary

	AM Peak Hour						
	Existing (2021) PCE	2021- 2029 Growth	Project Completion 2029	Cumulative Project Trips	OY Without Project	Project Trips	OY With Project
12 Trautwein Road/John F Kennedy Drive							
NBL	199	32	231	8	239	0	239
NBT	1,846	295	2,141	98	2,239	24	2,263
NBR	75	12	87	11	98	0	98
SBL	9	1	10	0	10	0	10
SBT	761	122	883	226	1,109	31	1,140
SBR	586	94	680	0	680	0	680
EBL	546	87	633	1	634	0	634
EBT	49	8	57	0	57	0	57
EBR	71	11	82	23	105	0	105
WBL	100	16	116	24	140	0	140
WBT	55	9	64	0	64	0	64
WBR	41	7	48	0	48	0	48
North Leg							
Approach	1,356	217	1,573	226	1,799	31	1,830
Departure	2,433	389	2,822	99	2,921	24	2,945
Total	3,789	606	4,395	325	4,720	55	4,775
South Leg							
Approach	2,120	339	2,459	117	2,576	24	2,600
Departure	932	149	1,081	273	1,354	31	1,385
Total	3,052	488	3,540	390	3,930	55	3,985
East Leg							
Approach	196	32	228	24	252	0	252
Departure	133	21	154	11	165	0	165
Total	329	53	382	35	417	0	417
West Leg							
Approach	666	106	772	24	796	0	796
Departure	840	135	975	8	983	0	983
Total	1,506	241	1,747	32	1,779	0	1,779
Total Approaches							
Approach	4,338	694	5,032	391	5,423	55	5,478
Departure	4,338	694	5,032	391	5,423	55	5,478
Total	8,676	1,388	10,064	782	10,846	110	10,956

Table C-2 - Opening Year (2029) Peak Hour PCE Volume Summary

	AM Peak Hour						
	Existing (2021) PCE	2021- 2029 Growth	Project Completion 2029	Cumulative Project Trips	OY Without Project	Project Trips	OY With Project
13 Trautwein Road/Grove Community Drive							
NBL	0	0	0	0	0	0	0
NBT	1,596	255	1,851	117	1,968	24	1,992
NBR	41	7	48	17	65	0	65
SBL	161	26	187	0	187	0	187
SBT	771	123	894	271	1,165	31	1,196
SBR	0	0	0	0	0	0	0
EBL	0	0	0	0	0	0	0
EBT	0	0	0	0	0	0	0
EBR	0	0	0	0	0	0	0
WBL	77	12	89	22	111	0	111
WBT	0	0	0	0	0	0	0
WBR	524	84	608	0	608	0	608
North Leg							
Approach	932	149	1,081	271	1,352	31	1,383
Departure	2,120	339	2,459	117	2,576	24	2,600
Total	3,052	488	3,540	388	3,928	55	3,983
South Leg							
Approach	1,637	262	1,899	134	2,033	24	2,057
Departure	848	135	983	293	1,276	31	1,307
Total	2,485	397	2,882	427	3,309	55	3,364
East Leg							
Approach	601	96	697	22	719	0	719
Departure	202	33	235	17	252	0	252
Total	803	129	932	39	971	0	971
West Leg							
Approach	0	0	0	0	0	0	0
Departure	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0
Total Approaches							
Approach	3,170	507	3,677	427	4,104	55	4,159
Departure	3,170	507	3,677	427	4,104	55	4,159
Total	6,340	1,014	7,354	854	8,208	110	8,318

Table C-2 - Opening Year (2029) Peak Hour PCE Volume Summary

	AM Peak Hour						
	Existing (2021) PCE	2021- 2029 Growth	Project Completion 2029	Cumulative Project Trips	OY Without Project	Project Trips	OY With Project
14 Trautwein Road/Orange Terrace Parkway							
NBL	49	8	57	11	68	0	68
NBT	1,042	167	1,209	133	1,342	24	1,366
NBR	213	34	247	20	267	9	276
SBL	302	48	350	0	350	0	350
SBT	568	91	659	293	952	31	983
SBR	27	4	31	0	31	0	31
EBL	84	13	97	0	97	0	97
EBT	58	9	67	0	67	0	67
EBR	18	3	21	24	45	0	45
WBL	302	48	350	26	376	12	388
WBT	139	22	161	0	161	0	161
WBR	511	82	593	0	593	0	593
North Leg							
Approach	897	143	1,040	293	1,333	31	1,364
Departure	1,637	262	1,899	133	2,032	24	2,056
Total	2,534	405	2,939	426	3,365	55	3,420
South Leg							
Approach	1,304	209	1,513	164	1,677	33	1,710
Departure	888	142	1,030	343	1,373	43	1,416
Total	2,192	351	2,543	507	3,050	76	3,126
East Leg							
Approach	952	152	1,104	26	1,130	12	1,142
Departure	573	91	664	20	684	9	693
Total	1,525	243	1,768	46	1,814	21	1,835
West Leg							
Approach	160	25	185	24	209	0	209
Departure	215	34	249	11	260	0	260
Total	375	59	434	35	469	0	469
Total Approaches							
Approach	3,313	529	3,842	507	4,349	76	4,425
Departure	3,313	529	3,842	507	4,349	76	4,425
Total	6,626	1,058	7,684	1,014	8,698	152	8,850

Table C-2 - Opening Year (2029) Peak Hour PCE Volume Summary

	AM Peak Hour						
	Existing (2021) PCE	2021- 2029 Growth	Project Completion 2029	Cumulative Project Trips	OY Without Project	Project Trips	OY With Project
15 Trautwein Road/Shopping Center Driveway 1							
NBL	44	7	51	34	85	0	85
NBT	913	146	1,059	139	1,198	33	1,231
NBR	6	1	7	15	22	0	22
SBL	68	11	79	0	79	0	79
SBT	633	101	734	313	1,047	43	1,090
SBR	15	2	17	27	44	0	44
EBL	32	5	37	25	62	0	62
EBT	9	1	10	0	10	0	10
EBR	23	4	27	28	55	0	55
WBL	23	4	27	5	32	0	32
WBT	7	1	8	0	8	0	8
WBR	48	8	56	0	56	0	56
North Leg							
Approach	716	114	830	340	1,170	43	1,213
Departure	993	159	1,152	164	1,316	33	1,349
Total	1,709	273	1,982	504	2,486	76	2,562
South Leg							
Approach	963	154	1,117	188	1,305	33	1,338
Departure	679	109	788	346	1,134	43	1,177
Total	1,642	263	1,905	534	2,439	76	2,515
East Leg							
Approach	78	13	91	5	96	0	96
Departure	83	13	96	15	111	0	111
Total	161	26	187	20	207	0	207
West Leg							
Approach	64	10	74	53	127	0	127
Departure	66	10	76	61	137	0	137
Total	130	20	150	114	264	0	264
Total Approaches							
Approach	1,821	291	2,112	586	2,698	76	2,774
Departure	1,821	291	2,112	586	2,698	76	2,774
Total	3,642	582	4,224	1,172	5,396	152	5,548

Table C-2 - Opening Year (2029) Peak Hour PCE Volume Summary

	AM Peak Hour						
	Existing (2021) PCE	2021- 2029 Growth	Project Completion 2029	Cumulative Project Trips	OY Without Project	Project Trips	OY With Project
16 Trautwein Road/Van Buren Boulevard							
NBL	138	22	160	66	226	7	233
NBT	634	101	735	38	773	0	773
NBR	108	17	125	26	151	0	151
SBL	179	29	208	277	485	0	485
SBT	377	60	437	17	454	0	454
SBR	268	43	311	52	363	43	406
EBL	302	48	350	58	408	33	441
EBT	859	137	996	371	1,367	22	1,389
EBR	67	11	78	59	137	5	142
WBL	160	26	186	8	194	0	194
WBT	1,323	212	1,535	190	1,725	29	1,754
WBR	340	54	394	100	494	0	494
North Leg							
Approach	824	132	956	346	1,302	43	1,345
Departure	1,276	203	1,479	196	1,675	33	1,708
Total	2,100	335	2,435	542	2,977	76	3,053
South Leg							
Approach	880	140	1,020	130	1,150	7	1,157
Departure	604	97	701	84	785	5	790
Total	1,484	237	1,721	214	1,935	12	1,947
East Leg							
Approach	1,823	292	2,115	298	2,413	29	2,442
Departure	1,146	183	1,329	674	2,003	22	2,025
Total	2,969	475	3,444	972	4,416	51	4,467
West Leg							
Approach	1,228	196	1,424	488	1,912	60	1,972
Departure	1,729	277	2,006	308	2,314	79	2,393
Total	2,957	473	3,430	796	4,226	139	4,365
Total Approaches							
Approach	4,755	760	5,515	1,262	6,777	139	6,916
Departure	4,755	760	5,515	1,262	6,777	139	6,916
Total	9,510	1,520	11,030	2,524	13,554	278	13,832

Table C-2 - Opening Year (2029) Peak Hour PCE Volume Summary

	AM Peak Hour						
	Existing (2021) PCE	2021- 2029 Growth	Project Completion 2029	Cumulative Project Trips	OY Without Project	Project Trips	OY With Project
17 Shopping Center Driveway 2/Van Buren Boulevard							
NBL	0	0	0	0	0	0	0
NBT	0	0	0	0	0	0	0
NBR	0	0	0	0	0	0	0
SBL	71	11	82	3	85	0	85
SBT	0	0	0	0	0	0	0
SBR	29	5	34	1	35	0	35
EBL	29	5	34	3	37	0	37
EBT	1,117	179	1,296	667	1,963	22	1,985
EBR	0	0	0	0	0	0	0
WBL	0	0	0	0	0	0	0
WBT	1,474	236	1,710	298	2,008	29	2,037
WBR	84	13	97	6	103	0	103
North Leg							
Approach	100	16	116	4	120	0	120
Departure	113	18	131	9	140	0	140
Total	213	34	247	13	260	0	260
South Leg							
Approach	0	0	0	0	0	0	0
Departure	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0
East Leg							
Approach	1,558	249	1,807	304	2,111	29	2,140
Departure	1,188	190	1,378	670	2,048	22	2,070
Total	2,746	439	3,185	974	4,159	51	4,210
West Leg							
Approach	1,146	184	1,330	670	2,000	22	2,022
Departure	1,503	241	1,744	299	2,043	29	2,072
Total	2,649	425	3,074	969	4,043	51	4,094
Total Approaches							
Approach	2,804	449	3,253	978	4,231	51	4,282
Departure	2,804	449	3,253	978	4,231	51	4,282
Total	5,608	898	6,506	1,956	8,462	102	8,564

Table C-2 - Opening Year (2029) Peak Hour PCE Volume Summary

	AM Peak Hour						
	Existing (2021) PCE	2021- 2029 Growth	Project Completion 2029	Cumulative Project Trips	OY Without Project	Project Trips	OY With Project
18 Barton Street/Van Buren Boulevard							
NBL	300	48	348	99	447	0	447
NBT	95	15	110	0	110	0	110
NBR	391	63	454	6	460	0	460
SBL	45	7	52	35	87	0	87
SBT	141	23	164	0	164	0	164
SBR	283	45	328	21	349	9	358
EBL	156	25	181	17	198	7	205
EBT	999	160	1,159	377	1,536	16	1,552
EBR	105	17	122	279	401	0	401
WBL	321	51	372	2	374	0	374
WBT	1,439	230	1,669	180	1,849	21	1,870
WBR	20	3	23	12	35	0	35
North Leg							
Approach	469	75	544	56	600	9	609
Departure	271	43	314	29	343	7	350
Total	740	118	858	85	943	16	959
South Leg							
Approach	786	126	912	105	1,017	0	1,017
Departure	567	91	658	281	939	0	939
Total	1,353	217	1,570	386	1,956	0	1,956
East Leg							
Approach	1,780	284	2,064	194	2,258	21	2,279
Departure	1,435	230	1,665	418	2,083	16	2,099
Total	3,215	514	3,729	612	4,341	37	4,378
West Leg							
Approach	1,260	202	1,462	673	2,135	23	2,158
Departure	2,022	323	2,345	300	2,645	30	2,675
Total	3,282	525	3,807	973	4,780	53	4,833
Total Approaches							
Approach	4,295	687	4,982	1,028	6,010	53	6,063
Departure	4,295	687	4,982	1,028	6,010	53	6,063
Total	8,590	1,374	9,964	2,056	12,020	106	12,126

Table C-2 - Opening Year (2029) Peak Hour PCE Volume Summary

	AM Peak Hour						
	Existing (2021) PCE	2021- 2029 Growth	Project Completion 2029	Cumulative Project Trips	OY Without Project	Project Trips	OY With Project
19 Project Driveway 1/Van Buren Boulevard							
NBL	0	0	0	0	0	0	0
NBT	0	0	0	0	0	0	0
NBR	0	0	0	0	0	0	0
SBL	0	0	0	0	0	0	0
SBT	0	0	0	0	0	0	0
SBR	0	0	0	0	0	0	0
EBL	0	0	0	0	0	0	0
EBT	1,315	210	1,525	593	2,118	55	2,173
EBR	0	0	0	0	0	0	0
WBL	0	0	0	0	0	0	0
WBT	1,787	286	2,073	427	2,500	42	2,542
WBR	7	1	8	0	8	0	8
North Leg							
Approach	0	0	0	0	0	0	0
Departure	7	1	8	0	8	0	8
Total	7	1	8	0	8	0	8
South Leg							
Approach	0	0	0	0	0	0	0
Departure	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0
East Leg							
Approach	1,794	287	2,081	427	2,508	42	2,550
Departure	1,315	210	1,525	593	2,118	55	2,173
Total	3,109	497	3,606	1,020	4,626	97	4,723
West Leg							
Approach	1,315	210	1,525	593	2,118	55	2,173
Departure	1,787	286	2,073	427	2,500	42	2,542
Total	3,102	496	3,598	1,020	4,618	97	4,715
Total Approaches							
Approach	3,109	497	3,606	1,020	4,626	97	4,723
Departure	3,109	497	3,606	1,020	4,626	97	4,723
Total	6,218	994	7,212	2,040	9,252	194	9,446

Table C-2 - Opening Year (2029) Peak Hour PCE Volume Summary

	AM Peak Hour						
	Existing (2021) PCE	2021- 2029 Growth	Project Completion 2029	Cumulative Project Trips	OY Without Project	Project Trips	OY With Project
20 Dauchy Avenue/Project Driveway 3							
NBL	15	0	15	0	15	7	22
NBT	334	53	387	54	441	72	513
NBR	0	0	0	0	0	0	0
SBL	0	0	0	0	0	0	0
SBT	163	26	189	44	233	38	271
SBR	114	0	114	0	114	52	166
EBL	0	0	0	0	0	0	0
EBT	0	0	0	0	0	0	0
EBR	0	0	0	0	0	0	0
WBL	0	0	0	0	0	0	0
WBT	0	0	0	0	0	0	0
WBR	0	0	0	0	0	0	0
North Leg							
Approach	277	26	303	44	347	90	437
Departure	334	53	387	54	441	72	513
Total	611	79	690	98	788	162	950
South Leg							
Approach	349	53	402	54	456	79	535
Departure	163	26	189	44	233	38	271
Total	512	79	591	98	689	117	806
East Leg							
Approach	0	0	0	0	0	0	0
Departure	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0
West Leg							
Approach	0	0	0	0	0	0	0
Departure	129	0	129	0	129	59	188
Total	129	0	129	0	129	59	188
Total Approaches							
Approach	626	79	705	98	803	169	972
Departure	626	79	705	98	803	169	972
Total	1,252	158	1,410	196	1,606	338	1,944

Table C-2 - Opening Year (2029) Peak Hour PCE Volume Summary

	AM Peak Hour						
	Existing (2021) PCE	2021- 2029 Growth	Project Completion 2029	Cumulative Project Trips	OY Without Project	Project Trips	OY With Project
21 Dauchy Avenue/Project Driveway 4							
NBL	38	0	38	0	38	3	41
NBT	225	36	261	54	315	15	330
NBR	0	0	0	0	0	0	0
SBL	0	0	0	0	0	0	0
SBT	117	19	136	44	180	7	187
SBR	46	0	46	0	46	31	77
EBL	125	0	125	0	125	63	188
EBT	0	0	0	0	0	0	0
EBR	41	0	41	0	41	8	49
WBL	0	0	0	0	0	0	0
WBT	0	0	0	0	0	0	0
WBR	0	0	0	0	0	0	0
North Leg							
Approach	163	19	182	44	226	38	264
Departure	350	36	386	54	440	78	518
Total	513	55	568	98	666	116	782
South Leg							
Approach	263	36	299	54	353	18	371
Departure	158	19	177	44	221	15	236
Total	421	55	476	98	574	33	607
East Leg							
Approach	0	0	0	0	0	0	0
Departure	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0
West Leg							
Approach	166	0	166	0	166	71	237
Departure	84	0	84	0	84	34	118
Total	250	0	250	0	250	105	355
Total Approaches							
Approach	592	55	647	98	745	127	872
Departure	592	55	647	98	745	127	872
Total	1,184	110	1,294	196	1,490	254	1,744

Table C-2 - Opening Year (2029) Peak Hour PCE Volume Summary

	AM Peak Hour						
	Existing (2021) PCE	2021- 2029 Growth	Project Completion 2029	Cumulative Project Trips	OY Without Project	Project Trips	OY With Project
22 Dauchy Avenue/Project Driveway 5							
NBL	0	0	0	0	0	0	0
NBT	265	42	307	54	361	19	380
NBR	0	0	0	0	0	0	0
SBL	0	0	0	0	0	0	0
SBT	156	25	181	44	225	14	239
SBR	1	0	1	0	1	0	1
EBL	1	0	1	0	1	0	1
EBT	0	0	0	0	0	0	0
EBR	0	0	0	0	0	0	0
WBL	0	0	0	0	0	0	0
WBT	0	0	0	0	0	0	0
WBR	0	0	0	0	0	0	0
North Leg							
Approach	157	25	182	44	226	14	240
Departure	266	42	308	54	362	19	381
Total	423	67	490	98	588	33	621
South Leg							
Approach	265	42	307	54	361	19	380
Departure	156	25	181	44	225	14	239
Total	421	67	488	98	586	33	619
East Leg							
Approach	0	0	0	0	0	0	0
Departure	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0
West Leg							
Approach	1	0	1	0	1	0	1
Departure	1	0	1	0	1	0	1
Total	2	0	2	0	2	0	2
Total Approaches							
Approach	423	67	490	98	588	33	621
Departure	423	67	490	98	588	33	621
Total	846	134	980	196	1,176	66	1,242

Table C-2 - Opening Year (2029) Peak Hour PCE Volume Summary

	PM Peak Hour						
	Existing (2021) PCE	2021- 2029 Growth	Project Completion 2029	Cumulative Project Trips	OY Without Project	Project Trips	OY With Project
1 Washington Street/Van Buren Boulevard							
NBL	100	16	116	18	134	0	134
NBT	294	47	341	12	353	0	353
NBR	104	17	121	60	181	6	187
SBL	443	71	514	214	728	6	734
SBT	275	44	319	22	341	0	341
SBR	102	16	118	0	118	0	118
EBL	129	21	150	0	150	0	150
EBT	1,181	189	1,370	166	1,536	9	1,545
EBR	79	13	92	25	117	0	117
WBL	116	19	135	85	220	10	230
WBT	1,219	195	1,414	209	1,623	14	1,637
WBR	359	57	416	251	667	9	676
North Leg							
Approach	820	131	951	236	1,187	6	1,193
Departure	782	125	907	263	1,170	9	1,179
Total	1,602	256	1,858	499	2,357	15	2,372
South Leg							
Approach	498	80	578	90	668	6	674
Departure	470	76	546	132	678	10	688
Total	968	156	1,124	222	1,346	16	1,362
East Leg							
Approach	1,694	271	1,965	545	2,510	33	2,543
Departure	1,728	277	2,005	440	2,445	21	2,466
Total	3,422	548	3,970	985	4,955	54	5,009
West Leg							
Approach	1,389	223	1,612	191	1,803	9	1,812
Departure	1,421	227	1,648	227	1,875	14	1,889
Total	2,810	450	3,260	418	3,678	23	3,701
Total Approaches							
Approach	4,401	705	5,106	1,062	6,168	54	6,222
Departure	4,401	705	5,106	1,062	6,168	54	6,222
Total	8,802	1,410	10,212	2,124	12,336	108	12,444

Table C-2 - Opening Year (2029) Peak Hour PCE Volume Summary

	PM Peak Hour						
	Existing (2021) PCE	2021- 2029 Growth	Project Completion 2029	Cumulative Project Trips	OY Without Project	Project Trips	OY With Project
2 Chicago Avenue - Alta Cresta Avenue/Van Buren Boulevard							
NBL	59	9	68	23	91	0	91
NBT	2	0	2	29	31	0	31
NBR	19	3	22	5	27	2	29
SBL	20	3	23	89	112	0	112
SBT	2	0	2	25	27	0	27
SBR	6	1	7	55	62	0	62
EBL	22	4	26	109	135	0	135
EBT	1,643	263	1,906	334	2,240	24	2,264
EBR	135	22	157	23	180	0	180
WBL	39	6	45	5	50	3	53
WBT	1,681	269	1,950	499	2,449	39	2,488
WBR	18	3	21	81	102	0	102
North Leg							
Approach	28	4	32	169	201	0	201
Departure	42	7	49	219	268	0	268
Total	70	11	81	388	469	0	469
South Leg							
Approach	80	12	92	57	149	2	151
Departure	176	28	204	53	257	3	260
Total	256	40	296	110	406	5	411
East Leg							
Approach	1,738	278	2,016	585	2,601	42	2,643
Departure	1,682	269	1,951	428	2,379	26	2,405
Total	3,420	547	3,967	1,013	4,980	68	5,048
West Leg							
Approach	1,800	289	2,089	466	2,555	24	2,579
Departure	1,746	279	2,025	577	2,602	39	2,641
Total	3,546	568	4,114	1,043	5,157	63	5,220
Total Approaches							
Approach	3,646	583	4,229	1,277	5,506	68	5,574
Departure	3,646	583	4,229	1,277	5,506	68	5,574
Total	7,292	1,166	8,458	2,554	11,012	136	11,148

Table C-2 - Opening Year (2029) Peak Hour PCE Volume Summary

	PM Peak Hour						
	Existing (2021) PCE	2021- 2029 Growth	Project Completion 2029	Cumulative Project Trips	OY Without Project	Project Trips	OY With Project
3 Van Buren Village Driveway/Van Buren Boulevard							
NBL	0	0	0	45	45	0	45
NBT	0	0	0	0	0	0	0
NBR	0	0	0	134	134	0	134
SBL	0	0	0	0	0	0	0
SBT	0	0	0	0	0	0	0
SBR	0	0	0	0	0	0	0
EBL	0	0	0	0	0	0	0
EBT	1,682	269	1,951	389	2,340	25	2,365
EBR	0	0	0	39	39	0	39
WBL	0	0	0	118	118	0	118
WBT	1,738	278	2,016	552	2,568	42	2,610
WBR	0	0	0	0	0	0	0
North Leg							
Approach	0	0	0	0	0	0	0
Departure	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0
South Leg							
Approach	0	0	0	179	179	0	179
Departure	0	0	0	157	157	0	157
Total	0	0	0	336	336	0	336
East Leg							
Approach	1,738	278	2,016	670	2,686	42	2,728
Departure	1,682	269	1,951	523	2,474	25	2,499
Total	3,420	547	3,967	1,193	5,160	67	5,227
West Leg							
Approach	1,682	269	1,951	428	2,379	25	2,404
Departure	1,738	278	2,016	597	2,613	42	2,655
Total	3,420	547	3,967	1,025	4,992	67	5,059
Total Approaches							
Approach	3,420	547	3,967	1,277	5,244	67	5,311
Departure	3,420	547	3,967	1,277	5,244	67	5,311
Total	6,840	1,094	7,934	2,554	10,488	134	10,622

Table C-2 - Opening Year (2029) Peak Hour PCE Volume Summary

	PM Peak Hour						
	Existing (2021) PCE	2021- 2029 Growth	Project Completion 2029	Cumulative Project Trips	OY Without Project	Project Trips	OY With Project
4 Little Court/Van Buren Boulevard							
NBL	0	0	0	0	0	0	0
NBT	0	0	0	0	0	0	0
NBR	2	0	2	0	2	0	2
SBL	0	0	0	0	0	0	0
SBT	0	0	0	0	0	0	0
SBR	0	0	0	0	0	0	0
EBL	0	0	0	0	0	0	0
EBT	1,678	268	1,946	523	2,469	25	2,494
EBR	4	1	5	0	5	0	5
WBL	0	0	0	0	0	0	0
WBT	1,738	278	2,016	670	2,686	42	2,728
WBR	0	0	0	0	0	0	0
North Leg							
Approach	0	0	0	0	0	0	0
Departure	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0
South Leg							
Approach	2	0	2	0	2	0	2
Departure	4	1	5	0	5	0	5
Total	6	1	7	0	7	0	7
East Leg							
Approach	1,738	278	2,016	670	2,686	42	2,728
Departure	1,680	268	1,948	523	2,471	25	2,496
Total	3,418	546	3,964	1,193	5,157	67	5,224
West Leg							
Approach	1,682	269	1,951	523	2,474	25	2,499
Departure	1,738	278	2,016	670	2,686	42	2,728
Total	3,420	547	3,967	1,193	5,160	67	5,227
Total Approaches							
Approach	3,422	547	3,969	1,193	5,162	67	5,229
Departure	3,422	547	3,969	1,193	5,162	67	5,229
Total	6,844	1,094	7,938	2,386	10,324	134	10,458

Table C-2 - Opening Year (2029) Peak Hour PCE Volume Summary

	PM Peak Hour						
	Existing (2021) PCE	2021- 2029 Growth	Project Completion 2029	Cumulative Project Trips	OY Without Project	Project Trips	OY With Project
5 Ridgeway Avenue/Van Buren Boulevard							
NBL	0	0	0	0	0	0	0
NBT	0	0	0	0	0	0	0
NBR	0	0	0	0	0	0	0
SBL	1	0	1	1	2	0	2
SBT	0	0	0	0	0	0	0
SBR	56	9	65	7	72	0	72
EBL	99	16	115	7	122	0	122
EBT	1,581	253	1,834	516	2,350	25	2,375
EBR	0	0	0	0	0	0	0
WBL	0	0	0	0	0	0	0
WBT	1,682	269	1,951	662	2,613	42	2,655
WBR	17	3	20	1	21	0	21
North Leg							
Approach	57	9	66	8	74	0	74
Departure	116	19	135	8	143	0	143
Total	173	28	201	16	217	0	217
South Leg							
Approach	0	0	0	0	0	0	0
Departure	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0
East Leg							
Approach	1,699	272	1,971	663	2,634	42	2,676
Departure	1,582	253	1,835	517	2,352	25	2,377
Total	3,281	525	3,806	1,180	4,986	67	5,053
West Leg							
Approach	1,680	269	1,949	523	2,472	25	2,497
Departure	1,738	278	2,016	669	2,685	42	2,727
Total	3,418	547	3,965	1,192	5,157	67	5,224
Total Approaches							
Approach	3,436	550	3,986	1,194	5,180	67	5,247
Departure	3,436	550	3,986	1,194	5,180	67	5,247
Total	6,872	1,100	7,972	2,388	10,360	134	10,494

Table C-2 - Opening Year (2029) Peak Hour PCE Volume Summary

	PM Peak Hour						
	Existing (2021) PCE	2021- 2029 Growth	Project Completion 2029	Cumulative Project Trips	OY Without Project	Project Trips	OY With Project
6 Dauchy Avenue/Van Buren Boulevard							
NBL	194	31	225	46	271	42	313
NBT	65	10	75	7	82	1	83
NBR	113	18	131	15	146	72	218
SBL	62	10	72	34	106	0	106
SBT	28	4	32	7	39	1	40
SBR	44	7	51	12	63	0	63
EBL	66	11	77	12	89	0	89
EBT	1,326	212	1,538	463	2,001	0	2,001
EBR	190	30	220	46	266	25	291
WBL	103	16	119	13	132	44	176
WBT	1,472	236	1,708	613	2,321	0	2,321
WBR	27	4	31	46	77	0	77
North Leg							
Approach	134	21	155	53	208	1	209
Departure	158	25	183	65	248	1	249
Total	292	46	338	118	456	2	458
South Leg							
Approach	372	59	431	68	499	115	614
Departure	321	50	371	66	437	70	507
Total	693	109	802	134	936	185	1,121
East Leg							
Approach	1,602	256	1,858	672	2,530	44	2,574
Departure	1,501	240	1,741	512	2,253	72	2,325
Total	3,103	496	3,599	1,184	4,783	116	4,899
West Leg							
Approach	1,582	253	1,835	521	2,356	25	2,381
Departure	1,710	274	1,984	671	2,655	42	2,697
Total	3,292	527	3,819	1,192	5,011	67	5,078
Total Approaches							
Approach	3,690	589	4,279	1,314	5,593	185	5,778
Departure	3,690	589	4,279	1,314	5,593	185	5,778
Total	7,380	1,178	8,558	2,628	11,186	370	11,556

Table C-2 - Opening Year (2029) Peak Hour PCE Volume Summary

	PM Peak Hour						
	Existing (2021) PCE	2021- 2029 Growth	Project Completion 2029	Cumulative Project Trips	OY Without Project	Project Trips	OY With Project
7 Dauchy Avenue/Project Driveway 2 - Ardenwood Lane							
NBL	14	0	14	0	14	4	18
NBT	199	32	231	52	283	62	345
NBR	8	1	9	0	9	0	9
SBL	8	1	9	9	18	0	18
SBT	226	36	262	52	314	38	352
SBR	62	0	62	0	62	32	94
EBL	119	0	119	0	119	53	172
EBT	1	0	1	0	1	0	1
EBR	29	0	29	0	29	7	36
WBL	5	1	6	0	6	0	6
WBT	0	0	0	0	0	0	0
WBR	14	2	16	9	25	0	25
North Leg							
Approach	296	37	333	61	394	70	464
Departure	332	34	366	61	427	115	542
Total	628	71	699	122	821	185	1,006
South Leg							
Approach	221	33	254	52	306	66	372
Departure	260	37	297	52	349	45	394
Total	481	70	551	104	655	111	766
East Leg							
Approach	19	3	22	9	31	0	31
Departure	17	2	19	9	28	0	28
Total	36	5	41	18	59	0	59
West Leg							
Approach	149	0	149	0	149	60	209
Departure	76	0	76	0	76	36	112
Total	225	0	225	0	225	96	321
Total Approaches							
Approach	685	73	758	122	880	196	1,076
Departure	685	73	758	122	880	196	1,076
Total	1,370	146	1,516	244	1,760	392	2,152

Table C-2 - Opening Year (2029) Peak Hour PCE Volume Summary

	PM Peak Hour						
	Existing (2021) PCE	2021- 2029 Growth	Project Completion 2029	Cumulative Project Trips	OY Without Project	Project Trips	OY With Project
8 Dauchy Avenue - Taft Street/Krameria Avenue							
NBL	11	2	13	0	13	0	13
NBT	17	3	20	10	30	2	32
NBR	8	1	9	0	9	0	9
SBL	136	22	158	9	167	12	179
SBT	20	3	23	15	38	3	41
SBR	62	10	72	1	73	0	73
EBL	33	5	38	1	39	0	39
EBT	302	48	350	0	350	0	350
EBR	23	4	27	0	27	0	27
WBL	6	1	7	0	7	0	7
WBT	245	39	284	0	284	0	284
WBR	47	8	55	9	64	7	71
North Leg							
Approach	218	35	253	25	278	15	293
Departure	97	16	113	20	133	9	142
Total	315	51	366	45	411	24	435
South Leg							
Approach	36	6	42	10	52	2	54
Departure	49	8	57	15	72	3	75
Total	85	14	99	25	124	5	129
East Leg							
Approach	298	48	346	9	355	7	362
Departure	446	71	517	9	526	12	538
Total	744	119	863	18	881	19	900
West Leg							
Approach	358	57	415	1	416	0	416
Departure	318	51	369	1	370	0	370
Total	676	108	784	2	786	0	786
Total Approaches							
Approach	910	146	1,056	45	1,101	24	1,125
Departure	910	146	1,056	45	1,101	24	1,125
Total	1,820	292	2,112	90	2,202	48	2,250

Table C-2 - Opening Year (2029) Peak Hour PCE Volume Summary

	PM Peak Hour						
	Existing (2021) PCE	2021- 2029 Growth	Project Completion 2029	Cumulative Project Trips	OY Without Project	Project Trips	OY With Project
9 Wood Road/Van Buren Boulevard							
NBL	267	43	310	89	399	6	405
NBT	354	57	411	1	412	0	412
NBR	210	34	244	24	268	0	268
SBL	103	16	119	10	129	0	129
SBT	283	45	328	1	329	0	329
SBR	206	33	239	20	259	1	260
EBL	155	25	180	21	201	1	202
EBT	1,079	173	1,252	409	1,661	61	1,722
EBR	199	32	231	89	320	10	330
WBL	206	33	239	35	274	0	274
WBT	1,190	190	1,380	558	1,938	37	1,975
WBR	88	14	102	21	123	0	123
North Leg							
Approach	592	94	686	31	717	1	718
Departure	597	96	693	43	736	1	737
Total	1,189	190	1,379	74	1,453	2	1,455
South Leg							
Approach	831	134	965	114	1,079	6	1,085
Departure	688	110	798	125	923	10	933
Total	1,519	244	1,763	239	2,002	16	2,018
East Leg							
Approach	1,484	237	1,721	614	2,335	37	2,372
Departure	1,392	223	1,615	443	2,058	61	2,119
Total	2,876	460	3,336	1,057	4,393	98	4,491
West Leg							
Approach	1,433	230	1,663	519	2,182	72	2,254
Departure	1,663	266	1,929	667	2,596	44	2,640
Total	3,096	496	3,592	1,186	4,778	116	4,894
Total Approaches							
Approach	4,340	695	5,035	1,278	6,313	116	6,429
Departure	4,340	695	5,035	1,278	6,313	116	6,429
Total	8,680	1,390	10,070	2,556	12,626	232	12,858

Table C-2 - Opening Year (2029) Peak Hour PCE Volume Summary

	PM Peak Hour						
	Existing (2021) PCE	2021- 2029 Growth	Project Completion 2029	Cumulative Project Trips	OY Without Project	Project Trips	OY With Project
10 Bountiful Street/Van Buren Boulevard							
NBL	0	0	0	0	0	0	0
NBT	0	0	0	0	0	0	0
NBR	0	0	0	0	0	0	0
SBL	15	2	17	0	17	0	17
SBT	0	0	0	0	0	0	0
SBR	136	22	158	64	222	1	223
EBL	179	29	208	63	271	1	272
EBT	1,370	219	1,589	384	1,973	60	2,033
EBR	0	0	0	0	0	0	0
WBL	0	0	0	1	1	0	1
WBT	1,361	218	1,579	553	2,132	36	2,168
WBR	24	4	28	0	28	0	28
North Leg							
Approach	151	24	175	64	239	1	240
Departure	203	33	236	63	299	1	300
Total	354	57	411	127	538	2	540
South Leg							
Approach	0	0	0	0	0	0	0
Departure	0	0	0	1	1	0	1
Total	0	0	0	1	1	0	1
East Leg							
Approach	1,385	222	1,607	554	2,161	36	2,197
Departure	1,385	221	1,606	384	1,990	60	2,050
Total	2,770	443	3,213	938	4,151	96	4,247
West Leg							
Approach	1,549	248	1,797	447	2,244	61	2,305
Departure	1,497	240	1,737	617	2,354	37	2,391
Total	3,046	488	3,534	1,064	4,598	98	4,696
Total Approaches							
Approach	3,085	494	3,579	1,065	4,644	98	4,742
Departure	3,085	494	3,579	1,065	4,644	98	4,742
Total	6,170	988	7,158	2,130	9,288	196	9,484

Table C-2 - Opening Year (2029) Peak Hour PCE Volume Summary

	PM Peak Hour						
	Existing (2021) PCE	2021- 2029 Growth	Project Completion 2029	Cumulative Project Trips	OY Without Project	Project Trips	OY With Project
11 Trautwein Road/Mission Grove Parkway							
NBL	5	1	6	0	6	0	6
NBT	1,298	208	1,506	238	1,744	12	1,756
NBR	432	69	501	35	536	12	548
SBL	130	21	151	0	151	0	151
SBT	1,429	229	1,658	127	1,785	7	1,792
SBR	34	5	39	0	39	0	39
EBL	37	6	43	0	43	0	43
EBT	10	2	12	0	12	0	12
EBR	13	2	15	0	15	0	15
WBL	527	84	611	30	641	7	648
WBT	16	3	19	0	19	0	19
WBR	37	6	43	0	43	0	43
North Leg							
Approach	1,593	255	1,848	127	1,975	7	1,982
Departure	1,372	220	1,592	238	1,830	12	1,842
Total	2,965	475	3,440	365	3,805	19	3,824
South Leg							
Approach	1,735	278	2,013	273	2,286	24	2,310
Departure	1,969	315	2,284	157	2,441	14	2,455
Total	3,704	593	4,297	430	4,727	38	4,765
East Leg							
Approach	580	93	673	30	703	7	710
Departure	572	92	664	35	699	12	711
Total	1,152	185	1,337	65	1,402	19	1,421
West Leg							
Approach	60	10	70	0	70	0	70
Departure	55	9	64	0	64	0	64
Total	115	19	134	0	134	0	134
Total Approaches							
Approach	3,968	636	4,604	430	5,034	38	5,072
Departure	3,968	636	4,604	430	5,034	38	5,072
Total	7,936	1,272	9,208	860	10,068	76	10,144

Table C-2 - Opening Year (2029) Peak Hour PCE Volume Summary

	PM Peak Hour						
	Existing (2021) PCE	2021- 2029 Growth	Project Completion 2029	Cumulative Project Trips	OY Without Project	Project Trips	OY With Project
12 Trautwein Road/John F Kennedy Drive							
NBL	75	12	87	27	114	0	114
NBT	1,148	184	1,332	272	1,604	23	1,627
NBR	56	9	65	27	92	0	92
SBL	11	2	13	0	13	0	13
SBT	1,436	230	1,666	157	1,823	14	1,837
SBR	594	95	689	1	690	0	690
EBL	537	86	623	0	623	0	623
EBT	48	8	56	0	56	0	56
EBR	90	14	104	13	117	0	117
WBL	31	5	36	15	51	0	51
WBT	18	3	21	0	21	0	21
WBR	26	4	30	0	30	0	30
North Leg							
Approach	2,041	327	2,368	158	2,526	14	2,540
Departure	1,711	274	1,985	272	2,257	23	2,280
Total	3,752	601	4,353	430	4,783	37	4,820
South Leg							
Approach	1,279	205	1,484	326	1,810	23	1,833
Departure	1,557	249	1,806	185	1,991	14	2,005
Total	2,836	454	3,290	511	3,801	37	3,838
East Leg							
Approach	75	12	87	15	102	0	102
Departure	115	19	134	27	161	0	161
Total	190	31	221	42	263	0	263
West Leg							
Approach	675	108	783	13	796	0	796
Departure	687	110	797	28	825	0	825
Total	1,362	218	1,580	41	1,621	0	1,621
Total Approaches							
Approach	4,070	652	4,722	512	5,234	37	5,271
Departure	4,070	652	4,722	512	5,234	37	5,271
Total	8,140	1,304	9,444	1,024	10,468	74	10,542

Table C-2 - Opening Year (2029) Peak Hour PCE Volume Summary

	PM Peak Hour						
	Existing (2021) PCE	2021- 2029 Growth	Project Completion 2029	Cumulative Project Trips	OY Without Project	Project Trips	OY With Project
13 Trautwein Road/Grove Community Drive							
NBL	0	0	0	0	0	0	0
NBT	1,055	169	1,224	325	1,549	23	1,572
NBR	58	9	67	20	87	0	87
SBL	322	52	374	0	374	0	374
SBT	1,235	198	1,433	185	1,618	14	1,632
SBR	0	0	0	0	0	0	0
EBL	0	0	0	0	0	0	0
EBT	0	0	0	0	0	0	0
EBR	0	0	0	0	0	0	0
WBL	54	9	63	18	81	0	81
WBT	0	0	0	0	0	0	0
WBR	224	36	260	0	260	0	260
North Leg							
Approach	1,557	250	1,807	185	1,992	14	2,006
Departure	1,279	205	1,484	325	1,809	23	1,832
Total	2,836	455	3,291	510	3,801	37	3,838
South Leg							
Approach	1,113	178	1,291	345	1,636	23	1,659
Departure	1,289	207	1,496	203	1,699	14	1,713
Total	2,402	385	2,787	548	3,335	37	3,372
East Leg							
Approach	278	45	323	18	341	0	341
Departure	380	61	441	20	461	0	461
Total	658	106	764	38	802	0	802
West Leg							
Approach	0	0	0	0	0	0	0
Departure	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0
Total Approaches							
Approach	2,948	473	3,421	548	3,969	37	4,006
Departure	2,948	473	3,421	548	3,969	37	4,006
Total	5,896	946	6,842	1,096	7,938	74	8,012

Table C-2 - Opening Year (2029) Peak Hour PCE Volume Summary

	PM Peak Hour						
	Existing (2021) PCE	2021- 2029 Growth	Project Completion 2029	Cumulative Project Trips	OY Without Project	Project Trips	OY With Project
14 Trautwein Road/Orange Terrace Parkway							
NBL	10	2	12	26	38	0	38
NBT	821	131	952	342	1,294	23	1,317
NBR	212	34	246	23	269	9	278
SBL	270	43	313	0	313	0	313
SBT	975	156	1,131	204	1,335	14	1,349
SBR	20	3	23	0	23	0	23
EBL	44	7	51	0	51	0	51
EBT	36	6	42	0	42	0	42
EBR	8	1	9	15	24	0	24
WBL	149	24	173	23	196	6	202
WBT	12	2	14	0	14	0	14
WBR	248	40	288	0	288	0	288
North Leg							
Approach	1,265	202	1,467	204	1,671	14	1,685
Departure	1,113	178	1,291	342	1,633	23	1,656
Total	2,378	380	2,758	546	3,304	37	3,341
South Leg							
Approach	1,043	167	1,210	391	1,601	32	1,633
Departure	1,132	181	1,313	242	1,555	20	1,575
Total	2,175	348	2,523	633	3,156	52	3,208
East Leg							
Approach	409	66	475	23	498	6	504
Departure	518	83	601	23	624	9	633
Total	927	149	1,076	46	1,122	15	1,137
West Leg							
Approach	88	14	102	15	117	0	117
Departure	42	7	49	26	75	0	75
Total	130	21	151	41	192	0	192
Total Approaches							
Approach	2,805	449	3,254	633	3,887	52	3,939
Departure	2,805	449	3,254	633	3,887	52	3,939
Total	5,610	898	6,508	1,266	7,774	104	7,878

Table C-2 - Opening Year (2029) Peak Hour PCE Volume Summary

	PM Peak Hour						
	Existing (2021) PCE	2021- 2029 Growth	Project Completion 2029	Cumulative Project Trips	OY Without Project	Project Trips	OY With Project
15 Trautwein Road/Shopping Center Driveway 1							
NBL	122	20	142	34	176	0	176
NBT	807	129	936	367	1,303	33	1,336
NBR	14	2	16	9	25	0	25
SBL	173	28	201	0	201	0	201
SBT	769	123	892	213	1,105	20	1,125
SBR	119	19	138	30	168	0	168
EBL	122	20	142	25	167	0	167
EBT	39	6	45	0	45	0	45
EBR	85	14	99	33	132	0	132
WBL	69	11	80	16	96	0	96
WBT	28	4	32	0	32	0	32
WBR	79	13	92	0	92	0	92
North Leg							
Approach	1,061	170	1,231	243	1,474	20	1,494
Departure	1,008	162	1,170	392	1,562	33	1,595
Total	2,069	332	2,401	635	3,036	53	3,089
South Leg							
Approach	943	151	1,094	410	1,504	33	1,537
Departure	923	148	1,071	262	1,333	20	1,353
Total	1,866	299	2,165	672	2,837	53	2,890
East Leg							
Approach	176	28	204	16	220	0	220
Departure	226	36	262	9	271	0	271
Total	402	64	466	25	491	0	491
West Leg							
Approach	246	40	286	58	344	0	344
Departure	269	43	312	64	376	0	376
Total	515	83	598	122	720	0	720
Total Approaches							
Approach	2,426	389	2,815	727	3,542	53	3,595
Departure	2,426	389	2,815	727	3,542	53	3,595
Total	4,852	778	5,630	1,454	7,084	106	7,190

Table C-2 - Opening Year (2029) Peak Hour PCE Volume Summary

	PM Peak Hour						
	Existing (2021) PCE	2021- 2029 Growth	Project Completion 2029	Cumulative Project Trips	OY Without Project	Project Trips	OY With Project
16 Trautwein Road/Van Buren Boulevard							
NBL	105	17	122	68	190	3	193
NBT	392	63	455	30	485	0	485
NBR	80	13	93	14	107	0	107
SBL	276	44	320	167	487	0	487
SBT	439	70	509	41	550	0	550
SBR	237	38	275	62	337	20	357
EBL	378	60	438	60	498	33	531
EBT	886	142	1,028	264	1,292	22	1,314
EBR	121	19	140	70	210	5	215
WBL	133	21	154	29	183	0	183
WBT	1,099	176	1,275	427	1,702	13	1,715
WBR	293	47	340	328	668	0	668
North Leg							
Approach	952	152	1,104	270	1,374	20	1,394
Departure	1,063	170	1,233	418	1,651	33	1,684
Total	2,015	322	2,337	688	3,025	53	3,078
South Leg							
Approach	577	93	670	112	782	3	785
Departure	693	110	803	140	943	5	948
Total	1,270	203	1,473	252	1,725	8	1,733
East Leg							
Approach	1,525	244	1,769	784	2,553	13	2,566
Departure	1,242	199	1,441	445	1,886	22	1,908
Total	2,767	443	3,210	1,229	4,439	35	4,474
West Leg							
Approach	1,385	221	1,606	394	2,000	60	2,060
Departure	1,441	231	1,672	557	2,229	36	2,265
Total	2,826	452	3,278	951	4,229	96	4,325
Total Approaches							
Approach	4,439	710	5,149	1,560	6,709	96	6,805
Departure	4,439	710	5,149	1,560	6,709	96	6,805
Total	8,878	1,420	10,298	3,120	13,418	192	13,610

Table C-2 - Opening Year (2029) Peak Hour PCE Volume Summary

	PM Peak Hour						
	Existing (2021) PCE	2021- 2029 Growth	Project Completion 2029	Cumulative Project Trips	OY Without Project	Project Trips	OY With Project
17 Shopping Center Driveway 2/Van Buren Boulevard							
NBL	0	0	0	0	0	0	0
NBT	0	0	0	0	0	0	0
NBR	0	0	0	0	0	0	0
SBL	171	27	198	6	204	0	204
SBT	0	0	0	0	0	0	0
SBR	46	7	53	3	56	0	56
EBL	75	12	87	2	89	0	89
EBT	1,167	187	1,354	444	1,798	22	1,820
EBR	0	0	0	0	0	0	0
WBL	0	0	0	0	0	0	0
WBT	1,370	219	1,589	779	2,368	13	2,381
WBR	88	14	102	4	106	0	106
North Leg							
Approach	217	34	251	9	260	0	260
Departure	163	26	189	6	195	0	195
Total	380	60	440	15	455	0	455
South Leg							
Approach	0	0	0	0	0	0	0
Departure	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0
East Leg							
Approach	1,458	233	1,691	783	2,474	13	2,487
Departure	1,338	214	1,552	450	2,002	22	2,024
Total	2,796	447	3,243	1,233	4,476	35	4,511
West Leg							
Approach	1,242	199	1,441	446	1,887	22	1,909
Departure	1,416	226	1,642	782	2,424	13	2,437
Total	2,658	425	3,083	1,228	4,311	35	4,346
Total Approaches							
Approach	2,917	466	3,383	1,238	4,621	35	4,656
Departure	2,917	466	3,383	1,238	4,621	35	4,656
Total	5,834	932	6,766	2,476	9,242	70	9,312

Table C-2 - Opening Year (2029) Peak Hour PCE Volume Summary

	PM Peak Hour						
	Existing (2021) PCE	2021- 2029 Growth	Project Completion 2029	Cumulative Project Trips	OY Without Project	Project Trips	OY With Project
18 Barton Street/Van Buren Boulevard							
NBL	232	37	269	327	596	0	596
NBT	66	11	77	0	77	0	77
NBR	274	44	318	3	321	0	321
SBL	26	4	30	21	51	0	51
SBT	33	5	38	0	38	0	38
SBR	143	23	166	18	184	4	188
EBL	104	17	121	19	140	7	147
EBT	993	159	1,152	259	1,411	16	1,427
EBR	201	32	233	167	400	0	400
WBL	294	47	341	6	347	0	347
WBT	1,208	193	1,401	436	1,837	9	1,846
WBR	41	7	48	42	90	0	90
North Leg							
Approach	202	32	234	39	273	4	277
Departure	211	35	246	61	307	7	314
Total	413	67	480	100	580	11	591
South Leg							
Approach	572	92	664	330	994	0	994
Departure	528	84	612	173	785	0	785
Total	1,100	176	1,276	503	1,779	0	1,779
East Leg							
Approach	1,543	247	1,790	484	2,274	9	2,283
Departure	1,293	207	1,500	283	1,783	16	1,799
Total	2,836	454	3,290	767	4,057	25	4,082
West Leg							
Approach	1,298	208	1,506	445	1,951	23	1,974
Departure	1,583	253	1,836	781	2,617	13	2,630
Total	2,881	461	3,342	1,226	4,568	36	4,604
Total Approaches							
Approach	3,615	579	4,194	1,298	5,492	36	5,528
Departure	3,615	579	4,194	1,298	5,492	36	5,528
Total	7,230	1,158	8,388	2,596	10,984	72	11,056

Table C-2 - Opening Year (2029) Peak Hour PCE Volume Summary

	PM Peak Hour						
	Existing (2021) PCE	2021- 2029 Growth	Project Completion 2029	Cumulative Project Trips	OY Without Project	Project Trips	OY With Project
19 Project Driveway 1/Van Buren Boulevard							
NBL	0	0	0	0	0	0	0
NBT	0	0	0	0	0	0	0
NBR	0	0	0	0	0	0	0
SBL	0	0	0	0	0	0	0
SBT	0	0	0	0	0	0	0
SBR	2	0	2	0	2	0	2
EBL	0	0	0	0	0	0	0
EBT	1,582	253	1,835	517	2,352	25	2,377
EBR	0	0	0	0	0	0	0
WBL	0	0	0	0	0	0	0
WBT	1,697	272	1,969	663	2,632	42	2,674
WBR	13	2	15	0	15	0	15
North Leg							
Approach	2	0	2	0	2	0	2
Departure	13	2	15	0	15	0	15
Total	15	2	17	0	17	0	17
South Leg							
Approach	0	0	0	0	0	0	0
Departure	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0
East Leg							
Approach	1,710	274	1,984	663	2,647	42	2,689
Departure	1,582	253	1,835	517	2,352	25	2,377
Total	3,292	527	3,819	1,180	4,999	67	5,066
West Leg							
Approach	1,582	253	1,835	517	2,352	25	2,377
Departure	1,699	272	1,971	663	2,634	42	2,676
Total	3,281	525	3,806	1,180	4,986	67	5,053
Total Approaches							
Approach	3,294	527	3,821	1,180	5,001	67	5,068
Departure	3,294	527	3,821	1,180	5,001	67	5,068
Total	6,588	1,054	7,642	2,360	10,002	134	10,136

Table C-2 - Opening Year (2029) Peak Hour PCE Volume Summary

	PM Peak Hour						
	Existing (2021) PCE	2021- 2029 Growth	Project Completion 2029	Cumulative Project Trips	OY Without Project	Project Trips	OY With Project
20 Dauchy Avenue/Project Driveway 3							
NBL	11	0	11	0	11	3	14
NBT	221	35	256	52	308	66	374
NBR	0	0	0	0	0	0	0
SBL	0	0	0	0	0	0	0
SBT	195	31	226	52	278	21	299
SBR	66	0	66	0	66	24	90
EBL	0	0	0	0	0	0	0
EBT	0	0	0	0	0	0	0
EBR	0	0	0	0	0	0	0
WBL	0	0	0	0	0	0	0
WBT	0	0	0	0	0	0	0
WBR	0	0	0	0	0	0	0
North Leg							
Approach	261	31	292	52	344	45	389
Departure	221	35	256	52	308	66	374
Total	482	66	548	104	652	111	763
South Leg							
Approach	232	35	267	52	319	69	388
Departure	195	31	226	52	278	21	299
Total	427	66	493	104	597	90	687
East Leg							
Approach	0	0	0	0	0	0	0
Departure	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0
West Leg							
Approach	0	0	0	0	0	0	0
Departure	77	0	77	0	77	27	104
Total	77	0	77	0	77	27	104
Total Approaches							
Approach	493	66	559	104	663	114	777
Departure	493	66	559	104	663	114	777
Total	986	132	1,118	208	1,326	228	1,554

Table C-2 - Opening Year (2029) Peak Hour PCE Volume Summary

	PM Peak Hour						
	Existing (2021) PCE	2021- 2029 Growth	Project Completion 2029	Cumulative Project Trips	OY Without Project	Project Trips	OY With Project
21 Dauchy Avenue/Project Driveway 4							
NBL	14	0	14	0	14	2	16
NBT	119	19	138	52	190	7	197
NBR	0	0	0	0	0	0	0
SBL	0	0	0	0	0	0	0
SBT	182	29	211	52	263	7	270
SBR	13	0	13	0	13	14	27
EBL	106	0	106	0	106	62	168
EBT	0	0	0	0	0	0	0
EBR	42	0	42	0	42	8	50
WBL	0	0	0	0	0	0	0
WBT	0	0	0	0	0	0	0
WBR	0	0	0	0	0	0	0
North Leg							
Approach	195	29	224	52	276	21	297
Departure	225	19	244	52	296	69	365
Total	420	48	468	104	572	90	662
South Leg							
Approach	133	19	152	52	204	9	213
Departure	224	29	253	52	305	15	320
Total	357	48	405	104	509	24	533
East Leg							
Approach	0	0	0	0	0	0	0
Departure	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0
West Leg							
Approach	148	0	148	0	148	70	218
Departure	27	0	27	0	27	16	43
Total	175	0	175	0	175	86	261
Total Approaches							
Approach	476	48	524	104	628	100	728
Departure	476	48	524	104	628	100	728
Total	952	96	1,048	208	1,256	200	1,456

Table C-2 - Opening Year (2029) Peak Hour PCE Volume Summary

	PM Peak Hour						
	Existing (2021) PCE	2021- 2029 Growth	Project Completion 2029	Cumulative Project Trips	OY Without Project	Project Trips	OY With Project
22 Dauchy Avenue/Project Driveway 5							
NBL	1	0	1	0	1	0	1
NBT	130	21	151	52	203	9	212
NBR	0	0	0	0	0	0	0
SBL	0	0	0	0	0	0	0
SBT	224	36	260	52	312	14	326
SBR	0	0	0	0	0	0	0
EBL	3	0	3	0	3	0	3
EBT	0	0	0	0	0	0	0
EBR	0	0	0	0	0	0	0
WBL	0	0	0	0	0	0	0
WBT	0	0	0	0	0	0	0
WBR	0	0	0	0	0	0	0
North Leg							
Approach	224	36	260	52	312	14	326
Departure	133	21	154	52	206	9	215
Total	357	57	414	104	518	23	541
South Leg							
Approach	131	21	152	52	204	9	213
Departure	224	36	260	52	312	14	326
Total	355	57	412	104	516	23	539
East Leg							
Approach	0	0	0	0	0	0	0
Departure	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0
West Leg							
Approach	3	0	3	0	3	0	3
Departure	1	0	1	0	1	0	1
Total	4	0	4	0	4	0	4
Total Approaches							
Approach	358	57	415	104	519	23	542
Departure	358	57	415	104	519	23	542
Total	716	114	830	208	1,038	46	1,084

Table C-3-Cumulative (2045) Peak Hour Volume Summary

	AM Peak Hour			PM Peak Hour		
	Cumulative Without Project	Project Trips	Cumulative With Project	Cumulative Without Project	Project Trips	Cumulative With Project
1 Washington Street/Van Buren Boulevard						
NBL	283	0	283	153	0	153
NBT	995	0	995	408	0	408
NBR	229	14	243	190	6	196
SBL	593	12	605	764	6	770
SBT	181	0	181	567	0	567
SBR	93	0	93	124	0	124
EBL	164	0	164	165	0	165
EBT	1,298	19	1,317	1,613	9	1,622
EBR	153	0	153	202	0	202
WBL	146	10	156	233	10	243
WBT	1,719	14	1,733	1,704	14	1,718
WBR	920	9	929	700	9	709
North Leg						
Approach	867	12	879	1,455	6	1,461
Departure	2,079	9	2,088	1,273	9	1,282
Total	2,946	21	2,967	2,728	15	2,743
South Leg						
Approach	1,507	14	1,521	751	6	757
Departure	480	10	490	1,002	10	1,012
Total	1,987	24	2,011	1,753	16	1,769
East Leg						
Approach	2,785	33	2,818	2,637	33	2,670
Departure	2,120	45	2,165	2,567	21	2,588
Total	4,905	78	4,983	5,204	54	5,258
West Leg						
Approach	1,615	19	1,634	1,980	9	1,989
Departure	2,095	14	2,109	1,981	14	1,995
Total	3,710	33	3,743	3,961	23	3,984
Total Approaches						
Approach	6,774	78	6,852	6,823	54	6,877
Departure	6,774	78	6,852	6,823	54	6,877
Total	13,548	156	13,704	13,646	108	13,754

Table C-3-Cumulative (2045) Peak Hour Volume Summary

	AM Peak Hour			PM Peak Hour		
	Cumulative Without Project	Project Trips	Cumulative With Project	Cumulative Without Project	Project Trips	Cumulative With Project
2 Chicago Avenue - Alta Cresta Avenue/Van Buren Boulevard						
NBL	179	0	179	96	0	96
NBT	24	0	24	33	0	33
NBR	117	3	120	28	2	30
SBL	117	0	117	118	0	118
SBT	29	0	29	28	0	28
SBR	86	0	86	65	0	65
EBL	89	0	89	142	0	142
EBT	1,972	52	2,024	2,360	24	2,384
EBR	91	0	91	189	0	189
WBL	89	3	92	54	3	57
WBT	2,549	39	2,588	2,602	39	2,641
WBR	35	0	35	108	0	108
North Leg						
Approach	232	0	232	211	0	211
Departure	148	0	148	283	0	283
Total	380	0	380	494	0	494
South Leg						
Approach	320	3	323	157	2	159
Departure	209	3	212	271	3	274
Total	529	6	535	428	5	433
East Leg						
Approach	2,673	42	2,715	2,764	42	2,806
Departure	2,206	55	2,261	2,506	26	2,532
Total	4,879	97	4,976	5,270	68	5,338
West Leg						
Approach	2,152	52	2,204	2,691	24	2,715
Departure	2,814	39	2,853	2,763	39	2,802
Total	4,966	91	5,057	5,454	63	5,517
Total Approaches						
Approach	5,377	97	5,474	5,823	68	5,891
Departure	5,377	97	5,474	5,823	68	5,891
Total	10,754	194	10,948	11,646	136	11,782

Table C-3-Cumulative (2045) Peak Hour Volume Summary

	AM Peak Hour			PM Peak Hour		
	Cumulative Without Project	Project Trips	Cumulative With Project	Cumulative Without Project	Project Trips	Cumulative With Project
3 Van Buren Village Driveway/Van Buren Boulevard						
NBL	38	0	38	45	0	45
NBT	0	0	0	0	0	0
NBR	114	0	114	134	0	134
SBL	0	0	0	0	0	0
SBT	0	0	0	0	0	0
SBR	0	0	0	0	0	0
EBL	0	0	0	0	0	0
EBT	2,159	55	2,214	2,468	25	2,493
EBR	46	0	46	39	0	39
WBL	138	0	138	118	0	118
WBT	2,635	42	2,677	2,719	42	2,761
WBR	0	0	0	0	0	0
North Leg						
Approach	0	0	0	0	0	0
Departure	0	0	0	0	0	0
Total	0	0	0	0	0	0
South Leg						
Approach	152	0	152	179	0	179
Departure	184	0	184	157	0	157
Total	336	0	336	336	0	336
East Leg						
Approach	2,773	42	2,815	2,837	42	2,879
Departure	2,273	55	2,328	2,602	25	2,627
Total	5,046	97	5,143	5,439	67	5,506
West Leg						
Approach	2,205	55	2,260	2,507	25	2,532
Departure	2,673	42	2,715	2,764	42	2,806
Total	4,878	97	4,975	5,271	67	5,338
Total Approaches						
Approach	5,130	97	5,227	5,523	67	5,590
Departure	5,130	97	5,227	5,523	67	5,590
Total	10,260	194	10,454	11,046	134	11,180

Table C-3-Cumulative (2045) Peak Hour Volume Summary

	AM Peak Hour			PM Peak Hour		
	Cumulative Without Project	Project Trips	Cumulative With Project	Cumulative Without Project	Project Trips	Cumulative With Project
4 Little Court/Van Buren Boulevard						
NBL	0	0	0	0	0	0
NBT	0	0	0	0	0	0
NBR	8	0	8	2	0	2
SBL	0	0	0	0	0	0
SBT	0	0	0	0	0	0
SBR	0	0	0	0	0	0
EBL	0	0	0	0	0	0
EBT	2,273	55	2,328	2,598	25	2,623
EBR	1	0	1	5	0	5
WBL	0	0	0	0	0	0
WBT	2,774	42	2,816	2,838	42	2,880
WBR	0	0	0	0	0	0
North Leg						
Approach	0	0	0	0	0	0
Departure	0	0	0	0	0	0
Total	0	0	0	0	0	0
South Leg						
Approach	8	0	8	2	0	2
Departure	1	0	1	5	0	5
Total	9	0	9	7	0	7
East Leg						
Approach	2,774	42	2,816	2,838	42	2,880
Departure	2,281	55	2,336	2,600	25	2,625
Total	5,055	97	5,152	5,438	67	5,505
West Leg						
Approach	2,274	55	2,329	2,603	25	2,628
Departure	2,774	42	2,816	2,838	42	2,880
Total	5,048	97	5,145	5,441	67	5,508
Total Approaches						
Approach	5,056	97	5,153	5,443	67	5,510
Departure	5,056	97	5,153	5,443	67	5,510
Total	10,112	194	10,306	10,886	134	11,020

Table C-3-Cumulative (2045) Peak Hour Volume Summary

	AM Peak Hour			PM Peak Hour		
	Cumulative Without Project	Project Trips	Cumulative With Project	Cumulative Without Project	Project Trips	Cumulative With Project
5 Ridgeway Avenue/Van Buren Boulevard						
NBL	0	0	0	0	0	0
NBT	0	0	0	0	0	0
NBR	0	0	0	0	0	0
SBL	2	0	2	2	0	2
SBT	0	0	0	0	0	0
SBR	152	0	152	78	0	78
EBL	55	0	55	128	0	128
EBT	2,226	55	2,281	2,472	25	2,497
EBR	0	0	0	0	0	0
WBL	0	0	0	0	0	0
WBT	2,622	42	2,664	2,760	42	2,802
WBR	13	0	13	24	0	24
North Leg						
Approach	154	0	154	80	0	80
Departure	68	0	68	152	0	152
Total	222	0	222	232	0	232
South Leg						
Approach	0	0	0	0	0	0
Departure	0	0	0	0	0	0
Total	0	0	0	0	0	0
East Leg						
Approach	2,635	42	2,677	2,784	42	2,826
Departure	2,228	55	2,283	2,474	25	2,499
Total	4,863	97	4,960	5,258	67	5,325
West Leg						
Approach	2,281	55	2,336	2,600	25	2,625
Departure	2,774	42	2,816	2,838	42	2,880
Total	5,055	97	5,152	5,438	67	5,505
Total Approaches						
Approach	5,070	97	5,167	5,464	67	5,531
Departure	5,070	97	5,167	5,464	67	5,531
Total	10,140	194	10,334	10,928	134	11,062

Table C-3-Cumulative (2045) Peak Hour Volume Summary

	AM Peak Hour			PM Peak Hour		
	Cumulative Without Project	Project Trips	Cumulative With Project	Cumulative Without Project	Project Trips	Cumulative With Project
6 Dauchy Avenue/Van Buren Boulevard						
NBL	339	42	381	285	42	327
NBT	72	1	73	110	1	111
NBR	190	73	263	153	72	225
SBL	96	0	96	111	0	111
SBT	65	2	67	63	1	64
SBR	41	0	41	76	0	76
EBL	36	0	36	94	0	94
EBT	1,874	0	1,874	2,101	0	2,101
EBR	318	55	373	279	25	304
WBL	201	97	298	150	44	194
WBT	2,263	0	2,263	2,437	0	2,437
WBR	56	0	56	81	0	81
North Leg						
Approach	202	2	204	250	1	251
Departure	164	1	165	285	1	286
Total	366	3	369	535	2	537
South Leg						
Approach	601	116	717	548	115	663
Departure	584	154	738	492	70	562
Total	1,185	270	1,455	1,040	185	1,225
East Leg						
Approach	2,520	97	2,617	2,668	44	2,712
Departure	2,160	73	2,233	2,365	72	2,437
Total	4,680	170	4,850	5,033	116	5,149
West Leg						
Approach	2,228	55	2,283	2,474	25	2,499
Departure	2,643	42	2,685	2,798	42	2,840
Total	4,871	97	4,968	5,272	67	5,339
Total Approaches						
Approach	5,551	270	5,821	5,940	185	6,125
Departure	5,551	270	5,821	5,940	185	6,125
Total	11,102	540	11,642	11,880	370	12,250

Table C-3-Cumulative (2045) Peak Hour Volume Summary

	AM Peak Hour			PM Peak Hour		
	Cumulative Without Project	Project Trips	Cumulative With Project	Cumulative Without Project	Project Trips	Cumulative With Project
7 Dauchy Avenue/Project Driveway 2 - Ardenwood Lane						
NBL	34	9	43	14	4	18
NBT	409	63	472	314	62	376
NBR	5	0	5	9	0	9
SBL	18	0	18	19	0	19
SBT	348	83	431	378	38	416
SBR	143	71	214	62	32	94
EBL	112	54	166	119	53	172
EBT	0	0	0	1	0	1
EBR	27	7	34	29	7	36
WBL	5	0	5	6	0	6
WBT	0	0	0	0	0	0
WBR	56	0	56	26	0	26
North Leg						
Approach	509	154	663	459	70	529
Departure	577	117	694	459	115	574
Total	1,086	271	1,357	918	185	1,103
South Leg						
Approach	448	72	520	337	66	403
Departure	380	90	470	413	45	458
Total	828	162	990	750	111	861
East Leg						
Approach	61	0	61	32	0	32
Departure	23	0	23	29	0	29
Total	84	0	84	61	0	61
West Leg						
Approach	139	61	200	149	60	209
Departure	177	80	257	76	36	112
Total	316	141	457	225	96	321
Total Approaches						
Approach	1,157	287	1,444	977	196	1,173
Departure	1,157	287	1,444	977	196	1,173
Total	2,314	574	2,888	1,954	392	2,346

Table C-3-Cumulative (2045) Peak Hour Volume Summary

	AM Peak Hour			PM Peak Hour		
	Cumulative Without Project	Project Trips	Cumulative With Project	Cumulative Without Project	Project Trips	Cumulative With Project
8 Dauchy Avenue - Taft Street/Krameria Avenue						
NBL	23	0	23	19	0	19
NBT	34	3	37	32	2	34
NBR	13	0	13	14	0	14
SBL	126	12	138	237	12	249
SBT	16	3	19	40	3	43
SBR	55	0	55	108	0	108
EBL	65	0	65	58	0	58
EBT	564	0	564	527	0	527
EBR	3	0	3	40	0	40
WBL	2	0	2	10	0	10
WBT	637	0	637	428	0	428
WBR	143	15	158	82	7	89
North Leg						
Approach	197	15	212	385	15	400
Departure	242	18	260	172	9	181
Total	439	33	472	557	24	581
South Leg						
Approach	70	3	73	65	2	67
Departure	21	3	24	90	3	93
Total	91	6	97	155	5	160
East Leg						
Approach	782	15	797	520	7	527
Departure	703	12	715	778	12	790
Total	1,485	27	1,512	1,298	19	1,317
West Leg						
Approach	632	0	632	625	0	625
Departure	715	0	715	555	0	555
Total	1,347	0	1,347	1,180	0	1,180
Total Approaches						
Approach	1,681	33	1,714	1,595	24	1,619
Departure	1,681	33	1,714	1,595	24	1,619
Total	3,362	66	3,428	3,190	48	3,238

Table C-3-Cumulative (2045) Peak Hour Volume Summary

	AM Peak Hour			PM Peak Hour		
	Cumulative Without Project	Project Trips	Cumulative With Project	Cumulative Without Project	Project Trips	Cumulative With Project
9 Wood Road/Van Buren Boulevard						
NBL	527	14	541	419	6	425
NBT	592	0	592	472	0	472
NBR	383	0	383	281	0	281
SBL	119	0	119	135	0	135
SBT	490	0	490	374	0	374
SBR	238	2	240	281	1	282
EBL	182	1	183	253	1	254
EBT	1,555	62	1,617	1,744	61	1,805
EBR	463	10	473	336	10	346
WBL	522	0	522	288	0	288
WBT	1,804	81	1,885	2,035	37	2,072
WBR	188	0	188	129	0	129
North Leg						
Approach	847	2	849	790	1	791
Departure	962	1	963	854	1	855
Total	1,809	3	1,812	1,644	2	1,646
South Leg						
Approach	1,502	14	1,516	1,172	6	1,178
Departure	1,475	10	1,485	998	10	1,008
Total	2,977	24	3,001	2,170	16	2,186
East Leg						
Approach	2,514	81	2,595	2,452	37	2,489
Departure	2,057	62	2,119	2,160	61	2,221
Total	4,571	143	4,714	4,612	98	4,710
West Leg						
Approach	2,200	73	2,273	2,333	72	2,405
Departure	2,569	97	2,666	2,735	44	2,779
Total	4,769	170	4,939	5,068	116	5,184
Total Approaches						
Approach	7,063	170	7,233	6,747	116	6,863
Departure	7,063	170	7,233	6,747	116	6,863
Total	14,126	340	14,466	13,494	232	13,726

Table C-3-Cumulative (2045) Peak Hour Volume Summary

	AM Peak Hour			PM Peak Hour		
	Cumulative Without Project	Project Trips	Cumulative With Project	Cumulative Without Project	Project Trips	Cumulative With Project
10 Bountiful Street/Van Buren Boulevard						
NBL	0	0	0	0	0	0
NBT	0	0	0	0	0	0
NBR	1	0	1	0	0	0
SBL	58	0	58	18	0	18
SBT	0	0	0	0	0	0
SBR	265	2	267	233	1	234
EBL	170	1	171	285	1	286
EBT	1,949	60	2,009	2,083	60	2,143
EBR	0	0	0	0	0	0
WBL	0	0	0	1	0	1
WBT	1,939	79	2,018	2,239	36	2,275
WBR	38	0	38	29	0	29
North Leg						
Approach	323	2	325	251	1	252
Departure	208	1	209	314	1	315
Total	531	3	534	565	2	567
South Leg						
Approach	1	0	1	0	0	0
Departure	0	0	0	1	0	1
Total	1	0	1	1	0	1
East Leg						
Approach	1,977	79	2,056	2,269	36	2,305
Departure	2,008	60	2,068	2,101	60	2,161
Total	3,985	139	4,124	4,370	96	4,466
West Leg						
Approach	2,119	61	2,180	2,368	61	2,429
Departure	2,204	81	2,285	2,472	37	2,509
Total	4,323	142	4,465	4,840	98	4,938
Total Approaches						
Approach	4,420	142	4,562	4,888	98	4,986
Departure	4,420	142	4,562	4,888	98	4,986
Total	8,840	284	9,124	9,776	196	9,972

Table C-3-Cumulative (2045) Peak Hour Volume Summary

	AM Peak Hour			PM Peak Hour		
	Cumulative Without Project	Project Trips	Cumulative With Project	Cumulative Without Project	Project Trips	Cumulative With Project
11 Trautwein Road/Mission Grove Parkway						
NBL	3	0	3	6	0	6
NBT	2,087	12	2,099	1,831	12	1,843
NBR	634	12	646	563	12	575
SBL	218	0	218	159	0	159
SBT	1,264	15	1,279	1,874	7	1,881
SBR	20	0	20	41	0	41
EBL	70	0	70	48	0	48
EBT	39	0	39	13	0	13
EBR	11	0	11	16	0	16
WBL	740	15	755	673	7	680
WBT	38	0	38	20	0	20
WBR	61	0	61	57	0	57
North Leg						
Approach	1,502	15	1,517	2,074	7	2,081
Departure	2,218	12	2,230	1,936	12	1,948
Total	3,720	27	3,747	4,010	19	4,029
South Leg						
Approach	2,724	24	2,748	2,400	24	2,424
Departure	2,015	30	2,045	2,563	14	2,577
Total	4,739	54	4,793	4,963	38	5,001
East Leg						
Approach	839	15	854	750	7	757
Departure	891	12	903	735	12	747
Total	1,730	27	1,757	1,485	19	1,504
West Leg						
Approach	120	0	120	77	0	77
Departure	61	0	61	67	0	67
Total	181	0	181	144	0	144
Total Approaches						
Approach	5,185	54	5,239	5,301	38	5,339
Departure	5,185	54	5,239	5,301	38	5,339
Total	10,370	108	10,478	10,602	76	10,678

Table C-3-Cumulative (2045) Peak Hour Volume Summary

	AM Peak Hour			PM Peak Hour		
	Cumulative Without Project	Project Trips	Cumulative With Project	Cumulative Without Project	Project Trips	Cumulative With Project
12 Trautwein Road/John F Kennedy Drive						
NBL	251	0	251	120	0	120
NBT	2,351	24	2,375	1,684	23	1,707
NBR	103	0	103	97	0	97
SBL	11	0	11	17	0	17
SBT	1,164	31	1,195	1,914	14	1,928
SBR	733	0	733	760	0	760
EBL	677	0	677	704	0	704
EBT	60	0	60	59	0	59
EBR	110	0	110	123	0	123
WBL	147	0	147	54	0	54
WBT	67	0	67	22	0	22
WBR	52	0	52	35	0	35
North Leg						
Approach	1,908	31	1,939	2,691	14	2,705
Departure	3,080	24	3,104	2,423	23	2,446
Total	4,988	55	5,043	5,114	37	5,151
South Leg						
Approach	2,705	24	2,729	1,901	23	1,924
Departure	1,421	31	1,452	2,091	14	2,105
Total	4,126	55	4,181	3,992	37	4,029
East Leg						
Approach	266	0	266	111	0	111
Departure	174	0	174	173	0	173
Total	440	0	440	284	0	284
West Leg						
Approach	847	0	847	886	0	886
Departure	1,051	0	1,051	902	0	902
Total	1,898	0	1,898	1,788	0	1,788
Total Approaches						
Approach	5,726	55	5,781	5,589	37	5,626
Departure	5,726	55	5,781	5,589	37	5,626
Total	11,452	110	11,562	11,178	74	11,252

Table C-3-Cumulative (2045) Peak Hour Volume Summary

	AM Peak Hour			PM Peak Hour		
	Cumulative Without Project	Project Trips	Cumulative With Project	Cumulative Without Project	Project Trips	Cumulative With Project
13 Trautwein Road/Grove Community Drive						
NBL	0	0	0	0	0	0
NBT	2,067	24	2,091	1,628	23	1,651
NBR	97	0	97	100	0	100
SBL	195	0	195	393	0	393
SBT	1,226	31	1,257	1,698	14	1,712
SBR	0	0	0	0	0	0
EBL	0	0	0	0	0	0
EBT	0	0	0	0	0	0
EBR	0	0	0	0	0	0
WBL	128	0	128	123	0	123
WBT	0	0	0	0	0	0
WBR	638	0	638	273	0	273
North Leg						
Approach	1,421	31	1,452	2,091	14	2,105
Departure	2,705	24	2,729	1,901	23	1,924
Total	4,126	55	4,181	3,992	37	4,029
South Leg						
Approach	2,164	24	2,188	1,728	23	1,751
Departure	1,354	31	1,385	1,821	14	1,835
Total	3,518	55	3,573	3,549	37	3,586
East Leg						
Approach	766	0	766	396	0	396
Departure	292	0	292	493	0	493
Total	1,058	0	1,058	889	0	889
West Leg						
Approach	0	0	0	0	0	0
Departure	0	0	0	0	0	0
Total	0	0	0	0	0	0
Total Approaches						
Approach	4,351	55	4,406	4,215	37	4,252
Departure	4,351	55	4,406	4,215	37	4,252
Total	8,702	110	8,812	8,430	74	8,504

Table C-3-Cumulative (2045) Peak Hour Volume Summary

	AM Peak Hour			PM Peak Hour		
	Cumulative Without Project	Project Trips	Cumulative With Project	Cumulative Without Project	Project Trips	Cumulative With Project
14 Trautwein Road/Orange Terrace Parkway						
NBL	71	0	71	40	0	40
NBT	1,429	24	1,453	1,369	23	1,392
NBR	280	9	289	282	9	291
SBL	368	0	368	329	0	329
SBT	1,000	31	1,031	1,402	14	1,416
SBR	33	0	33	24	0	24
EBL	103	0	103	54	0	54
EBT	70	0	70	44	0	44
EBR	47	0	47	25	0	25
WBL	395	12	407	206	6	212
WBT	169	0	169	15	0	15
WBR	632	0	632	304	0	304
North Leg						
Approach	1,401	31	1,432	1,755	14	1,769
Departure	2,164	24	2,188	1,727	23	1,750
Total	3,565	55	3,620	3,482	37	3,519
South Leg						
Approach	1,780	33	1,813	1,691	32	1,723
Departure	1,442	43	1,485	1,633	20	1,653
Total	3,222	76	3,298	3,324	52	3,376
East Leg						
Approach	1,196	12	1,208	525	6	531
Departure	718	9	727	655	9	664
Total	1,914	21	1,935	1,180	15	1,195
West Leg						
Approach	220	0	220	123	0	123
Departure	273	0	273	79	0	79
Total	493	0	493	202	0	202
Total Approaches						
Approach	4,597	76	4,673	4,094	52	4,146
Departure	4,597	76	4,673	4,094	52	4,146
Total	9,194	152	9,346	8,188	104	8,292

Table C-3-Cumulative (2045) Peak Hour Volume Summary

	AM Peak Hour			PM Peak Hour		
	Cumulative Without Project	Project Trips	Cumulative With Project	Cumulative Without Project	Project Trips	Cumulative With Project
15 Trautwein Road/Shopping Center Driveway 1						
NBL	89	0	89	185	0	185
NBT	1,258	33	1,291	1,368	33	1,401
NBR	23	0	23	26	0	26
SBL	83	0	83	211	0	211
SBT	1,099	43	1,142	1,160	20	1,180
SBR	46	0	46	176	0	176
EBL	65	0	65	175	0	175
EBT	11	0	11	47	0	47
EBR	58	0	58	139	0	139
WBL	34	0	34	101	0	101
WBT	8	0	8	34	0	34
WBR	59	0	59	97	0	97
North Leg						
Approach	1,228	43	1,271	1,547	20	1,567
Departure	1,382	33	1,415	1,640	33	1,673
Total	2,610	76	2,686	3,187	53	3,240
South Leg						
Approach	1,370	33	1,403	1,579	33	1,612
Departure	1,191	43	1,234	1,400	20	1,420
Total	2,561	76	2,637	2,979	53	3,032
East Leg						
Approach	101	0	101	232	0	232
Departure	117	0	117	284	0	284
Total	218	0	218	516	0	516
West Leg						
Approach	134	0	134	361	0	361
Departure	143	0	143	395	0	395
Total	277	0	277	756	0	756
Total Approaches						
Approach	2,833	76	2,909	3,719	53	3,772
Departure	2,833	76	2,909	3,719	53	3,772
Total	5,666	152	5,818	7,438	106	7,544

Table C-3-Cumulative (2045) Peak Hour Volume Summary

	AM Peak Hour			PM Peak Hour		
	Cumulative Without Project	Project Trips	Cumulative With Project	Cumulative Without Project	Project Trips	Cumulative With Project
16 Trautwein Road/Van Buren Boulevard						
NBL	237	7	244	200	3	203
NBT	812	0	812	509	0	509
NBR	159	0	159	112	0	112
SBL	509	0	509	531	0	531
SBT	477	0	477	578	0	578
SBR	381	43	424	400	20	420
EBL	420	33	453	523	33	556
EBT	1,444	22	1,466	1,357	22	1,379
EBR	145	5	150	221	5	226
WBL	204	0	204	192	0	192
WBT	1,811	29	1,840	1,787	13	1,800
WBR	500	0	500	701	0	701
North Leg						
Approach	1,367	43	1,410	1,509	20	1,529
Departure	1,732	33	1,765	1,733	33	1,766
Total	3,099	76	3,175	3,242	53	3,295
South Leg						
Approach	1,208	7	1,215	821	3	824
Departure	826	5	831	991	5	996
Total	2,034	12	2,046	1,812	8	1,820
East Leg						
Approach	2,515	29	2,544	2,680	13	2,693
Departure	2,112	22	2,134	2,000	22	2,022
Total	4,627	51	4,678	4,680	35	4,715
West Leg						
Approach	2,009	60	2,069	2,101	60	2,161
Departure	2,429	79	2,508	2,387	36	2,423
Total	4,438	139	4,577	4,488	96	4,584
Total Approaches						
Approach	7,099	139	7,238	7,111	96	7,207
Departure	7,099	139	7,238	7,111	96	7,207
Total	14,198	278	14,476	14,222	192	14,414

Table C-3-Cumulative (2045) Peak Hour Volume Summary

	AM Peak Hour			PM Peak Hour		
	Cumulative Without Project	Project Trips	Cumulative With Project	Cumulative Without Project	Project Trips	Cumulative With Project
17 Shopping Center Driveway 2/Van Buren Boulevard						
NBL	0	0	0	0	0	0
NBT	0	0	0	0	0	0
NBR	0	0	0	0	0	0
SBL	89	0	89	214	0	214
SBT	0	0	0	0	0	0
SBR	37	0	37	59	0	59
EBL	39	0	39	94	0	94
EBT	2,073	22	2,095	1,906	22	1,928
EBR	0	0	0	0	0	0
WBL	0	0	0	0	0	0
WBT	2,108	29	2,137	2,486	13	2,499
WBR	108	0	108	111	0	111
North Leg						
Approach	126	0	126	273	0	273
Departure	147	0	147	205	0	205
Total	273	0	273	478	0	478
South Leg						
Approach	0	0	0	0	0	0
Departure	0	0	0	0	0	0
Total	0	0	0	0	0	0
East Leg						
Approach	2,216	29	2,245	2,597	13	2,610
Departure	2,162	22	2,184	2,120	22	2,142
Total	4,378	51	4,429	4,717	35	4,752
West Leg						
Approach	2,112	22	2,134	2,000	22	2,022
Departure	2,145	29	2,174	2,545	13	2,558
Total	4,257	51	4,308	4,545	35	4,580
Total Approaches						
Approach	4,454	51	4,505	4,870	35	4,905
Departure	4,454	51	4,505	4,870	35	4,905
Total	8,908	102	9,010	9,740	70	9,810

Table C-3-Cumulative (2045) Peak Hour Volume Summary

	AM Peak Hour			PM Peak Hour		
	Cumulative Without Project	Project Trips	Cumulative With Project	Cumulative Without Project	Project Trips	Cumulative With Project
18 Barton Street/Van Buren Boulevard						
NBL	454	0	454	626	0	626
NBT	116	0	116	81	0	81
NBR	483	0	483	323	0	323
SBL	91	0	91	54	0	54
SBT	172	0	172	53	0	53
SBR	366	9	375	214	4	218
EBL	202	7	209	147	7	154
EBT	1,613	16	1,629	1,482	16	1,498
EBR	421	0	421	420	0	420
WBL	393	0	393	369	0	369
WBT	1,941	21	1,962	1,929	9	1,938
WBR	37	0	37	95	0	95
North Leg						
Approach	629	9	638	321	4	325
Departure	355	7	362	323	7	330
Total	984	16	1,000	644	11	655
South Leg						
Approach	1,053	0	1,053	1,030	0	1,030
Departure	986	0	986	842	0	842
Total	2,039	0	2,039	1,872	0	1,872
East Leg						
Approach	2,371	21	2,392	2,393	9	2,402
Departure	2,187	16	2,203	1,859	16	1,875
Total	4,558	37	4,595	4,252	25	4,277
West Leg						
Approach	2,236	23	2,259	2,049	23	2,072
Departure	2,761	30	2,791	2,769	13	2,782
Total	4,997	53	5,050	4,818	36	4,854
Total Approaches						
Approach	6,289	53	6,342	5,793	36	5,829
Departure	6,289	53	6,342	5,793	36	5,829
Total	12,578	106	12,684	11,586	72	11,658

Table C-3-Cumulative (2045) Peak Hour Volume Summary

	AM Peak Hour			PM Peak Hour		
	Cumulative Without Project	Project Trips	Cumulative With Project	Cumulative Without Project	Project Trips	Cumulative With Project
19 Project Driveway 1/Van Buren Boulevard						
NBL	0	0	0	0	0	0
NBT	0	0	0	0	0	0
NBR	0	0	0	0	0	0
SBL	0	0	0	0	0	0
SBT	0	0	0	0	0	0
SBR	0	0	0	2	0	2
EBL	0	0	0	0	0	0
EBT	2,228	55	2,283	2,474	25	2,499
EBR	0	0	0	0	0	0
WBL	0	0	0	0	0	0
WBT	2,635	42	2,677	2,782	42	2,824
WBR	8	0	8	16	0	16
North Leg						
Approach	0	0	0	2	0	2
Departure	8	0	8	16	0	16
Total	8	0	8	18	0	18
South Leg						
Approach	0	0	0	0	0	0
Departure	0	0	0	0	0	0
Total	0	0	0	0	0	0
East Leg						
Approach	2,643	42	2,685	2,798	42	2,840
Departure	2,228	55	2,283	2,474	25	2,499
Total	4,871	97	4,968	5,272	67	5,339
West Leg						
Approach	2,228	55	2,283	2,474	25	2,499
Departure	2,635	42	2,677	2,784	42	2,826
Total	4,863	97	4,960	5,258	67	5,325
Total Approaches						
Approach	4,871	97	4,968	5,274	67	5,341
Departure	4,871	97	4,968	5,274	67	5,341
Total	9,742	194	9,936	10,548	134	10,682

Table C-3-Cumulative (2045) Peak Hour Volume Summary

	AM Peak Hour			PM Peak Hour		
	Cumulative Without Project	Project Trips	Cumulative With Project	Cumulative Without Project	Project Trips	Cumulative With Project
20 Dauchy Avenue/Project Driveway 3						
NBL	15	7	22	11	3	14
NBT	448	72	520	337	66	403
NBR	0	0	0	0	0	0
SBL	0	0	0	0	0	0
SBT	259	38	297	347	21	368
SBR	114	52	166	66	24	90
EBL	0	0	0	0	0	0
EBT	0	0	0	0	0	0
EBR	0	0	0	0	0	0
WBL	0	0	0	0	0	0
WBT	0	0	0	0	0	0
WBR	0	0	0	0	0	0
North Leg						
Approach	373	90	463	413	45	458
Departure	448	72	520	337	66	403
Total	821	162	983	750	111	861
South Leg						
Approach	463	79	542	348	69	417
Departure	259	38	297	347	21	368
Total	722	117	839	695	90	785
East Leg						
Approach	0	0	0	0	0	0
Departure	0	0	0	0	0	0
Total	0	0	0	0	0	0
West Leg						
Approach	0	0	0	0	0	0
Departure	129	59	188	77	27	104
Total	129	59	188	77	27	104
Total Approaches						
Approach	836	169	1,005	761	114	875
Departure	836	169	1,005	761	114	875
Total	1,672	338	2,010	1,522	228	1,750

Table C-3-Cumulative (2045) Peak Hour Volume Summary

	AM Peak Hour			PM Peak Hour		
	Cumulative Without Project	Project Trips	Cumulative With Project	Cumulative Without Project	Project Trips	Cumulative With Project
21 Dauchy Avenue/Project Driveway 4						
NBL	38	3	41	14	2	16
NBT	339	15	354	240	7	247
NBR	0	0	0	0	0	0
SBL	0	0	0	0	0	0
SBT	208	7	215	334	7	341
SBR	46	31	77	13	14	27
EBL	125	63	188	106	62	168
EBT	0	0	0	0	0	0
EBR	41	8	49	42	8	50
WBL	0	0	0	0	0	0
WBT	0	0	0	0	0	0
WBR	0	0	0	0	0	0
North Leg						
Approach	254	38	292	347	21	368
Departure	464	78	542	346	69	415
Total	718	116	834	693	90	783
South Leg						
Approach	377	18	395	254	9	263
Departure	249	15	264	376	15	391
Total	626	33	659	630	24	654
East Leg						
Approach	0	0	0	0	0	0
Departure	0	0	0	0	0	0
Total	0	0	0	0	0	0
West Leg						
Approach	166	71	237	148	70	218
Departure	84	34	118	27	16	43
Total	250	105	355	175	86	261
Total Approaches						
Approach	797	127	924	749	100	849
Departure	797	127	924	749	100	849
Total	1,594	254	1,848	1,498	200	1,698

Table C-3-Cumulative (2045) Peak Hour Volume Summary

	AM Peak Hour			PM Peak Hour		
	Cumulative Without Project	Project Trips	Cumulative With Project	Cumulative Without Project	Project Trips	Cumulative With Project
22 Dauchy Avenue/Project Driveway 5						
NBL	0	0	0	1	0	1
NBT	376	19	395	251	9	260
NBR	0	0	0	0	0	0
SBL	0	0	0	0	0	0
SBT	248	14	262	376	14	390
SBR	1	0	1	0	0	0
EBL	1	0	1	3	0	3
EBT	0	0	0	0	0	0
EBR	0	0	0	0	0	0
WBL	0	0	0	0	0	0
WBT	0	0	0	0	0	0
WBR	0	0	0	0	0	0
North Leg						
Approach	249	14	263	376	14	390
Departure	377	19	396	254	9	263
Total	626	33	659	630	23	653
South Leg						
Approach	376	19	395	252	9	261
Departure	248	14	262	376	14	390
Total	624	33	657	628	23	651
East Leg						
Approach	0	0	0	0	0	0
Departure	0	0	0	0	0	0
Total	0	0	0	0	0	0
West Leg						
Approach	1	0	1	3	0	3
Departure	1	0	1	1	0	1
Total	2	0	2	4	0	4
Total Approaches						
Approach	626	33	659	631	23	654
Departure	626	33	659	631	23	654
Total	1,252	66	1,318	1,262	46	1,308

APPENDIX D

INTERSECTION LEVEL OF SERVICE WORKSHEETS

HCM 6th Signalized Intersection Summary

1: Washington Street & Van Buren Boulevard

Woodcrest Christian School Expansion

Existing (2021) Without Project AM

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	134	902	120	81	1291	607	146	533	125	308	147	76
Future Volume (veh/h)	134	902	120	81	1291	607	146	533	125	308	147	76
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		1.00	1.00		0.99	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	141	949	126	85	1359	639	154	561	132	324	155	80
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	166	1596	212	107	1684	750	715	629	279	377	262	115
Arrive On Green	0.09	0.50	0.50	0.06	0.47	0.47	0.20	0.17	0.17	0.11	0.07	0.07
Sat Flow, veh/h	1810	3197	424	1810	3610	1608	3510	3610	1602	3510	3610	1590
Grp Volume(v), veh/h	141	536	539	85	1359	639	154	561	132	324	155	80
Grp Sat Flow(s),veh/h/ln	1810	1805	1817	1810	1805	1608	1755	1805	1602	1755	1805	1590
Q Serve(g_s), s	10.0	27.5	27.5	6.0	41.9	29.1	4.8	19.8	8.1	11.8	5.4	5.2
Cycle Q Clear(g_c), s	10.0	27.5	27.5	6.0	41.9	29.1	4.8	19.8	8.1	11.8	5.4	5.2
Prop In Lane	1.00		0.23	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	166	901	907	107	1684	750	715	629	279	377	262	115
V/C Ratio(X)	0.85	0.59	0.59	0.79	0.81	0.85	0.22	0.89	0.47	0.86	0.59	0.69
Avail Cap(c_a), veh/h	192	901	907	174	1684	750	715	664	294	405	783	345
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	58.1	23.2	23.2	60.4	29.7	12.5	43.1	52.5	34.0	57.1	58.4	39.1
Incr Delay (d2), s/veh	25.5	2.9	2.9	12.2	4.3	11.7	0.1	13.9	1.2	16.1	2.1	7.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	5.6	11.6	11.7	3.1	17.9	12.2	2.1	10.1	3.2	6.0	2.5	2.8
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	83.6	26.1	26.0	72.6	33.9	24.2	43.3	66.4	35.2	73.1	60.6	46.4
LnGrp LOS	F	C	C	E	C	C	D	E	D	E	E	D
Approach Vol, veh/h		1216			2083			847			559	
Approach Delay, s/veh		32.7			32.5			57.4			65.8	
Approach LOS		C			C			E			E	
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	12.2	71.1	31.5	15.2	16.5	66.9	18.9	27.7				
Change Period (Y+Rc), s	4.5	6.2	5.0	* 5.8	4.5	6.2	5.0	5.1				
Max Green Setting (Gmax), s	12.5	57.8	10.5	* 28	13.8	56.5	15.0	23.9				
Max Q Clear Time (g_c+I1), s	8.0	29.5	6.8	7.4	12.0	43.9	13.8	21.8				
Green Ext Time (p_c), s	0.1	7.0	0.1	1.0	0.1	8.6	0.1	0.9				

Intersection Summary

HCM 6th Ctrl Delay	41.0
HCM 6th LOS	D

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

HCM 6th Signalized Intersection Summary

Woodcrest Christian School Expansion

2: Alta Cresta Avenue/Chicago Avenue & Van Buren Boulevard

Existing (2021) Without Project AM



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	25	1252	58	69	1822	7	128	2	89	3	2	5
Future Volume (veh/h)	25	1252	58	69	1822	7	128	2	89	3	2	5
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No			No			No		
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	28	1391	64	77	2024	8	142	2	99	3	2	6
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	62	2313	1030	98	2436	10	170	5	232	10	24	73
Arrive On Green	0.03	0.64	0.64	0.05	0.66	0.66	0.09	0.15	0.15	0.01	0.06	0.06
Sat Flow, veh/h	1810	3610	1608	1810	3688	15	1810	32	1577	1810	415	1246
Grp Volume(v), veh/h	28	1391	64	77	990	1042	142	0	101	3	0	8
Grp Sat Flow(s),veh/h/ln	1810	1805	1608	1810	1805	1897	1810	0	1609	1810	0	1661
Q Serve(g_s), s	2.0	29.3	1.9	5.5	53.6	53.7	10.0	0.0	7.4	0.2	0.0	0.6
Cycle Q Clear(g_c), s	2.0	29.3	1.9	5.5	53.6	53.7	10.0	0.0	7.4	0.2	0.0	0.6
Prop In Lane	1.00		1.00	1.00		0.01	1.00		0.98	1.00		0.75
Lane Grp Cap(c), veh/h	62	2313	1030	98	1193	1254	170	0	237	10	0	98
V/C Ratio(X)	0.45	0.60	0.06	0.79	0.83	0.83	0.84	0.00	0.43	0.30	0.00	0.08
Avail Cap(c_a), veh/h	97	2313	1030	166	1193	1254	306	0	262	255	0	230
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	61.6	13.6	8.7	60.7	16.6	16.6	57.9	0.0	50.4	64.4	0.0	57.8
Incr Delay (d2), s/veh	5.1	1.2	0.1	12.8	6.8	6.5	10.3	0.0	1.2	15.9	0.0	0.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.0	10.8	0.7	2.8	20.8	21.9	5.0	0.0	3.1	0.1	0.0	0.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	66.6	14.8	8.9	73.5	23.3	23.1	68.2	0.0	51.7	80.2	0.0	58.2
LnGrp LOS	E	B	A	E	C	C	E	A	D	F	A	E
Approach Vol, veh/h	1483		2109				243		11			
Approach Delay, s/veh	15.5		25.1				61.3		64.2			
Approach LOS	B		C				E		E			
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	1.5	89.5	16.2	12.8	9.0	92.1	4.7	24.2				
Change Period (Y+Rc), s	4.5	6.2	4.0	* 5.1	4.5	6.2	4.0	5.1				
Max Green Setting (Gmax), s	1.9	58.8	22.0	* 18	7.0	63.7	18.3	21.2				
Max Q Clear Time (g_c+17), s	1.5	31.3	12.0	2.6	4.0	55.7	2.2	9.4				
Green Ext Time (p_c), s	0.0	11.2	0.2	0.0	0.0	6.6	0.0	0.3				

Intersection Summary

HCM 6th Ctrl Delay 23.8

HCM 6th LOS C

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

HCM 6th TWSC
4: Little Court & Van Buren Boulevard

Woodcrest Christian School Expansion
Existing (2021) Without Project AM

Intersection						
Int Delay, s/veh	0					
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑↑↑			↑↑		↗
Traffic Vol, veh/h	1343	1	0	1898	0	7
Future Vol, veh/h	1343	1	0	1898	0	7
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	-	0
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	93	93	93	93	93	93
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	1444	1	0	2041	0	8
Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	-	-	-	723
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	-	-	-	-	7.1
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	-	-	-	-	3.9
Pot Cap-1 Maneuver	-	-	0	-	0	320
Stage 1	-	-	0	-	0	-
Stage 2	-	-	0	-	0	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	-	-	-	320
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Approach	EB		WB		NB	
HCM Control Delay, s	0		0		16.5	
HCM LOS					C	
Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBT		
Capacity (veh/h)	320	-	-	-		
HCM Lane V/C Ratio	0.024	-	-	-		
HCM Control Delay (s)	16.5	-	-	-		
HCM Lane LOS	C	-	-	-		
HCM 95th %tile Q(veh)	0.1	-	-	-		

HCM 6th TWSC
5: Van Buren Boulevard & Ridgeway Avenue

Woodcrest Christian School Expansion
Existing (2021) Without Project AM

Intersection						
Int Delay, s/veh	1.1					
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	36	1314	1779	8	1	119
Future Vol, veh/h	36	1314	1779	8	1	119
Conflicting Peds, #/hr	3	0	0	3	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	93	93	93	93	93	93
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	39	1413	1913	9	1	128
Major/Minor	Major1	Major2		Minor2		
Conflicting Flow All	1925	0	-	0	2706	964
Stage 1	-	-	-	-	1921	-
Stage 2	-	-	-	-	785	-
Critical Hdwy	4.1	-	-	-	6.8	6.9
Critical Hdwy Stg 1	-	-	-	-	5.8	-
Critical Hdwy Stg 2	-	-	-	-	5.8	-
Follow-up Hdwy	2.2	-	-	-	3.5	3.3
Pot Cap-1 Maneuver	*519	-	-	-	*15	*346
Stage 1	-	-	-	-	*326	-
Stage 2	-	-	-	-	*415	-
Platoon blocked, %	1	-	-	-	1	1
Mov Cap-1 Maneuver	*517	-	-	-	*14	*345
Mov Cap-2 Maneuver	-	-	-	-	*14	-
Stage 1	-	-	-	-	*300	-
Stage 2	-	-	-	-	*414	-
Approach	EB	WB		SB		
HCM Control Delay, s	0.3	0		27.3		
HCM LOS	D					
Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1	
Capacity (veh/h)	* 517	-	-	-	288	
HCM Lane V/C Ratio	0.075	-	-	-	0.448	
HCM Control Delay (s)	12.5	-	-	-	27.3	
HCM Lane LOS	B	-	-	-	D	
HCM 95th %tile Q(veh)	0.2	-	-	-	2.2	
Notes						
~: Volume exceeds capacity		\$: Delay exceeds 300s		+: Computation Not Defined		*: All major volume in platoon

HCM 6th Signalized Intersection Summary 6: Dauchy Avenue & Van Buren Boulevard

Woodcrest Christian School Expansion
Existing (2021) Without Project AM

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	19	1073	223	156	1532	15	239	35	145	37	45	23
Future Volume (veh/h)	19	1073	223	156	1532	15	239	35	145	37	45	23
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	20	1118	232	162	1596	16	249	36	151	39	47	24
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	50	1668	344	189	2307	1029	311	42	178	156	104	88
Arrive On Green	0.03	0.56	0.56	0.07	0.43	0.43	0.12	0.13	0.13	0.04	0.05	0.05
Sat Flow, veh/h	1810	2968	612	1810	3610	1610	1810	319	1340	1810	1900	1610
Grp Volume(v), veh/h	20	677	673	162	1596	16	249	0	187	39	47	24
Grp Sat Flow(s),veh/h/ln	1810	1805	1775	1810	1805	1610	1810	0	1659	1810	1900	1610
Q Serve(g_s), s	1.4	34.2	34.7	11.5	46.7	0.7	15.4	0.0	14.3	2.6	3.1	1.9
Cycle Q Clear(g_c), s	1.4	34.2	34.7	11.5	46.7	0.7	15.4	0.0	14.3	2.6	3.1	1.9
Prop In Lane	1.00		0.34	1.00		1.00	1.00		0.81	1.00		1.00
Lane Grp Cap(c), veh/h	50	1015	998	189	2307	1029	311	0	220	156	104	88
V/C Ratio(X)	0.40	0.67	0.67	0.86	0.69	0.02	0.80	0.00	0.85	0.25	0.45	0.27
Avail Cap(c_a), veh/h	97	1015	998	320	2307	1029	311	0	383	297	438	372
HCM Platoon Ratio	1.00	1.00	1.00	0.67	0.67	0.67	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	0.29	0.29	0.29	1.00	0.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	62.1	19.9	20.1	59.5	26.8	13.6	50.2	0.0	55.1	54.4	59.5	59.0
Incr Delay (d2), s/veh	1.9	3.5	3.6	1.5	0.5	0.0	12.8	0.0	8.9	0.3	3.0	1.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.7	14.0	14.1	5.4	20.7	0.3	8.8	0.0	6.6	1.2	1.6	0.8
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	64.0	23.4	23.7	60.9	27.3	13.6	63.0	0.0	64.0	54.7	62.6	60.6
LnGrp LOS	E	C	C	E	C	B	E	A	E	D	E	E
Approach Vol, veh/h		1370			1774			436			110	
Approach Delay, s/veh		24.2			30.2			63.4			59.4	
Approach LOS		C			C			E			E	
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	18.6	80.3	19.4	11.7	8.6	90.3	9.3	21.8				
Change Period (Y+Rc), s	5.0	7.2	4.0	4.6	5.0	7.2	4.0	4.6				
Max Green Setting (Gmax), s	23.0	40.8	15.4	30.0	7.0	56.8	15.4	30.0				
Max Q Clear Time (g_c+I1), s	13.5	36.7	17.4	5.1	3.4	48.7	4.6	16.3				
Green Ext Time (p_c), s	0.1	2.7	0.0	0.3	0.0	5.8	0.0	0.9				
Intersection Summary												
HCM 6th Ctrl Delay			32.8									
HCM 6th LOS			C									

Intersection												
Int Delay, s/veh	4.6											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	↕
Traffic Vol, veh/h	112	0	27	4	0	37	34	295	4	8	247	143
Future Vol, veh/h	112	0	27	4	0	37	34	295	4	8	247	143
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	90
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	88	88	88	88	88	88	88	88	88	88	88	88
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	127	0	31	5	0	42	39	335	5	9	281	163
Major/Minor	Minor2		Minor1			Major1			Major2			
Conflicting Flow All	736	717	281	812	878	338	444	0	0	340	0	0
Stage 1	299	299	-	416	416	-	-	-	-	-	-	-
Stage 2	437	418	-	396	462	-	-	-	-	-	-	-
Critical Hdwy	7.1	6.5	6.2	7.1	6.5	6.2	4.1	-	-	4.1	-	-
Critical Hdwy Stg 1	6.1	5.5	-	6.1	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.1	5.5	-	6.1	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.5	4	3.3	3.5	4	3.3	2.2	-	-	2.2	-	-
Pot Cap-1 Maneuver	337	358	763	300	289	709	1127	-	-	1230	-	-
Stage 1	714	670	-	618	595	-	-	-	-	-	-	-
Stage 2	602	594	-	633	568	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	304	339	763	276	274	709	1127	-	-	1230	-	-
Mov Cap-2 Maneuver	304	339	-	276	274	-	-	-	-	-	-	-
Stage 1	683	663	-	591	569	-	-	-	-	-	-	-
Stage 2	542	568	-	601	562	-	-	-	-	-	-	-
Approach	EB		WB			NB			SB			
HCM Control Delay, s	24		11.3			0.8			0.2			
HCM LOS	C		B									
Minor Lane/Major Mvmt	NBL		NBT	NBR		EBLn1WBLn1	SBL	SBT	SBR			
Capacity (veh/h)	1127		-	-	344	615	1230	-	-			
HCM Lane V/C Ratio	0.034		-	-	0.459	0.076	0.007	-	-			
HCM Control Delay (s)	8.3		0	-	24	11.3	7.9	0	-			
HCM Lane LOS	A		A	-	C	B	A	A	-			
HCM 95th %tile Q(veh)	0.1		-	-	2.3	0.2	0	-	-			

HCM 6th AWSC
8: Taft Street/Dauchy Avenue & Krameria Avenue

Woodcrest Christian School Expansion
Existing (2021) Without Project AM

Intersection	
Intersection Delay, s/veh	24.2
Intersection LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	39	339	2	1	383	86	14	15	8	76	6	33
Future Vol, veh/h	39	339	2	1	383	86	14	15	8	76	6	33
Peak Hour Factor	0.79	0.79	0.79	0.79	0.79	0.79	0.79	0.79	0.79	0.79	0.79	0.79
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	49	429	3	1	485	109	18	19	10	96	8	42
Number of Lanes	0	1	0	0	1	0	0	1	0	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	1	1	1
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	1	1	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	1	1	1	1
HCM Control Delay	21.3	30.5	10.8	12.2
HCM LOS	C	D	B	B

Lane	NBLn1	EBLn1	WBLn1	SBLn1
Vol Left, %	38%	10%	0%	66%
Vol Thru, %	41%	89%	81%	5%
Vol Right, %	22%	1%	18%	29%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	37	380	470	115
LT Vol	14	39	1	76
Through Vol	15	339	383	6
RT Vol	8	2	86	33
Lane Flow Rate	47	481	595	146
Geometry Grp	1	1	1	1
Degree of Util (X)	0.092	0.722	0.851	0.268
Departure Headway (Hd)	7.068	5.407	5.152	6.626
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	510	664	702	539
Service Time	5.068	3.469	3.209	4.712
HCM Lane V/C Ratio	0.092	0.724	0.848	0.271
HCM Control Delay	10.8	21.3	30.5	12.2
HCM Lane LOS	B	C	D	B
HCM 95th-tile Q	0.3	6.1	9.7	1.1

HCM 6th Signalized Intersection Summary

9: Wood Road & Van Buren Boulevard

Woodcrest Christian School Expansion
Existing (2021) Without Project AM



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	133	852	316	415	1189	149	360	485	287	82	407	163
Future Volume (veh/h)	133	852	316	415	1189	149	360	485	287	82	407	163
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.98	1.00		0.91	1.00		0.87
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No			No			No		
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	148	947	351	461	1321	166	400	539	319	91	452	181
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	163	1164	734	1795	2732	1197	493	612	361	97	495	195
Arrive On Green	0.12	0.43	0.43	0.17	0.25	0.25	0.14	0.29	0.29	0.05	0.20	0.20
Sat Flow, veh/h	1810	3610	1575	3510	3610	1582	3510	2099	1239	1810	2417	952
Grp Volume(v), veh/h	148	947	351	461	1321	166	400	463	395	91	336	297
Grp Sat Flow(s),veh/h/ln	1810	1805	1575	1755	1805	1582	1755	1805	1533	1810	1805	1565
Q Serve(g_s), s	10.5	29.9	0.0	14.8	40.6	20.4	14.4	31.8	31.9	6.5	23.6	24.3
Cycle Q Clear(g_c), s	10.5	29.9	0.0	14.8	40.6	20.4	14.4	31.8	31.9	6.5	23.6	24.3
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.81	1.00		0.61
Lane Grp Cap(c), veh/h	163	1164	734	1795	2732	1197	493	526	447	97	370	321
V/C Ratio(X)	0.91	0.81	0.48	0.26	0.48	0.14	0.81	0.88	0.88	0.93	0.91	0.93
Avail Cap(c_a), veh/h	163	1164	734	1795	2732	1197	493	528	448	97	378	327
HCM Platoon Ratio	1.33	1.33	1.33	0.33	0.33	0.33	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.67	0.67	0.67	0.91	0.91	0.91	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	56.7	33.7	19.4	32.6	27.1	58.8	54.2	43.9	43.9	61.3	50.5	50.7
Incr Delay (d2), s/veh	33.7	4.3	1.5	0.0	0.6	0.2	9.2	15.7	18.3	69.1	24.7	31.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	6.0	12.0	6.1	6.9	19.7	8.9	6.9	16.1	14.1	4.8	13.0	12.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	90.4	38.0	20.9	32.6	27.7	59.0	63.4	59.6	62.2	130.3	75.2	82.1
LnGrp LOS	F	D	C	C	C	E	E	E	E	F	E	F
Approach Vol, veh/h	1446					1948		1258		724		
Approach Delay, s/veh	39.2					31.5		61.6		85.0		
Approach LOS	D					C		E		F		
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	35.1	49.1	23.8	32.4	17.2	107.0	12.5	43.7				
Change Period (Y+Rc), s	7.2	* 7.2	5.5	5.8	5.5	7.2	5.5	* 5.8				
Max Green Setting (Gmax), s	20.6	* 42	16.3	27.2	11.7	50.8	7.0	* 38				
Max Q Clear Time (g_c+11g_s), s	116.8	31.9	16.4	26.3	12.5	42.6	8.5	33.9				
Green Ext Time (p_c), s	0.4	5.0	0.0	0.4	0.0	5.2	0.0	2.0				

Intersection Summary

HCM 6th Ctrl Delay 47.8

HCM 6th LOS D

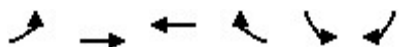
Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

HCM 6th Signalized Intersection Summary

10: Van Buren Boulevard & Bountiful Street

Woodcrest Christian School Expansion
Existing (2021) Without Project AM



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations	↰	↑↑↑	↑↑↑		↰	↰
Traffic Volume (veh/h)	89	1181	1332	31	47	170
Future Volume (veh/h)	89	1181	1332	31	47	170
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00			0.98	1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No	No		No	
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	96	1270	1432	33	51	183
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %	0	0	0	0	0	0
Cap, veh/h	118	4035	3535	81	239	213
Arrive On Green	0.13	1.00	1.00	1.00	0.13	0.13
Sat Flow, veh/h	1810	5358	5384	120	1810	1610
Grp Volume(v), veh/h	96	1270	950	515	51	183
Grp Sat Flow(s), veh/h/ln	1810	1729	1729	1875	1810	1610
Q Serve(g_s), s	6.7	0.0	0.0	0.0	3.3	14.5
Cycle Q Clear(g_c), s	6.7	0.0	0.0	0.0	3.3	14.5
Prop In Lane	1.00			0.06	1.00	1.00
Lane Grp Cap(c), veh/h	118	4035	2345	1271	239	213
V/C Ratio(X)	0.81	0.31	0.41	0.41	0.21	0.86
Avail Cap(c_a), veh/h	230	4035	2345	1271	536	477
HCM Platoon Ratio	2.00	2.00	2.00	2.00	1.00	1.00
Upstream Filter(I)	0.52	0.52	0.72	0.72	1.00	1.00
Uniform Delay (d), s/veh	55.7	0.0	0.0	0.0	50.4	55.2
Incr Delay (d2), s/veh	2.7	0.1	0.4	0.7	0.4	9.8
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%), veh/ln	2.9	0.0	0.1	0.2	1.5	12.9
Unsig. Movement Delay, s/veh						
LnGrp Delay(d), s/veh	58.4	0.1	0.4	0.7	50.8	65.0
LnGrp LOS	E	A	A	A	D	E
Approach Vol, veh/h		1366	1465		234	
Approach Delay, s/veh		4.2	0.5		61.9	
Approach LOS		A	A		E	
Timer - Assigned Phs		2		4	5	6
Phs Duration (G+Y+Rc), s		108.3		21.7	13.0	95.3
Change Period (Y+Rc), s		7.2		4.5	4.5	7.2
Max Green Setting (Gmax), s		79.8		38.5	16.5	58.8
Max Q Clear Time (g_c+l1), s		2.0		16.5	8.7	2.0
Green Ext Time (p_c), s		11.0		0.7	0.1	12.4
Intersection Summary						
HCM 6th Ctrl Delay			6.8			
HCM 6th LOS			A			

HCM 6th Signalized Intersection Summary

11: Trautwein Road & Mission Grove Parkway S

Woodcrest Christian School Expansion
Existing (2021) Without Project AM



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	58	32	9	584	31	50	3	1647	499	179	865	16
Future Volume (veh/h)	58	32	9	584	31	50	3	1647	499	179	865	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		0.98	1.00		1.00	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No			No			No		
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	60	33	9	608	32	52	3	1716	520	186	901	17
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	91	94	26	512	329	274	10	1762	1020	213	2166	945
Arrive On Green	0.05	0.07	0.07	0.15	0.17	0.17	0.00	0.33	0.33	0.12	0.60	0.60
Sat Flow, veh/h	1810	1436	392	3510	1900	1582	1810	3610	1608	1810	3610	1574
Grp Volume(v), veh/h	60	0	42	608	32	52	3	1716	520	186	901	17
Grp Sat Flow(s),veh/h/ln	1810	0	1827	1755	1900	1582	1810	1805	1608	1810	1805	1574
Q Serve(g_s), s	3.9	0.0	2.6	17.5	1.7	3.4	0.2	56.3	23.8	12.1	16.0	0.5
Cycle Q Clear(g_c), s	3.9	0.0	2.6	17.5	1.7	3.4	0.2	56.3	23.8	12.1	16.0	0.5
Prop In Lane	1.00		0.21	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	91	0	119	512	329	274	10	1762	1020	213	2166	945
V/C Ratio(X)	0.66	0.00	0.35	1.19	0.10	0.19	0.30	0.97	0.51	0.87	0.42	0.02
Avail Cap(c_a), veh/h	166	0	490	512	656	546	219	1762	1020	219	2166	945
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	0.67	0.67	0.67	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	1.00	1.00	0.09	0.09	0.09	1.00	1.00	1.00
Uniform Delay (d), s/veh	56.0	0.0	53.7	51.2	41.7	42.4	59.5	39.6	16.3	52.1	12.8	9.7
Incr Delay (d2), s/veh	3.0	0.0	1.8	102.7	0.1	0.3	0.6	2.8	0.2	28.4	0.6	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.9	0.0	1.3	14.8	0.8	1.3	0.1	25.8	9.1	7.0	5.9	0.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	58.9	0.0	55.4	154.0	41.9	42.8	60.1	42.4	16.5	80.4	13.4	9.7
LnGrp LOS	E	A	E	F	D	D	E	D	B	F	B	A
Approach Vol, veh/h	102			692			2239			1104		
Approach Delay, s/veh	57.5			140.4			36.4			24.6		
Approach LOS	E			F			D			C		
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	18.6	64.8	23.0	13.6	5.2	78.2	10.1	26.6				
Change Period (Y+Rc), s	4.5	6.2	5.5	5.8	4.5	6.2	4.0	* 5.8				
Max Green Setting (Gmax), s	14.5	33.8	17.5	32.2	14.5	33.8	11.0	* 41				
Max Q Clear Time (g_c+14), s	14.5	58.3	19.5	4.6	2.2	18.0	5.9	5.4				
Green Ext Time (p_c), s	0.0	0.0	0.0	0.2	0.0	5.1	0.0	0.3				

Intersection Summary

HCM 6th Ctrl Delay	51.2
HCM 6th LOS	D

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

HCM 6th Signalized Intersection Summary

12: Trautwein Road & John F Kennedy Drive

Woodcrest Christian School Expansion
Existing (2021) Without Project AM



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	546	49	71	100	55	41	199	1846	75	9	761	586
Future Volume (veh/h)	546	49	71	100	55	41	199	1846	75	9	761	586
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.99	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No			No			No		
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	587	53	76	108	59	44	214	1985	81	10	818	630
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	395	190	158	216	108	81	369	2120	944	30	1348	781
Arrive On Green	0.11	0.10	0.10	0.12	0.11	0.11	0.14	0.39	0.39	0.01	0.25	0.25
Sat Flow, veh/h	3510	1900	1586	1810	1004	749	1810	3610	1607	1810	3610	1606
Grp Volume(v), veh/h	587	53	76	108	0	103	214	1985	81	10	818	630
Grp Sat Flow(s),veh/h/ln	1755	1900	1586	1810	0	1753	1810	1805	1607	1810	1805	1606
Q Serve(g_s), s	13.5	3.1	5.4	6.7	0.0	6.7	13.3	63.4	1.7	0.7	24.0	22.1
Cycle Q Clear(g_c), s	13.5	3.1	5.4	6.7	0.0	6.7	13.3	63.4	1.7	0.7	24.0	22.1
Prop In Lane	1.00		1.00	1.00		0.43	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	395	190	158	216	0	189	369	2120	944	30	1348	781
V/C Ratio(X)	1.49	0.28	0.48	0.50	0.00	0.54	0.58	0.94	0.09	0.33	0.61	0.81
Avail Cap(c_a), veh/h	395	583	486	216	0	482	369	2120	944	106	1348	781
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	0.67	0.67	0.67	0.67	0.67	0.67
Upstream Filter(I)	1.00	1.00	1.00	1.00	0.00	1.00	0.57	0.57	0.57	0.63	0.63	0.63
Uniform Delay (d), s/veh	53.2	50.0	51.1	49.5	0.0	50.7	47.0	34.2	3.4	58.7	37.2	16.7
Incr Delay (d2), s/veh	232.0	0.8	2.2	1.8	0.0	2.4	1.3	5.9	0.1	4.1	1.3	5.7
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	8.6	1.5	2.3	3.2	0.0	3.1	6.2	29.6	1.4	0.3	11.1	9.6
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	285.2	50.8	53.3	51.2	0.0	53.2	48.3	40.1	3.5	62.7	38.5	22.4
LnGrp LOS	F	D	D	D	A	D	D	D	A	E	D	C
Approach Vol, veh/h	716			211			2280			1458		
Approach Delay, s/veh	243.3			52.2			39.6			31.7		
Approach LOS	F			D			D			C		
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	6.0	77.7	19.8	16.6	31.7	52.0	18.0	18.3				
Change Period (Y+Rc), s	4.0	7.2	5.4	* 4.6	7.2	* 7.2	4.5	5.4				
Max Green Setting (Gmax), s	7.0	45.4	11.0	* 37	7.6	* 45	13.5	33.0				
Max Q Clear Time (g_c+1/2, s)	12.5	65.4	8.7	7.4	15.3	26.0	15.5	8.7				
Green Ext Time (p_c), s	0.0	0.0	0.0	0.5	0.0	7.4	0.0	0.5				

Intersection Summary

HCM 6th Ctrl Delay 69.0

HCM 6th LOS E

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

HCM 6th Signalized Intersection Summary

13: Trautwein Road & Grove Community Drive

Woodcrest Christian School Expansion
Existing (2021) Without Project AM



Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	77	524	1596	41	161	771
Future Volume (veh/h)	77	524	1596	41	161	771
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00		1.00	1.00	
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No		No		No	
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	85	576	1754	45	177	847
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91
Percent Heavy Veh, %	0	0	0	0	0	0
Cap, veh/h	131	725	2160	962	644	3009
Arrive On Green	0.07	0.07	1.00	1.00	0.37	1.00
Sat Flow, veh/h	1810	2834	3705	1607	3510	3705
Grp Volume(v), veh/h	85	576	1754	45	177	847
Grp Sat Flow(s), veh/h/ln	1810	1417	1805	1607	1755	1805
Q Serve(g_s), s	5.5	0.8	0.0	0.0	4.3	0.0
Cycle Q Clear(g_c), s	5.5	0.8	0.0	0.0	4.3	0.0
Prop In Lane	1.00	1.00		1.00	1.00	
Lane Grp Cap(c), veh/h	131	725	2160	962	644	3009
V/C Ratio(X)	0.65	0.79	0.81	0.05	0.27	0.28
Avail Cap(c_a), veh/h	179	801	2160	962	644	3009
HCM Platoon Ratio	1.00	1.00	2.00	2.00	2.00	2.00
Upstream Filter(I)	1.00	1.00	0.09	0.09	0.93	0.93
Uniform Delay (d), s/veh	54.2	41.7	0.0	0.0	32.4	0.0
Incr Delay (d2), s/veh	5.3	5.1	0.3	0.0	0.2	0.2
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%), veh/ln	2.7	8.4	0.1	0.0	1.7	0.1
Unsig. Movement Delay, s/veh						
LnGrp Delay(d), s/veh	59.5	46.8	0.3	0.0	32.6	0.2
LnGrp LOS	E	D	A	A	C	A
Approach Vol, veh/h	661		1799			1024
Approach Delay, s/veh	48.4		0.3			5.8
Approach LOS	D		A			A
Timer - Assigned Phs	1	2			6	8
Phs Duration (G+Y+Rc), s	28.2	78.0			106.2	13.8
Change Period (Y+Rc), s	6.2	* 6.2			6.2	5.1
Max Green Setting (Gmax), s	19.5	* 72			96.8	11.9
Max Q Clear Time (g_c+I), s	10.3	2.0			2.0	7.5
Green Ext Time (p_c), s	0.4	21.9			6.2	1.2

Intersection Summary

HCM 6th Ctrl Delay	11.1
HCM 6th LOS	B

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

HCM 6th Signalized Intersection Summary

14: Trautwein Road & Orange Terrace Pkwy

Woodcrest Christian School Expansion
Existing (2021) Without Project AM



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	84	58	18	302	139	511	49	1042	213	302	568	27
Future Volume (veh/h)	84	58	18	302	139	511	49	1042	213	302	568	27
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		0.97	1.00		1.00	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No			No			No		
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	102	71	22	368	170	623	60	1271	260	368	693	33
Peak Hour Factor	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	127	124	39	315	387	902	91	1588	705	426	1875	830
Arrive On Green	0.07	0.09	0.09	0.17	0.20	0.20	0.05	0.44	0.44	0.24	1.00	1.00
Sat Flow, veh/h	1810	1388	430	1810	1900	2741	1810	3610	1602	3510	3610	1599
Grp Volume(v), veh/h	102	0	93	368	170	623	60	1271	260	368	693	33
Grp Sat Flow(s), veh/h/ln	1810	0	1817	1810	1900	1371	1810	1805	1602	1755	1805	1599
Q Serve(g_s), s	6.7	0.0	5.9	20.9	9.4	17.3	3.9	36.5	7.0	12.0	0.0	0.0
Cycle Q Clear(g_c), s	6.7	0.0	5.9	20.9	9.4	17.3	3.9	36.5	7.0	12.0	0.0	0.0
Prop In Lane	1.00		0.24	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	127	0	163	315	387	902	91	1588	705	426	1875	830
V/C Ratio(X)	0.80	0.00	0.57	1.17	0.44	0.69	0.66	0.80	0.37	0.86	0.37	0.04
Avail Cap(c_a), veh/h	196	0	503	315	624	1244	226	1588	705	761	1875	830
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00	2.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	1.00	1.00	0.93	0.93	0.93	0.96	0.96	0.96
Uniform Delay (d), s/veh	55.0	0.0	52.4	49.6	41.8	19.6	56.0	29.1	6.5	44.5	0.0	0.0
Incr Delay (d2), s/veh	6.4	0.0	3.1	104.6	0.8	1.0	2.8	4.0	1.4	2.0	0.5	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.3	0.0	2.9	18.6	4.5	5.6	1.8	15.5	4.7	4.6	0.1	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	61.3	0.0	55.5	154.2	42.6	20.5	58.7	33.1	7.9	46.4	0.5	0.1
LnGrp LOS	E	A	E	F	D	C	E	C	A	D	A	A
Approach Vol, veh/h	195				1161				1591			
Approach Delay, s/veh	58.6				66.1				29.9			
Approach LOS	E				E				C			
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	19.6	59.0	24.9	16.6	10.1	68.5	12.4	29.0				
Change Period (Y+Rc), s	5.0	6.2	4.0	5.8	4.0	6.2	4.0	4.6				
Max Green Setting (Gmax), s	26.0	21.8	18.0	33.2	15.0	33.8	13.0	39.4				
Max Q Clear Time (g_c+14.0), s	14.0	38.5	22.9	7.9	5.9	2.0	8.7	19.3				
Green Ext Time (p_c), s	0.5	0.0	0.0	0.5	0.0	4.6	0.0	3.7				

Intersection Summary

HCM 6th Ctrl Delay	37.9
HCM 6th LOS	D

HCM 6th Signalized Intersection Summary 15: Trautwein Road & Shopping Ctr Dwy

Woodcrest Christian School Expansion
Existing (2021) Without Project AM



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	32	9	23	23	7	48	44	913	6	68	633	15
Future Volume (veh/h)	32	9	23	23	7	48	44	913	6	68	633	15
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	0.99		0.99	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No				No		No				No	
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	37	10	27	27	8	56	51	1062	7	79	736	17
Peak Hour Factor	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	131	42	113	156	19	133	82	2622	1168	100	2658	1185
Arrive On Green	0.09	0.09	0.09	0.09	0.09	0.09	0.09	1.00	1.00	0.06	0.74	0.74
Sat Flow, veh/h	1353	452	1219	1385	204	1428	1810	3610	1609	1810	3610	1609
Grp Volume(v), veh/h	37	0	37	27	0	64	51	1062	7	79	736	17
Grp Sat Flow(s),veh/h/ln	1353	0	1671	1385	0	1632	1810	1805	1609	1810	1805	1609
Q Serve(g_s), s	3.5	0.0	2.7	2.4	0.0	4.8	3.5	0.0	0.0	5.6	8.8	0.4
Cycle Q Clear(g_c), s	8.3	0.0	2.7	5.1	0.0	4.8	3.5	0.0	0.0	5.6	8.8	0.4
Prop In Lane	1.00		0.73	1.00		0.88	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	131	0	155	156	0	152	82	2622	1168	100	2658	1185
V/C Ratio(X)	0.28	0.00	0.24	0.17	0.00	0.42	0.62	0.41	0.01	0.79	0.28	0.01
Avail Cap(c_a), veh/h	363	0	442	393	0	432	118	2622	1168	216	2658	1185
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00	2.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	0.23	0.23	0.23	0.81	0.81	0.81
Uniform Delay (d), s/veh	59.6	0.0	54.7	57.0	0.0	55.7	58.0	0.0	0.0	60.6	5.7	4.6
Incr Delay (d2), s/veh	1.2	0.0	0.8	0.5	0.0	1.9	0.7	0.1	0.0	4.2	0.2	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.2	0.0	1.2	0.9	0.0	2.1	1.5	0.0	0.0	2.6	2.7	0.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	60.7	0.0	55.5	57.6	0.0	57.5	58.7	0.1	0.0	64.8	5.9	4.6
LnGrp LOS	E	A	E	E	A	E	E	A	A	E	A	A
Approach Vol, veh/h	74				91		1120				832	
Approach Delay, s/veh	58.1				57.5		2.8				11.5	
Approach LOS	E				E		A				B	
Timer - Assigned Phs	1	2	4		5	6	8					
Phs Duration (G+Y+Rc), s	1.7	101.6	16.7		10.4	102.9	16.7					
Change Period (Y+Rc), s	4.5	7.2	4.6		4.5	7.2	4.6					
Max Green Setting (Gmax), s	15.5	63.8	34.4		8.5	70.8	34.4					
Max Q Clear Time (g_c+17), s	17.6	2.0	10.3		5.5	10.8	7.1					
Green Ext Time (p_c), s	0.0	8.5	0.3		0.0	5.2	0.4					
Intersection Summary												
HCM 6th Ctrl Delay	10.5											
HCM 6th LOS	B											

HCM 6th Signalized Intersection Summary

16: Trautwein Road & Van Buren Boulevard

Woodcrest Christian School Expansion
Existing (2021) Without Project AM



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↔↔	↑↑	↗	↗	↑↑↑	↗	↗	↑↑		↗↗	↑↑	↗
Traffic Volume (veh/h)	302	859	67	160	1323	340	138	634	108	179	377	268
Future Volume (veh/h)	302	859	67	160	1323	340	138	634	108	179	377	268
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No				No				No			
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	328	934	73	174	1438	370	150	689	117	195	410	291
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	476	1300	735	245	1867	695	176	804	136	252	849	591
Arrive On Green	0.27	0.72	0.72	0.27	0.72	0.72	0.10	0.26	0.26	0.02	0.08	0.08
Sat Flow, veh/h	3510	3610	1609	1810	5187	1609	1810	3085	523	3510	3610	1583
Grp Volume(v), veh/h	328	934	73	174	1438	370	150	403	403	195	410	291
Grp Sat Flow(s),veh/h/ln	1755	1805	1609	1810	1729	1609	1810	1805	1804	1755	1805	1583
Q Serve(g_s), s	10.9	19.5	0.8	11.3	22.6	7.5	10.6	27.6	27.7	7.2	14.1	4.2
Cycle Q Clear(g_c), s	10.9	19.5	0.8	11.3	22.6	7.5	10.6	27.6	27.7	7.2	14.1	4.2
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.29	1.00		1.00
Lane Grp Cap(c), veh/h	476	1300	735	245	1867	695	176	470	470	252	849	591
V/C Ratio(X)	0.69	0.72	0.10	0.71	0.77	0.53	0.85	0.86	0.86	0.77	0.48	0.49
Avail Cap(c_a), veh/h	476	1300	735	245	1867	695	223	555	555	394	1050	679
HCM Platoon Ratio	2.00	2.00	2.00	2.00	2.00	2.00	1.00	1.00	1.00	0.33	0.33	0.33
Upstream Filter(I)	0.97	0.97	0.97	0.92	0.92	0.92	1.00	1.00	1.00	0.98	0.98	0.98
Uniform Delay (d), s/veh	44.9	14.4	3.2	45.1	14.8	4.2	57.8	45.8	45.8	62.4	52.4	18.4
Incr Delay (d2), s/veh	3.4	3.3	0.3	7.3	2.9	2.7	18.7	11.1	11.3	1.9	0.4	0.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.3	5.1	0.4	4.9	5.1	2.4	5.7	13.6	13.6	3.3	6.9	5.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	48.3	17.7	3.5	52.3	17.7	6.8	76.5	56.9	57.0	64.3	52.8	19.1
LnGrp LOS	D	B	A	D	B	A	E	E	E	E	D	B
Approach Vol, veh/h	1335				1982				956		896	
Approach Delay, s/veh	24.5				18.7				60.0		44.3	
Approach LOS	C				B				E		D	
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	22.6	53.0	17.6	36.8	22.6	53.0	14.3	40.1				
Change Period (Y+Rc), s	5.0	* 6.2	5.0	6.2	5.0	6.2	5.0	* 6.2				
Max Green Setting (Gmax), s	7.5	* 47	16.0	37.8	7.0	46.8	14.6	* 40				
Max Q Clear Time (g_c+113), s	113.3	21.5	12.6	16.1	12.9	24.6	9.2	29.7				
Green Ext Time (p_c), s	0.0	6.5	0.1	3.3	0.0	11.5	0.1	3.5				

Intersection Summary

HCM 6th Ctrl Delay	32.3
HCM 6th LOS	C

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

HCM 6th Signalized Intersection Summary

17: Van Buren Boulevard & Shopping Ctr Dwy

Woodcrest Christian School Expansion
Existing (2021) Without Project AM



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations	↰	↑↑	↑↑↑		↰	↰
Traffic Volume (veh/h)	29	1117	1474	84	71	29
Future Volume (veh/h)	29	1117	1474	84	71	29
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00			0.98	1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No	No		No	
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	31	1188	1568	89	76	31
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	0	0	0	0	0	0
Cap, veh/h	66	3091	3938	223	104	93
Arrive On Green	0.07	1.00	0.53	0.53	0.06	0.06
Sat Flow, veh/h	1810	3705	5186	285	1810	1610
Grp Volume(v), veh/h	31	1188	1081	576	76	31
Grp Sat Flow(s),veh/h/ln	1810	1805	1729	1841	1810	1610
Q Serve(g_s), s	2.1	0.0	24.4	24.4	5.4	2.4
Cycle Q Clear(g_c), s	2.1	0.0	24.4	24.4	5.4	2.4
Prop In Lane	1.00			0.15	1.00	1.00
Lane Grp Cap(c), veh/h	66	3091	2716	1446	104	93
V/C Ratio(X)	0.47	0.38	0.40	0.40	0.73	0.33
Avail Cap(c_a), veh/h	104	3091	2716	1446	487	434
HCM Platoon Ratio	2.00	2.00	0.67	0.67	1.00	1.00
Upstream Filter(I)	0.75	0.75	0.38	0.38	1.00	1.00
Uniform Delay (d), s/veh	59.1	0.0	12.4	12.4	60.3	58.9
Incr Delay (d2), s/veh	1.5	0.3	0.2	0.3	9.3	2.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.0	0.1	10.1	10.8	2.8	2.2
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	60.6	0.3	12.5	12.7	69.5	60.9
LnGrp LOS	E	A	B	B	E	E
Approach Vol, veh/h		1219	1657		107	
Approach Delay, s/veh		1.8	12.6		67.1	
Approach LOS		A	B		E	
Timer - Assigned Phs		2		4	5	6
Phs Duration (G+Y+Rc), s		118.5		11.5	9.2	109.3
Change Period (Y+Rc), s		7.2		4.0	4.5	7.2
Max Green Setting (Gmax), s		83.8		35.0	7.5	71.8
Max Q Clear Time (g_c+I1), s		2.0		7.4	4.1	26.4
Green Ext Time (p_c), s		10.3		0.3	0.0	14.8
Intersection Summary						
HCM 6th Ctrl Delay			10.1			
HCM 6th LOS			B			

HCM 6th Signalized Intersection Summary

18: Barton Street & Van Buren Boulevard

Woodcrest Christian School Expansion
Existing (2021) Without Project AM



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	156	999	105	321	1439	20	300	95	391	45	141	283
Future Volume (veh/h)	156	999	105	321	1439	20	300	95	391	45	141	283
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No			No			No		
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	168	1074	113	345	1547	22	323	102	420	48	152	304
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	196	1263	133	1665	6386	91	372	661	560	80	157	315
Arrive On Green	0.04	0.13	0.13	0.92	1.00	1.00	0.11	0.35	0.35	0.04	0.28	0.28
Sat Flow, veh/h	1810	3296	346	1810	5270	75	3510	1900	1610	1810	565	1131
Grp Volume(v), veh/h	168	588	599	345	1015	554	323	102	420	48	0	456
Grp Sat Flow(s),veh/h/ln	1810	1805	1838	1810	1729	1887	1755	1900	1610	1810	0	1696
Q Serve(g_s), s	12.0	41.4	41.5	2.4	0.0	0.0	11.8	4.8	23.6	3.4	0.0	34.5
Cycle Q Clear(g_c), s	12.0	41.4	41.5	2.4	0.0	0.0	11.8	4.8	23.6	3.4	0.0	34.5
Prop In Lane	1.00		0.19	1.00		0.04	1.00		1.00	1.00		0.67
Lane Grp Cap(c), veh/h	196	691	704	1665	4190	2286	372	661	560	80	0	472
V/C Ratio(X)	0.86	0.85	0.85	0.21	0.24	0.24	0.87	0.15	0.75	0.60	0.00	0.97
Avail Cap(c_a), veh/h	278	691	704	1665	4190	2286	378	661	560	97	0	472
HCM Platoon Ratio	0.33	0.33	0.33	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.93	0.93	0.93	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	61.7	53.1	53.2	0.5	0.0	0.0	57.2	29.2	23.2	61.0	0.0	46.3
Incr Delay (d2), s/veh	11.8	11.7	11.6	0.0	0.1	0.3	17.8	0.1	5.6	2.6	0.0	32.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	6.4	22.2	22.6	0.0	0.1	0.2	6.0	2.2	9.4	1.6	0.0	18.8
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	73.4	64.8	64.8	0.5	0.1	0.3	75.0	29.3	28.8	63.6	0.0	78.8
LnGrp LOS	E	E	E	A	A	A	E	C	C	E	A	E
Approach Vol, veh/h	1355		1914				845			504		
Approach Delay, s/veh	65.9		0.2				46.5			77.4		
Approach LOS	E		A				D			E		
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc),s	28.8	57.0	18.8	42.0	19.1	166.7	9.8	51.0				
Change Period (Y+Rc), s	7.2	* 7.2	5.0	* 5.8	5.0	7.2	4.0	5.8				
Max Green Setting (Gmax), s	28.8	* 50	14.0	* 36	20.0	38.0	7.0	43.0				
Max Q Clear Time (g_c+14.4), s	14.4	43.5	13.8	36.5	14.0	2.0	5.4	25.6				
Green Ext Time (p_c), s	0.2	3.5	0.0	0.0	0.1	12.6	0.0	1.8				

Intersection Summary

HCM 6th Ctrl Delay	36.4
HCM 6th LOS	D

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Intersection												
Int Delay, s/veh	0											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↑↑			↑↑				↑			↑
Traffic Vol, veh/h	0	1315	0	0	1787	7	0	0	0	0	0	0
Future Vol, veh/h	0	1315	0	0	1787	7	0	0	0	0	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	0	-	-	0
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	94	94	94	94	94	94	94	94	94	94	94	94
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	0	1399	0	0	1901	7	0	0	0	0	0	0
Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	-	0	0	-	-	0	-	-	700	-	-	954
Stage 1	-	-	-	-	-	-	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-	-	-	-	-	-	-
Critical Hdwy	-	-	-	-	-	-	-	-	6.9	-	-	6.9
Critical Hdwy Stg 1	-	-	-	-	-	-	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-	-	-	-	-	-	-
Follow-up Hdwy	-	-	-	-	-	-	-	-	3.3	-	-	3.3
Pot Cap-1 Maneuver	0	-	-	0	-	-	0	0	386	0	0	*346
Stage 1	0	-	-	0	-	-	0	0	-	0	0	-
Stage 2	0	-	-	0	-	-	0	0	-	0	0	-
Platoon blocked, %		-	-		-	-						1
Mov Cap-1 Maneuver	-	-	-	-	-	-	-	-	386	-	-	*346
Mov Cap-2 Maneuver	-	-	-	-	-	-	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-	-	-	-	-	-	-
Approach	EB			WB			NB			SB		
HCM Control Delay, s	0			0			0			0		
HCM LOS							A			A		
Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBT	WBR	SBLn1						
Capacity (veh/h)	-	-	-	-	-	-						
HCM Lane V/C Ratio	-	-	-	-	-	-						
HCM Control Delay (s)	0	-	-	-	-	0						
HCM Lane LOS	A	-	-	-	-	A						
HCM 95th %tile Q(veh)	-	-	-	-	-	-						
Notes												
~: Volume exceeds capacity		\$: Delay exceeds 300s				+: Computation Not Defined				*: All major volume in platoon		

Intersection						
Int Delay, s/veh	0.2					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	0	0	15	334	163	114
Future Vol, veh/h	0	0	15	334	163	114
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	85	85	85	85	85	85
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	0	0	18	393	192	134
Major/Minor	Minor2	Major1		Major2		
Conflicting Flow All	688	259	326	0	-	0
Stage 1	259	-	-	-	-	-
Stage 2	429	-	-	-	-	-
Critical Hdwy	6.4	6.2	4.1	-	-	-
Critical Hdwy Stg 1	5.4	-	-	-	-	-
Critical Hdwy Stg 2	5.4	-	-	-	-	-
Follow-up Hdwy	3.5	3.3	2.2	-	-	-
Pot Cap-1 Maneuver	415	785	1245	-	-	-
Stage 1	789	-	-	-	-	-
Stage 2	661	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	408	785	1245	-	-	-
Mov Cap-2 Maneuver	408	-	-	-	-	-
Stage 1	775	-	-	-	-	-
Stage 2	661	-	-	-	-	-
Approach	EB	NB		SB		
HCM Control Delay, s	0	0.3		0		
HCM LOS	A					
Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR	
Capacity (veh/h)	1245	-	-	-	-	
HCM Lane V/C Ratio	0.014	-	-	-	-	
HCM Control Delay (s)	7.9	0	0	-	-	
HCM Lane LOS	A	A	A	-	-	
HCM 95th %tile Q(veh)	0	-	-	-	-	

Intersection						
Int Delay, s/veh	4.6					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	125	41	38	225	117	46
Future Vol, veh/h	125	41	38	225	117	46
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	85	85	85	85	85	85
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	147	48	45	265	138	54
Major/Minor	Minor2	Major1		Major2		
Conflicting Flow All	520	165	192	0	-	0
Stage 1	165	-	-	-	-	-
Stage 2	355	-	-	-	-	-
Critical Hdwy	6.4	6.2	4.1	-	-	-
Critical Hdwy Stg 1	5.4	-	-	-	-	-
Critical Hdwy Stg 2	5.4	-	-	-	-	-
Follow-up Hdwy	3.5	3.3	2.2	-	-	-
Pot Cap-1 Maneuver	520	885	1394	-	-	-
Stage 1	869	-	-	-	-	-
Stage 2	714	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	500	885	1394	-	-	-
Mov Cap-2 Maneuver	500	-	-	-	-	-
Stage 1	836	-	-	-	-	-
Stage 2	714	-	-	-	-	-
Approach	EB	NB		SB		
HCM Control Delay, s	14.8	1.1		0		
HCM LOS	B					
Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR	
Capacity (veh/h)	1394	-	560	-	-	
HCM Lane V/C Ratio	0.032	-	0.349	-	-	
HCM Control Delay (s)	7.7	0	14.8	-	-	
HCM Lane LOS	A	A	B	-	-	
HCM 95th %tile Q(veh)	0.1	-	1.6	-	-	

Intersection						
Int Delay, s/veh	0					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	1	0	0	265	156	1
Future Vol, veh/h	1	0	0	265	156	1
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	87	87	87	87	87	87
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	1	0	0	305	179	1
Major/Minor	Minor2	Major1		Major2		
Conflicting Flow All	485	180	180	0	-	0
Stage 1	180	-	-	-	-	-
Stage 2	305	-	-	-	-	-
Critical Hdwy	6.4	6.2	4.1	-	-	-
Critical Hdwy Stg 1	5.4	-	-	-	-	-
Critical Hdwy Stg 2	5.4	-	-	-	-	-
Follow-up Hdwy	3.5	3.3	2.2	-	-	-
Pot Cap-1 Maneuver	545	868	1408	-	-	-
Stage 1	856	-	-	-	-	-
Stage 2	752	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	545	868	1408	-	-	-
Mov Cap-2 Maneuver	545	-	-	-	-	-
Stage 1	856	-	-	-	-	-
Stage 2	752	-	-	-	-	-
Approach	EB	NB		SB		
HCM Control Delay, s	11.6	0		0		
HCM LOS	B					
Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR	
Capacity (veh/h)	1408	-	545	-	-	
HCM Lane V/C Ratio	-	-	0.002	-	-	
HCM Control Delay (s)	0	-	11.6	-	-	
HCM Lane LOS	A	-	B	-	-	
HCM 95th %tile Q(veh)	0	-	0	-	-	

HCM 6th Signalized Intersection Summary

1: Washington Street & Van Buren Boulevard

Woodcrest Christian School Expansion
Existing (2021) Without Project Afternoon

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	129	1181	79	116	1219	359	100	294	104	443	275	102
Future Volume (veh/h)	129	1181	79	116	1219	359	100	294	104	443	275	102
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		0.99	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	137	1256	84	123	1297	382	106	313	111	471	293	109
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	163	1708	114	148	1766	787	505	400	177	526	402	178
Arrive On Green	0.09	0.50	0.50	0.08	0.49	0.49	0.14	0.11	0.11	0.15	0.11	0.11
Sat Flow, veh/h	1810	3434	229	1810	3610	1608	3510	3610	1597	3510	3610	1597
Grp Volume(v), veh/h	137	659	681	123	1297	382	106	313	111	471	293	109
Grp Sat Flow(s),veh/h/ln	1810	1805	1858	1810	1805	1608	1755	1805	1597	1755	1805	1597
Q Serve(g_s), s	9.7	37.6	37.8	8.7	37.2	11.1	3.5	11.0	7.1	17.1	10.2	6.9
Cycle Q Clear(g_c), s	9.7	37.6	37.8	8.7	37.2	11.1	3.5	11.0	7.1	17.1	10.2	6.9
Prop In Lane	1.00		0.12	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	163	898	925	148	1766	787	505	400	177	526	402	178
V/C Ratio(X)	0.84	0.73	0.74	0.83	0.73	0.49	0.21	0.78	0.63	0.90	0.73	0.61
Avail Cap(c_a), veh/h	202	898	925	174	1766	787	505	500	221	567	850	376
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	58.3	25.9	25.9	58.8	26.5	6.4	49.1	56.3	37.6	54.3	55.9	36.1
Incr Delay (d2), s/veh	22.3	5.3	5.2	24.6	2.8	2.1	0.2	6.3	3.7	16.0	2.5	3.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	5.3	16.2	16.8	4.9	15.5	3.9	1.5	5.3	3.0	8.6	4.7	2.8
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	80.6	31.2	31.1	83.4	29.2	8.6	49.3	62.5	41.3	70.2	58.4	39.5
LnGrp LOS	F	C	C	F	C	A	D	E	D	E	E	D
Approach Vol, veh/h		1477			1802			530			873	
Approach Delay, s/veh		35.7			28.5			55.4			62.4	
Approach LOS		D			C			E			E	
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	15.1	70.9	23.7	20.3	16.2	69.8	24.5	19.5				
Change Period (Y+Rc), s	4.5	6.2	5.0	* 5.8	4.5	6.2	5.0	5.1				
Max Green Setting (Gmax), s	12.5	57.7	8.2	* 31	14.5	55.7	21.0	18.0				
Max Q Clear Time (g_c+I1), s	10.7	39.8	5.5	12.2	11.7	39.2	19.1	13.0				
Green Ext Time (p_c), s	0.0	7.9	0.1	1.9	0.1	9.0	0.4	1.0				

Intersection Summary

HCM 6th Ctrl Delay	40.2
HCM 6th LOS	D

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

HCM 6th Signalized Intersection Summary

Woodcrest Christian School Expansion

2: Alta Cresta Avenue/Chicago Avenue & Van Buren Boulevard

Existing (2021) Without Project Afternoon



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	22	1643	135	39	1681	18	59	2	19	20	2	6
Future Volume (veh/h)	22	1643	135	39	1681	18	59	2	19	20	2	6
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		0.98	1.00		1.00	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No			No			No		
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	24	1786	147	42	1827	20	64	2	21	22	2	7
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	56	2555	1138	76	2627	29	88	10	102	53	18	64
Arrive On Green	0.03	0.71	0.71	0.04	0.72	0.72	0.05	0.07	0.07	0.03	0.05	0.05
Sat Flow, veh/h	1810	3610	1608	1810	3657	40	1810	141	1484	1810	369	1290
Grp Volume(v), veh/h	24	1786	147	42	900	947	64	0	23	22	0	9
Grp Sat Flow(s),veh/h/ln	1810	1805	1608	1810	1805	1892	1810	0	1625	1810	0	1659
Q Serve(g_s), s	1.7	37.2	3.8	3.0	36.4	36.7	4.5	0.0	1.7	1.6	0.0	0.7
Cycle Q Clear(g_c), s	1.7	37.2	3.8	3.0	36.4	36.7	4.5	0.0	1.7	1.6	0.0	0.7
Prop In Lane	1.00		1.00	1.00		0.02	1.00		0.91	1.00		0.78
Lane Grp Cap(c), veh/h	56	2555	1138	76	1297	1359	88	0	111	53	0	82
V/C Ratio(X)	0.42	0.70	0.13	0.55	0.69	0.70	0.73	0.00	0.21	0.41	0.00	0.11
Avail Cap(c_a), veh/h	97	2555	1138	104	1297	1359	111	0	226	104	0	231
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	61.8	11.0	6.1	61.1	10.3	10.3	61.0	0.0	57.2	62.0	0.0	59.0
Incr Delay (d2), s/veh	5.0	1.6	0.2	6.1	3.1	3.0	16.2	0.0	0.9	5.0	0.0	0.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.8	12.6	1.3	1.5	12.6	13.3	2.5	0.0	0.7	0.8	0.0	0.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	66.8	12.6	6.3	67.2	13.4	13.3	77.2	0.0	58.1	67.0	0.0	59.6
LnGrp LOS	E	B	A	E	B	B	E	A	E	E	A	E
Approach Vol, veh/h	1957			1889			87			31		
Approach Delay, s/veh	12.8			14.5			72.2			64.8		
Approach LOS	B			B			E			E		
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), \$0.0	98.2	10.3	11.5	8.6	99.6	7.8	14.0					
Change Period (Y+Rc), s	4.5	6.2	4.0	* 5.1	4.5	6.2	4.0	5.1				
Max Green Setting (Gmax),s	77.1	8.0	* 18	7.0	77.6	7.5	18.1					
Max Q Clear Time (g_c+1/15),s	39.2	6.5	2.7	3.7	38.7	3.6	3.7					
Green Ext Time (p_c), s	0.0	19.1	0.0	0.0	0.0	18.4	0.0	0.0				

Intersection Summary

HCM 6th Ctrl Delay 15.3

HCM 6th LOS B

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

HCM 6th TWSC
4: Little Court & Van Buren Boulevard

Woodcrest Christian School Expansion
Existing (2021) Without Project Afternoon

Intersection						
Int Delay, s/veh	0					
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑↑↑			↑↑		↗
Traffic Vol, veh/h	1678	4	0	1738	0	2
Future Vol, veh/h	1678	4	0	1738	0	2
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	-	0
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	90	90	90	90	90	90
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	1864	4	0	1931	0	2
Major/Minor	Major1	Major2	Minor1			
Conflicting Flow All	0	0	-	-	-	934
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	-	-	-	-	7.1
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	-	-	-	-	3.9
Pot Cap-1 Maneuver	-	-	0	-	0	233
Stage 1	-	-	0	-	0	-
Stage 2	-	-	0	-	0	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	-	-	-	233
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Approach	EB	WB	NB			
HCM Control Delay, s	0	0	20.6			
HCM LOS	C					
Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBT		
Capacity (veh/h)	233	-	-	-		
HCM Lane V/C Ratio	0.01	-	-	-		
HCM Control Delay (s)	20.6	-	-	-		
HCM Lane LOS	C	-	-	-		
HCM 95th %tile Q(veh)	0	-	-	-		

HCM 6th TWSC
5: Van Buren Boulevard & Ridgeway Avenue

Woodcrest Christian School Expansion
Existing (2021) Without Project Afternoon

Intersection						
Int Delay, s/veh	1.1					
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	99	1581	1682	17	1	56
Future Vol, veh/h	99	1581	1682	17	1	56
Conflicting Peds, #/hr	3	0	0	3	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	90	90	90	90	90	90
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	110	1757	1869	19	1	62
Major/Minor	Major1	Major2		Minor2		
Conflicting Flow All	1891	0	-	0	2981	947
Stage 1	-	-	-	-	1882	-
Stage 2	-	-	-	-	1099	-
Critical Hdwy	4.1	-	-	-	6.8	6.9
Critical Hdwy Stg 1	-	-	-	-	5.8	-
Critical Hdwy Stg 2	-	-	-	-	5.8	-
Follow-up Hdwy	2.2	-	-	-	3.5	3.3
Pot Cap-1 Maneuver	*590	-	-	-	*4	*393
Stage 1	-	-	-	-	*371	-
Stage 2	-	-	-	-	*285	-
Platoon blocked, %	1	-	-	-	1	1
Mov Cap-1 Maneuver	*589	-	-	-	*4	*392
Mov Cap-2 Maneuver	-	-	-	-	*4	-
Stage 1	-	-	-	-	*301	-
Stage 2	-	-	-	-	*284	-
Approach	EB	WB		SB		
HCM Control Delay, s	0.7	0		47.8		
HCM LOS	E					
Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1	
Capacity (veh/h)	* 589	-	-	-	145	
HCM Lane V/C Ratio	0.187	-	-	-	0.437	
HCM Control Delay (s)	12.5	-	-	-	47.8	
HCM Lane LOS	B	-	-	-	E	
HCM 95th %tile Q(veh)	0.7	-	-	-	2	
Notes						
~: Volume exceeds capacity		\$: Delay exceeds 300s		+: Computation Not Defined		*: All major volume in platoon

HCM 6th Signalized Intersection Summary 6: Dauchy Avenue & Van Buren Boulevard

Woodcrest Christian School Expansion
Existing (2021) Without Project Afternoon

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	66	1326	190	103	1472	27	194	65	113	62	28	44
Future Volume (veh/h)	66	1326	190	103	1472	27	194	65	113	62	28	44
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		0.99	0.97		0.96	0.98		0.96
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	72	1441	207	112	1600	29	211	71	123	67	30	48
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	92	1841	261	125	2164	959	312	86	149	177	259	211
Arrive On Green	0.05	0.58	0.58	0.09	0.80	0.80	0.05	0.14	0.14	0.05	0.14	0.14
Sat Flow, veh/h	1810	3170	450	1810	3610	1599	1810	609	1055	1810	1900	1550
Grp Volume(v), veh/h	72	813	835	112	1600	29	211	0	194	67	30	48
Grp Sat Flow(s),veh/h/ln	1810	1805	1815	1810	1805	1599	1810	0	1663	1810	1900	1550
Q Serve(g_s), s	5.1	44.6	46.5	8.0	28.5	0.5	7.0	0.0	14.7	4.1	1.8	3.6
Cycle Q Clear(g_c), s	5.1	44.6	46.5	8.0	28.5	0.5	7.0	0.0	14.7	4.1	1.8	3.6
Prop In Lane	1.00		0.25	1.00		1.00	1.00		0.63	1.00		1.00
Lane Grp Cap(c), veh/h	92	1048	1054	125	2164	959	312	0	234	177	259	211
V/C Ratio(X)	0.79	0.78	0.79	0.89	0.74	0.03	0.68	0.00	0.83	0.38	0.12	0.23
Avail Cap(c_a), veh/h	97	1048	1054	125	2164	959	312	0	384	186	438	358
HCM Platoon Ratio	1.00	1.00	1.00	1.33	1.33	1.33	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	0.44	0.44	0.44	1.00	0.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	61.0	20.8	21.2	58.5	8.2	5.3	49.8	0.0	54.3	45.6	49.3	50.1
Incr Delay (d2), s/veh	28.8	5.6	6.1	27.3	1.0	0.0	4.8	0.0	7.5	0.5	0.2	0.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.0	18.4	19.4	4.4	5.9	0.2	3.5	0.0	6.7	1.9	0.9	1.4
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	89.8	26.4	27.3	85.8	9.2	5.4	54.6	0.0	61.8	46.1	49.5	50.6
LnGrp LOS	F	C	C	F	A	A	D	A	E	D	D	D
Approach Vol, veh/h		1720			1741			405			145	
Approach Delay, s/veh		29.5			14.1			58.0			48.3	
Approach LOS		C			B			E			D	
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	14.0	82.7	11.0	22.3	11.6	85.1	10.4	22.9				
Change Period (Y+Rc), s	5.0	7.2	4.0	4.6	5.0	7.2	4.0	4.6				
Max Green Setting (Gmax), s	9.0	63.2	7.0	30.0	7.0	65.2	7.0	30.0				
Max Q Clear Time (g_c+I1), s	10.0	48.5	9.0	5.6	7.1	30.5	6.1	16.7				
Green Ext Time (p_c), s	0.0	9.1	0.0	0.3	0.0	14.9	0.0	0.9				
Intersection Summary												
HCM 6th Ctrl Delay			26.4									
HCM 6th LOS			C									

Intersection												
Int Delay, s/veh	5.1											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	119	1	29	5	0	14	14	199	8	8	226	62
Future Vol, veh/h	119	1	29	5	0	14	14	199	8	8	226	62
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	90
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	76	76	76	76	76	76	76	76	76	76	76	76
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	157	1	38	7	0	18	18	262	11	11	297	82
Major/Minor	Minor2		Minor1			Major1			Major2			
Conflicting Flow All	632	628	297	684	705	268	379	0	0	273	0	0
Stage 1	319	319	-	304	304	-	-	-	-	-	-	-
Stage 2	313	309	-	380	401	-	-	-	-	-	-	-
Critical Hdwy	7.1	6.5	6.2	7.1	6.5	6.2	4.1	-	-	4.1	-	-
Critical Hdwy Stg 1	6.1	5.5	-	6.1	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.1	5.5	-	6.1	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.5	4	3.3	3.5	4	3.3	2.2	-	-	2.2	-	-
Pot Cap-1 Maneuver	396	402	747	365	363	776	1191	-	-	1302	-	-
Stage 1	697	657	-	710	667	-	-	-	-	-	-	-
Stage 2	702	663	-	646	604	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	378	390	747	338	352	776	1191	-	-	1302	-	-
Mov Cap-2 Maneuver	378	390	-	338	352	-	-	-	-	-	-	-
Stage 1	684	650	-	697	655	-	-	-	-	-	-	-
Stage 2	673	651	-	605	597	-	-	-	-	-	-	-
Approach	EB		WB			NB			SB			
HCM Control Delay, s	21		11.5			0.5			0.2			
HCM LOS	C		B									
Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1WBLn1	SBL	SBT	SBR					
Capacity (veh/h)	1191	-	-	418	579	1302	-	-				
HCM Lane V/C Ratio	0.015	-	-	0.469	0.043	0.008	-	-				
HCM Control Delay (s)	8.1	0	-	21	11.5	7.8	0	-				
HCM Lane LOS	A	A	-	C	B	A	A	-				
HCM 95th %tile Q(veh)	0	-	-	2.4	0.1	0	-	-				

HCM 6th AWSC
8: Taft Street/Dauchy Avenue & Krameria Avenue

Woodcrest Christian School Expansion
Existing (2021) Without Project Afternoon

Intersection	
Intersection Delay, s/veh	17.8
Intersection LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	33	302	23	6	245	47	11	17	8	136	20	62
Future Vol, veh/h	33	302	23	6	245	47	11	17	8	136	20	62
Peak Hour Factor	0.78	0.78	0.78	0.78	0.78	0.78	0.78	0.78	0.78	0.78	0.78	0.78
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	42	387	29	8	314	60	14	22	10	174	26	79
Number of Lanes	0	1	0	0	1	0	0	1	0	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	1	1	1
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	1	1	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	1	1	1	1
HCM Control Delay	21.1	16.7	10.6	14.9
HCM LOS	C	C	B	B

Lane	NBLn1	EBLn1	WBLn1	SBLn1
Vol Left, %	31%	9%	2%	62%
Vol Thru, %	47%	84%	82%	9%
Vol Right, %	22%	6%	16%	28%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	36	358	298	218
LT Vol	11	33	6	136
Through Vol	17	302	245	20
RT Vol	8	23	47	62
Lane Flow Rate	46	459	382	279
Geometry Grp	1	1	1	1
Degree of Util (X)	0.089	0.708	0.594	0.48
Departure Headway (Hd)	6.953	5.551	5.601	6.184
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	518	647	638	579
Service Time	4.953	3.632	3.688	4.275
HCM Lane V/C Ratio	0.089	0.709	0.599	0.482
HCM Control Delay	10.6	21.1	16.7	14.9
HCM Lane LOS	B	C	C	B
HCM 95th-tile Q	0.3	5.8	3.9	2.6

HCM 6th Signalized Intersection Summary

9: Wood Road & Van Buren Boulevard

Woodcrest Christian School Expansion
Existing (2021) Without Project Afternoon



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	155	1079	199	206	1190	88	267	354	210	103	283	206
Future Volume (veh/h)	155	1079	199	206	1190	88	267	354	210	103	283	206
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.95	1.00		0.96	1.00		0.76	1.00		0.74
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No			No			No		
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	163	1136	209	217	1253	93	281	373	221	108	298	217
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	177	3082	1464	265	3003	1290	336	576	326	111	470	309
Arrive On Green	0.03	0.28	0.28	0.15	1.00	1.00	0.10	0.29	0.29	0.06	0.26	0.26
Sat Flow, veh/h	1810	3610	1534	3510	3610	1552	3510	1970	1114	1810	1805	1187
Grp Volume(v), veh/h	163	1136	209	217	1253	93	281	340	254	108	298	217
Grp Sat Flow(s),veh/h/ln	1810	1805	1534	1755	1805	1552	1755	1805	1279	1810	1805	1187
Q Serve(g_s), s	11.7	32.8	4.6	7.8	0.0	0.0	10.2	21.4	22.8	7.7	19.0	21.5
Cycle Q Clear(g_c), s	11.7	32.8	4.6	7.8	0.0	0.0	10.2	21.4	22.8	7.7	19.0	21.5
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.87	1.00		1.00
Lane Grp Cap(c), veh/h	177	3082	1464	265	3003	1290	336	528	374	111	470	309
V/C Ratio(X)	0.92	0.37	0.14	0.82	0.42	0.07	0.84	0.64	0.68	0.97	0.63	0.70
Avail Cap(c_a), veh/h	177	3082	1464	292	3003	1290	451	528	374	111	470	309
HCM Platoon Ratio	0.33	0.33	0.33	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.52	0.52	0.52	0.89	0.89	0.89	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	62.4	18.6	1.4	54.3	0.0	0.0	57.8	40.1	40.6	60.9	42.6	43.5
Incr Delay (d2), s/veh	29.3	0.2	0.1	12.5	0.4	0.1	7.6	2.7	4.9	75.1	2.8	7.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	7.0	15.7	0.0	3.6	0.2	0.0	4.8	9.7	7.5	5.8	8.7	6.8
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	91.7	18.8	1.5	66.8	0.4	0.1	65.3	42.8	45.5	136.0	45.4	50.5
LnGrp LOS	F	B	A	E	A	A	E	D	D	F	D	D
Approach Vol, veh/h	1508			1563			875			623		
Approach Delay, s/veh	24.3			9.6			50.8			62.9		
Approach LOS	C			A			D			E		
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), \$5.3	120.0	18.0	39.6	18.2	117.1	13.8	43.8					
Change Period (Y+Rc), s	5.5	7.2	5.5	5.8	5.5	7.2	5.8	* 5.8				
Max Green Setting (Gmax), s	10.8	50.7	16.7	27.8	12.7	48.8	8.0	* 38				
Max Q Clear Time (g_c+19.8)	19.8	34.8	12.2	23.5	13.7	2.0	9.7	24.8				
Green Ext Time (p_c), s	0.0	7.3	0.2	1.3	0.0	11.3	0.0	3.1				

Intersection Summary

HCM 6th Ctrl Delay	29.6
HCM 6th LOS	C

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

HCM 6th Signalized Intersection Summary

10: Van Buren Boulevard & Bountiful Street

Woodcrest Christian School Expansion
Existing (2021) Without Project Afternoon



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations	↰	↑↑↑	↑↑↑		↰	↰
Traffic Volume (veh/h)	179	1370	1361	24	15	136
Future Volume (veh/h)	179	1370	1361	24	15	136
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00			0.96	1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No	No		No	
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	195	1489	1479	26	16	148
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	0	0	0	0	0	0
Cap, veh/h	219	4155	3387	60	197	175
Arrive On Green	0.24	1.00	1.00	1.00	0.11	0.11
Sat Flow, veh/h	1810	5358	5416	92	1810	1610
Grp Volume(v), veh/h	195	1489	975	530	16	148
Grp Sat Flow(s), veh/h/ln	1810	1729	1729	1879	1810	1610
Q Serve(g_s), s	13.5	0.0	0.0	0.0	1.0	11.7
Cycle Q Clear(g_c), s	13.5	0.0	0.0	0.0	1.0	11.7
Prop In Lane	1.00			0.05	1.00	1.00
Lane Grp Cap(c), veh/h	219	4155	2233	1213	197	175
V/C Ratio(X)	0.89	0.36	0.44	0.44	0.08	0.84
Avail Cap(c_a), veh/h	355	4155	2233	1213	494	440
HCM Platoon Ratio	2.00	2.00	2.00	2.00	1.00	1.00
Upstream Filter(I)	0.63	0.63	0.84	0.84	1.00	1.00
Uniform Delay (d), s/veh	48.5	0.0	0.0	0.0	52.1	56.8
Incr Delay (d2), s/veh	6.5	0.2	0.5	1.0	0.2	10.4
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%), veh/ln	5.6	0.1	0.2	0.3	0.5	10.6
Unsig. Movement Delay, s/veh						
LnGrp Delay(d), s/veh	55.0	0.2	0.5	1.0	52.2	67.3
LnGrp LOS	D	A	A	A	D	E
Approach Vol, veh/h		1684	1505		164	
Approach Delay, s/veh		6.5	0.7		65.8	
Approach LOS		A	A		E	
Timer - Assigned Phs		2		4	5	6
Phs Duration (G+Y+Rc), s		111.3		18.7	20.2	91.1
Change Period (Y+Rc), s		7.2		4.5	4.5	7.2
Max Green Setting (Gmax), s		82.8		35.5	25.5	52.8
Max Q Clear Time (g_c+I1), s		2.0		13.7	15.5	2.0
Green Ext Time (p_c), s		14.4		0.5	0.2	12.8
Intersection Summary						
HCM 6th Ctrl Delay			6.8			
HCM 6th LOS			A			

HCM 6th Signalized Intersection Summary

11: Trautwein Road & Mission Grove Parkway S

Woodcrest Christian School Expansion

Existing (2021) Without Project Afternoon



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	37	10	13	527	16	37	5	1298	432	130	1429	34
Future Volume (veh/h)	37	10	13	527	16	37	5	1298	432	130	1429	34
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.97	1.00		0.99	1.00		0.98	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No			No			No		
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	38	10	13	543	16	38	5	1338	445	134	1473	35
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	73	83	108	516	438	367	16	1793	1021	135	2030	898
Arrive On Green	0.04	0.11	0.11	0.15	0.23	0.23	0.00	0.16	0.16	0.07	0.56	0.56
Sat Flow, veh/h	1810	738	959	3510	1900	1589	1810	3610	1580	1810	3610	1596
Grp Volume(v), veh/h	38	0	23	543	16	38	5	1338	445	134	1473	35
Grp Sat Flow(s),veh/h/ln	1810	0	1696	1755	1900	1589	1810	1805	1580	1810	1805	1596
Q Serve(g_s), s	2.7	0.0	1.6	19.1	0.8	2.4	0.4	45.9	23.9	9.6	39.2	1.3
Cycle Q Clear(g_c), s	2.7	0.0	1.6	19.1	0.8	2.4	0.4	45.9	23.9	9.6	39.2	1.3
Prop In Lane	1.00		0.57	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	73	0	191	516	438	367	16	1793	1021	135	2030	898
V/C Ratio(X)	0.52	0.00	0.12	1.05	0.04	0.10	0.31	0.75	0.44	0.99	0.73	0.04
Avail Cap(c_a), veh/h	97	0	418	516	684	572	97	1793	1021	135	2030	898
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	0.33	0.33	0.33	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	1.00	1.00	0.68	0.68	0.68	1.00	1.00	1.00
Uniform Delay (d), s/veh	61.2	0.0	51.9	55.4	38.8	39.4	64.4	46.5	20.8	60.1	21.0	12.7
Incr Delay (d2), s/veh	2.2	0.0	0.3	54.2	0.0	0.1	2.7	2.0	0.9	74.9	2.3	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.3	0.0	0.7	12.1	0.4	1.0	0.2	22.6	10.2	7.1	15.6	0.5
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	63.3	0.0	52.2	109.7	38.8	39.5	67.1	48.5	21.7	135.1	23.3	12.8
LnGrp LOS	E	A	D	F	D	D	E	D	C	F	C	B
Approach Vol, veh/h	61			597			1788			1642		
Approach Delay, s/veh	59.1			103.3			41.9			32.2		
Approach LOS	E			F			D			C		
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	4.2	70.8	24.6	20.4	5.7	79.3	9.2	35.8				
Change Period (Y+Rc), s	4.5	6.2	5.5	5.8	4.5	6.2	4.0	* 5.8				
Max Green Setting (Gmax), s	4.3	47.2	19.1	32.0	7.0	49.9	7.0	* 47				
Max Q Clear Time (g_c+T1), s	11.6	47.9	21.1	3.6	2.4	41.2	4.7	4.4				
Green Ext Time (p_c), s	0.0	0.0	0.0	0.1	0.0	5.8	0.0	0.2				

Intersection Summary

HCM 6th Ctrl Delay 47.2

HCM 6th LOS D

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

HCM 6th Signalized Intersection Summary

12: Trautwein Road & John F Kennedy Drive

Woodcrest Christian School Expansion
Existing (2021) Without Project Afternoon



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	537	48	90	31	18	26	75	1148	56	11	1436	594
Future Volume (veh/h)	537	48	90	31	18	26	75	1148	56	11	1436	594
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		0.99	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No				No				No			
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	554	49	93	32	19	27	77	1184	58	11	1480	612
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	529	353	298	67	48	68	97	2170	966	32	2041	1152
Arrive On Green	0.15	0.19	0.19	0.04	0.07	0.07	0.11	1.00	1.00	0.02	0.75	0.75
Sat Flow, veh/h	3510	1900	1605	1810	706	1003	1810	3610	1607	1810	3610	1607
Grp Volume(v), veh/h	554	49	93	32	0	46	77	1184	58	11	1480	612
Grp Sat Flow(s),veh/h/ln	1755	1900	1605	1810	0	1709	1810	1805	1607	1810	1805	1607
Q Serve(g_s), s	19.6	2.8	6.5	2.3	0.0	3.4	5.4	0.0	0.0	0.8	29.1	16.2
Cycle Q Clear(g_c), s	19.6	2.8	6.5	2.3	0.0	3.4	5.4	0.0	0.0	0.8	29.1	16.2
Prop In Lane	1.00		1.00	1.00		0.59	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	529	353	298	67	0	116	97	2170	966	32	2041	1152
V/C Ratio(X)	1.05	0.14	0.31	0.48	0.00	0.40	0.80	0.55	0.06	0.34	0.72	0.53
Avail Cap(c_a), veh/h	529	685	579	97	0	434	97	2170	966	97	2041	1152
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00	2.00	1.33	1.33	1.33
Upstream Filter(I)	1.00	1.00	1.00	1.00	0.00	1.00	0.86	0.86	0.86	0.62	0.62	0.62
Uniform Delay (d), s/veh	55.2	44.2	45.7	61.4	0.0	58.0	57.4	0.0	0.0	62.7	10.6	4.3
Incr Delay (d2), s/veh	51.9	0.2	0.6	5.2	0.0	2.2	31.4	0.9	0.1	3.9	1.4	1.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.3	1.3	2.7	1.1	0.0	1.5	3.1	0.3	0.0	0.4	6.9	3.7
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	107.1	44.4	46.3	66.6	0.0	60.2	88.8	0.9	0.1	66.6	12.0	5.4
LnGrp LOS	F	D	D	E	A	E	F	A	A	E	B	A
Approach Vol, veh/h	696				78		1319				2103	
Approach Delay, s/veh	94.6				62.8		6.0				10.4	
Approach LOS	F				E		A				B	
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	6.3	85.4	8.8	29.5	10.9	80.7	24.1	14.2				
Change Period (Y+Rc), s	4.0	7.2	4.0	* 5.4	4.0	7.2	4.5	5.4				
Max Green Setting (Gmax), s	49.3	49.3	7.0	* 47	7.0	49.3	19.6	33.0				
Max Q Clear Time (g_c+I), s	12.8	2.0	4.3	8.5	7.4	31.1	21.6	5.4				
Green Ext Time (p_c), s	0.0	10.2	0.0	0.5	0.0	11.8	0.0	0.2				

Intersection Summary

HCM 6th Ctrl Delay 23.9

HCM 6th LOS C

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

HCM 6th Signalized Intersection Summary

13: Trautwein Road & Grove Community Drive

Woodcrest Christian School Expansion
Existing (2021) Without Project Afternoon



Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	54	224	1055	58	322	1235
Future Volume (veh/h)	54	224	1055	58	322	1235
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00		1.00	1.00	
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No		No		No	
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	60	249	1172	64	358	1372
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90
Percent Heavy Veh, %	0	0	0	0	0	0
Cap, veh/h	97	887	1994	888	910	3102
Arrive On Green	0.05	0.05	1.00	1.00	0.52	1.00
Sat Flow, veh/h	1810	2834	3705	1607	3510	3705
Grp Volume(v), veh/h	60	249	1172	64	358	1372
Grp Sat Flow(s), veh/h/ln	1810	1417	1805	1607	1755	1805
Q Serve(g_s), s	4.2	0.0	0.0	0.0	8.0	0.0
Cycle Q Clear(g_c), s	4.2	0.0	0.0	0.0	8.0	0.0
Prop In Lane	1.00	1.00		1.00	1.00	
Lane Grp Cap(c), veh/h	97	887	1994	888	910	3102
V/C Ratio(X)	0.62	0.28	0.59	0.07	0.39	0.44
Avail Cap(c_a), veh/h	193	1038	1994	888	910	3102
HCM Platoon Ratio	1.00	1.00	2.00	2.00	2.00	2.00
Upstream Filter(I)	1.00	1.00	0.92	0.92	0.65	0.65
Uniform Delay (d), s/veh	60.2	33.6	0.0	0.0	25.1	0.0
Incr Delay (d2), s/veh	6.2	0.2	1.2	0.1	0.2	0.3
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%), veh/ln	2.1	3.0	0.3	0.0	2.9	0.1
Unsig. Movement Delay, s/veh						
LnGrp Delay(d), s/veh	66.4	33.8	1.2	0.1	25.3	0.3
LnGrp LOS	E	C	A	A	C	A
Approach Vol, veh/h	309		1236			1730
Approach Delay, s/veh	40.1		1.1			5.5
Approach LOS	D		A			A
Timer - Assigned Phs	1	2			6	8
Phs Duration (G+Y+Rc), s	39.9	78.0			117.9	12.1
Change Period (Y+Rc), s	6.2	* 6.2			6.2	5.1
Max Green Setting (Gmax), s	72.5	* 72			104.8	13.9
Max Q Clear Time (g_c+110, s)	110.0	2.0			2.0	6.2
Green Ext Time (p_c), s	1.1	10.3			13.3	0.7

Intersection Summary

HCM 6th Ctrl Delay	7.1
HCM 6th LOS	A

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

HCM 6th Signalized Intersection Summary

14: Trautwein Road & Orange Terrace Pkwy

Woodcrest Christian School Expansion
Existing (2021) Without Project Afternoon



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	44	36	8	149	12	248	10	821	212	270	975	20
Future Volume (veh/h)	44	36	8	149	12	248	10	821	212	270	975	20
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		0.97	1.00		0.99	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No			No			No		
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	47	39	9	160	13	267	11	883	228	290	1048	22
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	80	91	21	185	227	1041	32	1494	659	884	2401	1059
Arrive On Green	0.04	0.06	0.06	0.10	0.12	0.12	0.04	0.83	0.83	0.50	1.00	1.00
Sat Flow, veh/h	1810	1492	344	1810	1900	2739	1810	3610	1593	3510	3610	1592
Grp Volume(v), veh/h	47	0	48	160	13	267	11	883	228	290	1048	22
Grp Sat Flow(s), veh/h/ln	1810	0	1836	1810	1900	1370	1810	1805	1593	1755	1805	1592
Q Serve(g_s), s	3.3	0.0	3.3	11.3	0.8	1.0	0.8	10.7	3.1	6.4	0.0	0.0
Cycle Q Clear(g_c), s	3.3	0.0	3.3	11.3	0.8	1.0	0.8	10.7	3.1	6.4	0.0	0.0
Prop In Lane	1.00		0.19	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	80	0	112	185	227	1041	32	1494	659	884	2401	1059
V/C Ratio(X)	0.59	0.00	0.43	0.86	0.06	0.26	0.34	0.59	0.35	0.33	0.44	0.02
Avail Cap(c_a), veh/h	125	0	466	209	588	1561	97	1494	659	884	2401	1059
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00	2.00	2.00	2.00	2.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	1.00	1.00	0.90	0.90	0.90	0.90	0.90	0.90
Uniform Delay (d), s/veh	61.0	0.0	58.8	57.4	50.7	15.7	62.0	7.5	3.3	25.7	0.0	0.0
Incr Delay (d2), s/veh	2.6	0.0	2.6	24.9	0.1	0.1	2.1	1.6	1.3	0.1	0.5	0.0
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%), veh/ln	1.6	0.0	1.6	6.5	0.4	2.0	0.4	2.7	1.5	2.4	0.2	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	63.6	0.0	61.4	82.4	50.8	15.8	64.1	9.0	4.6	25.8	0.5	0.0
LnGrp LOS	E	A	E	F	D	B	E	A	A	C	A	A
Approach Vol, veh/h	95				440				1122			
Approach Delay, s/veh	62.5				41.0				8.7			
Approach LOS	E				D				A			
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	38.9	60.0	17.3	13.7	6.3	92.7	9.7	21.3				
Change Period (Y+Rc), s	6.2	* 6.2	4.0	5.8	4.0	6.2	4.0	* 5.8				
Max Green Setting (Gmax), s	54	* 54	15.0	33.0	7.0	55.0	9.0	* 40				
Max Q Clear Time (g_c+1/4), s	12.7	12.7	13.3	5.3	2.8	2.0	5.3	3.0				
Green Ext Time (p_c), s	0.0	7.4	0.0	0.2	0.0	8.4	0.0	1.2				

Intersection Summary

HCM 6th Ctrl Delay 13.8

HCM 6th LOS B

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

HCM 6th Signalized Intersection Summary 15: Trautwein Road & Shopping Ctr Dwy

Woodcrest Christian School Expansion
Existing (2021) Without Project Afternoon



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	122	39	85	69	28	79	122	807	14	173	769	119
Future Volume (veh/h)	122	39	85	69	28	79	122	807	14	173	769	119
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		0.98	1.00		0.97	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No			No			No		
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	126	40	88	71	29	81	126	832	14	178	793	123
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	215	95	210	201	79	221	150	2101	908	202	2205	974
Arrive On Green	0.18	0.18	0.18	0.18	0.18	0.18	0.17	1.00	1.00	0.22	1.00	1.00
Sat Flow, veh/h	1300	527	1160	1280	437	1220	1810	3610	1560	1810	3610	1594
Grp Volume(v), veh/h	126	0	128	71	0	110	126	832	14	178	793	123
Grp Sat Flow(s),veh/h/ln	1300	0	1687	1280	0	1656	1810	1805	1560	1810	1805	1594
Q Serve(g_s), s	12.2	0.0	8.7	6.8	0.0	7.6	8.8	0.0	0.0	12.4	0.0	0.0
Cycle Q Clear(g_c), s	19.8	0.0	8.7	15.5	0.0	7.6	8.8	0.0	0.0	12.4	0.0	0.0
Prop In Lane	1.00		0.69	1.00		0.74	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	215	0	305	201	0	300	150	2101	908	202	2205	974
V/C Ratio(X)	0.59	0.00	0.42	0.35	0.00	0.37	0.84	0.40	0.02	0.88	0.36	0.13
Avail Cap(c_a), veh/h	354	0	485	337	0	477	285	2101	908	355	2205	974
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00	2.00	2.00	2.00	2.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	0.68	0.68	0.68	0.88	0.88	0.88
Uniform Delay (d), s/veh	55.4	0.0	47.2	54.0	0.0	46.7	53.4	0.0	0.0	49.7	0.0	0.0
Incr Delay (d2), s/veh	2.5	0.0	0.9	1.1	0.0	0.7	3.3	0.4	0.0	4.5	0.4	0.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.2	0.0	3.8	2.3	0.0	3.2	3.7	0.1	0.0	5.1	0.1	0.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	57.9	0.0	48.1	55.1	0.0	47.4	56.8	0.4	0.0	54.1	0.4	0.2
LnGrp LOS	E	A	D	E	A	D	E	A	A	D	A	A
Approach Vol, veh/h	254		181			972			1094			
Approach Delay, s/veh	53.0		50.4			7.7			9.1			
Approach LOS	D		D			A			A			
Timer - Assigned Phs	1	2	4		5	6	8					
Phs Duration (G+Y+Rc), s	9.0	82.9	28.1		15.3	86.6	28.1					
Change Period (Y+Rc), s	4.5	7.2	4.6		4.5	7.2	4.6					
Max Green Setting (Gmax), s	25.5	50.8	37.4		20.5	55.8	37.4					
Max Q Clear Time (g_c+14.4), s	14.4	2.0	21.8		10.8	2.0	17.5					
Green Ext Time (p_c), s	0.2	6.0	1.0		0.1	6.1	0.8					

Intersection Summary

HCM 6th Ctrl Delay	16.0
HCM 6th LOS	B

HCM 6th Signalized Intersection Summary 16: Trautwein Road & Van Buren Boulevard

Woodcrest Christian School Expansion
Existing (2021) Without Project Afternoon

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	 	 			  			 		 	 	
Traffic Volume (veh/h)	378	886	121	133	1099	293	105	392	80	276	439	237
Future Volume (veh/h)	378	886	121	133	1099	293	105	392	80	276	439	237
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		0.99	1.00		0.96	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No			No			No		
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	398	933	127	140	1157	308	111	413	84	291	462	249
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	727	1501	787	166	1492	616	135	675	136	338	898	726
Arrive On Green	0.41	0.83	0.83	0.03	0.09	0.09	0.07	0.23	0.23	0.16	0.42	0.42
Sat Flow, veh/h	3510	3610	1603	1810	5187	1600	1810	2971	598	3510	3610	1579
Grp Volume(v), veh/h	398	933	127	140	1157	308	111	249	248	291	462	249
Grp Sat Flow(s),veh/h/ln	1755	1805	1603	1810	1729	1600	1810	1805	1764	1755	1805	1579
Q Serve(g_s), s	11.2	11.7	1.8	10.0	28.3	9.3	7.9	16.1	16.4	10.5	12.4	2.5
Cycle Q Clear(g_c), s	11.2	11.7	1.8	10.0	28.3	9.3	7.9	16.1	16.4	10.5	12.4	2.5
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.34	1.00		1.00
Lane Grp Cap(c), veh/h	727	1501	787	166	1492	616	135	410	401	338	898	726
V/C Ratio(X)	0.55	0.62	0.16	0.84	0.78	0.50	0.82	0.61	0.62	0.86	0.51	0.34
Avail Cap(c_a), veh/h	727	1501	787	191	1492	616	209	555	543	351	1033	785
HCM Platoon Ratio	2.00	2.00	2.00	0.33	0.33	0.33	1.00	1.00	1.00	1.67	1.67	1.67
Upstream Filter(I)	0.95	0.95	0.95	0.90	0.90	0.90	1.00	1.00	1.00	0.94	0.94	0.94
Uniform Delay (d), s/veh	33.5	7.4	5.0	62.1	54.7	15.0	59.3	45.0	45.2	53.7	32.2	7.2
Incr Delay (d2), s/veh	0.5	1.8	0.4	20.5	3.6	2.6	7.6	1.5	1.6	16.7	0.4	0.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.0	2.9	0.7	5.7	13.6	3.9	3.8	7.3	7.3	5.0	4.7	2.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	33.9	9.2	5.4	82.5	58.3	17.6	66.9	46.5	46.7	70.4	32.6	7.5
LnGrp LOS	C	A	A	F	E	B	E	D	D	E	C	A
Approach Vol, veh/h	1458			1605			608			1002		
Approach Delay, s/veh	15.6			52.6			50.3			37.3		
Approach LOS	B			D			D			D		
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	60.3	14.7	38.5	33.1	43.6	17.5	35.8					
Change Period (Y+Rc), s	4.5	6.2	5.0	6.2	6.2	* 6.2	5.0	* 6.2				
Max Green Setting (Gmax), s	42.2	15.0	37.2	18.0	* 37	13.0	* 40					
Max Q Clear Time (g_c+1/2g), s	13.7	9.9	14.4	13.2	30.3	12.5	18.4					
Green Ext Time (p_c), s	0.0	6.9	0.1	3.5	0.4	4.4	0.0	2.7				
Intersection Summary												
HCM 6th Ctrl Delay	37.5											
HCM 6th LOS	D											
Notes												

HCM 6th Signalized Intersection Summary

17: Van Buren Boulevard & Shopping Ctr Dwy

Woodcrest Christian School Expansion
Existing (2021) Without Project Afternoon



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations	↰	↑↑	↑↑↑		↰	↰
Traffic Volume (veh/h)	75	1167	1370	88	171	46
Future Volume (veh/h)	75	1167	1370	88	171	46
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00			1.00	1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No	No		No	
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	79	1228	1442	93	180	48
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	0	0	0	0	0	0
Cap, veh/h	99	2874	3519	227	213	189
Arrive On Green	0.11	1.00	0.71	0.71	0.12	0.12
Sat Flow, veh/h	1810	3705	5150	321	1810	1610
Grp Volume(v), veh/h	79	1228	1001	534	180	48
Grp Sat Flow(s), veh/h/ln	1810	1805	1729	1842	1810	1610
Q Serve(g_s), s	5.5	0.0	15.5	15.5	12.7	3.5
Cycle Q Clear(g_c), s	5.5	0.0	15.5	15.5	12.7	3.5
Prop In Lane	1.00			0.17	1.00	1.00
Lane Grp Cap(c), veh/h	99	2874	2444	1302	213	189
V/C Ratio(X)	0.80	0.43	0.41	0.41	0.85	0.25
Avail Cap(c_a), veh/h	160	2874	2444	1302	487	434
HCM Platoon Ratio	2.00	2.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.72	0.72	0.87	0.87	1.00	1.00
Uniform Delay (d), s/veh	57.2	0.0	7.9	7.9	56.2	52.2
Incr Delay (d2), s/veh	3.9	0.3	0.4	0.8	8.8	0.7
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%), veh/ln	2.5	0.1	4.9	5.4	6.4	3.3
Unsig. Movement Delay, s/veh						
LnGrp Delay(d), s/veh	61.1	0.3	8.3	8.7	65.0	52.9
LnGrp LOS	E	A	A	A	E	D
Approach Vol, veh/h		1307	1535		228	
Approach Delay, s/veh		4.0	8.4		62.5	
Approach LOS		A	A		E	
Timer - Assigned Phs		2		4	5	6
Phs Duration (G+Y+Rc), s		110.7		19.3	11.6	99.1
Change Period (Y+Rc), s		7.2		4.0	4.5	7.2
Max Green Setting (Gmax), s		83.8		35.0	11.5	67.8
Max Q Clear Time (g_c+l1), s		2.0		14.7	7.5	17.5
Green Ext Time (p_c), s		10.9		0.6	0.0	13.3
Intersection Summary						
HCM 6th Ctrl Delay			10.6			
HCM 6th LOS			B			

HCM 6th Signalized Intersection Summary

18: Barton Street & Van Buren Boulevard

Woodcrest Christian School Expansion
Existing (2021) Without Project Afternoon



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	104	993	201	294	1208	41	232	66	274	26	33	143
Future Volume (veh/h)	104	993	201	294	1208	41	232	66	274	26	33	143
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No			No			No		
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	107	1024	207	303	1245	42	239	68	282	27	34	147
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	131	1380	278	239	2662	90	295	381	323	62	44	192
Arrive On Green	0.07	0.46	0.46	0.13	0.52	0.52	0.08	0.20	0.20	0.03	0.14	0.14
Sat Flow, veh/h	1810	2992	603	1810	5153	174	3510	1900	1608	1810	311	1344
Grp Volume(v), veh/h	107	617	614	303	835	452	239	68	282	27	0	181
Grp Sat Flow(s),veh/h/ln	1810	1805	1791	1810	1729	1869	1755	1900	1608	1810	0	1655
Q Serve(g_s), s	7.3	34.9	35.2	16.5	19.2	19.3	8.4	3.7	21.3	1.8	0.0	13.2
Cycle Q Clear(g_c), s	7.3	34.9	35.2	16.5	19.2	19.3	8.4	3.7	21.3	1.8	0.0	13.2
Prop In Lane	1.00		0.34	1.00		0.09	1.00		1.00	1.00		0.81
Lane Grp Cap(c), veh/h	131	833	826	239	1787	965	295	381	323	62	0	236
V/C Ratio(X)	0.81	0.74	0.74	1.27	0.47	0.47	0.81	0.18	0.87	0.44	0.00	0.77
Avail Cap(c_a), veh/h	159	833	826	239	1787	965	393	654	553	101	0	479
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.88	0.88	0.88	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	57.1	27.6	27.6	54.2	19.3	19.3	56.3	41.4	48.4	59.2	0.0	51.6
Incr Delay (d2), s/veh	17.4	5.2	5.3	149.6	0.9	1.6	6.7	0.2	7.9	1.8	0.0	5.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.9	15.2	15.2	17.2	7.4	8.2	3.9	1.7	9.0	0.9	0.0	5.8
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	74.5	32.8	32.9	203.8	20.1	20.9	63.0	41.6	56.3	61.0	0.0	56.8
LnGrp LOS	E	C	C	F	C	C	E	D	E	E	A	E
Approach Vol, veh/h	1338			1590			589			208		
Approach Delay, s/veh	36.2			55.4			57.3			57.3		
Approach LOS	D			E			E			E		
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	31.0	64.9	15.5	23.6	14.1	71.8	8.3	30.9				
Change Period (Y+Rc), s	4.5	7.2	5.0	* 5.8	5.0	7.2	4.0	5.8				
Max Green Setting (Gmax), s	16.5	37.0	14.0	* 36	11.0	42.0	7.0	43.0				
Max Q Clear Time (g_c+11g), s	119.5	37.2	10.4	15.2	9.3	21.3	3.8	23.3				
Green Ext Time (p_c), s	0.0	0.0	0.1	1.1	0.0	7.9	0.0	1.2				

Intersection Summary

HCM 6th Ctrl Delay 48.9

HCM 6th LOS D

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Intersection												
Int Delay, s/veh	0											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↑↑			↑↑				↗			↗
Traffic Vol, veh/h	0	1582	0	0	1697	13	0	0	0	0	0	2
Future Vol, veh/h	0	1582	0	0	1697	13	0	0	0	0	0	2
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	0	-	-	0
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	0	1720	0	0	1845	14	0	0	0	0	0	2
Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	-	0	0	-	-	0	-	-	860	-	-	930
Stage 1	-	-	-	-	-	-	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-	-	-	-	-	-	-
Critical Hdwy	-	-	-	-	-	-	-	-	6.9	-	-	6.9
Critical Hdwy Stg 1	-	-	-	-	-	-	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-	-	-	-	-	-	-
Follow-up Hdwy	-	-	-	-	-	-	-	-	3.3	-	-	3.3
Pot Cap-1 Maneuver	0	-	-	0	-	-	0	0	303	0	0	*393
Stage 1	0	-	-	0	-	-	0	0	-	0	0	-
Stage 2	0	-	-	0	-	-	0	0	-	0	0	-
Platoon blocked, %		-	-		-	-						1
Mov Cap-1 Maneuver	-	-	-	-	-	-	-	-	303	-	-	*393
Mov Cap-2 Maneuver	-	-	-	-	-	-	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-	-	-	-	-	-	-
Approach	EB		WB			NB			SB			
HCM Control Delay, s	0		0			0			14.2			
HCM LOS						A			B			
Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBT	WBR	SBLn1						
Capacity (veh/h)	-	-	-	-	-	393						
HCM Lane V/C Ratio	-	-	-	-	-	0.006						
HCM Control Delay (s)	0	-	-	-	-	14.2						
HCM Lane LOS	A	-	-	-	-	B						
HCM 95th %tile Q(veh)	-	-	-	-	-	0						
Notes												
~: Volume exceeds capacity		\$: Delay exceeds 300s			+: Computation Not Defined				*: All major volume in platoon			

Intersection						
Int Delay, s/veh	0.2					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	0	0	11	221	195	66
Future Vol, veh/h	0	0	11	221	195	66
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	83	83	83	83	83	83
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	0	0	13	266	235	80
Major/Minor	Minor2	Major1		Major2		
Conflicting Flow All	567	275	315	0	-	0
Stage 1	275	-	-	-	-	-
Stage 2	292	-	-	-	-	-
Critical Hdwy	6.4	6.2	4.1	-	-	-
Critical Hdwy Stg 1	5.4	-	-	-	-	-
Critical Hdwy Stg 2	5.4	-	-	-	-	-
Follow-up Hdwy	3.5	3.3	2.2	-	-	-
Pot Cap-1 Maneuver	488	769	1257	-	-	-
Stage 1	776	-	-	-	-	-
Stage 2	762	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	482	769	1257	-	-	-
Mov Cap-2 Maneuver	482	-	-	-	-	-
Stage 1	767	-	-	-	-	-
Stage 2	762	-	-	-	-	-
Approach	EB	NB		SB		
HCM Control Delay, s	0	0.4		0		
HCM LOS	A					
Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR	
Capacity (veh/h)	1257	-	-	-	-	
HCM Lane V/C Ratio	0.011	-	-	-	-	
HCM Control Delay (s)	7.9	0	0	-	-	
HCM Lane LOS	A	A	A	-	-	
HCM 95th %tile Q(veh)	0	-	-	-	-	

HCM 6th TWSC
21: Dauchy Avenue & Project Driveway 4

Woodcrest Christian School Expansion
Existing (2021) Without Project Afternoon

Intersection						
Int Delay, s/veh	4.3					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	106	42	14	119	182	13
Future Vol, veh/h	106	42	14	119	182	13
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	80	80	80	80	80	80
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	133	53	18	149	228	16
Major/Minor	Minor2	Major1		Major2		
Conflicting Flow All	421	236	244	0	-	0
Stage 1	236	-	-	-	-	-
Stage 2	185	-	-	-	-	-
Critical Hdwy	6.4	6.2	4.1	-	-	-
Critical Hdwy Stg 1	5.4	-	-	-	-	-
Critical Hdwy Stg 2	5.4	-	-	-	-	-
Follow-up Hdwy	3.5	3.3	2.2	-	-	-
Pot Cap-1 Maneuver	593	808	1334	-	-	-
Stage 1	808	-	-	-	-	-
Stage 2	852	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	584	808	1334	-	-	-
Mov Cap-2 Maneuver	584	-	-	-	-	-
Stage 1	796	-	-	-	-	-
Stage 2	852	-	-	-	-	-
Approach	EB	NB		SB		
HCM Control Delay, s	13	0.8		0		
HCM LOS	B					
Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR	
Capacity (veh/h)	1334	-	634	-	-	
HCM Lane V/C Ratio	0.013	-	0.292	-	-	
HCM Control Delay (s)	7.7	0	13	-	-	
HCM Lane LOS	A	A	B	-	-	
HCM 95th %tile Q(veh)	0	-	1.2	-	-	

Intersection						
Int Delay, s/veh	0.1					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	3	0	1	130	224	0
Future Vol, veh/h	3	0	1	130	224	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	81	81	81	81	81	81
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	4	0	1	160	277	0
Major/Minor	Minor2	Major1		Major2		
Conflicting Flow All	439	277	277	0	-	0
Stage 1	277	-	-	-	-	-
Stage 2	162	-	-	-	-	-
Critical Hdwy	6.4	6.2	4.1	-	-	-
Critical Hdwy Stg 1	5.4	-	-	-	-	-
Critical Hdwy Stg 2	5.4	-	-	-	-	-
Follow-up Hdwy	3.5	3.3	2.2	-	-	-
Pot Cap-1 Maneuver	579	767	1298	-	-	-
Stage 1	774	-	-	-	-	-
Stage 2	872	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	578	767	1298	-	-	-
Mov Cap-2 Maneuver	578	-	-	-	-	-
Stage 1	773	-	-	-	-	-
Stage 2	872	-	-	-	-	-
Approach	EB	NB		SB		
HCM Control Delay, s	11.3	0.1		0		
HCM LOS	B					
Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR	
Capacity (veh/h)	1298	-	578	-	-	
HCM Lane V/C Ratio	0.001	-	0.006	-	-	
HCM Control Delay (s)	7.8	0	11.3	-	-	
HCM Lane LOS	A	A	B	-	-	
HCM 95th %tile Q(veh)	0	-	0	-	-	

HCM 6th Signalized Intersection Summary

1: Washington Street & Van Buren Boulevard

Woodcrest Christian School Expansion
Opening Year (2029) Without Project AM

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	155	1236	151	139	1637	876	190	637	218	565	177	88
Future Volume (veh/h)	155	1236	151	139	1637	876	190	637	218	565	177	88
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	163	1301	159	146	1723	922	200	671	229	595	186	93
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	174	1388	169	1047	3338	1488	261	664	295	567	992	441
Arrive On Green	0.10	0.43	0.43	0.58	0.92	0.92	0.07	0.18	0.18	0.16	0.27	0.27
Sat Flow, veh/h	1810	3235	393	1810	3610	1609	3510	3610	1602	3510	3610	1605
Grp Volume(v), veh/h	163	723	737	146	1723	922	200	671	229	595	186	93
Grp Sat Flow(s),veh/h/ln	1810	1805	1823	1810	1805	1609	1755	1805	1602	1755	1805	1605
Q Serve(g_s), s	11.6	49.5	50.4	4.8	8.9	13.1	7.3	23.9	14.7	21.0	5.1	5.8
Cycle Q Clear(g_c), s	11.6	49.5	50.4	4.8	8.9	13.1	7.3	23.9	14.7	21.0	5.1	5.8
Prop In Lane	1.00		0.22	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	174	775	782	1047	3338	1488	261	664	295	567	992	441
V/C Ratio(X)	0.94	0.93	0.94	0.14	0.52	0.62	0.77	1.01	0.78	1.05	0.19	0.21
Avail Cap(c_a), veh/h	174	775	782	1047	3338	1488	500	664	295	567	992	441
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	58.4	35.3	35.6	12.6	0.7	0.9	59.0	53.1	34.8	54.5	36.0	36.3
Incr Delay (d2), s/veh	50.1	19.6	20.9	0.1	0.6	1.9	4.7	37.7	12.4	51.3	0.1	0.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	7.6	24.5	25.4	1.8	0.3	0.8	3.4	14.2	6.7	13.1	2.2	2.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	108.4	54.9	56.4	12.6	1.3	2.8	63.7	90.7	47.1	105.8	36.1	36.5
LnGrp LOS	F	D	E	B	A	A	E	F	D	F	D	D
Approach Vol, veh/h		1623			2791			1100			874	
Approach Delay, s/veh		61.0			2.4			76.7			83.6	
Approach LOS		E			A			E			F	
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	82.3	62.0	14.2	41.5	17.0	127.3	26.0	29.7				
Change Period (Y+Rc), s	6.2	* 6.2	4.5	5.8	4.5	6.2	5.0	* 5.8				
Max Green Setting (Gmax), s	8.5	* 56	18.5	26.2	12.5	51.8	21.0	* 24				
Max Q Clear Time (g_c+I1), s	6.8	52.4	9.3	7.8	13.6	15.1	23.0	25.9				
Green Ext Time (p_c), s	0.1	2.5	0.4	1.2	0.0	24.3	0.0	0.0				
Intersection Summary												
HCM 6th Ctrl Delay			41.2									
HCM 6th LOS			D									
Notes												
* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.												

HCM 6th Signalized Intersection Summary

Woodcrest Christian School Expansion

2: Alta Cresta Avenue/Chicago Avenue & Van Buren Boulevard

Opening Year (2029) Without Project AM

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	85	1869	87	84	2407	33	170	23	110	110	28	82
Future Volume (veh/h)	85	1869	87	84	2407	33	170	23	110	110	28	82
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		0.99	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No			No			No		
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	94	2077	97	93	2674	37	189	26	122	122	31	91
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	104	2240	998	104	2262	31	145	31	146	111	39	116
Arrive On Green	0.06	0.62	0.62	0.08	0.83	0.83	0.08	0.11	0.11	0.06	0.09	0.09
Sat Flow, veh/h	1810	3610	1608	1810	3646	50	1810	289	1357	1810	424	1243
Grp Volume(v), veh/h	94	2077	97	93	1321	1390	189	0	148	122	0	122
Grp Sat Flow(s),veh/h/ln	1810	1805	1608	1810	1805	1891	1810	0	1647	1810	0	1667
Q Serve(g_s), s	6.7	66.8	1.8	6.6	80.7	80.7	10.4	0.0	11.5	8.0	0.0	9.3
Cycle Q Clear(g_c), s	6.7	66.8	1.8	6.6	80.7	80.7	10.4	0.0	11.5	8.0	0.0	9.3
Prop In Lane	1.00		1.00	1.00		0.03	1.00		0.82	1.00		0.75
Lane Grp Cap(c), veh/h	104	2240	998	104	1120	1173	145	0	178	111	0	155
V/C Ratio(X)	0.90	0.93	0.10	0.89	1.18	1.18	1.30	0.00	0.83	1.10	0.00	0.79
Avail Cap(c_a), veh/h	104	2240	998	104	1120	1173	145	0	228	111	0	237
HCM Platoon Ratio	1.00	1.00	1.00	1.33	1.33	1.33	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	0.44	0.44	0.44	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	60.9	22.0	3.4	59.6	11.4	11.4	59.8	0.0	56.8	61.0	0.0	57.7
Incr Delay (d2), s/veh	57.6	8.2	0.2	31.3	85.0	87.3	176.4	0.0	18.3	113.3	0.0	9.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.7	26.8	1.1	3.8	34.7	37.1	11.9	0.0	5.6	7.2	0.0	4.4
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	118.5	30.2	3.6	90.9	96.4	98.6	236.2	0.0	75.1	174.3	0.0	67.0
LnGrp LOS	F	C	A	F	F	F	F	A	E	F	A	E
Approach Vol, veh/h	2268					2804		337		244		
Approach Delay, s/veh	32.7					97.3		165.4		120.7		
Approach LOS	C					F		F		F		
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	12.0	86.9	14.4	16.7	12.0	86.9	12.0	19.1				
Change Period (Y+Rc), s	4.5	6.2	4.0	4.6	4.5	6.2	4.0	5.1				
Max Green Setting (Gmax), s	7.5	76.7	8.0	18.5	7.5	76.7	8.0	18.0				
Max Q Clear Time (g_c+I1), s	8.6	68.8	12.4	11.3	8.7	82.7	10.0	13.5				
Green Ext Time (p_c), s	0.0	6.8	0.0	0.3	0.0	0.0	0.0	0.3				
Intersection Summary												
HCM 6th Ctrl Delay	76.5											
HCM 6th LOS	E											

HCM 6th Signalized Intersection Summary

3: Van Buren Village Driveway & Van Buren Boulevard

Woodcrest Christian School Expansion
Opening Year (2029) Without Project AM

	→	↘	↙	←	↖	↗
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑↑	↑	↘	↑↑	↘	↑
Traffic Volume (veh/h)	2044	46	138	2499	38	114
Future Volume (veh/h)	2044	46	138	2499	38	114
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)		1.00	1.00		1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	2152	48	145	2631	40	120
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	0	0	0	0	0	0
Cap, veh/h	2555	1139	168	3001	163	145
Arrive On Green	0.94	0.94	0.19	1.00	0.09	0.09
Sat Flow, veh/h	3705	1610	1810	3705	1810	1610
Grp Volume(v), veh/h	2152	48	145	2631	40	120
Grp Sat Flow(s),veh/h/ln	1805	1610	1810	1805	1810	1610
Q Serve(g_s), s	22.0	0.2	10.1	0.0	2.7	9.5
Cycle Q Clear(g_c), s	22.0	0.2	10.1	0.0	2.7	9.5
Prop In Lane		1.00	1.00		1.00	1.00
Lane Grp Cap(c), veh/h	2555	1139	168	3001	163	145
V/C Ratio(X)	0.84	0.04	0.86	0.88	0.24	0.83
Avail Cap(c_a), veh/h	2555	1139	181	3001	262	233
HCM Platoon Ratio	1.33	1.33	2.00	2.00	1.00	1.00
Upstream Filter(I)	0.20	0.20	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	1.8	1.1	52.1	0.0	55.0	58.1
Incr Delay (d2), s/veh	0.7	0.0	31.0	4.0	0.8	12.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.9	0.1	5.5	1.7	1.3	4.4
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	2.5	1.1	83.1	4.0	55.8	70.3
LnGrp LOS	A	A	F	A	E	E
Approach Vol, veh/h	2200			2776	160	
Approach Delay, s/veh	2.5			8.1	66.7	
Approach LOS	A			A	E	
Timer - Assigned Phs	1	2			6	8
Phs Duration (G+Y+Rc), s	16.1	98.2			114.3	15.7
Change Period (Y+Rc), s	4.0	6.2			* 6.2	4.0
Max Green Setting (Gmax), s	13.0	84.0			* 1E2	18.8
Max Q Clear Time (g_c+I1), s	12.1	24.0			2.0	11.5
Green Ext Time (p_c), s	0.0	30.8			62.6	0.3
Intersection Summary						
HCM 6th Ctrl Delay			7.5			
HCM 6th LOS			A			
Notes						
* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.						

HCM 6th TWSC
4: Little Court & Van Buren Boulevard

Woodcrest Christian School Expansion
Opening Year (2029) Without Project AM

Intersection						
Int Delay, s/veh	0					
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑↑	↗		↑↑		↗
Traffic Vol, veh/h	2157	1	0	2637	0	8
Future Vol, veh/h	2157	1	0	2637	0	8
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	0	-	-	-	0
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	93	93	93	93	93	93
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	2319	1	0	2835	0	9
Major/Minor	Major1	Major2		Minor1		
Conflicting Flow All	0	0	-	-	-	1160
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	-	-	-	-	6.9
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	-	-	-	-	3.3
Pot Cap-1 Maneuver	-	-	0	-	0	*179
Stage 1	-	-	0	-	0	-
Stage 2	-	-	0	-	0	-
Platoon blocked, %	-	-		-		1
Mov Cap-1 Maneuver	-	-	-	-	-	*179
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Approach	EB	WB		NB		
HCM Control Delay, s	0	0		26.1		
HCM LOS	D					
Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBT		
Capacity (veh/h)	179	-	-	-		
HCM Lane V/C Ratio	0.048	-	-	-		
HCM Control Delay (s)	26.1	-	-	-		
HCM Lane LOS	D	-	-	-		
HCM 95th %tile Q(veh)	0.1	-	-	-		
Notes						
~: Volume exceeds capacity		\$: Delay exceeds 300s		+: Computation Not Defined		*: All major volume in platoon

HCM 6th TWSC
5: Van Buren Boulevard & Ridgeway Avenue

Woodcrest Christian School Expansion
Opening Year (2029) Without Project AM

Intersection						
Int Delay, s/veh	2.5					
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	49	2116	2491	9	2	145
Future Vol, veh/h	49	2116	2491	9	2	145
Conflicting Peds, #/hr	3	0	0	3	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	93	93	93	93	93	93
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	53	2275	2678	10	2	156
Major/Minor	Major1	Major2	Minor2			
Conflicting Flow All	2691	0	-	0	3930	1347
Stage 1	-	-	-	-	2686	-
Stage 2	-	-	-	-	1244	-
Critical Hdwy	4.1	-	-	-	6.8	6.9
Critical Hdwy Stg 1	-	-	-	-	5.8	-
Critical Hdwy Stg 2	-	-	-	-	5.8	-
Follow-up Hdwy	2.2	-	-	-	3.5	3.3
Pot Cap-1 Maneuver	*53	-	-	-	-	*~ 36
Stage 1	-	-	-	-	*34	-
Stage 2	-	-	-	-	*191	-
Platoon blocked, %	1	-	-	-	2	1
Mov Cap-1 Maneuver	*53	-	-	-	-	*~ 35
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	*0	-
Stage 2	-	-	-	-	*190	-
Approach	EB	WB		SB		
HCM Control Delay, s	5.6	0				
HCM LOS					-	
Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1	
Capacity (veh/h)	* 53	-	-	-	-	
HCM Lane V/C Ratio	0.994	-	-	-	-	
HCM Control Delay (s)	245.9	-	-	-	-	
HCM Lane LOS	F	-	-	-	-	
HCM 95th %tile Q(veh)	4.4	-	-	-	-	
Notes						
~: Volume exceeds capacity		\$: Delay exceeds 300s		+: Computation Not Defined		*: All major volume in platoon

HCM 6th Signalized Intersection Summary

6: Dauchy Avenue & Van Buren Boulevard

Woodcrest Christian School Expansion
Opening Year (2029) Without Project AM

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	34	1785	303	191	2155	53	323	48	181	91	61	39
Future Volume (veh/h)	34	1785	303	191	2155	53	323	48	181	91	61	39
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No			No			No		
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	35	1859	316	199	2245	55	336	50	189	95	64	41
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	70	1711	282	125	2108	940	329	57	215	180	311	263
Arrive On Green	0.01	0.18	0.18	0.14	1.00	1.00	0.05	0.16	0.16	0.05	0.16	0.16
Sat Flow, veh/h	1810	3092	509	1810	3610	1610	1810	348	1315	1810	1900	1610
Grp Volume(v), veh/h	35	1060	1115	199	2245	55	336	0	239	95	64	41
Grp Sat Flow(s),veh/h/ln	1810	1805	1796	1810	1805	1610	1810	0	1663	1810	1900	1610
Q Serve(g_s), s	2.5	71.9	71.9	9.0	0.0	0.0	7.0	0.0	18.2	5.6	3.8	2.8
Cycle Q Clear(g_c), s	2.5	71.9	71.9	9.0	0.0	0.0	7.0	0.0	18.2	5.6	3.8	2.8
Prop In Lane	1.00		0.28	1.00		1.00	1.00		0.79	1.00		1.00
Lane Grp Cap(c), veh/h	70	999	994	125	2108	940	329	0	272	180	311	263
V/C Ratio(X)	0.50	1.06	1.12	1.59	1.06	0.06	1.02	0.00	0.88	0.53	0.21	0.16
Avail Cap(c_a), veh/h	97	999	994	125	2108	940	329	0	384	180	438	372
HCM Platoon Ratio	0.33	0.33	0.33	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	0.09	0.09	0.09	1.00	0.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	62.9	53.1	53.1	56.0	0.0	0.0	53.0	0.0	53.1	43.4	47.1	46.7
Incr Delay (d2), s/veh	2.1	46.0	68.4	268.3	30.4	0.0	55.4	0.0	15.3	1.5	0.3	0.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.2	47.3	53.3	13.0	8.9	0.0	12.5	0.0	8.8	2.6	1.9	1.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	65.0	99.2	121.5	324.3	30.4	0.0	108.4	0.0	68.4	44.9	47.4	46.9
LnGrp LOS	E	F	F	F	F	A	F	A	E	D	D	D
Approach Vol, veh/h	2210		2499				575		200			
Approach Delay, s/veh	109.9		53.1				91.8		46.1			
Approach LOS	F		D				F		D			
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	14.0	79.1	11.0	25.9	10.0	83.1	11.0	25.9				
Change Period (Y+Rc), s	5.0	7.2	4.0	4.6	5.0	7.2	4.0	4.6				
Max Green Setting (Gmax), s	9.0	63.2	7.0	30.0	7.0	65.2	7.0	30.0				
Max Q Clear Time (g_c+l1), s	11.0	73.9	9.0	5.8	4.5	2.0	7.6	20.2				
Green Ext Time (p_c), s	0.0	0.0	0.0	0.4	0.0	35.5	0.0	1.0				
Intersection Summary												
HCM 6th Ctrl Delay	79.8											
HCM 6th LOS	E											

Intersection												
Int Delay, s/veh	7.2											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	112	0	27	5	0	53	34	396	5	17	331	143
Future Vol, veh/h	112	0	27	5	0	53	34	396	5	17	331	143
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	90
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	88	88	88	88	88	88	88	88	88	88	88	88
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	127	0	31	6	0	60	39	450	6	19	376	163
Major/Minor	Minor2		Minor1			Major1			Major2			
Conflicting Flow All	975	948	376	1042	1108	453	539	0	0	456	0	0
Stage 1	414	414	-	531	531	-	-	-	-	-	-	-
Stage 2	561	534	-	511	577	-	-	-	-	-	-	-
Critical Hdwy	7.1	6.5	6.2	7.1	6.5	6.2	4.1	-	-	4.1	-	-
Critical Hdwy Stg 1	6.1	5.5	-	6.1	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.1	5.5	-	6.1	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.5	4	3.3	3.5	4	3.3	2.2	-	-	2.2	-	-
Pot Cap-1 Maneuver	233	263	675	210	212	611	1040	-	-	1115	-	-
Stage 1	620	597	-	536	529	-	-	-	-	-	-	-
Stage 2	516	528	-	549	505	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	198	244	675	189	196	611	1040	-	-	1115	-	-
Mov Cap-2 Maneuver	198	244	-	189	196	-	-	-	-	-	-	-
Stage 1	589	582	-	509	503	-	-	-	-	-	-	-
Stage 2	442	502	-	511	492	-	-	-	-	-	-	-
Approach	EB		WB			NB			SB			
HCM Control Delay, s	49.2		13.1			0.7			0.3			
HCM LOS	E		B									
Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1WBLn1	SBL	SBT	SBR					
Capacity (veh/h)	1040	-	-	230	512	1115	-	-				
HCM Lane V/C Ratio	0.037	-	-	0.687	0.129	0.017	-	-				
HCM Control Delay (s)	8.6	0	-	49.2	13.1	8.3	0	-				
HCM Lane LOS	A	A	-	E	B	A	A	-				
HCM 95th %tile Q(veh)	0.1	-	-	4.4	0.4	0.1	-	-				

HCM 6th AWSC
8: Taft Street/Dauchy Avenue & Krameria Avenue

Woodcrest Christian School Expansion
Opening Year (2029) Without Project AM

Intersection	
Intersection Delay, s/veh	63.7
Intersection LOS	F

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	46	393	2	1	444	110	16	32	9	98	15	39
Future Vol, veh/h	46	393	2	1	444	110	16	32	9	98	15	39
Peak Hour Factor	0.79	0.79	0.79	0.79	0.79	0.79	0.79	0.79	0.79	0.79	0.79	0.79
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	58	497	3	1	562	139	20	41	11	124	19	49
Number of Lanes	0	1	0	0	1	0	0	1	0	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	1	1	1
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	1	1	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	1	1	1	1
HCM Control Delay	45	97.1	12.7	15.3
HCM LOS	E	F	B	C

Lane	NBLn1	EBLn1	WBLn1	SBLn1
Vol Left, %	28%	10%	0%	64%
Vol Thru, %	56%	89%	80%	10%
Vol Right, %	16%	0%	20%	26%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	57	441	555	152
LT Vol	16	46	1	98
Through Vol	32	393	444	15
RT Vol	9	2	110	39
Lane Flow Rate	72	558	703	192
Geometry Grp	1	1	1	1
Degree of Util (X)	0.155	0.92	1.122	0.385
Departure Headway (Hd)	8.194	6.199	5.752	7.584
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	440	592	625	477
Service Time	6.194	4.199	3.832	5.584
HCM Lane V/C Ratio	0.164	0.943	1.125	0.403
HCM Control Delay	12.7	45	97.1	15.3
HCM Lane LOS	B	E	F	C
HCM 95th-tile Q	0.5	11.5	21.5	1.8

HCM 6th Signalized Intersection Summary

9: Wood Road & Van Buren Boulevard

Woodcrest Christian School Expansion
Opening Year (2029) Without Project AM



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	173	1481	441	497	1718	179	502	564	365	113	472	212
Future Volume (veh/h)	173	1481	441	497	1718	179	502	564	365	113	472	212
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.98	1.00		0.91	1.00		0.88
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No			No			No		
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	192	1646	490	552	1909	199	558	627	406	126	524	236
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	220	2760	1440	581	2918	1279	500	592	383	109	495	221
Arrive On Green	0.04	0.25	0.25	0.22	1.00	1.00	0.14	0.29	0.29	0.06	0.21	0.21
Sat Flow, veh/h	1810	3610	1584	3510	3610	1582	3510	2016	1304	1810	2314	1035
Grp Volume(v), veh/h	192	1646	490	552	1909	199	558	561	472	126	408	352
Grp Sat Flow(s),veh/h/ln	1810	1805	1584	1755	1805	1582	1755	1805	1515	1810	1805	1544
Q Serve(g_s), s	13.7	52.2	13.2	20.2	0.0	0.0	18.5	38.2	38.2	7.8	27.8	27.8
Cycle Q Clear(g_c), s	13.7	52.2	13.2	20.2	0.0	0.0	18.5	38.2	38.2	7.8	27.8	27.8
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.86	1.00		0.67
Lane Grp Cap(c), veh/h	220	2760	1440	581	2918	1279	500	530	445	109	386	330
V/C Ratio(X)	0.87	0.60	0.34	0.95	0.65	0.16	1.12	1.06	1.06	1.16	1.06	1.07
Avail Cap(c_a), veh/h	299	2760	1440	581	2918	1279	500	530	445	109	386	330
HCM Platoon Ratio	0.33	0.33	0.33	1.33	1.33	1.33	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.09	0.09	0.09	0.71	0.71	0.71	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	61.4	30.9	3.7	50.2	0.0	0.0	55.7	45.9	45.9	61.1	51.1	51.1
Incr Delay (d2), s/veh	1.7	0.1	0.1	20.2	0.8	0.2	76.4	55.4	59.2	135.9	61.6	68.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	6.7	25.1	2.5	9.7	0.3	0.1	13.3	24.8	21.3	7.6	18.9	16.8
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	63.0	31.0	3.8	70.4	0.8	0.2	132.1	101.3	105.1	197.0	112.7	119.3
LnGrp LOS	E	C	A	E	A	A	F	F	F	F	F	F
Approach Vol, veh/h	2328		2660			1591			886			
Approach Delay, s/veh	27.9		15.2			113.3			127.3			
Approach LOS	C		B			F			F			
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	37.0	108.4	24.0	33.6	21.3	114.1	13.6	44.0				
Change Period (Y+Rc), s	5.5	7.2	5.5	5.8	5.5	7.2	5.8	* 5.8				
Max Green Setting (Gmax), s	21.5	40.0	18.5	26.0	21.5	40.0	7.8	* 38				
Max Q Clear Time (g_c+0.25), s	22.2	54.2	20.5	29.8	15.7	2.0	9.8	40.2				
Green Ext Time (p_c), s	0.0	0.0	0.0	0.0	0.1	21.5	0.0	0.0				

Intersection Summary

HCM 6th Ctrl Delay 53.4

HCM 6th LOS D

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

HCM 6th Signalized Intersection Summary

10: Van Buren Boulevard & Bountiful Street

Woodcrest Christian School Expansion
Opening Year (2029) Without Project AM



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations	↰	↑↑↑	↑↑↑		↰	↑
Traffic Volume (veh/h)	162	1856	1847	36	55	252
Future Volume (veh/h)	162	1856	1847	36	55	252
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00			0.98	1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No	No		No	
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	174	1996	1986	39	59	271
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %	0	0	0	0	0	0
Cap, veh/h	174	3746	3095	61	340	302
Arrive On Green	0.19	1.00	1.00	1.00	0.19	0.19
Sat Flow, veh/h	1810	5358	5405	103	1810	1610
Grp Volume(v), veh/h	174	1996	1311	714	59	271
Grp Sat Flow(s), veh/h/ln	1810	1729	1729	1879	1810	1610
Q Serve(g_s), s	12.5	0.0	0.0	0.0	3.6	21.4
Cycle Q Clear(g_c), s	12.5	0.0	0.0	0.0	3.6	21.4
Prop In Lane	1.00			0.05	1.00	1.00
Lane Grp Cap(c), veh/h	174	3746	2045	1111	340	302
V/C Ratio(X)	1.00	0.53	0.64	0.64	0.17	0.90
Avail Cap(c_a), veh/h	174	3746	2045	1111	619	551
HCM Platoon Ratio	2.00	2.00	2.00	2.00	1.00	1.00
Upstream Filter(I)	0.09	0.09	0.21	0.21	1.00	1.00
Uniform Delay (d), s/veh	52.5	0.0	0.0	0.0	44.3	51.6
Incr Delay (d2), s/veh	20.5	0.0	0.3	0.6	0.2	9.3
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%), veh/ln	5.9	0.0	0.1	0.2	1.6	18.5
Unsig. Movement Delay, s/veh						
LnGrp Delay(d), s/veh	73.0	0.0	0.3	0.6	44.6	60.8
LnGrp LOS	F	A	A	A	D	E
Approach Vol, veh/h		2170	2025		330	
Approach Delay, s/veh		5.9	0.4		57.9	
Approach LOS		A	A		E	
Timer - Assigned Phs		2		4	5	6
Phs Duration (G+Y+Rc), s		101.1		28.9	17.0	84.1
Change Period (Y+Rc), s		7.2		4.5	4.5	7.2
Max Green Setting (Gmax), s		73.8		44.5	12.5	56.8
Max Q Clear Time (g_c+l1), s		2.0		23.4	14.5	2.0
Green Ext Time (p_c), s		25.5		1.1	0.0	22.2
Intersection Summary						
HCM 6th Ctrl Delay			7.2			
HCM 6th LOS			A			

HCM 6th Signalized Intersection Summary

11: Trautwein Road & Mission Grove Parkway S

Woodcrest Christian School Expansion
Opening Year (2029) Without Project AM



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	67	37	10	705	36	58	3	1988	604	208	1204	19
Future Volume (veh/h)	67	37	10	705	36	58	3	1988	604	208	1204	19
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		0.97	1.00		1.00	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No			No			No		
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	70	39	10	734	38	60	3	2071	629	217	1254	20
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	289	89	23	532	117	97	10	1941	1109	146	2213	965
Arrive On Green	0.16	0.06	0.06	0.15	0.06	0.06	0.00	0.18	0.18	0.08	0.61	0.61
Sat Flow, veh/h	1810	1457	374	3510	1900	1566	1810	3610	1608	1810	3610	1574
Grp Volume(v), veh/h	70	0	49	734	38	60	3	2071	629	217	1254	20
Grp Sat Flow(s),veh/h/ln	1810	0	1831	1755	1900	1566	1810	1805	1608	1810	1805	1574
Q Serve(g_s), s	4.4	0.0	3.4	19.7	2.5	4.1	0.2	69.9	16.0	10.5	26.8	0.2
Cycle Q Clear(g_c), s	4.4	0.0	3.4	19.7	2.5	4.1	0.2	69.9	16.0	10.5	26.8	0.2
Prop In Lane	1.00		0.20	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	289	0	111	532	117	97	10	1941	1109	146	2213	965
V/C Ratio(X)	0.24	0.00	0.44	1.38	0.32	0.62	0.30	1.07	0.57	1.48	0.57	0.02
Avail Cap(c_a), veh/h	289	0	451	532	693	571	104	1941	1109	146	2213	965
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	0.33	0.33	0.33	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	1.00	1.00	0.09	0.09	0.09	1.00	1.00	1.00
Uniform Delay (d), s/veh	47.7	0.0	58.9	55.2	58.4	41.9	64.6	53.5	8.6	59.7	14.9	1.2
Incr Delay (d2), s/veh	0.2	0.0	2.7	182.4	1.6	6.4	0.6	31.4	0.2	250.9	1.1	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.0	0.0	1.7	22.0	1.2	2.0	0.1	42.1	6.4	14.9	10.1	0.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	47.9	0.0	61.6	237.6	60.0	48.3	65.2	84.9	8.8	310.7	16.0	1.3
LnGrp LOS	D	A	E	F	E	D	E	F	A	F	B	A
Approach Vol, veh/h	119					832		2703		1491		
Approach Delay, s/veh	53.5					215.8		67.1		58.7		
Approach LOS	D					F		E		E		
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	5.0	76.1	25.2	13.7	5.2	85.9	26.3	12.6				
Change Period (Y+Rc), s	4.5	6.2	5.5	5.8	4.5	6.2	5.5	* 4.6				
Max Green Setting (Gmax), s	10.5	45.8	19.7	32.0	7.5	48.8	7.0	* 47				
Max Q Clear Time (g_c+1/2Y), s	112.5	71.9	21.7	5.4	2.2	28.8	6.4	6.1				
Green Ext Time (p_c), s	0.0	0.0	0.0	0.2	0.0	8.4	0.0	0.4				

Intersection Summary

HCM 6th Ctrl Delay 88.4

HCM 6th LOS F

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

HCM 6th Signalized Intersection Summary

12: Trautwein Road & John F Kennedy Drive

Woodcrest Christian School Expansion

Opening Year (2029) Without Project AM



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↖↗	↑	↗	↖	↗		↖	↑↑	↗	↖	↑↑	↗
Traffic Volume (veh/h)	634	57	105	140	64	48	239	2239	98	10	1109	680
Future Volume (veh/h)	634	57	105	140	64	48	239	2239	98	10	1109	680
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		0.99	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No			No			No		
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	682	61	113	151	69	52	257	2408	105	11	1192	731
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	516	223	186	259	114	86	306	2018	898	32	1383	852
Arrive On Green	0.15	0.12	0.12	0.14	0.11	0.11	0.17	0.56	0.56	0.04	0.77	0.77
Sat Flow, veh/h	3510	1900	1590	1810	999	753	1810	3610	1607	1810	3610	1606
Grp Volume(v), veh/h	682	61	113	151	0	121	257	2408	105	11	1192	731
Grp Sat Flow(s),veh/h/ln	1755	1900	1590	1810	0	1753	1810	1805	1607	1810	1805	1606
Q Serve(g_s), s	19.1	3.8	8.8	10.1	0.0	8.5	17.9	72.7	1.8	0.8	29.6	39.0
Cycle Q Clear(g_c), s	19.1	3.8	8.8	10.1	0.0	8.5	17.9	72.7	1.8	0.8	29.6	39.0
Prop In Lane	1.00		1.00	1.00		0.43	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	516	223	186	259	0	200	306	2018	898	32	1383	852
V/C Ratio(X)	1.32	0.27	0.61	0.58	0.00	0.60	0.84	1.19	0.12	0.34	0.86	0.86
Avail Cap(c_a), veh/h	516	678	567	259	0	445	306	2018	898	97	1383	852
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00	2.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	0.00	1.00	0.23	0.23	0.23	0.65	0.65	0.65
Uniform Delay (d), s/veh	55.4	52.3	54.5	52.1	0.0	54.8	52.3	28.7	2.8	62.0	12.8	3.2
Incr Delay (d2), s/veh	158.2	0.7	3.2	3.3	0.0	2.9	5.0	88.3	0.1	4.1	4.9	7.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	9.6	1.8	3.7	4.9	0.0	4.0	8.3	52.5	1.4	0.4	5.7	3.6
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	213.6	53.0	57.7	55.4	0.0	57.7	57.4	117.0	2.9	66.1	17.7	10.7
LnGrp LOS	F	D	E	E	A	E	E	F	A	E	B	B
Approach Vol, veh/h	856			272			2770			1934		
Approach Delay, s/veh	181.6			56.4			107.1			15.3		
Approach LOS	F			E			F			B		
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	6.3	79.9	24.0	19.8	29.1	57.0	23.6	20.3				
Change Period (Y+Rc), s	4.0	7.2	5.4	* 4.6	7.2	* 7.2	4.5	5.4				
Max Green Setting (Gmax), s	49.8	7.0	* 46	7.0	* 50	19.1	33.0					
Max Q Clear Time (g_c+I2, s)	74.7	12.1	10.8	19.9	41.0	21.1	10.5					
Green Ext Time (p_c), s	0.0	0.0	0.0	0.7	0.0	6.2	0.0	0.6				

Intersection Summary

HCM 6th Ctrl Delay 85.3

HCM 6th LOS F

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

HCM 6th Signalized Intersection Summary 13: Trautwein Road & Grove Community Drive

Woodcrest Christian School Expansion
Opening Year (2029) Without Project AM



Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	111	608	1968	65	187	1165
Future Volume (veh/h)	111	608	1968	65	187	1165
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00		1.00	1.00	
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No		No		No	
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	122	668	2163	71	205	1280
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91
Percent Heavy Veh, %	0	0	0	0	0	0
Cap, veh/h	221	560	2430	1082	264	2855
Arrive On Green	0.12	0.12	0.67	0.67	0.15	1.00
Sat Flow, veh/h	1810	2834	3705	1608	3510	3705
Grp Volume(v), veh/h	122	668	2163	71	205	1280
Grp Sat Flow(s), veh/h/ln	1810	1417	1805	1608	1755	1805
Q Serve(g_s), s	8.2	15.9	63.5	2.0	7.3	0.0
Cycle Q Clear(g_c), s	8.2	15.9	63.5	2.0	7.3	0.0
Prop In Lane	1.00	1.00		1.00	1.00	
Lane Grp Cap(c), veh/h	221	560	2430	1082	264	2855
V/C Ratio(X)	0.55	1.19	0.89	0.07	0.78	0.45
Avail Cap(c_a), veh/h	221	560	2430	1082	608	2855
HCM Platoon Ratio	1.00	1.00	1.00	1.00	2.00	2.00
Upstream Filter(I)	1.00	1.00	0.09	0.09	0.78	0.78
Uniform Delay (d), s/veh	53.7	52.2	17.3	7.3	54.2	0.0
Incr Delay (d2), s/veh	2.9	103.4	0.5	0.0	3.8	0.4
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%), veh/ln	3.9	17.1	21.8	0.6	3.1	0.2
Unsig. Movement Delay, s/veh						
LnGrp Delay(d), s/veh	56.6	155.6	17.9	7.3	58.0	0.4
LnGrp LOS	E	F	B	A	E	A
Approach Vol, veh/h	790		2234			1485
Approach Delay, s/veh	140.3		17.5			8.3
Approach LOS	F		B			A
Timer - Assigned Phs	1	2			6	8
Phs Duration (G+Y+Rc), s	5.3	93.7			109.0	21.0
Change Period (Y+Rc), s	5.5	6.2			6.2	5.1
Max Green Setting (Gmax), s	22.5	74.8			102.8	15.9
Max Q Clear Time (g_c+1.3), s	19.3	65.5			2.0	17.9
Green Ext Time (p_c), s	0.5	8.0			11.7	0.0
Intersection Summary						
HCM 6th Ctrl Delay			36.0			
HCM 6th LOS			D			

HCM 6th Signalized Intersection Summary 14: Trautwein Road & Orange Terrace Pkwy

Woodcrest Christian School Expansion
Opening Year (2029) Without Project AM

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	97	67	45	376	161	593	68	1342	267	350	952	31
Future Volume (veh/h)	97	67	45	376	161	593	68	1342	267	350	952	31
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		0.97	1.00		1.00	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No			No			No		
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	118	82	55	459	196	723	83	1637	326	427	1161	38
Peak Hour Factor	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	143	119	80	326	423	938	105	1554	690	405	1789	792
Arrive On Green	0.08	0.11	0.11	0.18	0.22	0.22	0.04	0.29	0.29	0.23	0.99	0.99
Sat Flow, veh/h	1810	1057	709	1810	1900	2744	1810	3610	1602	3510	3610	1599
Grp Volume(v), veh/h	118	0	137	459	196	723	83	1637	326	427	1161	38
Grp Sat Flow(s),veh/h/ln	1810	0	1766	1810	1900	1372	1810	1805	1602	1755	1805	1599
Q Serve(g_s), s	8.4	0.0	9.7	23.4	11.6	22.2	5.9	56.0	11.9	15.0	1.1	0.0
Cycle Q Clear(g_c), s	8.4	0.0	9.7	23.4	11.6	22.2	5.9	56.0	11.9	15.0	1.1	0.0
Prop In Lane	1.00		0.40	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	143	0	199	326	423	938	105	1554	690	405	1789	792
V/C Ratio(X)	0.82	0.00	0.69	1.41	0.46	0.77	0.79	1.05	0.47	1.05	0.65	0.05
Avail Cap(c_a), veh/h	237	0	492	326	547	1117	223	1554	690	405	1789	792
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	0.67	0.67	0.67	2.00	2.00	2.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	1.00	1.00	0.81	0.81	0.81	0.89	0.89	0.89
Uniform Delay (d), s/veh	59.0	0.0	55.5	53.3	43.8	21.2	61.7	46.2	10.2	50.0	0.3	0.1
Incr Delay (d2), s/veh	4.5	0.0	4.2	201.4	0.8	2.8	4.0	36.2	1.9	57.2	1.6	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.0	0.0	4.6	28.8	5.6	7.4	2.8	33.1	4.9	8.7	0.6	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	63.5	0.0	59.7	254.7	44.6	24.0	65.7	82.5	12.0	107.2	1.9	0.2
LnGrp LOS	E	A	E	F	D	C	E	F	B	F	A	A
Approach Vol, veh/h	255				1378		2046				1626	
Approach Delay, s/veh	61.5				103.8		70.6				29.5	
Approach LOS	E				F		E				C	
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	30.0	62.2	27.4	20.4	11.6	70.6	14.3	33.6				
Change Period (Y+Rc), s	5.0	6.2	4.0	5.8	4.0	6.2	4.0	4.6				
Max Green Setting (Gmax), s	15.0	40.8	17.0	36.2	16.0	40.8	17.0	37.4				
Max Q Clear Time (g_c+117), s	117.0	58.0	25.4	11.7	7.9	3.1	10.4	24.2				
Green Ext Time (p_c), s	0.0	0.0	0.0	0.8	0.0	9.4	0.1	3.8				
Intersection Summary												
HCM 6th Ctrl Delay			66.2									
HCM 6th LOS			E									

HCM 6th Signalized Intersection Summary

15: Trautwein Road & Shopping Ctr Dwy

Woodcrest Christian School Expansion
Opening Year (2029) Without Project AM



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	62	10	55	32	8	56	85	1198	22	79	1047	44
Future Volume (veh/h)	62	10	55	32	8	56	85	1198	22	79	1047	44
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No			No			No		
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	72	12	64	37	9	65	99	1393	26	92	1217	51
Peak Hour Factor	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	165	32	171	164	25	177	104	2481	1106	116	2503	1116
Arrive On Green	0.12	0.12	0.12	0.12	0.12	0.12	0.12	1.00	1.00	0.06	0.69	0.69
Sat Flow, veh/h	1342	259	1384	1339	199	1435	1810	3610	1609	1810	3610	1609
Grp Volume(v), veh/h	72	0	76	37	0	74	99	1393	26	92	1217	51
Grp Sat Flow(s), veh/h/ln	1342	0	1643	1339	0	1633	1810	1805	1609	1810	1805	1609
Q Serve(g_s), s	6.8	0.0	5.5	3.4	0.0	5.4	7.1	0.0	0.0	6.5	20.3	1.3
Cycle Q Clear(g_c), s	12.2	0.0	5.5	8.9	0.0	5.4	7.1	0.0	0.0	6.5	20.3	1.3
Prop In Lane	1.00		0.84	1.00		0.88	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	165	0	203	164	0	202	104	2481	1106	116	2503	1116
V/C Ratio(X)	0.44	0.00	0.37	0.23	0.00	0.37	0.95	0.56	0.02	0.80	0.49	0.05
Avail Cap(c_a), veh/h	351	0	430	349	0	427	104	2481	1106	480	2503	1116
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00	2.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	0.09	0.09	0.09	0.34	0.34	0.34
Uniform Delay (d), s/veh	57.9	0.0	52.4	56.5	0.0	52.3	57.3	0.0	0.0	60.0	9.2	6.3
Incr Delay (d2), s/veh	1.8	0.0	1.1	0.7	0.0	1.1	15.5	0.1	0.0	1.6	0.2	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.4	0.0	2.4	1.2	0.0	2.3	3.4	0.0	0.0	3.0	6.8	0.4
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	59.7	0.0	53.5	57.2	0.0	53.4	72.8	0.1	0.0	61.6	9.4	6.3
LnGrp LOS	E	A	D	E	A	D	E	A	A	E	A	A
Approach Vol, veh/h	148			111			1518			1360		
Approach Delay, s/veh	56.5			54.7			4.8			12.9		
Approach LOS	E			D			A			B		
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	2.8	96.5		20.7	12.0	97.3		20.7				
Change Period (Y+Rc), s	4.5	7.2		4.6	4.5	7.2		4.6				
Max Green Setting (Gmax), s	34.5	45.2		34.0	7.5	72.2		34.0				
Max Q Clear Time (g_c+10), s	19.5	2.0		14.2	9.1	22.3		10.9				
Green Ext Time (p_c), s	0.1	12.8		0.6	0.0	10.6		0.5				
Intersection Summary												
HCM 6th Ctrl Delay	12.5											
HCM 6th LOS	B											

HCM 6th Signalized Intersection Summary

16: Trautwein Road & Van Buren Boulevard

Woodcrest Christian School Expansion
Opening Year (2029) Without Project AM



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	408	1367	137	194	1725	494	226	773	151	485	454	363
Future Volume (veh/h)	408	1367	137	194	1725	494	226	773	151	485	454	363
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No			No			No		
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	443	1486	149	211	1875	537	246	840	164	527	493	395
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	1378	2296	1234	234	1867	760	237	902	176	394	1026	1082
Arrive On Green	0.52	0.85	0.85	0.26	0.72	0.72	0.13	0.30	0.30	0.19	0.47	0.47
Sat Flow, veh/h	3510	3610	1609	1810	5187	1609	1810	3010	588	3510	3610	1585
Grp Volume(v), veh/h	443	1486	149	211	1875	537	246	504	500	527	493	395
Grp Sat Flow(s),veh/h/ln	1755	1805	1609	1810	1729	1609	1810	1805	1792	1755	1805	1585
Q Serve(g_s), s	9.4	18.2	1.4	14.6	46.8	0.0	17.0	35.3	35.3	14.6	12.1	6.9
Cycle Q Clear(g_c), s	9.4	18.2	1.4	14.6	46.8	0.0	17.0	35.3	35.3	14.6	12.1	6.9
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.33	1.00		1.00
Lane Grp Cap(c), veh/h	1378	2296	1234	234	1867	760	237	541	537	394	1026	1082
V/C Ratio(X)	0.32	0.65	0.12	0.90	1.00	0.71	1.04	0.93	0.93	1.34	0.48	0.37
Avail Cap(c_a), veh/h	1378	2296	1234	383	1867	760	237	555	551	394	1026	1082
HCM Platoon Ratio	1.33	1.33	1.33	2.00	2.00	2.00	1.00	1.00	1.00	1.67	1.67	1.67
Upstream Filter(I)	0.88	0.88	0.88	0.69	0.69	0.69	1.00	1.00	1.00	0.86	0.86	0.86
Uniform Delay (d), s/veh	21.1	5.1	1.6	47.4	18.2	9.3	56.5	44.2	44.2	52.8	27.6	11.5
Incr Delay (d2), s/veh	0.0	1.3	0.2	7.2	18.3	3.8	69.2	22.4	22.6	165.8	0.3	0.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.5	4.0	0.4	6.0	9.4	5.1	12.2	18.7	18.6	14.8	4.5	4.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	21.2	6.3	1.7	54.6	36.5	13.1	125.7	66.7	66.8	218.6	27.9	11.6
LnGrp LOS	C	A	A	D	F	B	F	E	E	F	C	B
Approach Vol, veh/h	2078			2623			1250			1415		
Approach Delay, s/veh	9.1			33.2			78.3			94.4		
Approach LOS	A			C			E			F		
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	31.3	90.2	22.0	43.1	58.6	53.0	20.8	44.3				
Change Period (Y+Rc), s	4.5	6.2	5.0	6.2	6.2	* 6.2	6.2	* 5.4				
Max Green Setting (Gmax), s	27.5	26.8	17.0	36.8	7.0	* 47	14.6	* 40				
Max Q Clear Time (g_c+116), s	116.6	20.2	19.0	14.1	11.4	48.8	16.6	37.3				
Green Ext Time (p_c), s	0.2	4.8	0.0	4.3	0.0	0.0	0.0	1.6				

Intersection Summary

HCM 6th Ctrl Delay 45.8

HCM 6th LOS D

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

HCM 6th Signalized Intersection Summary

17: Van Buren Boulevard & Shopping Ctr Dwy

Woodcrest Christian School Expansion
Opening Year (2029) Without Project AM



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations	↰	↑↑	↑↑↑		↰	↰
Traffic Volume (veh/h)	37	1963	2008	103	85	35
Future Volume (veh/h)	37	1963	2008	103	85	35
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00			0.98	1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No	No		No	
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	39	2088	2136	110	90	37
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	0	0	0	0	0	0
Cap, veh/h	671	3060	2127	109	120	107
Arrive On Green	0.74	1.00	0.84	0.84	0.07	0.07
Sat Flow, veh/h	1810	3705	5217	258	1810	1610
Grp Volume(v), veh/h	39	2088	1460	786	90	37
Grp Sat Flow(s), veh/h/ln	1810	1805	1729	1846	1810	1610
Q Serve(g_s), s	0.8	0.0	54.8	54.8	6.4	2.9
Cycle Q Clear(g_c), s	0.8	0.0	54.8	54.8	6.4	2.9
Prop In Lane	1.00			0.14	1.00	1.00
Lane Grp Cap(c), veh/h	671	3060	1458	778	120	107
V/C Ratio(X)	0.06	0.68	1.00	1.01	0.75	0.35
Avail Cap(c_a), veh/h	671	3060	1458	778	487	434
HCM Platoon Ratio	2.00	2.00	2.00	2.00	1.00	1.00
Upstream Filter(I)	0.09	0.09	0.09	0.09	1.00	1.00
Uniform Delay (d), s/veh	10.7	0.0	10.2	10.2	59.6	58.0
Incr Delay (d2), s/veh	0.0	0.1	7.4	12.2	9.1	1.9
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%), veh/ln	0.3	0.0	5.3	6.7	3.2	2.6
Unsig. Movement Delay, s/veh						
LnGrp Delay(d), s/veh	10.7	0.1	17.6	22.4	68.7	59.9
LnGrp LOS	B	A	F	F	E	E
Approach Vol, veh/h		2127	2246		127	
Approach Delay, s/veh		0.3	19.3		66.1	
Approach LOS		A	B		E	
Timer - Assigned Phs		2		4	5	6
Phs Duration (G+Y+Rc), s		117.4		12.6	55.4	62.0
Change Period (Y+Rc), s		7.2		4.0	7.2	* 7.2
Max Green Setting (Gmax), s		83.8		35.0	24.5	* 55
Max Q Clear Time (g_c+I1), s		2.0		8.4	2.8	56.8
Green Ext Time (p_c), s		33.2		0.3	0.0	0.0

Intersection Summary

HCM 6th Ctrl Delay	11.7
HCM 6th LOS	B

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

HCM 6th Signalized Intersection Summary

18: Barton Street & Van Buren Boulevard

Woodcrest Christian School Expansion
Opening Year (2029) Without Project AM



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	198	1536	401	374	1849	35	447	110	460	87	164	349
Future Volume (veh/h)	198	1536	401	374	1849	35	447	110	460	87	164	349
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No				No				No			
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	213	1652	431	402	1988	38	481	118	495	94	176	375
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	1659	3129	781	425	2048	39	459	646	547	97	138	294
Arrive On Green	0.30	0.36	0.36	0.24	0.39	0.39	0.13	0.34	0.34	0.05	0.26	0.26
Sat Flow, veh/h	1810	2862	715	1810	5240	100	3510	1900	1610	1810	541	1152
Grp Volume(v), veh/h	213	1015	1068	402	1311	715	481	118	495	94	0	551
Grp Sat Flow(s),veh/h/ln	1810	1805	1771	1810	1729	1882	1755	1900	1610	1810	0	1693
Q Serve(g_s), s	11.1	0.0	0.0	28.4	48.4	48.5	17.0	5.7	38.1	6.7	0.0	33.2
Cycle Q Clear(g_c), s	11.1	0.0	0.0	28.4	48.4	48.5	17.0	5.7	38.1	6.7	0.0	33.2
Prop In Lane	1.00		0.40	1.00		0.05	1.00		1.00	1.00		0.68
Lane Grp Cap(c), veh/h	1659	1974	1937	425	1351	735	459	646	547	97	0	432
V/C Ratio(X)	0.13	0.51	0.55	0.95	0.97	0.97	1.05	0.18	0.90	0.96	0.00	1.27
Avail Cap(c_a), veh/h	1659	1974	1937	452	1351	735	459	646	547	97	0	432
HCM Platoon Ratio	0.33	0.33	0.33	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.65	0.65	0.65	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	7.6	0.0	0.0	48.9	38.9	38.9	56.5	30.2	40.9	61.4	0.0	48.4
Incr Delay (d2), s/veh	0.0	0.6	0.7	27.4	18.4	27.0	55.1	0.1	18.5	79.0	0.0	140.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	0.3	0.4	15.6	22.7	26.5	10.8	2.6	17.3	5.3	0.0	30.9
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	7.6	0.6	0.7	76.3	57.2	65.9	111.6	30.3	59.3	140.4	0.0	189.0
LnGrp LOS	A	A	A	E	E	E	F	C	E	F	A	F
Approach Vol, veh/h	2296				2428				1094		645	
Approach Delay, s/veh	1.3				62.9				79.2		181.9	
Approach LOS	A				E				E		F	
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	35.1	152.7	22.0	39.0	129.8	58.0	11.0	50.0				
Change Period (Y+Rc), s	4.5	7.2	5.0	* 5.8	7.2	* 7.2	4.0	5.8				
Max Green Setting (Gmax), s	32.5	26.0	17.0	* 33	7.2	* 51	7.0	43.0				
Max Q Clear Time (g_c+Q0), s	30.4	2.0	19.0	35.2	13.1	50.5	8.7	40.1				
Green Ext Time (p_c), s	0.2	17.0	0.0	0.0	0.0	0.3	0.0	0.8				

Intersection Summary

HCM 6th Ctrl Delay 55.7

HCM 6th LOS E

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Intersection												
Int Delay, s/veh	0											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↑↑			↑↑				↑			↑
Traffic Vol, veh/h	0	2118	0	0	2500	8	0	0	0	0	0	0
Future Vol, veh/h	0	2118	0	0	2500	8	0	0	0	0	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	0	-	-	0
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	94	94	94	94	94	94	94	94	94	94	94	94
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	0	2253	0	0	2660	9	0	0	0	0	0	0
Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	-	0	0	-	-	0	-	-	1127	-	-	1335
Stage 1	-	-	-	-	-	-	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-	-	-	-	-	-	-
Critical Hdwy	-	-	-	-	-	-	-	-	6.9	-	-	6.9
Critical Hdwy Stg 1	-	-	-	-	-	-	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-	-	-	-	-	-	-
Follow-up Hdwy	-	-	-	-	-	-	-	-	3.3	-	-	3.3
Pot Cap-1 Maneuver	0	-	-	0	-	-	0	0	*202	0	0	*36
Stage 1	0	-	-	0	-	-	0	0	-	0	0	-
Stage 2	0	-	-	0	-	-	0	0	-	0	0	-
Platoon blocked, %	-	-	-	-	-	-	-	-	1	-	-	1
Mov Cap-1 Maneuver	-	-	-	-	-	-	-	-	*202	-	-	*36
Mov Cap-2 Maneuver	-	-	-	-	-	-	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-	-	-	-	-	-	-
Approach	EB			WB			NB			SB		
HCM Control Delay, s	0			0			0			0		
HCM LOS							A			A		
Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBT	WBR	SBLn1						
Capacity (veh/h)	-	-	-	-	-	-						
HCM Lane V/C Ratio	-	-	-	-	-	-						
HCM Control Delay (s)	0	-	-	-	-	0						
HCM Lane LOS	A	-	-	-	-	A						
HCM 95th %tile Q(veh)	-	-	-	-	-	-						
Notes												
~: Volume exceeds capacity		\$: Delay exceeds 300s				+: Computation Not Defined				*: All major volume in platoon		

Intersection						
Int Delay, s/veh	0.2					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	0	0	15	441	233	114
Future Vol, veh/h	0	0	15	441	233	114
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	85	85	85	85	85	85
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	0	0	18	519	274	134
Major/Minor	Minor2	Major1		Major2		
Conflicting Flow All	896	341	408	0	-	0
Stage 1	341	-	-	-	-	-
Stage 2	555	-	-	-	-	-
Critical Hdwy	6.4	6.2	4.1	-	-	-
Critical Hdwy Stg 1	5.4	-	-	-	-	-
Critical Hdwy Stg 2	5.4	-	-	-	-	-
Follow-up Hdwy	3.5	3.3	2.2	-	-	-
Pot Cap-1 Maneuver	313	706	1162	-	-	-
Stage 1	725	-	-	-	-	-
Stage 2	579	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	306	706	1162	-	-	-
Mov Cap-2 Maneuver	306	-	-	-	-	-
Stage 1	709	-	-	-	-	-
Stage 2	579	-	-	-	-	-
Approach	EB	NB		SB		
HCM Control Delay, s	0	0.3		0		
HCM LOS	A					
Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR	
Capacity (veh/h)	1162	-	-	-	-	
HCM Lane V/C Ratio	0.015	-	-	-	-	
HCM Control Delay (s)	8.1	0	0	-	-	
HCM Lane LOS	A	A	A	-	-	
HCM 95th %tile Q(veh)	0	-	-	-	-	

HCM 6th TWSC
21: Dauchy Avenue & Project Driveway 4

Woodcrest Christian School Expansion
Opening Year (2029) Without Project AM

Intersection						
Int Delay, s/veh	4.6					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	125	41	38	315	180	46
Future Vol, veh/h	125	41	38	315	180	46
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	85	85	85	85	85	85
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	147	48	45	371	212	54
Major/Minor	Minor2	Major1		Major2		
Conflicting Flow All	700	239	266	0	-	0
Stage 1	239	-	-	-	-	-
Stage 2	461	-	-	-	-	-
Critical Hdwy	6.4	6.2	4.1	-	-	-
Critical Hdwy Stg 1	5.4	-	-	-	-	-
Critical Hdwy Stg 2	5.4	-	-	-	-	-
Follow-up Hdwy	3.5	3.3	2.2	-	-	-
Pot Cap-1 Maneuver	409	805	1310	-	-	-
Stage 1	805	-	-	-	-	-
Stage 2	639	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	391	805	1310	-	-	-
Mov Cap-2 Maneuver	391	-	-	-	-	-
Stage 1	770	-	-	-	-	-
Stage 2	639	-	-	-	-	-
Approach	EB	NB		SB		
HCM Control Delay, s	19.1	0.8		0		
HCM LOS	C					
Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR	
Capacity (veh/h)	1310	-	448	-	-	
HCM Lane V/C Ratio	0.034	-	0.436	-	-	
HCM Control Delay (s)	7.8	0	19.1	-	-	
HCM Lane LOS	A	A	C	-	-	
HCM 95th %tile Q(veh)	0.1	-	2.2	-	-	

Intersection						
Int Delay, s/veh	0					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	1	0	0	361	225	1
Future Vol, veh/h	1	0	0	361	225	1
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	87	87	87	87	87	87
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	1	0	0	415	259	1
Major/Minor	Minor2	Major1		Major2		
Conflicting Flow All	675	260	260	0	-	0
Stage 1	260	-	-	-	-	-
Stage 2	415	-	-	-	-	-
Critical Hdwy	6.4	6.2	4.1	-	-	-
Critical Hdwy Stg 1	5.4	-	-	-	-	-
Critical Hdwy Stg 2	5.4	-	-	-	-	-
Follow-up Hdwy	3.5	3.3	2.2	-	-	-
Pot Cap-1 Maneuver	422	784	1316	-	-	-
Stage 1	788	-	-	-	-	-
Stage 2	671	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	422	784	1316	-	-	-
Mov Cap-2 Maneuver	422	-	-	-	-	-
Stage 1	788	-	-	-	-	-
Stage 2	671	-	-	-	-	-
Approach	EB	NB		SB		
HCM Control Delay, s	13.6	0		0		
HCM LOS	B					
Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR	
Capacity (veh/h)	1316	-	422	-	-	
HCM Lane V/C Ratio	-	-	0.003	-	-	
HCM Control Delay (s)	0	-	13.6	-	-	
HCM Lane LOS	A	-	B	-	-	
HCM 95th %tile Q(veh)	0	-	0	-	-	

HCM 6th Signalized Intersection Summary

1: Washington Street & Van Buren Boulevard

Woodcrest Christian School Expansion
Opening Year (2029) Without Project Afternoon

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	150	1536	117	220	1623	667	134	353	181	728	341	118
Future Volume (veh/h)	150	1536	117	220	1623	667	134	353	181	728	341	118
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		0.99	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	160	1634	124	234	1727	710	143	376	193	774	363	126
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	160	1715	129	202	1903	848	196	490	217	621	941	418
Arrive On Green	0.09	0.50	0.50	0.11	0.53	0.53	0.06	0.14	0.14	0.18	0.26	0.26
Sat Flow, veh/h	1810	3403	256	1810	3610	1608	3510	3610	1600	3510	3610	1605
Grp Volume(v), veh/h	160	860	898	234	1727	710	143	376	193	774	363	126
Grp Sat Flow(s),veh/h/ln	1810	1805	1854	1810	1805	1608	1755	1805	1600	1755	1805	1605
Q Serve(g_s), s	11.5	58.7	60.5	14.5	56.4	48.6	5.2	13.1	15.4	23.0	10.7	8.2
Cycle Q Clear(g_c), s	11.5	58.7	60.5	14.5	56.4	48.6	5.2	13.1	15.4	23.0	10.7	8.2
Prop In Lane	1.00		0.14	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	160	910	934	202	1903	848	196	490	217	621	941	418
V/C Ratio(X)	1.00	0.95	0.96	1.16	0.91	0.84	0.73	0.77	0.89	1.25	0.39	0.30
Avail Cap(c_a), veh/h	160	910	934	202	1903	848	267	500	221	621	941	418
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	59.2	30.5	31.0	57.8	27.9	26.0	60.4	54.2	55.2	53.5	39.5	38.6
Incr Delay (d2), s/veh	71.0	19.2	21.3	112.9	7.8	9.7	6.3	6.9	32.1	123.9	0.3	0.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	8.3	28.1	30.2	12.8	24.1	20.0	2.5	6.4	8.1	20.5	4.7	3.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	130.2	49.8	52.3	170.7	35.7	35.7	66.7	61.1	87.3	177.4	39.8	39.0
LnGrp LOS	F	D	D	F	D	D	E	E	F	F	D	D
Approach Vol, veh/h		1918			2671			712			1263	
Approach Delay, s/veh		57.7			47.5			69.3			124.0	
Approach LOS		E			D			E			F	
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	19.0	72.1	11.8	39.7	16.0	75.1	28.0	23.5				
Change Period (Y+Rc), s	4.5	6.2	4.5	5.8	4.5	6.2	5.0	* 5.8				
Max Green Setting (Gmax), s	14.5	53.7	9.9	30.9	11.5	56.7	23.0	* 18				
Max Q Clear Time (g_c+I1), s	16.5	62.5	7.2	12.7	13.5	58.4	25.0	17.4				
Green Ext Time (p_c), s	0.0	0.0	0.1	2.3	0.0	0.0	0.0	0.2				

Intersection Summary

HCM 6th Ctrl Delay	67.6
HCM 6th LOS	E

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

HCM 6th Signalized Intersection Summary

Woodcrest Christian School Expansion

2: Alta Cresta Avenue/Chicago Avenue & Van Buren Boulevard

Opening Year (2029) Without Project Afternoon

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	135	2240	180	50	2449	102	91	31	27	112	27	62
Future Volume (veh/h)	135	2240	180	50	2449	102	91	31	27	112	27	62
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		0.98	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	147	2435	196	54	2662	111	99	34	29	122	29	67
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	104	2398	1068	84	2303	95	111	72	61	111	39	89
Arrive On Green	0.06	0.66	0.66	0.06	0.87	0.87	0.06	0.08	0.08	0.06	0.08	0.08
Sat Flow, veh/h	1810	3610	1608	1810	3529	146	1810	945	806	1810	508	1175
Grp Volume(v), veh/h	147	2435	196	54	1351	1422	99	0	63	122	0	96
Grp Sat Flow(s),veh/h/ln	1810	1805	1608	1810	1805	1870	1810	0	1751	1810	0	1683
Q Serve(g_s), s	7.5	86.3	6.1	3.8	84.9	84.9	7.1	0.0	4.5	8.0	0.0	7.3
Cycle Q Clear(g_c), s	7.5	86.3	6.1	3.8	84.9	84.9	7.1	0.0	4.5	8.0	0.0	7.3
Prop In Lane	1.00		1.00	1.00		0.08	1.00		0.46	1.00		0.70
Lane Grp Cap(c), veh/h	104	2398	1068	84	1178	1220	111	0	133	111	0	128
V/C Ratio(X)	1.41	1.02	0.18	0.65	1.15	1.17	0.89	0.00	0.47	1.10	0.00	0.75
Avail Cap(c_a), veh/h	104	2398	1068	104	1178	1220	111	0	242	111	0	240
HCM Platoon Ratio	1.00	1.00	1.00	1.33	1.33	1.33	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	0.39	0.39	0.39	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	61.3	21.8	8.3	60.0	8.6	8.6	60.6	0.0	57.6	61.0	0.0	58.9
Incr Delay (d2), s/veh	231.0	22.3	0.4	3.6	70.4	78.2	52.3	0.0	2.6	113.3	0.0	8.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	10.0	37.2	2.1	1.8	28.2	31.9	4.8	0.0	2.1	7.2	0.0	3.4
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	292.2	44.2	8.7	63.6	79.0	86.8	112.8	0.0	60.2	174.3	0.0	67.5
LnGrp LOS	F	F	A	E	F	F	F	A	E	F	A	E
Approach Vol, veh/h		2778			2827			162			218	
Approach Delay, s/veh		54.8			82.6			92.4			127.3	
Approach LOS		D			F			F			F	
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	10.5	92.5	12.0	14.9	12.0	91.1	12.0	14.9				
Change Period (Y+Rc), s	4.5	6.2	4.0	* 5.1	4.5	6.2	4.0	5.1				
Max Green Setting (Gmax), s	7.5	76.7	8.0	* 19	7.5	76.7	8.0	18.0				
Max Q Clear Time (g_c+I1), s	5.8	88.3	9.1	9.3	9.5	86.9	10.0	6.5				
Green Ext Time (p_c), s	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.2				
Intersection Summary												
HCM 6th Ctrl Delay			71.6									
HCM 6th LOS			E									
Notes												
* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.												

HCM 6th Signalized Intersection Summary

3: Van Buren Village Driveway & Van Buren Boulevard

Woodcrest Christian School Expansion
Opening Year (2029) Without Project Afternoon

						
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑↑	↑	↓	↑↑	↓	↑
Traffic Volume (veh/h)	2340	39	118	2568	45	134
Future Volume (veh/h)	2340	39	118	2568	45	134
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)		1.00	1.00		1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	2463	41	124	2703	47	141
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	0	0	0	0	0	0
Cap, veh/h	2559	1142	142	2954	187	166
Arrive On Green	0.94	0.94	0.16	1.00	0.10	0.10
Sat Flow, veh/h	3705	1610	1810	3705	1810	1610
Grp Volume(v), veh/h	2463	41	124	2703	47	141
Grp Sat Flow(s),veh/h/ln	1805	1610	1810	1805	1810	1610
Q Serve(g_s), s	54.7	0.2	8.7	0.0	3.1	11.2
Cycle Q Clear(g_c), s	54.7	0.2	8.7	0.0	3.1	11.2
Prop In Lane		1.00	1.00		1.00	1.00
Lane Grp Cap(c), veh/h	2559	1142	142	2954	187	166
V/C Ratio(X)	0.96	0.04	0.87	0.92	0.25	0.85
Avail Cap(c_a), veh/h	2559	1142	142	2954	262	233
HCM Platoon Ratio	1.33	1.33	2.00	2.00	1.00	1.00
Upstream Filter(I)	0.09	0.09	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	2.6	1.1	54.2	0.0	53.7	57.3
Incr Delay (d2), s/veh	1.5	0.0	40.8	5.7	0.7	18.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.4	0.1	5.2	2.3	1.5	5.4
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	4.1	1.1	95.0	5.7	54.4	75.4
LnGrp LOS	A	A	F	A	D	E
Approach Vol, veh/h	2504			2827	188	
Approach Delay, s/veh	4.1			9.6	70.2	
Approach LOS	A			A	E	
Timer - Assigned Phs	1	2			6	8
Phs Duration (G+Y+Rc), s	14.2	98.4			112.6	17.4
Change Period (Y+Rc), s	4.0	6.2			* 6.2	4.0
Max Green Setting (Gmax), s	10.2	86.8			* 1E2	18.8
Max Q Clear Time (g_c+I1), s	10.7	56.7			2.0	13.2
Green Ext Time (p_c), s	0.0	24.0			66.3	0.3
Intersection Summary						
HCM 6th Ctrl Delay			9.2			
HCM 6th LOS			A			
Notes						
* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.						

HCM 6th TWSC
4: Little Court & Van Buren Boulevard

Woodcrest Christian School Expansion
Opening Year (2029) Without Project Afternoon

Intersection						
Int Delay, s/veh	0					
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑↑	↗		↑↑		↗
Traffic Vol, veh/h	2469	5	0	2686	0	2
Future Vol, veh/h	2469	5	0	2686	0	2
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	0	-	-	-	0
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	90	90	90	90	90	90
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	2743	6	0	2984	0	2
Major/Minor	Major1	Major2		Minor1		
Conflicting Flow All	0	0	-	-	-	1372
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	-	-	-	-	6.9
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	-	-	-	-	3.3
Pot Cap-1 Maneuver	-	-	0	-	0	*59
Stage 1	-	-	0	-	0	-
Stage 2	-	-	0	-	0	-
Platoon blocked, %	-	-		-		1
Mov Cap-1 Maneuver	-	-	-	-	-	*59
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Approach	EB	WB		NB		
HCM Control Delay, s	0	0		68.4		
HCM LOS	F					
Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBT		
Capacity (veh/h)	59	-	-	-		
HCM Lane V/C Ratio	0.038	-	-	-		
HCM Control Delay (s)	68.4	-	-	-		
HCM Lane LOS	F	-	-	-		
HCM 95th %tile Q(veh)	0.1	-	-	-		
Notes						
~: Volume exceeds capacity		\$: Delay exceeds 300s		+: Computation Not Defined		*: All major volume in platoon

HCM 6th TWSC
5: Van Buren Boulevard & Ridgeway Avenue

Woodcrest Christian School Expansion
Opening Year (2029) Without Project Afternoon

Intersection						
Int Delay, s/veh	0					
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	122	2350	2613	21	2	72
Future Vol, veh/h	122	2350	2613	21	2	72
Conflicting Peds, #/hr	3	0	0	3	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	90	90	90	90	90	90
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	136	2611	2903	23	2	80
Major/Minor	Major1	Major2	Minor2			
Conflicting Flow All	2929	0	-	0	4496	1466
Stage 1	-	-	-	-	2918	-
Stage 2	-	-	-	-	1578	-
Critical Hdwy	4.1	-	-	-	6.8	6.9
Critical Hdwy Stg 1	-	-	-	-	5.8	-
Critical Hdwy Stg 2	-	-	-	-	5.8	-
Follow-up Hdwy	2.2	-	-	-	3.5	3.3
Pot Cap-1 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	*101	-
Platoon blocked, %	2	-	-	-	2	2
Mov Cap-1 Maneuver	-	-	-	-	-	-
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	*101	-
Approach	EB	WB		SB		
HCM Control Delay, s	0					
HCM LOS	-					
Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1	
Capacity (veh/h)	-	-	-	-	-	
HCM Lane V/C Ratio	-	-	-	-	-	
HCM Control Delay (s)	-	-	-	-	-	
HCM Lane LOS	-	-	-	-	-	
HCM 95th %tile Q(veh)	-	-	-	-	-	
Notes						
~: Volume exceeds capacity		\$: Delay exceeds 300s		+: Computation Not Defined		*: All major volume in platoon

HCM 6th Signalized Intersection Summary

6: Dauchy Avenue & Van Buren Boulevard

Woodcrest Christian School Expansion
Opening Year (2029) Without Project Afternoon

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	89	2001	266	132	2321	77	271	82	146	106	39	63
Future Volume (veh/h)	89	2001	266	132	2321	77	271	82	146	106	39	63
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		0.99	0.98		0.97	0.99		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	97	2175	289	143	2523	84	295	89	159	115	42	68
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	97	1810	235	97	2036	902	343	101	180	179	320	263
Arrive On Green	0.02	0.19	0.19	0.07	0.75	0.75	0.05	0.17	0.17	0.05	0.17	0.17
Sat Flow, veh/h	1810	3210	417	1810	3610	1599	1810	599	1069	1810	1900	1561
Grp Volume(v), veh/h	97	1200	1264	143	2523	84	295	0	248	115	42	68
Grp Sat Flow(s),veh/h/ln	1810	1805	1822	1810	1805	1599	1810	0	1668	1810	1900	1561
Q Serve(g_s), s	7.0	73.3	73.3	7.0	73.3	1.8	7.0	0.0	18.9	6.9	2.4	4.9
Cycle Q Clear(g_c), s	7.0	73.3	73.3	7.0	73.3	1.8	7.0	0.0	18.9	6.9	2.4	4.9
Prop In Lane	1.00		0.23	1.00		1.00	1.00		0.64	1.00		1.00
Lane Grp Cap(c), veh/h	97	1018	1027	97	2036	902	343	0	281	179	320	263
V/C Ratio(X)	1.00	1.18	1.23	1.47	1.24	0.09	0.86	0.00	0.88	0.64	0.13	0.26
Avail Cap(c_a), veh/h	97	1018	1027	97	2036	902	343	0	385	179	438	360
HCM Platoon Ratio	0.33	0.33	0.33	1.33	1.33	1.33	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	0.09	0.09	0.09	1.00	0.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	63.8	52.9	52.9	60.3	16.2	7.3	50.3	0.0	52.8	43.5	46.0	47.0
Incr Delay (d2), s/veh	89.6	91.0	112.2	215.5	108.1	0.0	18.5	0.0	16.3	5.9	0.2	0.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	5.7	60.9	67.5	8.9	46.8	0.7	8.0	0.0	9.3	3.4	1.2	2.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	153.4	143.9	165.1	275.9	124.3	7.3	68.9	0.0	69.1	49.5	46.2	47.5
LnGrp LOS	F	F	F	F	F	A	E	A	E	D	D	D
Approach Vol, veh/h		2561			2750			543			225	
Approach Delay, s/veh		154.7			128.7			69.0			48.3	
Approach LOS		F			F			E			D	
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	12.0	80.5	11.0	26.5	12.0	80.5	11.0	26.5				
Change Period (Y+Rc), s	5.0	7.2	4.0	4.6	5.0	7.2	4.0	4.6				
Max Green Setting (Gmax), s	7.0	65.2	7.0	30.0	7.0	65.2	7.0	30.0				
Max Q Clear Time (g_c+I1), s	9.0	75.3	9.0	6.9	9.0	75.3	8.9	20.9				
Green Ext Time (p_c), s	0.0	0.0	0.0	0.4	0.0	0.0	0.0	1.0				
Intersection Summary												
HCM 6th Ctrl Delay			131.3									
HCM 6th LOS			F									

Intersection												
Int Delay, s/veh	8.3											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	119	1	29	6	0	25	14	283	9	18	314	62
Future Vol, veh/h	119	1	29	6	0	25	14	283	9	18	314	62
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	90
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	76	76	76	76	76	76	76	76	76	76	76	76
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	157	1	38	8	0	33	18	372	12	24	413	82
Major/Minor	Minor2		Minor1			Major1			Major2			
Conflicting Flow All	892	881	413	936	957	378	495	0	0	384	0	0
Stage 1	461	461	-	414	414	-	-	-	-	-	-	-
Stage 2	431	420	-	522	543	-	-	-	-	-	-	-
Critical Hdwy	7.1	6.5	6.2	7.1	6.5	6.2	4.1	-	-	4.1	-	-
Critical Hdwy Stg 1	6.1	5.5	-	6.1	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.1	5.5	-	6.1	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.5	4	3.3	3.5	4	3.3	2.2	-	-	2.2	-	-
Pot Cap-1 Maneuver	265	288	643	247	260	673	1079	-	-	1186	-	-
Stage 1	584	569	-	620	597	-	-	-	-	-	-	-
Stage 2	607	593	-	542	523	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	243	274	643	223	248	673	1079	-	-	1186	-	-
Mov Cap-2 Maneuver	243	274	-	223	248	-	-	-	-	-	-	-
Stage 1	572	553	-	607	584	-	-	-	-	-	-	-
Stage 2	565	581	-	494	508	-	-	-	-	-	-	-
Approach	EB		WB			NB			SB			
HCM Control Delay, s	44.2		13.1			0.4			0.4			
HCM LOS	E		B									
Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR				
Capacity (veh/h)	1079	-	-	277	484	1186	-	-				
HCM Lane V/C Ratio	0.017	-	-	0.708	0.084	0.02	-	-				
HCM Control Delay (s)	8.4	0	-	44.2	13.1	8.1	0	-				
HCM Lane LOS	A	A	-	E	B	A	A	-				
HCM 95th %tile Q(veh)	0.1	-	-	4.9	0.3	0.1	-	-				

HCM 6th AWSC
8: Taft Street/Dauchy Avenue & Krameria Avenue

Woodcrest Christian School Expansion
Opening Year (2029) Without Project Afternoon

Intersection	
Intersection Delay, s/veh	40.8
Intersection LOS	E

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	39	350	27	7	284	64	13	30	9	167	38	73
Future Vol, veh/h	39	350	27	7	284	64	13	30	9	167	38	73
Peak Hour Factor	0.78	0.78	0.78	0.78	0.78	0.78	0.78	0.78	0.78	0.78	0.78	0.78
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	50	449	35	9	364	82	17	38	12	214	49	94
Number of Lanes	0	1	0	0	1	0	0	1	0	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	1	1	1
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	1	1	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	1	1	1	1
HCM Control Delay	58.4	35.6	13.1	26.2
HCM LOS	F	E	B	D

Lane	NBLn1	EBLn1	WBLn1	SBLn1
Vol Left, %	25%	9%	2%	60%
Vol Thru, %	58%	84%	80%	14%
Vol Right, %	17%	6%	18%	26%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	52	416	355	278
LT Vol	13	39	7	167
Through Vol	30	350	284	38
RT Vol	9	27	64	73
Lane Flow Rate	67	533	455	356
Geometry Grp	1	1	1	1
Degree of Util (X)	0.157	0.976	0.84	0.713
Departure Headway (Hd)	8.457	6.588	6.646	7.205
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	422	555	542	503
Service Time	6.555	4.616	4.709	5.233
HCM Lane V/C Ratio	0.159	0.96	0.839	0.708
HCM Control Delay	13.1	58.4	35.6	26.2
HCM Lane LOS	B	F	E	D
HCM 95th-tile Q	0.6	13.3	8.7	5.7

HCM 6th Signalized Intersection Summary

9: Wood Road & Van Buren Boulevard

Woodcrest Christian School Expansion
Opening Year (2029) Without Project Afternoon



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	201	1661	320	274	1938	123	399	412	268	129	329	259
Future Volume (veh/h)	201	1661	320	274	1938	123	399	412	268	129	329	259
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.95	1.00		0.96	1.00		0.76	1.00		0.71
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No			No			No		
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	212	1748	337	288	2040	129	420	434	282	136	346	273
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	238	3009	1470	338	2881	1236	419	545	346	111	428	271
Arrive On Green	0.13	0.83	0.83	0.10	0.80	0.80	0.12	0.29	0.29	0.06	0.24	0.24
Sat Flow, veh/h	1810	3610	1533	3510	3610	1549	3510	1864	1183	1810	1805	1145
Grp Volume(v), veh/h	212	1748	337	288	2040	129	420	420	296	136	346	273
Grp Sat Flow(s),veh/h/ln	1810	1805	1533	1755	1805	1549	1755	1805	1241	1810	1805	1145
Q Serve(g_s), s	15.0	20.3	1.7	10.5	34.1	6.0	15.5	27.9	28.8	8.0	23.5	30.8
Cycle Q Clear(g_c), s	15.0	20.3	1.7	10.5	34.1	6.0	15.5	27.9	28.8	8.0	23.5	30.8
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.95	1.00		1.00
Lane Grp Cap(c), veh/h	238	3009	1470	338	2881	1236	419	528	363	111	428	271
V/C Ratio(X)	0.89	0.58	0.23	0.85	0.71	0.10	1.00	0.80	0.82	1.22	0.81	1.01
Avail Cap(c_a), veh/h	313	3009	1470	338	2881	1236	419	528	363	111	428	271
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.09	0.09	0.09	0.58	0.58	0.58	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	55.5	3.5	0.2	57.8	6.1	18.5	57.3	42.4	42.7	61.0	46.8	49.6
Incr Delay (d2), s/veh	2.1	0.1	0.0	11.2	0.9	0.1	44.8	8.3	13.5	156.4	11.1	56.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	6.8	3.8	0.0	5.0	8.6	0.7	9.4	13.4	10.0	8.5	11.7	12.9
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	57.7	3.6	0.2	69.1	7.0	18.6	102.1	50.7	56.2	217.4	57.9	105.8
LnGrp LOS	E	A	A	E	A	B	F	D	E	F	E	F
Approach Vol, veh/h	2297			2457			1136			755		
Approach Delay, s/veh	8.1			14.9			71.2			103.9		
Approach LOS	A			B			E			F		
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	8.0	117.4	21.0	36.6	22.6	112.8	13.8	43.8				
Change Period (Y+Rc), s	5.5	7.2	5.5	5.8	5.5	7.2	5.8	* 5.8				
Max Green Setting (Gmax), s	12.5	49.0	15.5	29.0	22.5	39.0	8.0	* 38				
Max Q Clear Time (g_c+1/2g), s	12.5	22.3	17.5	32.8	17.0	36.1	10.0	30.8				
Green Ext Time (p_c), s	0.0	16.4	0.0	0.0	0.1	2.6	0.0	2.7				

Intersection Summary

HCM 6th Ctrl Delay	32.3
HCM 6th LOS	C

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

HCM 6th Signalized Intersection Summary

10: Van Buren Boulevard & Bountiful Street

Woodcrest Christian School Expansion
Opening Year (2029) Without Project Afternoon



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations	↰	↑↑↑	↑↑↑		↰	↰
Traffic Volume (veh/h)	271	1973	2132	28	17	222
Future Volume (veh/h)	271	1973	2132	28	17	222
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00			0.96	1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No	No		No	
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	295	2145	2317	30	18	241
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	0	0	0	0	0	0
Cap, veh/h	317	3853	2811	36	303	269
Arrive On Green	0.35	1.00	1.00	1.00	0.17	0.17
Sat Flow, veh/h	1810	5358	5445	68	1810	1610
Grp Volume(v), veh/h	295	2145	1518	829	18	241
Grp Sat Flow(s), veh/h/ln	1810	1729	1729	1884	1810	1610
Q Serve(g_s), s	20.4	0.0	0.0	0.0	1.1	19.1
Cycle Q Clear(g_c), s	20.4	0.0	0.0	0.0	1.1	19.1
Prop In Lane	1.00			0.04	1.00	1.00
Lane Grp Cap(c), veh/h	317	3853	1843	1004	303	269
V/C Ratio(X)	0.93	0.56	0.82	0.83	0.06	0.89
Avail Cap(c_a), veh/h	550	3853	1843	1004	480	427
HCM Platoon Ratio	2.00	2.00	2.00	2.00	1.00	1.00
Upstream Filter(I)	0.09	0.09	0.46	0.46	1.00	1.00
Uniform Delay (d), s/veh	41.5	0.0	0.0	0.0	45.5	53.0
Incr Delay (d2), s/veh	1.0	0.1	2.0	3.7	0.1	13.9
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%), veh/ln	7.0	0.0	0.5	1.0	0.5	17.0
Unsig. Movement Delay, s/veh						
LnGrp Delay(d), s/veh	42.4	0.1	2.0	3.7	45.6	66.9
LnGrp LOS	D	A	A	A	D	E
Approach Vol, veh/h		2440	2347		259	
Approach Delay, s/veh		5.2	2.6		65.4	
Approach LOS		A	A		E	
Timer - Assigned Phs		2		4	5	6
Phs Duration (G+Y+Rc), s		103.8		26.2	27.3	76.5
Change Period (Y+Rc), s		7.2		4.5	4.5	7.2
Max Green Setting (Gmax), s		83.8		34.5	39.5	39.8
Max Q Clear Time (g_c+I1), s		2.0		21.1	22.4	2.0
Green Ext Time (p_c), s		30.8		0.7	0.3	23.6
Intersection Summary						
HCM 6th Ctrl Delay			7.1			
HCM 6th LOS			A			

HCM 6th Signalized Intersection Summary

11: Trautwein Road & Mission Grove Parkway S

Woodcrest Christian School Expansion
Opening Year (2029) Without Project Afternoon



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	43	12	15	641	19	43	6	1744	536	151	1785	39
Future Volume (veh/h)	43	12	15	641	19	43	6	1744	536	151	1785	39
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.97	1.00		0.99	1.00		0.98	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No			No			No		
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	44	12	15	661	20	44	6	1798	553	156	1840	40
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	78	85	107	532	443	370	19	1809	1036	118	2007	887
Arrive On Green	0.04	0.11	0.11	0.15	0.23	0.23	0.00	0.17	0.17	0.07	0.56	0.56
Sat Flow, veh/h	1810	755	944	3510	1900	1589	1810	3610	1580	1810	3610	1596
Grp Volume(v), veh/h	44	0	27	661	20	44	6	1798	553	156	1840	40
Grp Sat Flow(s),veh/h/ln	1810	0	1700	1755	1900	1589	1810	1805	1580	1810	1805	1596
Q Serve(g_s), s	3.1	0.0	1.9	19.7	1.1	2.8	0.4	64.7	29.9	8.5	60.0	1.5
Cycle Q Clear(g_c), s	3.1	0.0	1.9	19.7	1.1	2.8	0.4	64.7	29.9	8.5	60.0	1.5
Prop In Lane	1.00		0.56	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	78	0	192	532	443	370	19	1809	1036	118	2007	887
V/C Ratio(X)	0.57	0.00	0.14	1.24	0.05	0.12	0.32	0.99	0.53	1.32	0.92	0.05
Avail Cap(c_a), veh/h	170	0	418	532	617	516	104	1809	1036	118	2007	887
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	0.33	0.33	0.33	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	1.00	1.00	0.39	0.39	0.39	1.00	1.00	1.00
Uniform Delay (d), s/veh	61.0	0.0	52.0	55.2	38.6	39.3	64.3	54.1	21.8	60.8	26.1	13.1
Incr Delay (d2), s/veh	2.4	0.0	0.3	124.4	0.0	0.1	1.4	11.9	0.8	190.7	8.1	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.5	0.0	0.8	17.7	0.5	1.1	0.2	34.1	12.6	10.1	25.3	0.5
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	63.4	0.0	52.3	179.5	38.7	39.5	65.7	66.0	22.6	251.4	34.3	13.2
LnGrp LOS	E	A	D	F	D	D	E	E	C	F	C	B
Approach Vol, veh/h	71			725			2357			2036		
Approach Delay, s/veh	59.2			167.1			55.8			50.5		
Approach LOS	E			F			E			D		
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	3.0	71.3	25.2	20.5	5.9	78.5	9.6	36.1				
Change Period (Y+Rc), s	4.5	6.2	5.5	5.8	4.5	6.2	4.0	* 5.8				
Max Green Setting (Gmax), s	4.5	47.8	19.7	32.0	7.5	48.8	12.2	* 42				
Max Q Clear Time (g_c+110), s	4.5	66.7	21.7	3.9	2.4	62.0	5.1	4.8				
Green Ext Time (p_c), s	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.2				

Intersection Summary

HCM 6th Ctrl Delay 69.3

HCM 6th LOS E

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

HCM 6th Signalized Intersection Summary

12: Trautwein Road & John F Kennedy Drive

Woodcrest Christian School Expansion

Opening Year (2029) Without Project Afternoon



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↖↗	↑	↗	↖	↗		↖	↑↑	↗	↖	↑↑	↗
Traffic Volume (veh/h)	623	56	117	51	21	30	114	1604	92	13	1823	690
Future Volume (veh/h)	623	56	117	51	21	30	114	1604	92	13	1823	690
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		0.99	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No			No			No		
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	642	58	121	53	22	31	118	1654	95	13	1879	711
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	516	329	277	83	48	68	97	2175	969	37	2054	1151
Arrive On Green	0.15	0.17	0.17	0.05	0.07	0.07	0.04	0.40	0.40	0.03	0.76	0.76
Sat Flow, veh/h	3510	1900	1605	1810	710	1000	1810	3610	1607	1810	3610	1607
Grp Volume(v), veh/h	642	58	121	53	0	53	118	1654	95	13	1879	711
Grp Sat Flow(s),veh/h/ln	1755	1900	1605	1810	0	1710	1810	1805	1607	1810	1805	1607
Q Serve(g_s), s	19.1	3.4	8.8	3.7	0.0	3.9	7.0	51.2	4.8	0.9	53.5	22.4
Cycle Q Clear(g_c), s	19.1	3.4	8.8	3.7	0.0	3.9	7.0	51.2	4.8	0.9	53.5	22.4
Prop In Lane	1.00		1.00	1.00		0.58	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	516	329	277	83	0	116	97	2175	969	37	2054	1151
V/C Ratio(X)	1.24	0.18	0.44	0.64	0.00	0.46	1.21	0.76	0.10	0.36	0.91	0.62
Avail Cap(c_a), veh/h	516	634	536	139	0	434	97	2175	969	97	2054	1151
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	0.67	0.67	0.67	1.33	1.33	1.33
Upstream Filter(I)	1.00	1.00	1.00	1.00	0.00	1.00	0.64	0.64	0.64	0.35	0.35	0.35
Uniform Delay (d), s/veh	55.4	45.9	48.1	61.0	0.0	58.3	62.7	30.7	16.8	62.4	13.3	4.8
Incr Delay (d2), s/veh	125.7	0.3	1.1	7.9	0.0	2.8	140.8	1.7	0.1	2.0	3.1	0.9
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	7.3	1.6	3.6	1.9	0.0	1.8	7.0	23.2	1.9	0.4	12.4	4.4
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	181.1	46.1	49.2	68.8	0.0	61.0	203.4	32.3	17.0	64.5	16.4	5.6
LnGrp LOS	F	D	D	E	A	E	F	C	B	E	B	A
Approach Vol, veh/h	821			106			1867			2603		
Approach Delay, s/veh	152.1			64.9			42.4			13.7		
Approach LOS	F			E			D			B		
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	6.6	85.5	10.0	27.9	11.0	81.2	23.6	14.2				
Change Period (Y+Rc), s	4.0	7.2	4.0	* 5.4	4.0	7.2	4.5	5.4				
Max Green Setting (Gmax), s	49.8	49.8	10.0	* 43	7.0	49.8	19.1	33.0				
Max Q Clear Time (g_c+12, s)	53.2	53.2	5.7	10.8	9.0	55.5	21.1	5.9				
Green Ext Time (p_c), s	0.0	0.0	0.0	0.7	0.0	0.0	0.0	0.2				

Intersection Summary

HCM 6th Ctrl Delay 45.7

HCM 6th LOS D

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

HCM 6th Signalized Intersection Summary

13: Trautwein Road & Grove Community Drive

Woodcrest Christian School Expansion
Opening Year (2029) Without Project Afternoon



Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	81	260	1549	87	374	1618
Future Volume (veh/h)	81	260	1549	87	374	1618
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00		1.00	1.00	
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No		No		No	
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	90	289	1721	97	416	1798
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90
Percent Heavy Veh, %	0	0	0	0	0	0
Cap, veh/h	189	681	2276	1014	476	2918
Arrive On Green	0.10	0.10	1.00	1.00	0.27	1.00
Sat Flow, veh/h	1810	2834	3705	1608	3510	3705
Grp Volume(v), veh/h	90	289	1721	97	416	1798
Grp Sat Flow(s), veh/h/ln	1810	1417	1805	1608	1755	1805
Q Serve(g_s), s	6.1	11.2	0.0	0.0	14.7	0.0
Cycle Q Clear(g_c), s	6.1	11.2	0.0	0.0	14.7	0.0
Prop In Lane	1.00	1.00		1.00	1.00	
Lane Grp Cap(c), veh/h	189	681	2276	1014	476	2918
V/C Ratio(X)	0.48	0.42	0.76	0.10	0.87	0.62
Avail Cap(c_a), veh/h	221	731	2276	1014	662	2918
HCM Platoon Ratio	1.00	1.00	2.00	2.00	2.00	2.00
Upstream Filter(I)	1.00	1.00	0.67	0.67	0.16	0.16
Uniform Delay (d), s/veh	54.8	41.8	0.0	0.0	46.3	0.0
Incr Delay (d2), s/veh	1.8	0.4	1.6	0.1	1.7	0.2
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%), veh/ln	2.9	4.0	0.5	0.0	5.5	0.1
Unsig. Movement Delay, s/veh						
LnGrp Delay(d), s/veh	56.7	42.2	1.6	0.1	48.0	0.2
LnGrp LOS	E	D	A	A	D	A
Approach Vol, veh/h	379		1818			2214
Approach Delay, s/veh	45.6		1.5			9.2
Approach LOS	D		A			A
Timer - Assigned Phs	1	2			6	8
Phs Duration (G+Y+Rc), s	23.1	88.2			111.3	18.7
Change Period (Y+Rc), s	5.5	6.2			6.2	5.1
Max Green Setting (Gmax), s	24.5	72.8			102.8	15.9
Max Q Clear Time (g_c+110, s)	110.7	2.0			2.0	13.2
Green Ext Time (p_c), s	0.9	21.6			24.0	0.4
Intersection Summary						
HCM 6th Ctrl Delay			9.1			
HCM 6th LOS			A			

HCM 6th Signalized Intersection Summary

14: Trautwein Road & Orange Terrace Pkwy

Woodcrest Christian School Expansion
Opening Year (2029) Without Project Afternoon



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	51	42	24	196	14	288	38	1294	269	313	1335	23
Future Volume (veh/h)	51	42	24	196	14	288	38	1294	269	313	1335	23
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		0.97	1.00		0.99	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No				No				No			
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	55	45	26	211	15	310	41	1391	289	337	1435	25
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	152	72	42	239	203	601	75	1927	852	382	2197	968
Arrive On Green	0.08	0.06	0.06	0.13	0.11	0.11	0.08	1.00	1.00	0.22	1.00	1.00
Sat Flow, veh/h	1810	1128	652	1810	1900	2735	1810	3610	1597	3510	3610	1590
Grp Volume(v), veh/h	55	0	71	211	15	310	41	1391	289	337	1435	25
Grp Sat Flow(s),veh/h/ln	1810	0	1779	1810	1900	1367	1810	1805	1597	1755	1805	1590
Q Serve(g_s), s	3.7	0.0	5.1	14.9	0.9	9.7	2.8	0.0	0.0	12.1	0.0	0.0
Cycle Q Clear(g_c), s	3.7	0.0	5.1	14.9	0.9	9.7	2.8	0.0	0.0	12.1	0.0	0.0
Prop In Lane	1.00		0.37	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	152	0	114	239	203	601	75	1927	852	382	2197	968
V/C Ratio(X)	0.36	0.00	0.62	0.88	0.07	0.52	0.54	0.72	0.34	0.88	0.65	0.03
Avail Cap(c_a), veh/h	362	0	452	434	576	1137	97	1927	852	405	2197	968
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00	2.00	2.00	2.00	2.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	1.00	1.00	0.64	0.64	0.64	0.77	0.77	0.77
Uniform Delay (d), s/veh	56.2	0.0	59.3	55.5	52.2	26.0	58.4	0.0	0.0	50.0	0.0	0.0
Incr Delay (d2), s/veh	0.5	0.0	5.5	4.3	0.2	0.7	1.5	1.5	0.7	14.6	1.2	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.7	0.0	2.5	7.1	0.5	3.2	1.3	0.4	0.2	5.4	0.4	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	56.8	0.0	64.8	59.7	52.4	26.7	59.9	1.5	0.7	64.7	1.2	0.0
LnGrp LOS	E	A	E	E	D	C	E	A	A	E	A	A
Approach Vol, veh/h	126				536		1721				1797	
Approach Delay, s/veh	61.3				40.4		2.8				13.1	
Approach LOS	E				D		A				B	
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	9.2	75.6	21.1	14.1	9.4	85.3	16.7	18.5				
Change Period (Y+Rc), s	5.0	6.2	4.0	5.8	4.0	6.2	5.8	* 4.6				
Max Green Setting (Gmax), s	15.0	29.8	31.2	33.0	7.0	38.8	26.0	* 39				
Max Q Clear Time (g_c+14), s	11.4	2.0	16.9	7.1	4.8	2.0	5.7	11.7				
Green Ext Time (p_c), s	0.1	12.4	0.2	0.3	0.0	12.8	0.1	1.4				

Intersection Summary

HCM 6th Ctrl Delay 13.8

HCM 6th LOS B

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

HCM 6th Signalized Intersection Summary 15: Trautwein Road & Shopping Ctr Dwy

Woodcrest Christian School Expansion
Opening Year (2029) Without Project Afternoon



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	167	45	132	96	32	92	176	1303	25	201	1105	168
Future Volume (veh/h)	167	45	132	96	32	92	176	1303	25	201	1105	168
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		0.98	1.00		0.97	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No			No			No		
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	172	46	136	99	33	95	181	1343	26	207	1139	173
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	255	93	276	209	94	272	205	1894	817	233	1950	860
Arrive On Green	0.22	0.22	0.22	0.22	0.22	0.22	0.23	1.00	1.00	0.17	0.72	0.72
Sat Flow, veh/h	1280	422	1249	1219	427	1229	1810	3610	1558	1810	3610	1592
Grp Volume(v), veh/h	172	0	182	99	0	128	181	1343	26	207	1139	173
Grp Sat Flow(s), veh/h/ln	1280	0	1671	1219	0	1656	1810	1805	1558	1810	1805	1592
Q Serve(g_s), s	17.0	0.0	12.4	10.0	0.0	8.5	12.6	0.0	0.0	14.5	19.9	4.6
Cycle Q Clear(g_c), s	25.5	0.0	12.4	22.4	0.0	8.5	12.6	0.0	0.0	14.5	19.9	4.6
Prop In Lane	1.00		0.75	1.00		0.74	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	255	0	370	209	0	366	205	1894	817	233	1950	860
V/C Ratio(X)	0.67	0.00	0.49	0.47	0.00	0.35	0.88	0.71	0.03	0.89	0.58	0.20
Avail Cap(c_a), veh/h	307	0	437	258	0	433	327	1894	817	383	1950	860
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00	2.00	1.33	1.33	1.33
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	0.09	0.09	0.09	0.68	0.68	0.68
Uniform Delay (d), s/veh	53.5	0.0	44.2	54.0	0.0	42.7	49.5	0.0	0.0	53.0	11.2	9.1
Incr Delay (d2), s/veh	4.4	0.0	1.0	1.7	0.0	0.6	1.1	0.2	0.0	5.9	0.9	0.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	5.8	0.0	5.3	3.2	0.0	3.6	4.9	0.1	0.0	6.5	5.8	1.5
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	57.9	0.0	45.2	55.7	0.0	43.3	50.5	0.2	0.0	58.8	12.1	9.4
LnGrp LOS	E	A	D	E	A	D	D	A	A	E	B	A
Approach Vol, veh/h	354			227			1550			1519		
Approach Delay, s/veh	51.4			48.7			6.1			18.2		
Approach LOS	D			D			A			B		
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	31.2	75.4		33.4	19.2	77.4		33.4				
Change Period (Y+Rc), s	4.5	7.2		4.6	4.5	7.2		4.6				
Max Green Setting (Gmax), s	27.5	52.2		34.0	23.5	56.2		34.0				
Max Q Clear Time (g_c+116), s	116.5	2.0		27.5	14.6	21.9		24.4				
Green Ext Time (p_c), s	0.2	12.4		0.9	0.1	9.7		0.7				

Intersection Summary

HCM 6th Ctrl Delay	18.2
HCM 6th LOS	B

HCM 6th Signalized Intersection Summary

16: Trautwein Road & Van Buren Boulevard

Woodcrest Christian School Expansion
Opening Year (2029) Without Project Afternoon



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↔↔	↑↑	↗	↗	↑↑↑	↗	↗	↑↑		↗↗	↑↑	↗
Traffic Volume (veh/h)	498	1292	210	183	1702	668	190	485	107	487	550	337
Future Volume (veh/h)	498	1292	210	183	1702	668	190	485	107	487	550	337
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		0.99	1.00		0.96	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No			No			No		
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	524	1360	221	193	1792	703	200	511	113	513	579	355
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	417	1401	836	146	1748	733	240	726	160	421	819	549
Arrive On Green	0.24	0.78	0.78	0.16	0.67	0.67	0.13	0.25	0.25	0.20	0.38	0.38
Sat Flow, veh/h	3510	3610	1603	1810	5187	1602	1810	2919	642	3510	3610	1576
Grp Volume(v), veh/h	524	1360	221	193	1792	703	200	315	309	513	579	355
Grp Sat Flow(s),veh/h/ln	1755	1805	1603	1810	1729	1602	1810	1805	1756	1755	1805	1576
Q Serve(g_s), s	15.5	44.5	1.0	10.5	43.8	43.8	14.0	20.6	20.9	15.6	17.7	3.9
Cycle Q Clear(g_c), s	15.5	44.5	1.0	10.5	43.8	43.8	14.0	20.6	20.9	15.6	17.7	3.9
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.37	1.00		1.00
Lane Grp Cap(c), veh/h	417	1401	836	146	1748	733	240	449	437	421	819	549
V/C Ratio(X)	1.26	0.97	0.26	1.32	1.03	0.96	0.83	0.70	0.71	1.22	0.71	0.65
Avail Cap(c_a), veh/h	417	1401	836	146	1748	733	240	555	540	421	1077	662
HCM Platoon Ratio	2.00	2.00	2.00	2.00	2.00	2.00	1.00	1.00	1.00	1.67	1.67	1.67
Upstream Filter(I)	0.87	0.87	0.87	0.45	0.45	0.45	1.00	1.00	1.00	0.80	0.80	0.80
Uniform Delay (d), s/veh	49.5	13.9	2.2	54.5	21.2	9.5	55.0	44.4	44.5	52.0	36.7	27.2
Incr Delay (d2), s/veh	131.2	16.5	0.7	164.3	21.4	14.5	20.2	2.9	3.2	114.4	1.2	1.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.2	8.5	0.7	10.9	11.0	6.1	7.6	9.4	9.3	12.7	6.6	7.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	180.8	30.3	2.9	218.8	42.6	24.0	75.2	47.4	47.7	166.4	37.9	28.5
LnGrp LOS	F	C	A	F	F	C	E	D	D	F	D	C
Approach Vol, veh/h	2105					2688		824		1447		
Approach Delay, s/veh	64.9					50.4		54.3		81.1		
Approach LOS	E					D		D		F		
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	56.7	22.7	35.7	21.7	50.0	20.6	37.7					
Change Period (Y+Rc), s	4.5	6.2	5.4	* 6.2	6.2	* 6.2	5.0	5.4				
Max Green Setting (Gmax), s	40.5	42.8	16.0	* 39	9.0	* 44	15.6	40.0				
Max Q Clear Time (g_c+1/2Y), s	46.5	46.5	16.0	19.7	17.5	45.8	17.6	22.9				
Green Ext Time (p_c), s	0.0	0.0	0.0	4.6	0.0	0.0	0.0	3.3				

Intersection Summary

HCM 6th Ctrl Delay 61.5

HCM 6th LOS E

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

HCM 6th Signalized Intersection Summary

17: Van Buren Boulevard & Shopping Ctr Dwy

Woodcrest Christian School Expansion
Opening Year (2029) Without Project Afternoon



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	89	1798	2368	106	204	56
Future Volume (veh/h)	89	1798	2368	106	204	56
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00			1.00	1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No	No		No	
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	94	1893	2493	112	215	59
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	0	0	0	0	0	0
Cap, veh/h	417	2803	2498	111	249	221
Arrive On Green	0.46	1.00	0.98	0.98	0.14	0.14
Sat Flow, veh/h	1810	3705	5261	227	1810	1610
Grp Volume(v), veh/h	94	1893	1686	919	215	59
Grp Sat Flow(s), veh/h/ln	1810	1805	1729	1859	1810	1610
Q Serve(g_s), s	4.1	0.0	47.4	63.8	15.1	4.3
Cycle Q Clear(g_c), s	4.1	0.0	47.4	63.8	15.1	4.3
Prop In Lane	1.00			0.12	1.00	1.00
Lane Grp Cap(c), veh/h	417	2803	1697	912	249	221
V/C Ratio(X)	0.23	0.68	0.99	1.01	0.86	0.27
Avail Cap(c_a), veh/h	417	2803	1697	912	487	434
HCM Platoon Ratio	2.00	2.00	2.00	2.00	1.00	1.00
Upstream Filter(I)	0.09	0.09	0.39	0.39	1.00	1.00
Uniform Delay (d), s/veh	28.1	0.0	1.0	1.2	54.9	50.2
Incr Delay (d2), s/veh	0.0	0.1	12.2	20.3	8.7	0.6
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%), veh/ln	1.6	0.0	3.3	5.6	7.6	4.0
Unsig. Movement Delay, s/veh						
LnGrp Delay(d), s/veh	28.1	0.1	13.3	21.5	63.6	50.8
LnGrp LOS	C	A	B	F	E	D
Approach Vol, veh/h		1987	2605		274	
Approach Delay, s/veh		1.4	16.2		60.8	
Approach LOS		A	B		E	
Timer - Assigned Phs		2		4	5	6
Phs Duration (G+Y+Rc), s		108.1		21.9	37.1	71.0
Change Period (Y+Rc), s		7.2		4.0	7.2	* 7.2
Max Green Setting (Gmax), s		83.8		35.0	15.5	* 64
Max Q Clear Time (g_c+l1), s		2.0		17.1	6.1	65.8
Green Ext Time (p_c), s		26.3		0.8	0.1	0.0

Intersection Summary

HCM 6th Ctrl Delay	12.7
HCM 6th LOS	B

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

HCM 6th Signalized Intersection Summary

18: Barton Street & Van Buren Boulevard

Woodcrest Christian School Expansion
Opening Year (2029) Without Project Afternoon



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	140	1411	400	347	1837	90	596	77	321	51	38	184
Future Volume (veh/h)	140	1411	400	347	1837	90	596	77	321	51	38	184
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No				No				No			
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	144	1455	412	358	1894	93	614	79	331	53	39	190
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	236	1100	299	233	1979	97	535	435	368	137	45	217
Arrive On Green	0.26	0.78	0.78	0.13	0.39	0.39	0.15	0.23	0.23	0.08	0.16	0.16
Sat Flow, veh/h	1810	2804	763	1810	5065	248	3510	1900	1608	1810	281	1369
Grp Volume(v), veh/h	144	915	952	358	1292	695	614	79	331	53	0	229
Grp Sat Flow(s),veh/h/ln	1810	1805	1762	1810	1729	1855	1755	1900	1608	1810	0	1650
Q Serve(g_s), s	9.1	51.0	51.0	16.8	47.2	47.5	19.8	4.3	26.0	3.6	0.0	17.6
Cycle Q Clear(g_c), s	9.1	51.0	51.0	16.8	47.2	47.5	19.8	4.3	26.0	3.6	0.0	17.6
Prop In Lane	1.00		0.43	1.00		0.13	1.00		1.00	1.00		0.83
Lane Grp Cap(c), veh/h	236	708	691	233	1351	725	535	435	368	137	0	262
V/C Ratio(X)	0.61	1.29	1.38	1.53	0.96	0.96	1.15	0.18	0.90	0.39	0.00	0.87
Avail Cap(c_a), veh/h	236	708	691	233	1351	725	535	628	532	137	0	386
HCM Platoon Ratio	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.65	0.65	0.65	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	45.1	14.0	14.0	56.6	38.5	38.6	55.1	40.3	48.6	57.2	0.0	53.4
Incr Delay (d2), s/veh	2.2	138.6	175.7	260.9	16.0	24.8	86.8	0.2	13.6	0.7	0.0	13.9
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.8	32.5	38.9	24.3	21.8	25.2	15.0	2.0	11.5	1.7	0.0	8.4
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	47.3	152.6	189.7	317.6	54.5	63.4	141.9	40.5	62.2	57.9	0.0	67.3
LnGrp LOS	D	F	F	F	D	E	F	D	E	E	A	E
Approach Vol, veh/h	2011				2345		1024				282	
Approach Delay, s/veh	162.6				97.3		108.3				65.5	
Approach LOS	F				F		F				E	
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	31.8	58.2	24.8	25.2	22.0	58.0	14.5	35.6				
Change Period (Y+Rc), s	5.0	* 7.2	5.0	4.6	5.0	7.2	4.6	* 5.8				
Max Green Setting (Gmax), s	51	* 51	19.8	30.4	7.2	50.8	7.0	* 43				
Max Q Clear Time (g_c+11g), s	119.8	53.0	21.8	19.6	11.1	49.5	5.6	28.0				
Green Ext Time (p_c), s	0.0	0.0	0.0	1.0	0.0	1.2	0.0	1.3				

Intersection Summary

HCM 6th Ctrl Delay 120.9

HCM 6th LOS F

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Intersection												
Int Delay, s/veh	0											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↑↑			↑↑				↑			↑
Traffic Vol, veh/h	0	2352	0	0	2632	15	0	0	0	0	0	2
Future Vol, veh/h	0	2352	0	0	2632	15	0	0	0	0	0	2
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	0	-	-	0
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	0	2557	0	0	2861	16	0	0	0	0	0	2
Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	-	0	0	-	-	0	-	-	1279	-	-	1439
Stage 1	-	-	-	-	-	-	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-	-	-	-	-	-	-
Critical Hdwy	-	-	-	-	-	-	-	-	6.9	-	-	6.9
Critical Hdwy Stg 1	-	-	-	-	-	-	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-	-	-	-	-	-	-
Follow-up Hdwy	-	-	-	-	-	-	-	-	3.3	-	-	3.3
Pot Cap-1 Maneuver	0	-	-	0	-	-	0	0	*107	0	0	-
Stage 1	0	-	-	0	-	-	0	0	-	0	0	-
Stage 2	0	-	-	0	-	-	0	0	-	0	0	-
Platoon blocked, %		-	-		-	-			1			2
Mov Cap-1 Maneuver	-	-	-	-	-	-	-	-	*107	-	-	-
Mov Cap-2 Maneuver	-	-	-	-	-	-	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-	-	-	-	-	-	-
Approach	EB			WB			NB			SB		
HCM Control Delay, s	0			0			0					
HCM LOS							A			-		
Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBT	WBR	SBLn1						
Capacity (veh/h)	-	-	-	-	-	-						
HCM Lane V/C Ratio	-	-	-	-	-	-						
HCM Control Delay (s)	0	-	-	-	-	-						
HCM Lane LOS	A	-	-	-	-	-						
HCM 95th %tile Q(veh)	-	-	-	-	-	-						
Notes												
~: Volume exceeds capacity		\$: Delay exceeds 300s			+: Computation Not Defined				*: All major volume in platoon			

Intersection						
Int Delay, s/veh	0.1					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	0	0	11	308	278	66
Future Vol, veh/h	0	0	11	308	278	66
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	83	83	83	83	83	83
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	0	0	13	371	335	80
Major/Minor	Minor2	Major1		Major2		
Conflicting Flow All	772	375	415	0	-	0
Stage 1	375	-	-	-	-	-
Stage 2	397	-	-	-	-	-
Critical Hdwy	6.4	6.2	4.1	-	-	-
Critical Hdwy Stg 1	5.4	-	-	-	-	-
Critical Hdwy Stg 2	5.4	-	-	-	-	-
Follow-up Hdwy	3.5	3.3	2.2	-	-	-
Pot Cap-1 Maneuver	371	676	1155	-	-	-
Stage 1	699	-	-	-	-	-
Stage 2	683	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	366	676	1155	-	-	-
Mov Cap-2 Maneuver	366	-	-	-	-	-
Stage 1	689	-	-	-	-	-
Stage 2	683	-	-	-	-	-
Approach	EB	NB		SB		
HCM Control Delay, s	0	0.3		0		
HCM LOS	A					
Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR	
Capacity (veh/h)	1155	-	-	-	-	
HCM Lane V/C Ratio	0.011	-	-	-	-	
HCM Control Delay (s)	8.2	0	0	-	-	
HCM Lane LOS	A	A	A	-	-	
HCM 95th %tile Q(veh)	0	-	-	-	-	

HCM 6th TWSC
21: Dauchy Avenue & Project Driveway 4

Woodcrest Christian School Expansion
Opening Year (2029) Without Project Afternoon

Intersection						
Int Delay, s/veh	4					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	106	42	14	190	263	13
Future Vol, veh/h	106	42	14	190	263	13
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	80	80	80	80	80	80
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	133	53	18	238	329	16
Major/Minor	Minor2	Major1		Major2		
Conflicting Flow All	611	337	345	0	-	0
Stage 1	337	-	-	-	-	-
Stage 2	274	-	-	-	-	-
Critical Hdwy	6.4	6.2	4.1	-	-	-
Critical Hdwy Stg 1	5.4	-	-	-	-	-
Critical Hdwy Stg 2	5.4	-	-	-	-	-
Follow-up Hdwy	3.5	3.3	2.2	-	-	-
Pot Cap-1 Maneuver	460	710	1225	-	-	-
Stage 1	728	-	-	-	-	-
Stage 2	777	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	452	710	1225	-	-	-
Mov Cap-2 Maneuver	452	-	-	-	-	-
Stage 1	716	-	-	-	-	-
Stage 2	777	-	-	-	-	-
Approach	EB	NB		SB		
HCM Control Delay, s	16.2	0.5		0		
HCM LOS	C					
Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR	
Capacity (veh/h)	1225	-	504	-	-	
HCM Lane V/C Ratio	0.014	-	0.367	-	-	
HCM Control Delay (s)	8	0	16.2	-	-	
HCM Lane LOS	A	A	C	-	-	
HCM 95th %tile Q(veh)	0	-	1.7	-	-	

Intersection						
Int Delay, s/veh	0.1					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	3	0	1	203	312	0
Future Vol, veh/h	3	0	1	203	312	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	81	81	81	81	81	81
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	4	0	1	251	385	0
Major/Minor	Minor2	Major1		Major2		
Conflicting Flow All	638	385	385	0	-	0
Stage 1	385	-	-	-	-	-
Stage 2	253	-	-	-	-	-
Critical Hdwy	6.4	6.2	4.1	-	-	-
Critical Hdwy Stg 1	5.4	-	-	-	-	-
Critical Hdwy Stg 2	5.4	-	-	-	-	-
Follow-up Hdwy	3.5	3.3	2.2	-	-	-
Pot Cap-1 Maneuver	444	667	1185	-	-	-
Stage 1	692	-	-	-	-	-
Stage 2	794	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	444	667	1185	-	-	-
Mov Cap-2 Maneuver	444	-	-	-	-	-
Stage 1	691	-	-	-	-	-
Stage 2	794	-	-	-	-	-
Approach	EB	NB		SB		
HCM Control Delay, s	13.2	0		0		
HCM LOS	B					
Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR	
Capacity (veh/h)	1185	-	444	-	-	
HCM Lane V/C Ratio	0.001	-	0.008	-	-	
HCM Control Delay (s)	8	0	13.2	-	-	
HCM Lane LOS	A	A	B	-	-	
HCM 95th %tile Q(veh)	0	-	0	-	-	

HCM 6th Signalized Intersection Summary

1: Washington Street & Van Buren Boulevard

Woodcrest Christian School Expansion
Opening Year (2029) With Project AM

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	155	1255	151	149	1651	885	190	637	232	577	177	88
Future Volume (veh/h)	155	1255	151	149	1651	885	190	637	232	577	177	88
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	163	1321	159	157	1738	932	200	671	244	607	186	93
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	160	1391	166	1091	3454	1540	261	664	295	567	992	441
Arrive On Green	0.09	0.43	0.43	0.60	0.96	0.96	0.07	0.18	0.18	0.16	0.27	0.27
Sat Flow, veh/h	1810	3241	388	1810	3610	1609	3510	3610	1602	3510	3610	1605
Grp Volume(v), veh/h	163	732	748	157	1738	932	200	671	244	607	186	93
Grp Sat Flow(s),veh/h/ln	1810	1805	1824	1810	1805	1609	1755	1805	1602	1755	1805	1605
Q Serve(g_s), s	11.5	50.6	51.6	4.9	5.2	7.7	7.3	23.9	15.8	21.0	5.1	5.8
Cycle Q Clear(g_c), s	11.5	50.6	51.6	4.9	5.2	7.7	7.3	23.9	15.8	21.0	5.1	5.8
Prop In Lane	1.00		0.21	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	160	775	783	1091	3454	1540	261	664	295	567	992	441
V/C Ratio(X)	1.02	0.94	0.96	0.14	0.50	0.61	0.77	1.01	0.83	1.07	0.19	0.21
Avail Cap(c_a), veh/h	160	775	783	1091	3454	1540	500	664	295	567	992	441
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	59.2	35.6	35.9	11.2	0.2	0.3	59.0	53.1	35.1	54.5	36.0	36.3
Incr Delay (d2), s/veh	76.0	21.4	23.0	0.1	0.5	1.8	4.7	37.7	17.6	58.0	0.1	0.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	8.5	25.3	26.3	1.8	0.3	0.8	3.4	14.2	7.6	13.6	2.2	2.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	135.3	57.0	58.9	11.3	0.8	2.1	63.7	90.7	52.7	112.5	36.1	36.5
LnGrp LOS	F	E	E	B	A	A	E	F	D	F	D	D
Approach Vol, veh/h		1643			2827			1115			886	
Approach Delay, s/veh		65.6			1.8			77.6			88.5	
Approach LOS		E			A			E			F	
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	85.5	62.0	14.2	41.5	16.0	131.5	26.0	29.7				
Change Period (Y+Rc), s	6.2	* 6.2	4.5	5.8	4.5	6.2	5.0	* 5.8				
Max Green Setting (Gmax), s	8.5	* 56	18.5	26.2	11.5	52.8	21.0	* 24				
Max Q Clear Time (g_c+I1), s	6.9	53.6	9.3	7.8	13.5	9.7	23.0	25.9				
Green Ext Time (p_c), s	0.1	1.7	0.4	1.2	0.0	27.3	0.0	0.0				
Intersection Summary												
HCM 6th Ctrl Delay			42.9									
HCM 6th LOS			D									
Notes												
* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.												

HCM 6th Signalized Intersection Summary

Woodcrest Christian School Expansion

2: Alta Cresta Avenue/Chicago Avenue & Van Buren Boulevard

Opening Year (2029) With Project AM

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	85	1921	87	87	2446	33	170	23	113	110	28	82
Future Volume (veh/h)	85	1921	87	87	2446	33	170	23	113	110	28	82
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		0.99	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No			No			No		
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	94	2134	97	97	2718	37	189	26	126	122	31	91
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	104	2232	994	104	2255	31	149	31	150	111	39	116
Arrive On Green	0.06	0.62	0.62	0.08	0.82	0.82	0.08	0.11	0.11	0.06	0.09	0.09
Sat Flow, veh/h	1810	3610	1608	1810	3646	50	1810	281	1364	1810	424	1243
Grp Volume(v), veh/h	94	2134	97	97	1342	1413	189	0	152	122	0	122
Grp Sat Flow(s),veh/h/ln	1810	1805	1608	1810	1805	1891	1810	0	1646	1810	0	1667
Q Serve(g_s), s	6.7	71.7	1.8	6.9	80.4	80.4	10.7	0.0	11.8	8.0	0.0	9.3
Cycle Q Clear(g_c), s	6.7	71.7	1.8	6.9	80.4	80.4	10.7	0.0	11.8	8.0	0.0	9.3
Prop In Lane	1.00		1.00	1.00		0.03	1.00		0.83	1.00		0.75
Lane Grp Cap(c), veh/h	104	2232	994	104	1116	1169	149	0	181	111	0	155
V/C Ratio(X)	0.90	0.96	0.10	0.93	1.20	1.21	1.27	0.00	0.84	1.10	0.00	0.79
Avail Cap(c_a), veh/h	104	2232	994	104	1116	1169	149	0	228	111	0	237
HCM Platoon Ratio	1.00	1.00	1.00	1.33	1.33	1.33	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	0.42	0.42	0.42	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	60.9	23.2	3.4	59.7	11.5	11.5	59.6	0.0	56.7	61.0	0.0	57.7
Incr Delay (d2), s/veh	57.6	11.2	0.2	38.3	95.0	97.4	161.8	0.0	19.5	113.3	0.0	9.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.7	29.6	1.1	4.1	38.2	40.8	11.6	0.0	5.8	7.2	0.0	4.4
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	118.5	34.4	3.6	98.1	106.6	108.9	221.4	0.0	76.2	174.3	0.0	67.0
LnGrp LOS	F	C	A	F	F	F	F	A	E	F	A	E
Approach Vol, veh/h	2325					2852		341		244		
Approach Delay, s/veh	36.5					107.4		156.7		120.7		
Approach LOS	D					F		F		F		
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	12.0	86.6	14.7	16.7	12.0	86.6	12.0	19.4				
Change Period (Y+Rc), s	4.5	6.2	4.0	4.6	4.5	6.2	4.0	5.1				
Max Green Setting (Gmax), s	7.5	76.7	8.0	18.5	7.5	76.7	8.0	18.0				
Max Q Clear Time (g_c+l1), s	8.9	73.7	12.7	11.3	8.7	82.4	10.0	13.8				
Green Ext Time (p_c), s	0.0	2.7	0.0	0.3	0.0	0.0	0.0	0.3				
Intersection Summary												
HCM 6th Ctrl Delay	82.3											
HCM 6th LOS	F											

HCM 6th Signalized Intersection Summary

3: Van Buren Village Driveway & Van Buren Boulevard

Woodcrest Christian School Expansion
Opening Year (2029) With Project AM

	→	↘	↙	←	↖	↗
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑↑	↑	↘	↑↑	↘	↑
Traffic Volume (veh/h)	2099	46	138	2541	38	114
Future Volume (veh/h)	2099	46	138	2541	38	114
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)		1.00	1.00		1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	2209	48	145	2675	40	120
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	0	0	0	0	0	0
Cap, veh/h	2557	1141	167	3001	163	145
Arrive On Green	0.94	0.94	0.18	1.00	0.09	0.09
Sat Flow, veh/h	3705	1610	1810	3705	1810	1610
Grp Volume(v), veh/h	2209	48	145	2675	40	120
Grp Sat Flow(s),veh/h/ln	1805	1610	1810	1805	1810	1610
Q Serve(g_s), s	24.8	0.2	10.1	0.0	2.7	9.5
Cycle Q Clear(g_c), s	24.8	0.2	10.1	0.0	2.7	9.5
Prop In Lane		1.00	1.00		1.00	1.00
Lane Grp Cap(c), veh/h	2557	1141	167	3001	163	145
V/C Ratio(X)	0.86	0.04	0.87	0.89	0.25	0.83
Avail Cap(c_a), veh/h	2557	1141	167	3001	251	223
HCM Platoon Ratio	1.33	1.33	2.00	2.00	1.00	1.00
Upstream Filter(I)	0.14	0.14	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	1.8	1.1	52.2	0.0	55.0	58.1
Incr Delay (d2), s/veh	0.6	0.0	35.3	4.5	0.8	13.9
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.9	0.1	5.7	1.9	1.3	4.5
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	2.4	1.1	87.5	4.5	55.8	72.0
LnGrp LOS	A	A	F	A	E	E
Approach Vol, veh/h	2257			2820	160	
Approach Delay, s/veh	2.4			8.8	68.0	
Approach LOS	A			A	E	
Timer - Assigned Phs	1	2			6	8
Phs Duration (G+Y+Rc), s	16.0	98.3			114.3	15.7
Change Period (Y+Rc), s	4.0	6.2			* 6.2	4.0
Max Green Setting (Gmax), s	12.0	85.8			* 1E2	18.0
Max Q Clear Time (g_c+I1), s	12.1	26.8			2.0	11.5
Green Ext Time (p_c), s	0.0	32.2			65.2	0.2
Intersection Summary						
HCM 6th Ctrl Delay			7.8			
HCM 6th LOS			A			
Notes						
* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.						

HCM 6th TWSC
4: Little Court & Van Buren Boulevard

Woodcrest Christian School Expansion
Opening Year (2029) With Project AM

Intersection						
Int Delay, s/veh	0					
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑↑	↗		↑↑		↗
Traffic Vol, veh/h	2212	1	0	2679	0	8
Future Vol, veh/h	2212	1	0	2679	0	8
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	0	-	-	-	0
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	93	93	93	93	93	93
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	2378	1	0	2881	0	9
Major/Minor	Major1	Major2		Minor1		
Conflicting Flow All	0	0	-	-	-	1189
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	-	-	-	-	6.9
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	-	-	-	-	3.3
Pot Cap-1 Maneuver	-	-	0	-	0	*155
Stage 1	-	-	0	-	0	-
Stage 2	-	-	0	-	0	-
Platoon blocked, %	-	-		-		1
Mov Cap-1 Maneuver	-	-	-	-	-	*155
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Approach	EB	WB		NB		
HCM Control Delay, s	0	0		29.6		
HCM LOS	D					
Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBT		
Capacity (veh/h)	155	-	-	-		
HCM Lane V/C Ratio	0.055	-	-	-		
HCM Control Delay (s)	29.6	-	-	-		
HCM Lane LOS	D	-	-	-		
HCM 95th %tile Q(veh)	0.2	-	-	-		
Notes						
~: Volume exceeds capacity		\$: Delay exceeds 300s		+: Computation Not Defined		*: All major volume in platoon

HCM 6th TWSC
5: Van Buren Boulevard & Ridgeway Avenue

Woodcrest Christian School Expansion
Opening Year (2029) With Project AM

Intersection						
Int Delay, s/veh	2.4					
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	49	2171	2533	9	2	145
Future Vol, veh/h	49	2171	2533	9	2	145
Conflicting Peds, #/hr	3	0	0	3	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	93	93	93	93	93	93
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	53	2334	2724	10	2	156
Major/Minor	Major1	Major2		Minor2		
Conflicting Flow All	2737	0	-	0	4005	1370
Stage 1	-	-	-	-	2732	-
Stage 2	-	-	-	-	1273	-
Critical Hdwy	4.1	-	-	-	6.8	6.9
Critical Hdwy Stg 1	-	-	-	-	5.8	-
Critical Hdwy Stg 2	-	-	-	-	5.8	-
Follow-up Hdwy	2.2	-	-	-	3.5	3.3
Pot Cap-1 Maneuver	*53	-	-	-	-	*~ 36
Stage 1	-	-	-	-	*34	-
Stage 2	-	-	-	-	*168	-
Platoon blocked, %	1	-	-	-	2	1
Mov Cap-1 Maneuver	*53	-	-	-	-	*~ 35
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	*0	-
Stage 2	-	-	-	-	*168	-
Approach	EB	WB		SB		
HCM Control Delay, s	5.4	0				
HCM LOS	-					
Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1	
Capacity (veh/h)	* 53	-	-	-	-	
HCM Lane V/C Ratio	0.994	-	-	-	-	
HCM Control Delay (s)	245.9	-	-	-	-	
HCM Lane LOS	F	-	-	-	-	
HCM 95th %tile Q(veh)	4.4	-	-	-	-	
Notes						
~: Volume exceeds capacity		\$: Delay exceeds 300s		+: Computation Not Defined		*: All major volume in platoon

HCM 6th Signalized Intersection Summary 6: Dauchy Avenue & Van Buren Boulevard

Woodcrest Christian School Expansion
Opening Year (2029) With Project AM

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	34	1785	358	288	2155	53	365	49	254	91	63	39
Future Volume (veh/h)	34	1785	358	288	2155	53	365	49	254	91	63	39
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	35	1859	373	300	2245	55	380	51	265	95	66	41
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	70	1529	295	125	1947	869	388	55	288	175	395	335
Arrive On Green	0.01	0.17	0.17	0.14	1.00	1.00	0.05	0.21	0.21	0.05	0.21	0.21
Sat Flow, veh/h	1810	3006	580	1810	3610	1610	1810	266	1384	1810	1900	1610
Grp Volume(v), veh/h	35	1087	1145	300	2245	55	380	0	316	95	66	41
Grp Sat Flow(s),veh/h/ln	1810	1805	1781	1810	1805	1610	1810	0	1651	1810	1900	1610
Q Serve(g_s), s	2.5	66.1	66.1	9.0	0.0	0.0	7.0	0.0	24.4	5.3	3.7	2.7
Cycle Q Clear(g_c), s	2.5	66.1	66.1	9.0	0.0	0.0	7.0	0.0	24.4	5.3	3.7	2.7
Prop In Lane	1.00		0.33	1.00		1.00	1.00		0.84	1.00		1.00
Lane Grp Cap(c), veh/h	70	918	906	125	1947	869	388	0	344	175	395	335
V/C Ratio(X)	0.50	1.18	1.26	2.39	1.15	0.06	0.98	0.00	0.92	0.54	0.17	0.12
Avail Cap(c_a), veh/h	97	918	906	125	1947	869	388	0	381	175	438	372
HCM Platoon Ratio	0.33	0.33	0.33	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	0.09	0.09	0.09	1.00	0.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	62.9	54.1	54.1	56.0	0.0	0.0	50.0	0.0	50.4	39.9	42.2	41.8
Incr Delay (d2), s/veh	2.1	93.9	127.3	629.8	69.4	0.0	40.3	0.0	25.7	1.9	0.2	0.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.2	55.8	63.4	25.6	18.8	0.0	13.5	0.0	12.6	2.5	1.8	1.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	65.0	148.0	181.3	685.8	69.4	0.0	90.2	0.0	76.1	41.8	42.4	42.0
LnGrp LOS	E	F	F	F	F	A	F	A	E	D	D	D
Approach Vol, veh/h		2267			2600			696			202	
Approach Delay, s/veh		163.6			139.1			83.8			42.0	
Approach LOS		F			F			F			D	
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	14.0	73.3	11.0	31.7	10.0	77.3	11.0	31.7				
Change Period (Y+Rc), s	5.0	7.2	4.0	4.6	5.0	7.2	4.0	4.6				
Max Green Setting (Gmax), s	9.0	63.2	7.0	30.0	7.0	65.2	7.0	30.0				
Max Q Clear Time (g_c+I1), s	11.0	68.1	9.0	5.7	4.5	2.0	7.3	26.4				
Green Ext Time (p_c), s	0.0	0.0	0.0	0.4	0.0	35.5	0.0	0.7				
Intersection Summary												
HCM 6th Ctrl Delay			138.6									
HCM 6th LOS			F									

Intersection												
Int Delay, s/veh	23.7											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕	↗		↕			↗			↕	↗
Traffic Vol, veh/h	166	0	34	5	0	53	43	459	5	17	414	214
Future Vol, veh/h	166	0	34	5	0	53	43	459	5	17	414	214
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	0	-	-	-	-	-	-	-	-	90
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	95	95	95	88	95	88	95	88	88	88	88	95
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	175	0	36	6	0	60	45	522	6	19	470	225
Major/Minor	Minor2		Minor1			Major1			Major2			
Conflicting Flow All	1153	1126	470	1254	1348	525	695	0	0	528	0	0
Stage 1	508	508	-	615	615	-	-	-	-	-	-	-
Stage 2	645	618	-	639	733	-	-	-	-	-	-	-
Critical Hdwy	7.1	6.5	6.2	7.1	6.5	6.2	4.1	-	-	4.1	-	-
Critical Hdwy Stg 1	6.1	5.5	-	6.1	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.1	5.5	-	6.1	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.5	4	3.3	3.5	4	3.3	2.2	-	-	2.2	-	-
Pot Cap-1 Maneuver	176	207	598	150	152	556	910	-	-	1049	-	-
Stage 1	551	542	-	482	485	-	-	-	-	-	-	-
Stage 2	464	484	-	468	429	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	~ 145	187	598	130	137	556	910	-	-	1049	-	-
Mov Cap-2 Maneuver	~ 145	187	-	130	137	-	-	-	-	-	-	-
Stage 1	512	525	-	448	451	-	-	-	-	-	-	-
Stage 2	385	450	-	426	416	-	-	-	-	-	-	-
Approach	EB		WB			NB			SB			
HCM Control Delay, s	168.6		14.8			0.7			0.2			
HCM LOS	F		B									
Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	EBLn2	WBLn1	SBL	SBT	SBR			
Capacity (veh/h)	910	-	-	145	598	434	1049	-	-			
HCM Lane V/C Ratio	0.05	-	-	1.205	0.06	0.152	0.018	-	-			
HCM Control Delay (s)	9.2	-	-	200.8	11.4	14.8	8.5	0	-			
HCM Lane LOS	A	-	-	F	B	B	A	A	-			
HCM 95th %tile Q(veh)	0.2	-	-	10.2	0.2	0.5	0.1	-	-			
Notes												
~: Volume exceeds capacity		\$: Delay exceeds 300s			+: Computation Not Defined				*: All major volume in platoon			

HCM 6th AWSC
8: Taft Street/Dauchy Avenue & Krameria Avenue

Woodcrest Christian School Expansion
Opening Year (2029) With Project AM

Intersection	
Intersection Delay, s/veh	75.2
Intersection LOS	F

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	46	393	2	1	444	125	16	35	9	110	18	39
Future Vol, veh/h	46	393	2	1	444	125	16	35	9	110	18	39
Peak Hour Factor	0.79	0.79	0.79	0.79	0.79	0.79	0.79	0.79	0.79	0.79	0.79	0.79
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	58	497	3	1	562	158	20	44	11	139	23	49
Number of Lanes	0	1	0	0	1	0	0	1	0	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	1	1	1
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	1	1	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	1	1	1	1
HCM Control Delay	49.7	118.8	13.1	16.4
HCM LOS	E	F	B	C

Lane	NBLn1	EBLn1	WBLn1	SBLn1
Vol Left, %	27%	10%	0%	66%
Vol Thru, %	58%	89%	78%	11%
Vol Right, %	15%	0%	22%	23%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	60	441	570	167
LT Vol	16	46	1	110
Through Vol	35	393	444	18
RT Vol	9	2	125	39
Lane Flow Rate	76	558	722	211
Geometry Grp	1	1	1	1
Degree of Util (X)	0.166	0.94	1.18	0.427
Departure Headway (Hd)	8.455	6.4	5.889	7.749
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	427	569	613	467
Service Time	6.455	4.4	3.969	5.749
HCM Lane V/C Ratio	0.178	0.981	1.178	0.452
HCM Control Delay	13.1	49.7	118.8	16.4
HCM Lane LOS	B	E	F	C
HCM 95th-tile Q	0.6	12.1	24.5	2.1

HCM 6th Signalized Intersection Summary

9: Wood Road & Van Buren Boulevard

Woodcrest Christian School Expansion
Opening Year (2029) With Project AM



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	174	1543	451	497	1799	179	516	564	365	113	472	214
Future Volume (veh/h)	174	1543	451	497	1799	179	516	564	365	113	472	214
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.98	1.00		0.91	1.00		0.88
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No			No			No		
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	193	1714	501	552	1999	199	573	627	406	126	524	238
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	221	2760	1440	581	2916	1278	500	592	383	109	493	222
Arrive On Green	0.04	0.25	0.25	0.22	1.00	1.00	0.14	0.29	0.29	0.06	0.21	0.21
Sat Flow, veh/h	1810	3610	1584	3510	3610	1582	3510	2016	1304	1810	2307	1040
Grp Volume(v), veh/h	193	1714	501	552	1999	199	573	561	472	126	409	353
Grp Sat Flow(s),veh/h/ln	1810	1805	1584	1755	1805	1582	1755	1805	1515	1810	1805	1542
Q Serve(g_s), s	13.8	54.7	13.6	20.2	0.0	0.0	18.5	38.2	38.2	7.8	27.8	27.8
Cycle Q Clear(g_c), s	13.8	54.7	13.6	20.2	0.0	0.0	18.5	38.2	38.2	7.8	27.8	27.8
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.86	1.00		0.67
Lane Grp Cap(c), veh/h	221	2760	1440	581	2916	1278	500	530	445	109	386	330
V/C Ratio(X)	0.87	0.62	0.35	0.95	0.69	0.16	1.15	1.06	1.06	1.16	1.06	1.07
Avail Cap(c_a), veh/h	299	2760	1440	581	2916	1278	500	530	445	109	386	330
HCM Platoon Ratio	0.33	0.33	0.33	1.33	1.33	1.33	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.09	0.09	0.09	0.68	0.68	0.68	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	61.4	31.9	3.8	50.2	0.0	0.0	55.7	45.9	45.9	61.1	51.1	51.1
Incr Delay (d2), s/veh	1.7	0.1	0.1	19.6	0.9	0.2	87.4	55.4	59.2	135.9	62.6	69.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	6.8	26.3	5.4	9.7	0.4	0.1	14.1	24.8	21.3	7.6	19.0	16.8
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	63.1	32.0	3.9	69.8	0.9	0.2	143.2	101.3	105.1	197.0	113.7	120.4
LnGrp LOS	E	C	A	E	A	A	F	F	F	F	F	F
Approach Vol, veh/h	2408			2750			1606			888		
Approach Delay, s/veh	28.6			14.7			117.4			128.2		
Approach LOS	C			B			F			F		
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	37.0	108.4	24.0	33.6	21.4	114.0	13.6	44.0				
Change Period (Y+Rc), s	5.5	7.2	5.5	5.8	5.5	7.2	5.8	* 5.8				
Max Green Setting (Gmax), s	21.5	40.0	18.5	26.0	21.5	40.0	7.8	* 38				
Max Q Clear Time (g_c+2.2), s	22.2	56.7	20.5	29.8	15.8	2.0	9.8	40.2				
Green Ext Time (p_c), s	0.0	0.0	0.0	0.0	0.1	23.0	0.0	0.0				

Intersection Summary

HCM 6th Ctrl Delay 53.8

HCM 6th LOS D

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

HCM 6th Signalized Intersection Summary

10: Van Buren Boulevard & Bountiful Street

Woodcrest Christian School Expansion
Opening Year (2029) With Project AM



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations	↰	↑↑↑	↑↑↑		↰	↑↑
Traffic Volume (veh/h)	163	1916	1926	36	55	254
Future Volume (veh/h)	163	1916	1926	36	55	254
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00			0.98	1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No	No		No	
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	175	2060	2071	39	59	273
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %	0	0	0	0	0	0
Cap, veh/h	174	3739	3092	58	342	304
Arrive On Green	0.19	1.00	1.00	1.00	0.19	0.19
Sat Flow, veh/h	1810	5358	5410	99	1810	1610
Grp Volume(v), veh/h	175	2060	1366	744	59	273
Grp Sat Flow(s), veh/h/ln	1810	1729	1729	1880	1810	1610
Q Serve(g_s), s	12.5	0.0	0.0	0.0	3.6	21.5
Cycle Q Clear(g_c), s	12.5	0.0	0.0	0.0	3.6	21.5
Prop In Lane	1.00			0.05	1.00	1.00
Lane Grp Cap(c), veh/h	174	3739	2041	1109	342	304
V/C Ratio(X)	1.01	0.55	0.67	0.67	0.17	0.90
Avail Cap(c_a), veh/h	174	3739	2041	1109	619	551
HCM Platoon Ratio	2.00	2.00	2.00	2.00	1.00	1.00
Upstream Filter(I)	0.09	0.09	0.15	0.15	1.00	1.00
Uniform Delay (d), s/veh	52.5	0.0	0.0	0.0	44.2	51.5
Incr Delay (d2), s/veh	21.9	0.1	0.3	0.5	0.2	9.3
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%), veh/ln	6.0	0.0	0.1	0.2	1.6	18.6
Unsig. Movement Delay, s/veh						
LnGrp Delay(d), s/veh	74.4	0.1	0.3	0.5	44.4	60.7
LnGrp LOS	F	A	A	A	D	E
Approach Vol, veh/h		2235	2110		332	
Approach Delay, s/veh		5.9	0.3		57.8	
Approach LOS		A	A		E	
Timer - Assigned Phs		2		4	5	6
Phs Duration (G+Y+Rc), s		100.9		29.1	17.0	83.9
Change Period (Y+Rc), s		7.2		4.5	4.5	7.2
Max Green Setting (Gmax), s		73.8		44.5	12.5	56.8
Max Q Clear Time (g_c+l1), s		2.0		23.5	14.5	2.0
Green Ext Time (p_c), s		27.2		1.1	0.0	23.9
Intersection Summary						
HCM 6th Ctrl Delay			7.1			
HCM 6th LOS			A			

HCM 6th Signalized Intersection Summary

11: Trautwein Road & Mission Grove Parkway S

Woodcrest Christian School Expansion
Opening Year (2029) With Project AM



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	67	37	10	720	36	58	3	2000	616	208	1219	19
Future Volume (veh/h)	67	37	10	720	36	58	3	2000	616	208	1219	19
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		0.97	1.00		1.00	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No			No			No		
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	70	39	10	750	38	60	3	2083	642	217	1270	20
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	273	89	23	500	117	97	10	1974	1109	146	2246	980
Arrive On Green	0.15	0.06	0.06	0.14	0.06	0.06	0.00	0.37	0.37	0.08	0.62	0.62
Sat Flow, veh/h	1810	1457	374	3510	1900	1566	1810	3610	1608	1810	3610	1574
Grp Volume(v), veh/h	70	0	49	750	38	60	3	2083	642	217	1270	20
Grp Sat Flow(s),veh/h/ln	1810	0	1831	1755	1900	1566	1810	1805	1608	1810	1805	1574
Q Serve(g_s), s	4.4	0.0	3.4	18.5	2.5	4.1	0.2	71.1	11.4	10.5	26.7	0.2
Cycle Q Clear(g_c), s	4.4	0.0	3.4	18.5	2.5	4.1	0.2	71.1	11.4	10.5	26.7	0.2
Prop In Lane	1.00		0.20	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	273	0	111	500	117	97	10	1974	1109	146	2246	980
V/C Ratio(X)	0.26	0.00	0.44	1.50	0.32	0.62	0.30	1.06	0.58	1.48	0.57	0.02
Avail Cap(c_a), veh/h	273	0	467	500	693	571	104	1974	1109	146	2246	980
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	0.67	0.67	0.67	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	1.00	1.00	0.09	0.09	0.09	1.00	1.00	1.00
Uniform Delay (d), s/veh	48.8	0.0	58.9	55.7	58.4	41.9	64.5	41.2	4.4	59.7	14.3	1.2
Incr Delay (d2), s/veh	0.2	0.0	2.7	235.9	1.6	6.4	0.6	26.2	0.2	250.9	1.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.1	0.0	1.7	24.3	1.2	2.0	0.1	39.0	4.2	14.9	10.0	0.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	49.0	0.0	61.6	291.7	60.0	48.3	65.1	67.4	4.6	310.7	15.4	1.3
LnGrp LOS	D	A	E	F	E	D	E	F	A	F	B	A
Approach Vol, veh/h	119		848				2728			1507		
Approach Delay, s/veh	54.2		264.1				52.6			57.7		
Approach LOS	D		F				D			E		
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	5.0	77.3	24.0	13.7	5.2	87.1	25.1	12.6				
Change Period (Y+Rc), s	4.5	6.2	5.5	5.8	4.5	6.2	5.5	* 4.6				
Max Green Setting (Gmax), s	10.5	45.8	18.5	33.2	7.5	48.8	7.0	* 47				
Max Q Clear Time (g_c+1/2), s	112.5	73.1	20.5	5.4	2.2	28.7	6.4	6.1				
Green Ext Time (p_c), s	0.0	0.0	0.0	0.2	0.0	8.5	0.0	0.4				

Intersection Summary

HCM 6th Ctrl Delay 88.6

HCM 6th LOS F

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

HCM 6th Signalized Intersection Summary

12: Trautwein Road & John F Kennedy Drive

Woodcrest Christian School Expansion
Opening Year (2029) With Project AM



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	634	57	105	140	64	48	239	2263	98	10	1140	680
Future Volume (veh/h)	634	57	105	140	64	48	239	2263	98	10	1140	680
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		0.99	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No			No			No		
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	682	61	113	151	69	52	257	2433	105	11	1226	731
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	516	223	186	259	114	86	306	2018	898	32	1383	852
Arrive On Green	0.15	0.12	0.12	0.14	0.11	0.11	0.22	0.74	0.74	0.02	0.38	0.38
Sat Flow, veh/h	3510	1900	1590	1810	999	753	1810	3610	1607	1810	3610	1606
Grp Volume(v), veh/h	682	61	113	151	0	121	257	2433	105	11	1226	731
Grp Sat Flow(s),veh/h/ln	1755	1900	1590	1810	0	1753	1810	1805	1607	1810	1805	1606
Q Serve(g_s), s	19.1	3.8	8.8	10.1	0.0	8.5	17.7	72.7	1.1	0.8	41.2	22.1
Cycle Q Clear(g_c), s	19.1	3.8	8.8	10.1	0.0	8.5	17.7	72.7	1.1	0.8	41.2	22.1
Prop In Lane	1.00		1.00	1.00		0.43	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	516	223	186	259	0	200	306	2018	898	32	1383	852
V/C Ratio(X)	1.32	0.27	0.61	0.58	0.00	0.60	0.84	1.21	0.12	0.34	0.89	0.86
Avail Cap(c_a), veh/h	516	678	567	259	0	445	306	2018	898	97	1383	852
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.33	1.33	1.33	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	0.00	1.00	0.22	0.22	0.22	0.63	0.63	0.63
Uniform Delay (d), s/veh	55.4	52.3	54.5	52.1	0.0	54.8	48.7	16.7	1.6	63.1	37.5	10.6
Incr Delay (d2), s/veh	158.2	0.7	3.2	3.3	0.0	2.9	4.8	93.8	0.1	4.0	5.8	7.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	9.6	1.8	3.7	4.9	0.0	4.0	7.7	43.0	0.8	0.4	18.3	9.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	213.6	53.0	57.7	55.4	0.0	57.7	53.6	110.5	1.7	67.1	43.2	17.9
LnGrp LOS	F	D	E	E	A	E	D	F	A	E	D	B
Approach Vol, veh/h	856			272			2795			1968		
Approach Delay, s/veh	181.6			56.4			101.2			33.9		
Approach LOS	F			E			F			C		
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	6.3	79.9	24.0	19.8	29.1	57.0	23.6	20.3				
Change Period (Y+Rc), s	4.0	7.2	5.4	* 4.6	7.2	* 7.2	4.5	5.4				
Max Green Setting (Gmax), s	7.0	49.8	7.0	* 46	7.0	* 50	19.1	33.0				
Max Q Clear Time (g_c+1/2), s	12.8	74.7	12.1	10.8	19.7	43.2	21.1	10.5				
Green Ext Time (p_c), s	0.0	0.0	0.0	0.7	0.0	4.9	0.0	0.6				

Intersection Summary

HCM 6th Ctrl Delay 88.3

HCM 6th LOS F

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

HCM 6th Signalized Intersection Summary

13: Trautwein Road & Grove Community Drive

Woodcrest Christian School Expansion
Opening Year (2029) With Project AM



Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	111	608	1992	65	187	1196
Future Volume (veh/h)	111	608	1992	65	187	1196
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00		1.00	1.00	
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No		No		No	
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	122	668	2189	71	205	1314
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91
Percent Heavy Veh, %	0	0	0	0	0	0
Cap, veh/h	221	559	2432	1083	263	2855
Arrive On Green	0.12	0.12	0.67	0.67	0.15	1.00
Sat Flow, veh/h	1810	2834	3705	1608	3510	3705
Grp Volume(v), veh/h	122	668	2189	71	205	1314
Grp Sat Flow(s), veh/h/ln	1810	1417	1805	1608	1755	1805
Q Serve(g_s), s	8.2	15.9	65.4	2.0	7.3	0.0
Cycle Q Clear(g_c), s	8.2	15.9	65.4	2.0	7.3	0.0
Prop In Lane	1.00	1.00		1.00	1.00	
Lane Grp Cap(c), veh/h	221	559	2432	1083	263	2855
V/C Ratio(X)	0.55	1.20	0.90	0.07	0.78	0.46
Avail Cap(c_a), veh/h	221	559	2432	1083	527	2855
HCM Platoon Ratio	1.00	1.00	1.00	1.00	2.00	2.00
Upstream Filter(I)	1.00	1.00	0.09	0.09	0.76	0.76
Uniform Delay (d), s/veh	53.7	52.2	17.6	7.2	54.2	0.0
Incr Delay (d2), s/veh	2.9	104.5	0.6	0.0	3.8	0.4
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%), veh/ln	3.9	17.1	22.5	0.6	3.1	0.2
Unsig. Movement Delay, s/veh						
LnGrp Delay(d), s/veh	56.6	156.7	18.2	7.3	58.1	0.4
LnGrp LOS	E	F	B	A	E	A
Approach Vol, veh/h	790		2260			1519
Approach Delay, s/veh	141.2		17.8			8.2
Approach LOS	F		B			A
Timer - Assigned Phs	1	2			6	8
Phs Duration (G+Y+Rc), s	5.2	93.8			109.0	21.0
Change Period (Y+Rc), s	5.5	6.2			6.2	5.1
Max Green Setting (Gmax), s	19.5	77.8			102.8	15.9
Max Q Clear Time (g_c+19.3), s	19.3	67.4			2.0	17.9
Green Ext Time (p_c), s	0.4	9.0			12.3	0.0
Intersection Summary						
HCM 6th Ctrl Delay			36.0			
HCM 6th LOS			D			

HCM 6th Signalized Intersection Summary

14: Trautwein Road & Orange Terrace Pkwy

Woodcrest Christian School Expansion

Opening Year (2029) With Project AM



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	97	67	45	388	161	593	68	1366	276	350	983	31
Future Volume (veh/h)	97	67	45	388	161	593	68	1366	276	350	983	31
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		0.97	1.00		1.00	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No			No			No		
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	118	82	55	473	196	723	83	1666	337	427	1199	38
Peak Hour Factor	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	143	119	80	326	423	938	106	1554	690	405	1788	792
Arrive On Green	0.08	0.11	0.11	0.18	0.22	0.22	0.02	0.14	0.14	0.23	0.99	0.99
Sat Flow, veh/h	1810	1057	709	1810	1900	2744	1810	3610	1602	3510	3610	1599
Grp Volume(v), veh/h	118	0	137	473	196	723	83	1666	337	427	1199	38
Grp Sat Flow(s),veh/h/ln	1810	0	1766	1810	1900	1372	1810	1805	1602	1755	1805	1599
Q Serve(g_s), s	8.4	0.0	9.7	23.4	11.6	22.2	5.9	56.0	13.8	15.0	1.2	0.0
Cycle Q Clear(g_c), s	8.4	0.0	9.7	23.4	11.6	22.2	5.9	56.0	13.8	15.0	1.2	0.0
Prop In Lane	1.00		0.40	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	143	0	199	326	423	938	106	1554	690	405	1788	792
V/C Ratio(X)	0.82	0.00	0.69	1.45	0.46	0.77	0.79	1.07	0.49	1.05	0.67	0.05
Avail Cap(c_a), veh/h	237	0	492	326	547	1117	223	1554	690	405	1788	792
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	0.33	0.33	0.33	2.00	2.00	2.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	1.00	1.00	0.80	0.80	0.80	0.88	0.88	0.88
Uniform Delay (d), s/veh	59.0	0.0	55.5	53.3	43.8	21.2	62.9	55.8	12.7	50.0	0.3	0.1
Incr Delay (d2), s/veh	4.5	0.0	4.2	219.8	0.8	2.8	3.9	42.8	2.0	57.0	1.8	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.0	0.0	4.6	30.5	5.6	7.4	2.9	36.2	6.2	8.7	0.6	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	63.5	0.0	59.7	273.1	44.6	24.0	66.8	98.6	14.7	107.0	2.1	0.2
LnGrp LOS	E	A	E	F	D	C	E	F	B	F	A	A
Approach Vol, veh/h	255		1392				2086		1664			
Approach Delay, s/veh	61.5		111.6				83.7		29.0			
Approach LOS	E		F				F		C			
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	30.0	62.2	27.4	20.4	11.6	70.6	14.3	33.6				
Change Period (Y+Rc), s	5.0	6.2	4.0	5.8	4.0	6.2	4.0	4.6				
Max Green Setting (Gmax), s	15.0	40.8	17.0	36.2	16.0	40.8	17.0	37.4				
Max Q Clear Time (g_c+117), s	117.0	58.0	25.4	11.7	7.9	3.2	10.4	24.2				
Green Ext Time (p_c), s	0.0	0.0	0.0	0.8	0.0	9.9	0.1	3.8				

Intersection Summary

HCM 6th Ctrl Delay	73.0
HCM 6th LOS	E

HCM 6th Signalized Intersection Summary

15: Trautwein Road & Shopping Ctr Dwy

Woodcrest Christian School Expansion
Opening Year (2029) With Project AM



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations								 			 	
Traffic Volume (veh/h)	62	10	55	32	8	56	85	1231	22	79	1090	44
Future Volume (veh/h)	62	10	55	32	8	56	85	1231	22	79	1090	44
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No				No		No				No	
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	72	12	64	37	9	65	99	1431	26	92	1267	51
Peak Hour Factor	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	165	32	171	164	25	177	121	2480	1105	116	2470	1101
Arrive On Green	0.12	0.12	0.12	0.12	0.12	0.12	0.13	1.00	1.00	0.04	0.46	0.46
Sat Flow, veh/h	1342	259	1384	1339	199	1435	1810	3610	1609	1810	3610	1609
Grp Volume(v), veh/h	72	0	76	37	0	74	99	1431	26	92	1267	51
Grp Sat Flow(s),veh/h/ln	1342	0	1643	1339	0	1633	1810	1805	1609	1810	1805	1609
Q Serve(g_s), s	6.8	0.0	5.5	3.4	0.0	5.4	6.9	0.0	0.0	6.5	32.3	2.3
Cycle Q Clear(g_c), s	12.2	0.0	5.5	8.9	0.0	5.4	6.9	0.0	0.0	6.5	32.3	2.3
Prop In Lane	1.00		0.84	1.00		0.88	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	165	0	203	164	0	202	121	2480	1105	116	2470	1101
V/C Ratio(X)	0.44	0.00	0.37	0.23	0.00	0.37	0.82	0.58	0.02	0.79	0.51	0.05
Avail Cap(c_a), veh/h	351	0	430	349	0	427	174	2480	1105	480	2470	1101
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00	2.00	0.67	0.67	0.67
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	0.09	0.09	0.09	0.29	0.29	0.29
Uniform Delay (d), s/veh	57.9	0.0	52.4	56.5	0.0	52.3	55.5	0.0	0.0	61.4	19.9	11.7
Incr Delay (d2), s/veh	1.8	0.0	1.1	0.7	0.0	1.1	1.2	0.1	0.0	1.4	0.2	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.4	0.0	2.4	1.2	0.0	2.3	2.9	0.0	0.0	3.0	14.2	0.7
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	59.7	0.0	53.5	57.2	0.0	53.4	56.8	0.1	0.0	62.7	20.1	11.8
LnGrp LOS	E	A	D	E	A	D	E	A	A	E	C	B
Approach Vol, veh/h	148				111		1556				1410	
Approach Delay, s/veh	56.5				54.7		3.7				22.6	
Approach LOS	E				D		A				C	
Timer - Assigned Phs	1	2	4		5	6	8					
Phs Duration (G+Y+Rc), s	2.8	96.5	20.7		13.2	96.2	20.7					
Change Period (Y+Rc), s	4.5	7.2	4.6		4.5	7.2	4.6					
Max Green Setting (Gmax), s	34.5	45.2	34.0		12.5	67.2	34.0					
Max Q Clear Time (g_c+I), s	19.5	2.0	14.2		8.9	34.3	10.9					
Green Ext Time (p_c), s	0.1	13.4	0.6		0.0	10.4	0.5					
Intersection Summary												
HCM 6th Ctrl Delay			16.1									
HCM 6th LOS			B									

HCM 6th Signalized Intersection Summary

16: Trautwein Road & Van Buren Boulevard

Woodcrest Christian School Expansion
Opening Year (2029) With Project AM



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	441	1389	142	194	1754	494	233	773	151	485	454	406
Future Volume (veh/h)	441	1389	142	194	1754	494	233	773	151	485	454	406
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No			No			No		
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	479	1510	154	211	1907	537	253	840	164	527	493	441
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	1378	2296	1234	234	1867	760	237	902	176	394	1026	1082
Arrive On Green	0.52	0.85	0.85	0.26	0.72	0.72	0.13	0.30	0.30	0.19	0.47	0.47
Sat Flow, veh/h	3510	3610	1609	1810	5187	1609	1810	3010	588	3510	3610	1585
Grp Volume(v), veh/h	479	1510	154	211	1907	537	253	504	500	527	493	441
Grp Sat Flow(s),veh/h/ln	1755	1805	1609	1810	1729	1609	1810	1805	1792	1755	1805	1585
Q Serve(g_s), s	10.4	18.9	1.4	14.6	46.8	0.0	17.0	35.3	35.3	14.6	12.1	8.4
Cycle Q Clear(g_c), s	10.4	18.9	1.4	14.6	46.8	0.0	17.0	35.3	35.3	14.6	12.1	8.4
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.33	1.00		1.00
Lane Grp Cap(c), veh/h	1378	2296	1234	234	1867	760	237	541	537	394	1026	1082
V/C Ratio(X)	0.35	0.66	0.12	0.90	1.02	0.71	1.07	0.93	0.93	1.34	0.48	0.41
Avail Cap(c_a), veh/h	1378	2296	1234	383	1867	760	237	555	551	394	1026	1082
HCM Platoon Ratio	1.33	1.33	1.33	2.00	2.00	2.00	1.00	1.00	1.00	1.67	1.67	1.67
Upstream Filter(I)	0.87	0.87	0.87	0.68	0.68	0.68	1.00	1.00	1.00	0.86	0.86	0.86
Uniform Delay (d), s/veh	21.4	5.1	1.6	47.4	18.2	9.3	56.5	44.2	44.2	52.8	27.6	11.8
Incr Delay (d2), s/veh	0.0	1.3	0.2	7.1	22.8	3.8	78.0	22.4	22.6	165.8	0.3	0.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.8	4.0	0.4	6.0	10.2	5.1	12.8	18.7	18.6	14.8	4.5	4.7
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	21.4	6.4	1.7	54.5	41.0	13.0	134.5	66.7	66.8	218.6	27.9	12.0
LnGrp LOS	C	A	A	D	F	B	F	E	E	F	C	B
Approach Vol, veh/h	2143		2655				1257			1461		
Approach Delay, s/veh	9.4		36.4				80.4			91.9		
Approach LOS	A		D				F			F		
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	31.3	90.2	22.0	43.1	58.6	53.0	20.8	44.3				
Change Period (Y+Rc), s	4.5	6.2	5.0	6.2	6.2	* 6.2	6.2	* 5.4				
Max Green Setting (Gmax), s	27.5	26.8	17.0	36.8	7.0	* 47	14.6	* 40				
Max Q Clear Time (g_c+11g), s	116.6	20.9	19.0	14.1	12.4	48.8	16.6	37.3				
Green Ext Time (p_c), s	0.2	4.4	0.0	4.6	0.0	0.0	0.0	1.6				

Intersection Summary

HCM 6th Ctrl Delay 46.9

HCM 6th LOS D

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

HCM 6th Signalized Intersection Summary

17: Van Buren Boulevard & Shopping Ctr Dwy

Woodcrest Christian School Expansion
Opening Year (2029) With Project AM



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations	↰	↑↑	↑↑↑		↰	↰
Traffic Volume (veh/h)	37	1985	2037	103	85	35
Future Volume (veh/h)	37	1985	2037	103	85	35
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00			0.98	1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No	No		No	
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	39	2112	2167	110	90	37
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	0	0	0	0	0	0
Cap, veh/h	671	3060	2129	107	120	107
Arrive On Green	0.74	1.00	0.84	0.84	0.07	0.07
Sat Flow, veh/h	1810	3705	5221	255	1810	1610
Grp Volume(v), veh/h	39	2112	1480	797	90	37
Grp Sat Flow(s), veh/h/ln	1810	1805	1729	1847	1810	1610
Q Serve(g_s), s	0.8	0.0	54.8	54.8	6.4	2.9
Cycle Q Clear(g_c), s	0.8	0.0	54.8	54.8	6.4	2.9
Prop In Lane	1.00			0.14	1.00	1.00
Lane Grp Cap(c), veh/h	671	3060	1458	779	120	107
V/C Ratio(X)	0.06	0.69	1.02	1.02	0.75	0.35
Avail Cap(c_a), veh/h	671	3060	1458	779	487	434
HCM Platoon Ratio	2.00	2.00	2.00	2.00	1.00	1.00
Upstream Filter(I)	0.09	0.09	0.09	0.09	1.00	1.00
Uniform Delay (d), s/veh	10.7	0.0	10.2	10.2	59.6	58.0
Incr Delay (d2), s/veh	0.0	0.1	11.3	16.6	9.1	1.9
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%), veh/ln	0.3	0.1	6.1	7.7	3.2	2.6
Unsig. Movement Delay, s/veh						
LnGrp Delay(d), s/veh	10.7	0.1	21.5	26.8	68.7	59.9
LnGrp LOS	B	A	F	F	E	E
Approach Vol, veh/h		2151	2277		127	
Approach Delay, s/veh		0.3	23.4		66.1	
Approach LOS		A	C		E	
Timer - Assigned Phs		2		4	5	6
Phs Duration (G+Y+Rc), s		117.4		12.6	55.4	62.0
Change Period (Y+Rc), s		7.2		4.0	7.2	* 7.2
Max Green Setting (Gmax), s		83.8		35.0	24.5	* 55
Max Q Clear Time (g_c+l1), s		2.0		8.4	2.8	56.8
Green Ext Time (p_c), s		34.1		0.3	0.0	0.0

Intersection Summary

HCM 6th Ctrl Delay	13.7
HCM 6th LOS	B

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

HCM 6th Signalized Intersection Summary

18: Barton Street & Van Buren Boulevard

Woodcrest Christian School Expansion

Opening Year (2029) With Project AM



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	205	1552	401	374	1870	35	447	110	460	87	164	358
Future Volume (veh/h)	205	1552	401	374	1870	35	447	110	460	87	164	358
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No				No				No			
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	220	1669	431	402	2011	38	481	118	495	94	176	385
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	1659	3136	776	425	2048	39	459	646	547	97	135	296
Arrive On Green	0.30	0.36	0.36	0.24	0.39	0.39	0.13	0.34	0.34	0.05	0.26	0.26
Sat Flow, veh/h	1810	2868	709	1810	5241	99	3510	1900	1610	1810	531	1161
Grp Volume(v), veh/h	220	1023	1077	402	1326	723	481	118	495	94	0	561
Grp Sat Flow(s),veh/h/ln	1810	1805	1772	1810	1729	1882	1755	1900	1610	1810	0	1691
Q Serve(g_s), s	11.5	0.0	0.0	28.4	49.3	49.4	17.0	5.7	38.1	6.7	0.0	33.2
Cycle Q Clear(g_c), s	11.5	0.0	0.0	28.4	49.3	49.4	17.0	5.7	38.1	6.7	0.0	33.2
Prop In Lane	1.00		0.40	1.00		0.05	1.00		1.00	1.00		0.69
Lane Grp Cap(c), veh/h	1659	1974	1938	425	1351	736	459	646	547	97	0	432
V/C Ratio(X)	0.13	0.52	0.56	0.95	0.98	0.98	1.05	0.18	0.90	0.96	0.00	1.30
Avail Cap(c_a), veh/h	1659	1974	1938	452	1351	736	459	646	547	97	0	432
HCM Platoon Ratio	0.33	0.33	0.33	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.64	0.64	0.64	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	7.8	0.0	0.0	48.9	39.1	39.2	56.5	30.2	40.9	61.4	0.0	48.4
Incr Delay (d2), s/veh	0.0	0.6	0.7	27.4	20.4	29.3	55.1	0.1	18.5	79.0	0.0	150.7
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	0.3	0.4	15.6	23.4	27.3	10.8	2.6	17.3	5.3	0.0	32.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	7.8	0.6	0.7	76.3	59.6	68.4	111.6	30.3	59.3	140.4	0.0	199.1
LnGrp LOS	A	A	A	E	E	E	F	C	E	F	A	F
Approach Vol, veh/h	2320				2451				1094		655	
Approach Delay, s/veh	1.4				64.9				79.2		190.7	
Approach LOS	A				E				E		F	
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	35.1	152.7	22.0	39.0	129.8	58.0	11.0	50.0				
Change Period (Y+Rc), s	4.5	7.2	5.0	* 5.8	7.2	* 7.2	4.0	5.8				
Max Green Setting (Gmax), s	32.5	26.0	17.0	* 33	7.2	* 51	7.0	43.0				
Max Q Clear Time (g_c+0.4), s	30.4	2.0	19.0	35.2	13.5	51.4	8.7	40.1				
Green Ext Time (p_c), s	0.2	17.2	0.0	0.0	0.0	0.0	0.0	0.8				

Intersection Summary

HCM 6th Ctrl Delay 57.3

HCM 6th LOS E

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Intersection												
Int Delay, s/veh	0											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↑↑			↑↑				↗			↗
Traffic Vol, veh/h	0	2173	0	0	2542	8	0	0	0	0	0	0
Future Vol, veh/h	0	2173	0	0	2542	8	0	0	0	0	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	0	-	-	0
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	94	94	94	94	94	94	94	94	94	94	94	94
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	0	2312	0	0	2704	9	0	0	0	0	0	0
Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	-	0	0	-	-	0	-	-	1156	-	-	1357
Stage 1	-	-	-	-	-	-	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-	-	-	-	-	-	-
Critical Hdwy	-	-	-	-	-	-	-	-	6.9	-	-	6.9
Critical Hdwy Stg 1	-	-	-	-	-	-	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-	-	-	-	-	-	-
Follow-up Hdwy	-	-	-	-	-	-	-	-	3.3	-	-	3.3
Pot Cap-1 Maneuver	0	-	-	0	-	-	0	0	*179	0	0	*36
Stage 1	0	-	-	0	-	-	0	0	-	0	0	-
Stage 2	0	-	-	0	-	-	0	0	-	0	0	-
Platoon blocked, %		-	-		-	-			1			1
Mov Cap-1 Maneuver	-	-	-	-	-	-	-	-	*179	-	-	*36
Mov Cap-2 Maneuver	-	-	-	-	-	-	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-	-	-	-	-	-	-
Approach	EB		WB			NB			SB			
HCM Control Delay, s	0		0			0			0			
HCM LOS						A			A			
Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBT	WBR	SBLn1						
Capacity (veh/h)		-	-	-	-	-						
HCM Lane V/C Ratio		-	-	-	-	-						
HCM Control Delay (s)		0	-	-	-	-						
HCM Lane LOS		A	-	-	-	-						
HCM 95th %tile Q(veh)		-	-	-	-	-						
Notes												
~: Volume exceeds capacity		\$: Delay exceeds 300s			+: Computation Not Defined				*: All major volume in platoon			

Intersection						
Int Delay, s/veh	0.2					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	0	0	22	513	271	166
Future Vol, veh/h	0	0	22	513	271	166
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	95	95	95	85	85	95
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	0	0	23	604	319	175
Major/Minor	Minor2	Major1		Major2		
Conflicting Flow All	1057	407	494	0	-	0
Stage 1	407	-	-	-	-	-
Stage 2	650	-	-	-	-	-
Critical Hdwy	6.4	6.2	4.1	-	-	-
Critical Hdwy Stg 1	5.4	-	-	-	-	-
Critical Hdwy Stg 2	5.4	-	-	-	-	-
Follow-up Hdwy	3.5	3.3	2.2	-	-	-
Pot Cap-1 Maneuver	251	648	1080	-	-	-
Stage 1	676	-	-	-	-	-
Stage 2	523	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	243	648	1080	-	-	-
Mov Cap-2 Maneuver	243	-	-	-	-	-
Stage 1	654	-	-	-	-	-
Stage 2	523	-	-	-	-	-
Approach	EB	NB		SB		
HCM Control Delay, s	0	0.3		0		
HCM LOS	A					
Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR	
Capacity (veh/h)	1080	-	-	-	-	
HCM Lane V/C Ratio	0.021	-	-	-	-	
HCM Control Delay (s)	8.4	0	0	-	-	
HCM Lane LOS	A	A	A	-	-	
HCM 95th %tile Q(veh)	0.1	-	-	-	-	

Intersection						
Int Delay, s/veh	6.9					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	188	49	41	330	187	77
Future Vol, veh/h	188	49	41	330	187	77
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	95	95	95	85	85	95
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	198	52	43	388	220	81
Major/Minor	Minor2	Major1		Major2		
Conflicting Flow All	735	261	301	0	-	0
Stage 1	261	-	-	-	-	-
Stage 2	474	-	-	-	-	-
Critical Hdwy	6.4	6.2	4.1	-	-	-
Critical Hdwy Stg 1	5.4	-	-	-	-	-
Critical Hdwy Stg 2	5.4	-	-	-	-	-
Follow-up Hdwy	3.5	3.3	2.2	-	-	-
Pot Cap-1 Maneuver	390	783	1272	-	-	-
Stage 1	787	-	-	-	-	-
Stage 2	630	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	373	783	1272	-	-	-
Mov Cap-2 Maneuver	373	-	-	-	-	-
Stage 1	753	-	-	-	-	-
Stage 2	630	-	-	-	-	-
Approach	EB	NB		SB		
HCM Control Delay, s	25.6	0.8		0		
HCM LOS	D					
Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR	
Capacity (veh/h)	1272	-	418	-	-	
HCM Lane V/C Ratio	0.034	-	0.597	-	-	
HCM Control Delay (s)	7.9	0	25.6	-	-	
HCM Lane LOS	A	A	D	-	-	
HCM 95th %tile Q(veh)	0.1	-	3.8	-	-	

Intersection						
Int Delay, s/veh	0					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	1	0	0	380	239	1
Future Vol, veh/h	1	0	0	380	239	1
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	95	95	95	87	87	95
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	1	0	0	437	275	1
Major/Minor	Minor2	Major1		Major2		
Conflicting Flow All	713	276	276	0	-	0
Stage 1	276	-	-	-	-	-
Stage 2	437	-	-	-	-	-
Critical Hdwy	6.4	6.2	4.1	-	-	-
Critical Hdwy Stg 1	5.4	-	-	-	-	-
Critical Hdwy Stg 2	5.4	-	-	-	-	-
Follow-up Hdwy	3.5	3.3	2.2	-	-	-
Pot Cap-1 Maneuver	401	768	1299	-	-	-
Stage 1	775	-	-	-	-	-
Stage 2	655	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	401	768	1299	-	-	-
Mov Cap-2 Maneuver	401	-	-	-	-	-
Stage 1	775	-	-	-	-	-
Stage 2	655	-	-	-	-	-
Approach	EB	NB		SB		
HCM Control Delay, s	14	0		0		
HCM LOS	B					
Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR	
Capacity (veh/h)	1299	-	401	-	-	
HCM Lane V/C Ratio	-	-	0.003	-	-	
HCM Control Delay (s)	0	-	14	-	-	
HCM Lane LOS	A	-	B	-	-	
HCM 95th %tile Q(veh)	0	-	0	-	-	

HCM 6th Signalized Intersection Summary

1: Washington Street & Van Buren Boulevard

Woodcrest Christian School Expansion
Opening Year (2029) With Project Afternoon

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	150	1545	117	230	1637	676	134	353	187	734	341	118
Future Volume (veh/h)	150	1545	117	230	1637	676	134	353	187	734	341	118
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		0.99	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	160	1644	124	245	1741	719	143	376	199	781	363	126
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	146	2104	157	132	2204	982	196	499	221	621	949	422
Arrive On Green	0.08	0.62	0.62	0.07	0.61	0.61	0.06	0.14	0.14	0.18	0.26	0.26
Sat Flow, veh/h	1810	3404	255	1810	3610	1609	3510	3610	1600	3510	3610	1605
Grp Volume(v), veh/h	160	865	903	245	1741	719	143	376	199	781	363	126
Grp Sat Flow(s),veh/h/ln	1810	1805	1854	1810	1805	1609	1755	1805	1600	1755	1805	1605
Q Serve(g_s), s	10.5	45.7	47.1	9.5	47.2	40.9	5.2	13.0	15.9	23.0	10.7	8.2
Cycle Q Clear(g_c), s	10.5	45.7	47.1	9.5	47.2	40.9	5.2	13.0	15.9	23.0	10.7	8.2
Prop In Lane	1.00		0.14	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	146	1116	1146	132	2204	982	196	499	221	621	949	422
V/C Ratio(X)	1.09	0.78	0.79	1.85	0.79	0.73	0.73	0.75	0.90	1.26	0.38	0.30
Avail Cap(c_a), veh/h	146	1116	1146	132	2204	982	267	500	221	621	949	422
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	59.7	18.2	18.5	60.2	19.1	17.8	60.4	53.9	55.1	53.5	39.3	38.3
Incr Delay (d2), s/veh	102.1	5.3	5.5	411.3	3.0	4.8	6.3	6.4	34.9	128.6	0.3	0.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	8.8	18.3	19.4	19.3	18.2	15.5	2.5	6.3	8.5	21.0	4.7	3.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	161.8	23.5	24.0	471.6	22.0	22.7	66.7	60.3	90.1	182.1	39.5	38.7
LnGrp LOS	F	C	C	F	C	C	E	E	F	F	D	D
Approach Vol, veh/h		1928			2705			718			1270	
Approach Delay, s/veh		35.2			62.9			69.8			127.1	
Approach LOS		D			E			E			F	
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	14.0	87.2	11.8	40.0	15.0	86.2	28.0	23.8				
Change Period (Y+Rc), s	4.5	6.2	4.5	5.8	4.5	6.2	5.0	* 5.8				
Max Green Setting (Gmax), s	9.5	58.7	9.9	30.9	10.5	57.7	23.0	* 18				
Max Q Clear Time (g_c+I1), s	11.5	49.1	7.2	12.7	12.5	49.2	25.0	17.9				
Green Ext Time (p_c), s	0.0	7.0	0.1	2.3	0.0	7.2	0.0	0.0				

Intersection Summary

HCM 6th Ctrl Delay	67.9
HCM 6th LOS	E

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

HCM 6th Signalized Intersection Summary

Woodcrest Christian School Expansion

2: Alta Cresta Avenue/Chicago Avenue & Van Buren Boulevard Opening Year (2029) With Project Afternoon

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	135	2264	180	53	2488	102	91	31	29	112	27	62
Future Volume (veh/h)	135	2264	180	53	2488	102	91	31	29	112	27	62
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		0.98	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No			No			No		
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	147	2461	196	58	2704	111	99	34	32	122	29	67
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	104	2394	1066	85	2305	94	111	68	64	111	39	89
Arrive On Green	0.06	0.66	0.66	0.06	0.87	0.87	0.06	0.08	0.08	0.06	0.08	0.08
Sat Flow, veh/h	1810	3610	1608	1810	3531	144	1810	898	845	1810	508	1175
Grp Volume(v), veh/h	147	2461	196	58	1371	1444	99	0	66	122	0	96
Grp Sat Flow(s),veh/h/ln	1810	1805	1608	1810	1805	1870	1810	0	1744	1810	0	1683
Q Serve(g_s), s	7.5	86.2	6.1	4.1	84.9	84.9	7.1	0.0	4.7	8.0	0.0	7.3
Cycle Q Clear(g_c), s	7.5	86.2	6.1	4.1	84.9	84.9	7.1	0.0	4.7	8.0	0.0	7.3
Prop In Lane	1.00		1.00	1.00		0.08	1.00		0.48	1.00		0.70
Lane Grp Cap(c), veh/h	104	2394	1066	85	1178	1221	111	0	132	111	0	128
V/C Ratio(X)	1.41	1.03	0.18	0.68	1.16	1.18	0.89	0.00	0.50	1.10	0.00	0.75
Avail Cap(c_a), veh/h	104	2394	1066	104	1178	1221	111	0	241	111	0	240
HCM Platoon Ratio	1.00	1.00	1.00	1.33	1.33	1.33	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	0.36	0.36	0.36	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	61.3	21.9	8.4	60.0	8.6	8.6	60.6	0.0	57.7	61.0	0.0	58.9
Incr Delay (d2), s/veh	231.0	26.0	0.4	4.7	77.5	85.5	52.3	0.0	2.9	113.3	0.0	8.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	10.0	38.4	2.1	1.9	30.6	34.4	4.8	0.0	2.2	7.2	0.0	3.4
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	292.2	47.9	8.8	64.7	86.1	94.1	112.8	0.0	60.6	174.3	0.0	67.5
LnGrp LOS	F	F	A	E	F	F	F	A	E	F	A	E
Approach Vol, veh/h	2804				2873				165		218	
Approach Delay, s/veh	57.9				89.7				91.9		127.3	
Approach LOS	E				F				F		F	
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	10.6	92.4	12.0	14.9	12.0	91.1	12.0	14.9				
Change Period (Y+Rc), s	4.5	6.2	4.0	* 5.1	4.5	6.2	4.0	5.1				
Max Green Setting (Gmax), s	7.5	76.7	8.0	* 19	7.5	76.7	8.0	18.0				
Max Q Clear Time (g_c+I1), s	6.1	88.2	9.1	9.3	9.5	86.9	10.0	6.7				
Green Ext Time (p_c), s	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.2				
Intersection Summary												
HCM 6th Ctrl Delay	76.4											
HCM 6th LOS	E											
Notes												

HCM 6th Signalized Intersection Summary

3: Van Buren Village Driveway & Van Buren Boulevard

Woodcrest Christian School Expansion
Opening Year (2029) With Project Afternoon

	→	↘	↙	←	↖	↗
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑↑	↑	↓	↑↑	↓	↑
Traffic Volume (veh/h)	2365	39	118	2610	45	134
Future Volume (veh/h)	2365	39	118	2610	45	134
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)		1.00	1.00		1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	2489	41	124	2747	47	141
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	0	0	0	0	0	0
Cap, veh/h	2559	1142	142	2954	187	166
Arrive On Green	0.94	0.94	0.16	1.00	0.10	0.10
Sat Flow, veh/h	3705	1610	1810	3705	1810	1610
Grp Volume(v), veh/h	2489	41	124	2747	47	141
Grp Sat Flow(s),veh/h/ln	1805	1610	1810	1805	1810	1610
Q Serve(g_s), s	61.6	0.2	8.7	0.0	3.1	11.2
Cycle Q Clear(g_c), s	61.6	0.2	8.7	0.0	3.1	11.2
Prop In Lane		1.00	1.00		1.00	1.00
Lane Grp Cap(c), veh/h	2559	1142	142	2954	187	166
V/C Ratio(X)	0.97	0.04	0.87	0.93	0.25	0.85
Avail Cap(c_a), veh/h	2559	1142	142	2954	262	233
HCM Platoon Ratio	1.33	1.33	2.00	2.00	1.00	1.00
Upstream Filter(I)	0.09	0.09	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	2.8	1.1	54.2	0.0	53.7	57.3
Incr Delay (d2), s/veh	1.9	0.0	40.8	6.7	0.7	18.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.6	0.1	5.2	2.7	1.5	5.4
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	4.8	1.1	95.0	6.7	54.4	75.4
LnGrp LOS	A	A	F	A	D	E
Approach Vol, veh/h	2530			2871	188	
Approach Delay, s/veh	4.7			10.5	70.2	
Approach LOS	A			B	E	
Timer - Assigned Phs	1	2			6	8
Phs Duration (G+Y+Rc), s	14.2	98.4			112.6	17.4
Change Period (Y+Rc), s	4.0	6.2			* 6.2	4.0
Max Green Setting (Gmax), s	10.2	86.8			* 1E2	18.8
Max Q Clear Time (g_c+I1), s	10.7	63.6			2.0	13.2
Green Ext Time (p_c), s	0.0	19.5			68.5	0.3
Intersection Summary						
HCM 6th Ctrl Delay			9.9			
HCM 6th LOS			A			
Notes						
* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.						

HCM 6th TWSC
4: Little Court & Van Buren Boulevard

Woodcrest Christian School Expansion
Opening Year (2029) With Project Afternoon

Intersection						
Int Delay, s/veh	0					
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑↑	↗		↑↑		↗
Traffic Vol, veh/h	2494	5	0	2728	0	2
Future Vol, veh/h	2494	5	0	2728	0	2
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	0	-	-	-	0
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	90	90	90	90	90	90
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	2771	6	0	3031	0	2
Major/Minor	Major1	Major2		Minor1		
Conflicting Flow All	0	0	-	-	-	1386
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	-	-	-	-	6.9
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	-	-	-	-	3.3
Pot Cap-1 Maneuver	-	-	0	-	0	*36
Stage 1	-	-	0	-	0	-
Stage 2	-	-	0	-	0	-
Platoon blocked, %	-	-		-		1
Mov Cap-1 Maneuver	-	-	-	-	-	*36
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Approach	EB	WB		NB		
HCM Control Delay, s	0	0		111.5		
HCM LOS	F					
Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBT		
Capacity (veh/h)	36	-	-	-		
HCM Lane V/C Ratio	0.062	-	-	-		
HCM Control Delay (s)	111.5	-	-	-		
HCM Lane LOS	F	-	-	-		
HCM 95th %tile Q(veh)	0.2	-	-	-		
Notes						
~: Volume exceeds capacity		\$: Delay exceeds 300s		+: Computation Not Defined		*: All major volume in platoon

HCM 6th TWSC
5: Van Buren Boulevard & Ridgeway Avenue

Woodcrest Christian School Expansion
Opening Year (2029) With Project Afternoon

Intersection						
Int Delay, s/veh	0					
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	122	2375	2655	21	2	72
Future Vol, veh/h	122	2375	2655	21	2	72
Conflicting Peds, #/hr	3	0	0	3	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	90	90	90	90	90	90
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	136	2639	2950	23	2	80
Major/Minor	Major1	Major2		Minor2		
Conflicting Flow All	2976	0	-	0	4557	1490
Stage 1	-	-	-	-	2965	-
Stage 2	-	-	-	-	1592	-
Critical Hdwy	4.1	-	-	-	6.8	6.9
Critical Hdwy Stg 1	-	-	-	-	5.8	-
Critical Hdwy Stg 2	-	-	-	-	5.8	-
Follow-up Hdwy	2.2	-	-	-	3.5	3.3
Pot Cap-1 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	*101	-
Platoon blocked, %	2	-	-	-	2	2
Mov Cap-1 Maneuver	-	-	-	-	-	-
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	*101	-
Approach	EB	WB		SB		
HCM Control Delay, s	0					
HCM LOS	-					
Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1	
Capacity (veh/h)	-	-	-	-	-	
HCM Lane V/C Ratio	-	-	-	-	-	
HCM Control Delay (s)	-	-	-	-	-	
HCM Lane LOS	-	-	-	-	-	
HCM 95th %tile Q(veh)	-	-	-	-	-	
Notes						
~: Volume exceeds capacity		\$: Delay exceeds 300s		+: Computation Not Defined		*: All major volume in platoon

HCM 6th Signalized Intersection Summary

6: Dauchy Avenue & Van Buren Boulevard

Woodcrest Christian School Expansion
Opening Year (2029) With Project Afternoon

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	89	2001	291	176	2321	77	313	83	218	106	40	63
Future Volume (veh/h)	89	2001	291	176	2321	77	313	83	218	106	40	63
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		0.99	0.98		0.98	0.99		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No			No			No		
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	97	2175	316	191	2523	84	340	90	237	115	43	68
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	97	1644	233	97	1871	828	403	97	256	174	406	336
Arrive On Green	0.02	0.17	0.17	0.07	0.69	0.69	0.05	0.21	0.21	0.05	0.21	0.21
Sat Flow, veh/h	1810	3171	449	1810	3610	1598	1810	454	1196	1810	1900	1572
Grp Volume(v), veh/h	97	1214	1277	191	2523	84	340	0	327	115	43	68
Grp Sat Flow(s),veh/h/ln	1810	1805	1815	1810	1805	1598	1810	0	1650	1810	1900	1572
Q Serve(g_s), s	7.0	67.4	67.4	7.0	67.4	2.3	7.0	0.0	25.3	6.5	2.4	4.6
Cycle Q Clear(g_c), s	7.0	67.4	67.4	7.0	67.4	2.3	7.0	0.0	25.3	6.5	2.4	4.6
Prop In Lane	1.00		0.25	1.00		1.00	1.00		0.72	1.00		1.00
Lane Grp Cap(c), veh/h	97	936	941	97	1871	828	403	0	353	174	406	336
V/C Ratio(X)	1.00	1.30	1.36	1.96	1.35	0.10	0.84	0.00	0.93	0.66	0.11	0.20
Avail Cap(c_a), veh/h	97	936	941	97	1871	828	403	0	381	174	438	363
HCM Platoon Ratio	0.33	0.33	0.33	1.33	1.33	1.33	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	0.09	0.09	0.09	1.00	0.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	63.8	53.9	53.9	60.3	20.2	10.1	46.7	0.0	50.1	40.0	41.1	42.0
Incr Delay (d2), s/veh	89.6	141.6	167.9	435.5	157.1	0.0	14.3	0.0	27.3	7.3	0.1	0.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	5.7	69.2	76.5	14.9	59.5	0.8	9.0	0.0	13.2	3.3	1.1	1.9
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	153.4	195.5	221.8	495.8	177.2	10.1	61.0	0.0	77.4	47.3	41.2	42.3
LnGrp LOS	F	F	F	F	F	B	E	A	E	D	D	D
Approach Vol, veh/h	2588			2798			667			226		
Approach Delay, s/veh	206.9			194.0			69.1			44.6		
Approach LOS	F			F			E			D		
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	12.0	74.6	11.0	32.4	12.0	74.6	11.0	32.4				
Change Period (Y+Rc), s	5.0	7.2	4.0	4.6	5.0	7.2	4.0	4.6				
Max Green Setting (Gmax), s	7.0	65.2	7.0	30.0	7.0	65.2	7.0	30.0				
Max Q Clear Time (g_c+I1), s	9.0	69.4	9.0	6.6	9.0	69.4	8.5	27.3				
Green Ext Time (p_c), s	0.0	0.0	0.0	0.4	0.0	0.0	0.0	0.6				
Intersection Summary												
HCM 6th Ctrl Delay	180.7											
HCM 6th LOS	F											

Intersection												
Int Delay, s/veh	14.4											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↰	↱		↰	↱		↰	↱		↰	↱
Traffic Vol, veh/h	172	1	36	6	0	25	18	345	9	18	352	94
Future Vol, veh/h	172	1	36	6	0	25	18	345	9	18	352	94
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	0	-	-	-	-	-	-	-	-	90
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	95	95	95	76	95	76	95	76	76	76	76	95
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	181	1	38	8	0	33	19	454	12	24	463	99
Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	1026	1015	463	1078	1108	460	562	0	0	466	0	0
Stage 1	511	511	-	498	498	-	-	-	-	-	-	-
Stage 2	515	504	-	580	610	-	-	-	-	-	-	-
Critical Hdwy	7.1	6.5	6.2	7.1	6.5	6.2	4.1	-	-	4.1	-	-
Critical Hdwy Stg 1	6.1	5.5	-	6.1	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.1	5.5	-	6.1	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.5	4	3.3	3.5	4	3.3	2.2	-	-	2.2	-	-
Pot Cap-1 Maneuver	215	240	603	198	212	605	1019	-	-	1106	-	-
Stage 1	549	540	-	558	548	-	-	-	-	-	-	-
Stage 2	546	544	-	504	488	-	-	-	-	-	-	-
Platoon blocked, %								-	-	-	-	-
Mov Cap-1 Maneuver	195	227	603	177	200	605	1019	-	-	1106	-	-
Mov Cap-2 Maneuver	195	227	-	177	200	-	-	-	-	-	-	-
Stage 1	535	523	-	544	534	-	-	-	-	-	-	-
Stage 2	503	530	-	456	472	-	-	-	-	-	-	-
Approach	EB			WB			NB			SB		
HCM Control Delay, s	83			14.7			0.3			0.3		
HCM LOS	F			B								
Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	EBLn2	WBLn1	SBL	SBT	SBR			
Capacity (veh/h)	1019	-	-	195	603	412	1106	-	-			
HCM Lane V/C Ratio	0.019	-	-	0.934	0.063	0.099	0.021	-	-			
HCM Control Delay (s)	8.6	-	-	97.9	11.4	14.7	8.3	0	-			
HCM Lane LOS	A	-	-	F	B	B	A	A	-			
HCM 95th %tile Q(veh)	0.1	-	-	7.5	0.2	0.3	0.1	-	-			

HCM 6th AWSC
8: Taft Street/Dauchy Avenue & Krameria Avenue

Woodcrest Christian School Expansion
Opening Year (2029) With Project Afternoon

Intersection	
Intersection Delay, s/veh	45.7
Intersection LOS	E

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	39	350	27	7	284	71	13	32	9	179	41	73
Future Vol, veh/h	39	350	27	7	284	71	13	32	9	179	41	73
Peak Hour Factor	0.78	0.78	0.78	0.78	0.78	0.78	0.78	0.78	0.78	0.78	0.78	0.78
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	50	449	35	9	364	91	17	41	12	229	53	94
Number of Lanes	0	1	0	0	1	0	0	1	0	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	1	1	1
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	1	1	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	1	1	1	1
HCM Control Delay	65.2	41	13.4	29.8
HCM LOS	F	E	B	D

Lane	NBLn1	EBLn1	WBLn1	SBLn1
Vol Left, %	24%	9%	2%	61%
Vol Thru, %	59%	84%	78%	14%
Vol Right, %	17%	6%	20%	25%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	54	416	362	293
LT Vol	13	39	7	179
Through Vol	32	350	284	41
RT Vol	9	27	71	73
Lane Flow Rate	69	533	464	376
Geometry Grp	1	1	1	1
Degree of Util (X)	0.168	1	0.879	0.762
Departure Headway (Hd)	8.716	6.751	6.816	7.306
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	417	539	538	503
Service Time	6.659	4.81	4.77	5.234
HCM Lane V/C Ratio	0.165	0.989	0.862	0.748
HCM Control Delay	13.4	65.2	41	29.8
HCM Lane LOS	B	F	E	D
HCM 95th-tile Q	0.6	14.1	9.8	6.6

HCM 6th Signalized Intersection Summary

9: Wood Road & Van Buren Boulevard

Woodcrest Christian School Expansion
Opening Year (2029) With Project Afternoon



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	202	1722	330	274	1975	123	405	412	268	129	329	260
Future Volume (veh/h)	202	1722	330	274	1975	123	405	412	268	129	329	260
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.95	1.00		0.96	1.00		0.76	1.00		0.71
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No			No			No		
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	213	1813	347	288	2079	129	426	434	282	136	346	274
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	239	3009	1470	338	2879	1236	419	545	346	111	428	271
Arrive On Green	0.13	0.83	0.83	0.10	0.80	0.80	0.12	0.29	0.29	0.06	0.24	0.24
Sat Flow, veh/h	1810	3610	1533	3510	3610	1549	3510	1864	1183	1810	1805	1145
Grp Volume(v), veh/h	213	1813	347	288	2079	129	426	420	296	136	346	274
Grp Sat Flow(s),veh/h/ln	1810	1805	1533	1755	1805	1549	1755	1805	1241	1810	1805	1145
Q Serve(g_s), s	15.1	21.8	1.8	10.5	35.7	6.0	15.5	27.9	28.8	8.0	23.5	30.8
Cycle Q Clear(g_c), s	15.1	21.8	1.8	10.5	35.7	6.0	15.5	27.9	28.8	8.0	23.5	30.8
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.95	1.00		1.00
Lane Grp Cap(c), veh/h	239	3009	1470	338	2879	1236	419	528	363	111	428	271
V/C Ratio(X)	0.89	0.60	0.24	0.85	0.72	0.10	1.02	0.80	0.82	1.22	0.81	1.01
Avail Cap(c_a), veh/h	313	3009	1470	338	2879	1236	419	528	363	111	428	271
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.09	0.09	0.09	0.52	0.52	0.52	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	55.5	3.6	0.2	57.8	6.3	18.5	57.3	42.4	42.7	61.0	46.8	49.6
Incr Delay (d2), s/veh	2.2	0.1	0.0	10.2	0.8	0.1	48.6	8.3	13.5	156.4	11.1	57.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	6.8	4.1	0.0	5.0	9.0	0.7	9.6	13.4	10.0	8.5	11.7	12.9
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	57.7	3.7	0.2	68.0	7.1	18.6	105.8	50.7	56.2	217.4	57.9	106.8
LnGrp LOS	E	A	A	E	A	B	F	D	E	F	E	F
Approach Vol, veh/h	2373			2496			1142			756		
Approach Delay, s/veh	8.0			14.7			72.7			104.3		
Approach LOS	A			B			E			F		
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	8.0	117.4	21.0	36.6	22.7	112.7	13.8	43.8				
Change Period (Y+Rc), s	5.5	7.2	5.5	5.8	5.5	7.2	5.8	* 5.8				
Max Green Setting (Gmax), s	12.5	49.0	15.5	29.0	22.5	39.0	8.0	* 38				
Max Q Clear Time (g_c+1/2g), s	12.5	23.8	17.5	32.8	17.1	37.7	10.0	30.8				
Green Ext Time (p_c), s	0.0	16.4	0.0	0.0	0.1	1.2	0.0	2.7				

Intersection Summary

HCM 6th Ctrl Delay	32.2
HCM 6th LOS	C

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

HCM 6th Signalized Intersection Summary

10: Van Buren Boulevard & Bountiful Street

Woodcrest Christian School Expansion
Opening Year (2029) With Project Afternoon



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations	↰	↑↑↑	↑↑↑		↰	↑↑
Traffic Volume (veh/h)	272	2033	2168	28	17	223
Future Volume (veh/h)	272	2033	2168	28	17	223
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00			0.96	1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No	No		No	
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	296	2210	2357	30	18	242
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	0	0	0	0	0	0
Cap, veh/h	299	3849	2860	36	304	270
Arrive On Green	0.33	1.00	1.00	1.00	0.17	0.17
Sat Flow, veh/h	1810	5358	5447	67	1810	1610
Grp Volume(v), veh/h	296	2210	1543	844	18	242
Grp Sat Flow(s), veh/h/ln	1810	1729	1729	1885	1810	1610
Q Serve(g_s), s	21.2	0.0	0.0	0.0	1.1	19.1
Cycle Q Clear(g_c), s	21.2	0.0	0.0	0.0	1.1	19.1
Prop In Lane	1.00			0.04	1.00	1.00
Lane Grp Cap(c), veh/h	299	3849	1875	1022	304	270
V/C Ratio(X)	0.99	0.57	0.82	0.83	0.06	0.90
Avail Cap(c_a), veh/h	299	3849	1875	1022	480	427
HCM Platoon Ratio	2.00	2.00	2.00	2.00	1.00	1.00
Upstream Filter(I)	0.09	0.09	0.25	0.25	1.00	1.00
Uniform Delay (d), s/veh	43.4	0.0	0.0	0.0	45.5	53.0
Incr Delay (d2), s/veh	13.1	0.1	1.1	2.0	0.1	14.0
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%), veh/ln	8.4	0.0	0.3	0.6	0.5	17.1
Unsig. Movement Delay, s/veh						
LnGrp Delay(d), s/veh	56.5	0.1	1.1	2.0	45.5	67.0
LnGrp LOS	E	A	A	A	D	E
Approach Vol, veh/h		2506	2387		260	
Approach Delay, s/veh		6.7	1.4		65.5	
Approach LOS		A	A		E	
Timer - Assigned Phs		2		4	5	6
Phs Duration (G+Y+Rc), s		103.7		26.3	26.0	77.7
Change Period (Y+Rc), s		7.2		4.5	4.5	7.2
Max Green Setting (Gmax), s		83.8		34.5	21.5	57.8
Max Q Clear Time (g_c+I1), s		2.0		21.1	23.2	2.0
Green Ext Time (p_c), s		32.9		0.7	0.0	30.2
Intersection Summary						
HCM 6th Ctrl Delay			7.2			
HCM 6th LOS			A			

HCM 6th Signalized Intersection Summary

11: Trautwein Road & Mission Grove Parkway S

Woodcrest Christian School Expansion
Opening Year (2029) With Project Afternoon



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	43	12	15	648	19	43	6	1756	548	151	1792	39
Future Volume (veh/h)	43	12	15	648	19	43	6	1756	548	151	1792	39
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.97	1.00		0.99	1.00		0.98	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No			No			No		
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	44	12	15	668	20	44	6	1810	565	156	1847	40
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	78	85	107	532	443	370	19	1809	1036	118	2007	887
Arrive On Green	0.04	0.11	0.11	0.15	0.23	0.23	0.00	0.17	0.17	0.07	0.56	0.56
Sat Flow, veh/h	1810	755	944	3510	1900	1589	1810	3610	1580	1810	3610	1596
Grp Volume(v), veh/h	44	0	27	668	20	44	6	1810	565	156	1847	40
Grp Sat Flow(s),veh/h/ln	1810	0	1700	1755	1900	1589	1810	1805	1580	1810	1805	1596
Q Serve(g_s), s	3.1	0.0	1.9	19.7	1.1	2.8	0.4	65.1	30.6	8.5	60.5	1.5
Cycle Q Clear(g_c), s	3.1	0.0	1.9	19.7	1.1	2.8	0.4	65.1	30.6	8.5	60.5	1.5
Prop In Lane	1.00		0.56	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	78	0	192	532	443	370	19	1809	1036	118	2007	887
V/C Ratio(X)	0.57	0.00	0.14	1.26	0.05	0.12	0.32	1.00	0.55	1.32	0.92	0.05
Avail Cap(c_a), veh/h	170	0	418	532	617	516	104	1809	1036	118	2007	887
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	0.33	0.33	0.33	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	1.00	1.00	0.38	0.38	0.38	1.00	1.00	1.00
Uniform Delay (d), s/veh	61.0	0.0	52.0	55.2	38.6	39.3	64.3	54.3	22.0	60.8	26.2	13.1
Incr Delay (d2), s/veh	2.4	0.0	0.3	129.8	0.0	0.1	1.3	13.2	0.8	190.7	8.4	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.5	0.0	0.8	18.1	0.5	1.1	0.2	34.6	12.9	10.1	25.5	0.5
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	63.4	0.0	52.3	184.9	38.7	39.5	65.6	67.5	22.8	251.4	34.6	13.2
LnGrp LOS	E	A	D	F	D	D	E	F	C	F	C	B
Approach Vol, veh/h	71		732			2381			2043			
Approach Delay, s/veh	59.2		172.2			56.9			50.8			
Approach LOS	E		F			E			D			
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	3.0	71.3	25.2	20.5	5.9	78.5	9.6	36.1				
Change Period (Y+Rc), s	4.5	6.2	5.5	5.8	4.5	6.2	4.0	* 5.8				
Max Green Setting (Gmax), s	4.5	47.8	19.7	32.0	7.5	48.8	12.2	* 42				
Max Q Clear Time (g_c+110), s	4.5	67.1	21.7	3.9	2.4	62.5	5.1	4.8				
Green Ext Time (p_c), s	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.2				

Intersection Summary

HCM 6th Ctrl Delay 70.7

HCM 6th LOS E

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

HCM 6th Signalized Intersection Summary

12: Trautwein Road & John F Kennedy Drive

Woodcrest Christian School Expansion

Opening Year (2029) With Project Afternoon



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↔	↑	↗	↗	↗		↗	↑↑	↗	↗	↑↑	↗
Traffic Volume (veh/h)	623	56	117	51	21	30	114	1627	92	13	1837	690
Future Volume (veh/h)	623	56	117	51	21	30	114	1627	92	13	1837	690
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		0.99	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No				No				No			
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	642	58	121	53	22	31	118	1677	95	13	1894	711
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	516	329	277	83	48	68	97	2175	969	37	2054	1151
Arrive On Green	0.15	0.17	0.17	0.05	0.07	0.07	0.04	0.40	0.40	0.03	0.76	0.76
Sat Flow, veh/h	3510	1900	1605	1810	710	1000	1810	3610	1607	1810	3610	1607
Grp Volume(v), veh/h	642	58	121	53	0	53	118	1677	95	13	1894	711
Grp Sat Flow(s),veh/h/ln	1755	1900	1605	1810	0	1710	1810	1805	1607	1810	1805	1607
Q Serve(g_s), s	19.1	3.4	8.8	3.7	0.0	3.9	7.0	52.3	4.8	0.9	54.9	22.4
Cycle Q Clear(g_c), s	19.1	3.4	8.8	3.7	0.0	3.9	7.0	52.3	4.8	0.9	54.9	22.4
Prop In Lane	1.00		1.00	1.00		0.58	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	516	329	277	83	0	116	97	2175	969	37	2054	1151
V/C Ratio(X)	1.24	0.18	0.44	0.64	0.00	0.46	1.21	0.77	0.10	0.36	0.92	0.62
Avail Cap(c_a), veh/h	516	626	528	148	0	434	97	2175	969	97	2054	1151
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	0.67	0.67	0.67	1.33	1.33	1.33
Upstream Filter(I)	1.00	1.00	1.00	1.00	0.00	1.00	0.63	0.63	0.63	0.34	0.34	0.34
Uniform Delay (d), s/veh	55.4	45.9	48.1	61.0	0.0	58.3	62.7	31.0	16.8	62.4	13.5	4.8
Incr Delay (d2), s/veh	125.7	0.3	1.1	7.9	0.0	2.8	140.2	1.7	0.1	2.0	3.2	0.9
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	7.3	1.6	3.6	1.9	0.0	1.8	7.0	23.7	1.9	0.4	12.7	4.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	181.1	46.1	49.2	68.8	0.0	61.0	202.9	32.7	17.0	64.4	16.7	5.6
LnGrp LOS	F	D	D	E	A	E	F	C	B	E	B	A
Approach Vol, veh/h	821			106			1890			2618		
Approach Delay, s/veh	152.1			64.9			42.5			14.0		
Approach LOS	F			E			D			B		
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	6.6	85.5	10.0	27.9	11.0	81.2	23.6	14.2				
Change Period (Y+Rc), s	4.0	7.2	4.0	* 5.4	4.0	7.2	4.5	5.4				
Max Green Setting (Gmax), s	49.8	10.6	* 43	7.0	49.8	19.1	33.0					
Max Q Clear Time (g_c+12, s)	54.3	5.7	10.8	9.0	56.9	21.1	5.9					
Green Ext Time (p_c), s	0.0	0.0	0.0	0.7	0.0	0.0	0.2					

Intersection Summary

HCM 6th Ctrl Delay 45.8

HCM 6th LOS D

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

HCM 6th Signalized Intersection Summary

13: Trautwein Road & Grove Community Drive

Woodcrest Christian School Expansion
Opening Year (2029) With Project Afternoon



Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	81	260	1572	87	374	1632
Future Volume (veh/h)	81	260	1572	87	374	1632
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00		1.00	1.00	
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No		No		No	
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	90	289	1747	97	416	1813
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90
Percent Heavy Veh, %	0	0	0	0	0	0
Cap, veh/h	189	681	2276	1014	476	2918
Arrive On Green	0.10	0.10	1.00	1.00	0.27	1.00
Sat Flow, veh/h	1810	2834	3705	1608	3510	3705
Grp Volume(v), veh/h	90	289	1747	97	416	1813
Grp Sat Flow(s), veh/h/ln	1810	1417	1805	1608	1755	1805
Q Serve(g_s), s	6.1	11.2	0.0	0.0	14.7	0.0
Cycle Q Clear(g_c), s	6.1	11.2	0.0	0.0	14.7	0.0
Prop In Lane	1.00	1.00		1.00	1.00	
Lane Grp Cap(c), veh/h	189	681	2276	1014	476	2918
V/C Ratio(X)	0.48	0.42	0.77	0.10	0.87	0.62
Avail Cap(c_a), veh/h	221	731	2276	1014	662	2918
HCM Platoon Ratio	1.00	1.00	2.00	2.00	2.00	2.00
Upstream Filter(I)	1.00	1.00	0.65	0.65	0.14	0.14
Uniform Delay (d), s/veh	54.8	41.8	0.0	0.0	46.3	0.0
Incr Delay (d2), s/veh	1.8	0.4	1.7	0.1	1.5	0.1
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%), veh/ln	2.9	4.0	0.5	0.0	5.4	0.1
Unsig. Movement Delay, s/veh						
LnGrp Delay(d), s/veh	56.7	42.2	1.7	0.1	47.8	0.1
LnGrp LOS	E	D	A	A	D	A
Approach Vol, veh/h	379		1844			2229
Approach Delay, s/veh	45.6		1.6			9.0
Approach LOS	D		A			A
Timer - Assigned Phs	1	2			6	8
Phs Duration (G+Y+Rc), s	23.1	88.2			111.3	18.7
Change Period (Y+Rc), s	5.5	6.2			6.2	5.1
Max Green Setting (Gmax), s	24.5	72.8			102.8	15.9
Max Q Clear Time (g_c+110, s)	110.7	2.0			2.0	13.2
Green Ext Time (p_c), s	0.9	22.3			24.5	0.4

Intersection Summary

HCM 6th Ctrl Delay	9.1
HCM 6th LOS	A

HCM 6th Signalized Intersection Summary

14: Trautwein Road & Orange Terrace Pkwy

Woodcrest Christian School Expansion
Opening Year (2029) With Project Afternoon



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	51	42	24	202	14	288	38	1317	278	313	1349	23
Future Volume (veh/h)	51	42	24	202	14	288	38	1317	278	313	1349	23
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		0.97	1.00		0.99	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No			No			No		
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	55	45	26	217	15	310	41	1416	299	337	1451	25
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	159	72	42	245	203	600	75	1915	847	382	2186	963
Arrive On Green	0.09	0.06	0.06	0.14	0.11	0.11	0.06	0.71	0.71	0.22	1.00	1.00
Sat Flow, veh/h	1810	1128	652	1810	1900	2735	1810	3610	1597	3510	3610	1590
Grp Volume(v), veh/h	55	0	71	217	15	310	41	1416	299	337	1451	25
Grp Sat Flow(s),veh/h/ln	1810	0	1779	1810	1900	1367	1810	1805	1597	1755	1805	1590
Q Serve(g_s), s	3.7	0.0	5.1	15.3	0.9	9.6	2.9	31.4	9.5	12.1	0.0	0.0
Cycle Q Clear(g_c), s	3.7	0.0	5.1	15.3	0.9	9.6	2.9	31.4	9.5	12.1	0.0	0.0
Prop In Lane	1.00		0.37	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	159	0	114	245	203	600	75	1915	847	382	2186	963
V/C Ratio(X)	0.35	0.00	0.62	0.89	0.07	0.52	0.54	0.74	0.35	0.88	0.66	0.03
Avail Cap(c_a), veh/h	362	0	452	434	576	1137	97	1915	847	405	2186	963
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.33	1.33	1.33	2.00	2.00	2.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	1.00	1.00	0.62	0.62	0.62	0.76	0.76	0.76
Uniform Delay (d), s/veh	55.8	0.0	59.3	55.2	52.3	25.8	60.2	13.6	10.4	50.0	0.0	0.0
Incr Delay (d2), s/veh	0.5	0.0	5.5	4.3	0.2	0.7	1.4	1.6	0.7	14.5	1.2	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.7	0.0	2.5	7.3	0.5	3.2	1.3	8.7	3.2	5.4	0.4	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	56.2	0.0	64.8	59.5	52.4	26.5	61.6	15.2	11.1	64.5	1.2	0.0
LnGrp LOS	E	A	E	E	D	C	E	B	B	E	A	A
Approach Vol, veh/h	126			542			1756			1813		
Approach Delay, s/veh	61.1			40.4			15.6			13.0		
Approach LOS	E			D			B			B		
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	9.2	75.2	21.6	14.1	9.4	84.9	17.2	18.5				
Change Period (Y+Rc), s	5.0	6.2	4.0	5.8	4.0	6.2	5.8	* 4.6				
Max Green Setting (Gmax), s	15.0	29.8	31.2	33.0	7.0	38.8	26.0	* 39				
Max Q Clear Time (g_c+1/4), s	11.4	33.4	17.3	7.1	4.9	2.0	5.7	11.6				
Green Ext Time (p_c), s	0.1	0.0	0.3	0.3	0.0	13.1	0.1	1.4				

Intersection Summary

HCM 6th Ctrl Delay	19.0
HCM 6th LOS	B

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

HCM 6th Signalized Intersection Summary

15: Trautwein Road & Shopping Ctr Dwy

Woodcrest Christian School Expansion

Opening Year (2029) With Project Afternoon



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	167	45	132	96	32	92	176	1336	25	201	1125	168
Future Volume (veh/h)	167	45	132	96	32	92	176	1336	25	201	1125	168
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		0.98	1.00		0.97	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No			No			No		
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	172	46	136	99	33	95	181	1377	26	207	1160	173
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	255	93	276	209	94	272	205	1890	815	235	1950	860
Arrive On Green	0.22	0.22	0.22	0.22	0.22	0.22	0.23	1.00	1.00	0.09	0.36	0.36
Sat Flow, veh/h	1280	422	1249	1219	427	1229	1810	3610	1558	1810	3610	1592
Grp Volume(v), veh/h	172	0	182	99	0	128	181	1377	26	207	1160	173
Grp Sat Flow(s), veh/h/ln	1280	0	1671	1219	0	1656	1810	1805	1558	1810	1805	1592
Q Serve(g_s), s	17.0	0.0	12.4	10.0	0.0	8.5	12.6	0.0	0.0	14.7	34.0	9.7
Cycle Q Clear(g_c), s	25.5	0.0	12.4	22.4	0.0	8.5	12.6	0.0	0.0	14.7	34.0	9.7
Prop In Lane	1.00		0.75	1.00		0.74	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	255	0	370	209	0	366	205	1890	815	235	1950	860
V/C Ratio(X)	0.67	0.00	0.49	0.47	0.00	0.35	0.88	0.73	0.03	0.88	0.60	0.20
Avail Cap(c_a), veh/h	307	0	437	258	0	433	383	1890	815	383	1950	860
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00	2.00	0.67	0.67	0.67
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	0.09	0.09	0.09	0.66	0.66	0.66
Uniform Delay (d), s/veh	53.5	0.0	44.2	54.0	0.0	42.7	49.4	0.0	0.0	58.3	29.9	22.2
Incr Delay (d2), s/veh	4.4	0.0	1.0	1.7	0.0	0.6	0.5	0.2	0.0	5.3	0.9	0.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	5.8	0.0	5.3	3.2	0.0	3.6	4.9	0.1	0.0	7.2	15.4	3.7
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	57.9	0.0	45.2	55.7	0.0	43.3	49.9	0.2	0.0	63.6	30.8	22.5
LnGrp LOS	E	A	D	E	A	D	D	A	A	E	C	C
Approach Vol, veh/h	354			227			1584			1540		
Approach Delay, s/veh	51.4			48.7			5.9			34.3		
Approach LOS	D			D			A			C		
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	31.4	75.2		33.4	19.2	77.4		33.4				
Change Period (Y+Rc), s	4.5	7.2		4.6	4.5	7.2		4.6				
Max Green Setting (Gmax), s	27.5	52.2		34.0	27.5	52.2		34.0				
Max Q Clear Time (g_c+11g), s	11.6	2.0		27.5	14.6	36.0		24.4				
Green Ext Time (p_c), s	0.2	12.9		0.9	0.2	7.4		0.7				

Intersection Summary

HCM 6th Ctrl Delay	24.7
HCM 6th LOS	C

HCM 6th Signalized Intersection Summary

16: Trautwein Road & Van Buren Boulevard

Woodcrest Christian School Expansion
Opening Year (2029) With Project Afternoon



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	531	1314	215	183	1715	668	193	485	107	487	550	357
Future Volume (veh/h)	531	1314	215	183	1715	668	193	485	107	487	550	357
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		0.99	1.00		0.96	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No			No			No		
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	559	1383	226	193	1805	703	203	511	113	513	579	376
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	538	1525	833	146	1748	676	175	729	160	297	825	607
Arrive On Green	0.31	0.84	0.84	0.16	0.67	0.67	0.10	0.25	0.25	0.14	0.38	0.38
Sat Flow, veh/h	3510	3610	1603	1810	5187	1602	1810	2919	642	3510	3610	1576
Grp Volume(v), veh/h	559	1383	226	193	1805	703	203	315	309	513	579	376
Grp Sat Flow(s),veh/h/ln	1755	1805	1603	1810	1729	1602	1810	1805	1756	1755	1805	1576
Q Serve(g_s), s	19.9	33.0	0.8	10.5	43.8	43.8	12.6	20.6	20.8	11.0	17.6	0.0
Cycle Q Clear(g_c), s	19.9	33.0	0.8	10.5	43.8	43.8	12.6	20.6	20.8	11.0	17.6	0.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.37	1.00		1.00
Lane Grp Cap(c), veh/h	538	1525	833	146	1748	676	175	451	439	297	825	607
V/C Ratio(X)	1.04	0.91	0.27	1.32	1.03	1.04	1.16	0.70	0.70	1.73	0.70	0.62
Avail Cap(c_a), veh/h	538	1525	833	146	1748	676	175	619	603	297	1300	814
HCM Platoon Ratio	2.00	2.00	2.00	2.00	2.00	2.00	1.00	1.00	1.00	1.67	1.67	1.67
Upstream Filter(I)	0.85	0.85	0.85	0.44	0.44	0.44	1.00	1.00	1.00	0.78	0.78	0.78
Uniform Delay (d), s/veh	45.1	8.4	1.6	54.5	21.2	8.5	58.7	44.3	44.4	55.8	36.4	24.5
Incr Delay (d2), s/veh	46.3	8.2	0.7	163.9	23.7	34.1	118.1	2.1	2.3	338.0	0.9	0.8
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.2	5.3	0.6	10.9	11.4	9.4	11.4	9.3	9.2	18.4	6.5	7.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	91.4	16.6	2.3	218.4	44.9	42.7	176.8	46.4	46.7	393.8	37.3	25.3
LnGrp LOS	F	B	A	F	F	F	F	D	D	F	D	C
Approach Vol, veh/h	2168			2701			827			1468		
Approach Delay, s/veh	34.4			56.7			78.5			158.8		
Approach LOS	C			E			E			F		
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	5.0	61.1	18.0	35.9	26.1	50.0	16.0	37.9				
Change Period (Y+Rc), s	4.5	6.2	5.4	* 6.2	6.2	* 6.2	5.0	5.4				
Max Green Setting (Gmax), s	40.5	42.8	8.0	* 47	9.0	* 44	11.0	44.6				
Max Q Clear Time (g_c+11.5), s	112.5	35.0	14.6	19.6	21.9	45.8	13.0	22.8				
Green Ext Time (p_c), s	0.0	5.3	0.0	5.1	0.0	0.0	0.0	3.6				

Intersection Summary

HCM 6th Ctrl Delay 73.4

HCM 6th LOS E

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

HCM 6th Signalized Intersection Summary

17: Van Buren Boulevard & Shopping Ctr Dwy

Woodcrest Christian School Expansion
Opening Year (2029) With Project Afternoon



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations	↰	↑↑	↑↑↑		↰	↰
Traffic Volume (veh/h)	89	1820	2381	106	204	56
Future Volume (veh/h)	89	1820	2381	106	204	56
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00			1.00	1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No	No		No	
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	94	1916	2506	112	215	59
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	0	0	0	0	0	0
Cap, veh/h	417	2803	2499	111	249	221
Arrive On Green	0.46	1.00	0.98	0.98	0.14	0.14
Sat Flow, veh/h	1810	3705	5263	225	1810	1610
Grp Volume(v), veh/h	94	1916	1694	924	215	59
Grp Sat Flow(s), veh/h/ln	1810	1805	1729	1859	1810	1610
Q Serve(g_s), s	4.1	0.0	58.9	63.8	15.1	4.3
Cycle Q Clear(g_c), s	4.1	0.0	58.9	63.8	15.1	4.3
Prop In Lane	1.00			0.12	1.00	1.00
Lane Grp Cap(c), veh/h	417	2803	1697	912	249	221
V/C Ratio(X)	0.23	0.68	1.00	1.01	0.86	0.27
Avail Cap(c_a), veh/h	417	2803	1697	912	487	434
HCM Platoon Ratio	2.00	2.00	2.00	2.00	1.00	1.00
Upstream Filter(I)	0.09	0.09	0.33	0.33	1.00	1.00
Uniform Delay (d), s/veh	28.1	0.0	1.2	1.2	54.9	50.2
Incr Delay (d2), s/veh	0.0	0.1	12.2	20.2	8.7	0.6
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%), veh/ln	1.6	0.0	3.3	5.6	7.6	4.0
Unsig. Movement Delay, s/veh						
LnGrp Delay(d), s/veh	28.1	0.1	13.4	21.4	63.6	50.8
LnGrp LOS	C	A	B	F	E	D
Approach Vol, veh/h		2010	2618		274	
Approach Delay, s/veh		1.4	16.2		60.8	
Approach LOS		A	B		E	
Timer - Assigned Phs		2		4	5	6
Phs Duration (G+Y+Rc), s		108.1		21.9	37.1	71.0
Change Period (Y+Rc), s		7.2		4.0	7.2	* 7.2
Max Green Setting (Gmax), s		83.8		35.0	15.5	* 64
Max Q Clear Time (g_c+I1), s		2.0		17.1	6.1	65.8
Green Ext Time (p_c), s		27.1		0.8	0.1	0.0

Intersection Summary

HCM 6th Ctrl Delay	12.6
HCM 6th LOS	B

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

HCM 6th Signalized Intersection Summary

18: Barton Street & Van Buren Boulevard

Woodcrest Christian School Expansion
Opening Year (2029) With Project Afternoon



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	147	1427	400	347	1846	90	596	77	321	51	38	188
Future Volume (veh/h)	147	1427	400	347	1846	90	596	77	321	51	38	188
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No				No				No			
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	152	1471	412	358	1903	93	614	79	331	53	39	194
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	232	1103	296	229	1980	97	535	435	368	136	45	221
Arrive On Green	0.04	0.13	0.13	0.13	0.39	0.39	0.15	0.23	0.23	0.08	0.16	0.16
Sat Flow, veh/h	1810	2812	756	1810	5066	247	3510	1900	1608	1810	276	1374
Grp Volume(v), veh/h	152	922	961	358	1298	698	614	79	331	53	0	233
Grp Sat Flow(s),veh/h/ln	1810	1805	1763	1810	1729	1855	1755	1900	1608	1810	0	1650
Q Serve(g_s), s	10.8	51.0	51.0	16.4	47.6	47.8	19.8	4.3	26.0	3.6	0.0	17.9
Cycle Q Clear(g_c), s	10.8	51.0	51.0	16.4	47.6	47.8	19.8	4.3	26.0	3.6	0.0	17.9
Prop In Lane	1.00		0.43	1.00		0.13	1.00		1.00	1.00		0.83
Lane Grp Cap(c), veh/h	232	708	692	229	1351	725	535	435	368	136	0	266
V/C Ratio(X)	0.66	1.30	1.39	1.56	0.96	0.96	1.15	0.18	0.90	0.39	0.00	0.88
Avail Cap(c_a), veh/h	232	708	692	229	1351	725	535	628	532	136	0	386
HCM Platoon Ratio	0.33	0.33	0.33	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.64	0.64	0.64	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	59.4	56.6	56.6	56.8	38.6	38.7	55.1	40.3	48.6	57.3	0.0	53.3
Incr Delay (d2), s/veh	3.4	142.6	181.1	274.1	16.7	25.6	86.8	0.2	13.6	0.7	0.0	14.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	5.3	52.6	58.8	24.7	22.1	25.6	15.0	2.0	11.5	1.7	0.0	8.6
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	62.8	199.1	237.7	330.9	55.3	64.3	141.9	40.5	62.2	57.9	0.0	67.7
LnGrp LOS	E	F	F	F	E	E	F	D	E	E	A	E
Approach Vol, veh/h	2035				2354		1024				286	
Approach Delay, s/veh	207.2				99.9		108.3				65.9	
Approach LOS	F				F		F				E	
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	31.4	58.2	24.8	25.6	21.6	58.0	14.8	35.6				
Change Period (Y+Rc), s	5.0	* 7.2	5.0	4.6	5.0	7.2	5.0	* 5.8				
Max Green Setting (Gmax), s	51	* 51	19.8	30.4	7.2	50.8	7.0	* 43				
Max Q Clear Time (g_c+11g), s	53.0	53.0	21.8	19.9	12.8	49.8	5.6	28.0				
Green Ext Time (p_c), s	0.0	0.0	0.0	1.0	0.0	0.9	0.0	1.3				

Intersection Summary

HCM 6th Ctrl Delay 138.0

HCM 6th LOS F

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Intersection												
Int Delay, s/veh	0											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↑↑			↑↑				↑			↑
Traffic Vol, veh/h	0	2377	0	0	2674	15	0	0	0	0	0	2
Future Vol, veh/h	0	2377	0	0	2674	15	0	0	0	0	0	2
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	0	-	-	0
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	0	2584	0	0	2907	16	0	0	0	0	0	2
Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	-	0	0	-	-	0	-	-	1292	-	-	1462
Stage 1	-	-	-	-	-	-	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-	-	-	-	-	-	-
Critical Hdwy	-	-	-	-	-	-	-	-	6.9	-	-	6.9
Critical Hdwy Stg 1	-	-	-	-	-	-	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-	-	-	-	-	-	-
Follow-up Hdwy	-	-	-	-	-	-	-	-	3.3	-	-	3.3
Pot Cap-1 Maneuver	0	-	-	0	-	-	0	0	*107	0	0	-
Stage 1	0	-	-	0	-	-	0	0	-	0	0	-
Stage 2	0	-	-	0	-	-	0	0	-	0	0	-
Platoon blocked, %		-	-		-	-			1			2
Mov Cap-1 Maneuver	-	-	-	-	-	-	-	-	*107	-	-	-
Mov Cap-2 Maneuver	-	-	-	-	-	-	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-	-	-	-	-	-	-
Approach	EB		WB			NB			SB			
HCM Control Delay, s	0		0			0						
HCM LOS						A			-			
Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBT	WBR	SBLn1						
Capacity (veh/h)		-	-	-	-	-						
HCM Lane V/C Ratio		-	-	-	-	-						
HCM Control Delay (s)		0	-	-	-	-						
HCM Lane LOS		A	-	-	-	-						
HCM 95th %tile Q(veh)		-	-	-	-	-						
Notes												
~: Volume exceeds capacity		\$: Delay exceeds 300s			+: Computation Not Defined				*: All major volume in platoon			

Intersection						
Int Delay, s/veh	0.2					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	0	0	14	374	299	90
Future Vol, veh/h	0	0	14	374	299	90
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	95	95	95	83	83	95
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	0	0	15	451	360	95
Major/Minor	Minor2	Major1		Major2		
Conflicting Flow All	889	408	455	0	-	0
Stage 1	408	-	-	-	-	-
Stage 2	481	-	-	-	-	-
Critical Hdwy	6.4	6.2	4.1	-	-	-
Critical Hdwy Stg 1	5.4	-	-	-	-	-
Critical Hdwy Stg 2	5.4	-	-	-	-	-
Follow-up Hdwy	3.5	3.3	2.2	-	-	-
Pot Cap-1 Maneuver	316	648	1116	-	-	-
Stage 1	676	-	-	-	-	-
Stage 2	626	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	310	648	1116	-	-	-
Mov Cap-2 Maneuver	310	-	-	-	-	-
Stage 1	664	-	-	-	-	-
Stage 2	626	-	-	-	-	-
Approach	EB	NB		SB		
HCM Control Delay, s	0	0.3		0		
HCM LOS	A					
Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR	
Capacity (veh/h)	1116	-	-	-	-	
HCM Lane V/C Ratio	0.013	-	-	-	-	
HCM Control Delay (s)	8.3	0	0	-	-	
HCM Lane LOS	A	A	A	-	-	
HCM 95th %tile Q(veh)	0	-	-	-	-	

Intersection						
Int Delay, s/veh	5.3					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	168	50	16	197	270	27
Future Vol, veh/h	168	50	16	197	270	27
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	95	95	95	80	80	95
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	177	53	17	246	338	28
Major/Minor	Minor2	Major1		Major2		
Conflicting Flow All	632	352	366	0	-	0
Stage 1	352	-	-	-	-	-
Stage 2	280	-	-	-	-	-
Critical Hdwy	6.4	6.2	4.1	-	-	-
Critical Hdwy Stg 1	5.4	-	-	-	-	-
Critical Hdwy Stg 2	5.4	-	-	-	-	-
Follow-up Hdwy	3.5	3.3	2.2	-	-	-
Pot Cap-1 Maneuver	448	696	1204	-	-	-
Stage 1	716	-	-	-	-	-
Stage 2	772	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	441	696	1204	-	-	-
Mov Cap-2 Maneuver	441	-	-	-	-	-
Stage 1	705	-	-	-	-	-
Stage 2	772	-	-	-	-	-
Approach	EB	NB		SB		
HCM Control Delay, s	19.1	0.5		0		
HCM LOS	C					
Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR	
Capacity (veh/h)	1204	-	481	-	-	
HCM Lane V/C Ratio	0.014	-	0.477	-	-	
HCM Control Delay (s)	8	0	19.1	-	-	
HCM Lane LOS	A	A	C	-	-	
HCM 95th %tile Q(veh)	0	-	2.5	-	-	

Intersection						
Int Delay, s/veh	0.1					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	3	0	1	212	326	0
Future Vol, veh/h	3	0	1	212	326	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	95	95	95	81	81	95
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	3	0	1	262	402	0
Major/Minor	Minor2	Major1		Major2		
Conflicting Flow All	666	402	402	0	-	0
Stage 1	402	-	-	-	-	-
Stage 2	264	-	-	-	-	-
Critical Hdwy	6.4	6.2	4.1	-	-	-
Critical Hdwy Stg 1	5.4	-	-	-	-	-
Critical Hdwy Stg 2	5.4	-	-	-	-	-
Follow-up Hdwy	3.5	3.3	2.2	-	-	-
Pot Cap-1 Maneuver	428	653	1168	-	-	-
Stage 1	680	-	-	-	-	-
Stage 2	785	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	428	653	1168	-	-	-
Mov Cap-2 Maneuver	428	-	-	-	-	-
Stage 1	679	-	-	-	-	-
Stage 2	785	-	-	-	-	-
Approach	EB	NB		SB		
HCM Control Delay, s	13.5	0		0		
HCM LOS	B					
Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR	
Capacity (veh/h)	1168	-	428	-	-	
HCM Lane V/C Ratio	0.001	-	0.007	-	-	
HCM Control Delay (s)	8.1	0	13.5	-	-	
HCM Lane LOS	A	A	B	-	-	
HCM 95th %tile Q(veh)	0	-	0	-	-	

HCM 6th Signalized Intersection Summary

1: Washington Street & Van Buren Boulevard

Woodcrest Christian School Expansion
Cumulative (2045) Without Project AM

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	164	1298	153	146	1719	920	283	995	229	593	181	93
Future Volume (veh/h)	164	1298	153	146	1719	920	283	995	229	593	181	93
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No			No			No		
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	173	1366	161	154	1809	968	298	1047	241	624	191	98
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	201	1370	160	1170	3503	1561	365	830	369	459	941	418
Arrive On Green	0.11	0.42	0.42	0.65	0.97	0.97	0.10	0.23	0.23	0.13	0.26	0.26
Sat Flow, veh/h	1810	3250	380	1810	3610	1609	3510	3610	1604	3510	3610	1605
Grp Volume(v), veh/h	173	754	773	154	1809	968	298	1047	241	624	191	98
Grp Sat Flow(s),veh/h/ln	1810	1805	1825	1810	1805	1609	1755	1805	1604	1755	1805	1605
Q Serve(g_s), s	12.2	54.0	54.8	4.3	3.9	5.8	10.8	29.9	14.7	17.0	5.4	6.3
Cycle Q Clear(g_c), s	12.2	54.0	54.8	4.3	3.9	5.8	10.8	29.9	14.7	17.0	5.4	6.3
Prop In Lane	1.00		0.21	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	201	761	769	1170	3503	1561	365	830	369	459	941	418
V/C Ratio(X)	0.86	0.99	1.00	0.13	0.52	0.62	0.82	1.26	0.65	1.36	0.20	0.23
Avail Cap(c_a), veh/h	313	761	769	1170	3503	1561	608	830	369	459	941	418
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	56.8	37.4	37.6	8.9	0.1	0.1	57.0	50.0	31.2	56.5	37.5	37.8
Incr Delay (d2), s/veh	13.5	30.6	33.5	0.1	0.5	1.9	4.5	127.1	4.1	175.4	0.1	0.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	6.2	28.6	29.9	1.5	0.3	0.8	5.0	28.0	6.1	18.5	2.3	2.5
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	70.3	68.0	71.1	8.9	0.7	2.0	61.5	177.2	35.3	231.9	37.6	38.1
LnGrp LOS	E	E	F	A	A	A	E	F	D	F	D	D
Approach Vol, veh/h	1700			2931				1586			913	
Approach Delay, s/veh	69.6			1.5				133.9			170.4	
Approach LOS	E			A				F			F	
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	92.2	61.0	18.0	39.7	18.9	134.2	22.0	35.7				
Change Period (Y+Rc), s	6.2	* 6.2	4.5	5.8	4.5	6.2	5.0	* 5.8				
Max Green Setting (Gmax), s	7.5	* 55	22.5	24.2	22.5	39.8	17.0	* 30				
Max Q Clear Time (g_c+I1), s	6.3	56.8	12.8	8.3	14.2	7.8	19.0	31.9				
Green Ext Time (p_c), s	0.0	0.0	0.7	1.2	0.3	23.5	0.0	0.0				
Intersection Summary												
HCM 6th Ctrl Delay	68.8											
HCM 6th LOS	E											
Notes												

HCM 6th Signalized Intersection Summary

Woodcrest Christian School Expansion

2: Alta Cresta Avenue/Chicago Avenue & Van Buren Boulevard

Cumulative (2045) Without Project AM

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	89	1972	91	89	2549	35	179	24	117	117	29	86
Future Volume (veh/h)	89	1972	91	89	2549	35	179	24	117	117	29	86
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		0.99	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	94	2076	96	94	2683	37	188	25	123	123	31	91
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	104	2240	997	104	2262	31	145	30	148	111	39	116
Arrive On Green	0.06	0.62	0.62	0.08	0.83	0.83	0.08	0.11	0.11	0.06	0.09	0.09
Sat Flow, veh/h	1810	3610	1608	1810	3646	50	1810	278	1367	1810	424	1243
Grp Volume(v), veh/h	94	2076	96	94	1325	1395	188	0	148	123	0	122
Grp Sat Flow(s),veh/h/ln	1810	1805	1608	1810	1805	1891	1810	0	1645	1810	0	1667
Q Serve(g_s), s	6.7	66.8	1.8	6.7	80.7	80.7	10.5	0.0	11.5	8.0	0.0	9.3
Cycle Q Clear(g_c), s	6.7	66.8	1.8	6.7	80.7	80.7	10.5	0.0	11.5	8.0	0.0	9.3
Prop In Lane	1.00		1.00	1.00		0.03	1.00		0.83	1.00		0.75
Lane Grp Cap(c), veh/h	104	2240	997	104	1120	1173	145	0	178	111	0	155
V/C Ratio(X)	0.90	0.93	0.10	0.90	1.18	1.19	1.29	0.00	0.83	1.10	0.00	0.79
Avail Cap(c_a), veh/h	104	2240	997	104	1120	1173	145	0	228	111	0	237
HCM Platoon Ratio	1.00	1.00	1.00	1.33	1.33	1.33	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	0.36	0.36	0.36	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	60.9	22.0	3.4	59.6	11.4	11.4	59.8	0.0	56.8	61.0	0.0	57.7
Incr Delay (d2), s/veh	57.6	8.2	0.2	28.8	86.0	88.3	173.1	0.0	18.3	116.2	0.0	9.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.7	26.8	1.1	3.8	35.0	37.4	11.8	0.0	5.6	7.3	0.0	4.4
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	118.5	30.2	3.6	88.5	97.4	99.7	232.9	0.0	75.2	177.2	0.0	67.0
LnGrp LOS	F	C	A	F	F	F	F	A	E	F	A	E
Approach Vol, veh/h		2266			2814			336			245	
Approach Delay, s/veh		32.7			98.2			163.4			122.3	
Approach LOS		C			F			F			F	
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	12.0	86.9	14.5	16.7	12.0	86.9	12.0	19.1				
Change Period (Y+Rc), s	4.5	6.2	4.0	4.6	4.5	6.2	4.0	5.1				
Max Green Setting (Gmax), s	7.5	76.7	8.0	18.5	7.5	76.7	8.0	18.0				
Max Q Clear Time (g_c+I1), s	8.7	68.8	12.5	11.3	8.7	82.7	10.0	13.5				
Green Ext Time (p_c), s	0.0	6.8	0.0	0.3	0.0	0.0	0.0	0.3				
Intersection Summary												
HCM 6th Ctrl Delay			76.9									
HCM 6th LOS			E									

HCM 6th Signalized Intersection Summary

3: Van Buren Village Driveway & Van Buren Boulevard

Woodcrest Christian School Expansion
Cumulative (2045) Without Project AM

						
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑↑	↑	↓	↑↑	↓	↑
Traffic Volume (veh/h)	2159	46	138	2635	38	114
Future Volume (veh/h)	2159	46	138	2635	38	114
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)		1.00	1.00		1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	2273	48	145	2774	40	120
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	0	0	0	0	0	0
Cap, veh/h	2555	1140	168	3001	163	145
Arrive On Green	0.94	0.94	0.19	1.00	0.09	0.09
Sat Flow, veh/h	3705	1610	1810	3705	1810	1610
Grp Volume(v), veh/h	2273	48	145	2774	40	120
Grp Sat Flow(s),veh/h/ln	1805	1610	1810	1805	1810	1610
Q Serve(g_s), s	29.5	0.2	10.1	0.0	2.7	9.5
Cycle Q Clear(g_c), s	29.5	0.2	10.1	0.0	2.7	9.5
Prop In Lane		1.00	1.00		1.00	1.00
Lane Grp Cap(c), veh/h	2555	1140	168	3001	163	145
V/C Ratio(X)	0.89	0.04	0.86	0.92	0.24	0.83
Avail Cap(c_a), veh/h	2555	1140	170	3001	259	230
HCM Platoon Ratio	1.33	1.33	2.00	2.00	1.00	1.00
Upstream Filter(I)	0.20	0.20	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	2.0	1.1	52.2	0.0	55.0	58.1
Incr Delay (d2), s/veh	1.1	0.0	34.0	6.2	0.8	12.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.2	0.1	5.6	2.6	1.3	4.4
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	3.1	1.1	86.1	6.2	55.8	70.7
LnGrp LOS	A	A	F	A	E	E
Approach Vol, veh/h	2321			2919	160	
Approach Delay, s/veh	3.0			10.2	67.0	
Approach LOS	A			B	E	
Timer - Assigned Phs	1	2			6	8
Phs Duration (G+Y+Rc), s	16.0	98.2			114.3	15.7
Change Period (Y+Rc), s	4.0	6.2			* 6.2	4.0
Max Green Setting (Gmax), s	12.2	85.0			* 1E2	18.6
Max Q Clear Time (g_c+I1), s	12.1	31.5			2.0	11.5
Green Ext Time (p_c), s	0.0	32.2			69.9	0.2
Intersection Summary						
HCM 6th Ctrl Delay			8.8			
HCM 6th LOS			A			
Notes						
* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.						

HCM 6th TWSC
4: Little Court & Van Buren Boulevard

Woodcrest Christian School Expansion
Cumulative (2045) Without Project AM

Intersection						
Int Delay, s/veh	0.1					
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑↑	↗		↑↑		↗
Traffic Vol, veh/h	2273	1	0	2774	0	8
Future Vol, veh/h	2273	1	0	2774	0	8
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	0	-	-	-	0
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	95	95	95	95	95	95
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	2393	1	0	2920	0	8
Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	-	-	-	1197
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	-	-	-	-	6.9
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	-	-	-	-	3.3
Pot Cap-1 Maneuver	-	-	0	-	0	*131
Stage 1	-	-	0	-	0	-
Stage 2	-	-	0	-	0	-
Platoon blocked, %	-	-		-		1
Mov Cap-1 Maneuver	-	-	-	-	-	*131
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Approach	EB		WB		NB	
HCM Control Delay, s	0		0		34.4	
HCM LOS	D					
Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBT		
Capacity (veh/h)	131	-	-	-		
HCM Lane V/C Ratio	0.064	-	-	-		
HCM Control Delay (s)	34.4	-	-	-		
HCM Lane LOS	D	-	-	-		
HCM 95th %tile Q(veh)	0.2	-	-	-		
Notes						
~: Volume exceeds capacity		\$: Delay exceeds 300s		+: Computation Not Defined		*: All major volume in platoon

HCM 6th TWSC
5: Van Buren Boulevard & Ridgeway Avenue

Woodcrest Christian School Expansion
Cumulative (2045) Without Project AM

Intersection						
Int Delay, s/veh	0					
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	55	2226	2622	13	2	152
Future Vol, veh/h	55	2226	2622	13	2	152
Conflicting Peds, #/hr	3	0	0	3	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	95	95	95	95	95	95
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	58	2343	2760	14	2	160
Major/Minor	Major1	Major2		Minor2		
Conflicting Flow All	2777	0	-	0	4058	1390
Stage 1	-	-	-	-	2770	-
Stage 2	-	-	-	-	1288	-
Critical Hdwy	4.1	-	-	-	6.8	6.9
Critical Hdwy Stg 1	-	-	-	-	5.8	-
Critical Hdwy Stg 2	-	-	-	-	5.8	-
Follow-up Hdwy	2.2	-	-	-	3.5	3.3
Pot Cap-1 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	*146	-
Platoon blocked, %	2	-	-	-	2	2
Mov Cap-1 Maneuver	-	-	-	-	-	-
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	*146	-
Approach	EB	WB		SB		
HCM Control Delay, s	0					
HCM LOS	-					
Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1	
Capacity (veh/h)	-	-	-	-	-	
HCM Lane V/C Ratio	-	-	-	-	-	
HCM Control Delay (s)	-	-	-	-	-	
HCM Lane LOS	-	-	-	-	-	
HCM 95th %tile Q(veh)	-	-	-	-	-	
Notes						
~: Volume exceeds capacity		\$: Delay exceeds 300s		+: Computation Not Defined		*: All major volume in platoon

HCM 6th Signalized Intersection Summary

6: Dauchy Avenue & Van Buren Boulevard

Woodcrest Christian School Expansion
Cumulative (2045) Without Project AM

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	36	1874	318	201	2263	56	339	72	190	96	65	41
Future Volume (veh/h)	36	1874	318	201	2263	56	339	72	190	96	65	41
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	38	1973	335	212	2382	59	357	76	200	101	68	43
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	73	1698	279	97	2031	906	352	85	223	178	348	295
Arrive On Green	0.01	0.18	0.18	0.11	1.00	1.00	0.05	0.18	0.18	0.05	0.18	0.18
Sat Flow, veh/h	1810	3093	508	1810	3610	1610	1810	463	1218	1810	1900	1610
Grp Volume(v), veh/h	38	1124	1184	212	2382	59	357	0	276	101	68	43
Grp Sat Flow(s),veh/h/ln	1810	1805	1796	1810	1805	1610	1810	0	1681	1810	1900	1610
Q Serve(g_s), s	2.7	71.4	71.4	7.0	73.1	0.0	7.0	0.0	20.9	5.9	3.9	2.9
Cycle Q Clear(g_c), s	2.7	71.4	71.4	7.0	73.1	0.0	7.0	0.0	20.9	5.9	3.9	2.9
Prop In Lane	1.00		0.28	1.00		1.00	1.00		0.72	1.00		1.00
Lane Grp Cap(c), veh/h	73	991	986	97	2031	906	352	0	308	178	348	295
V/C Ratio(X)	0.52	1.13	1.20	2.18	1.17	0.07	1.01	0.00	0.90	0.57	0.20	0.15
Avail Cap(c_a), veh/h	97	991	986	97	2031	906	352	0	388	178	438	372
HCM Platoon Ratio	0.33	0.33	0.33	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	0.09	0.09	0.09	1.00	0.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	62.9	53.2	53.2	58.0	0.0	0.0	51.8	0.0	51.9	41.9	45.0	44.5
Incr Delay (d2), s/veh	2.2	73.3	100.1	532.2	78.3	0.0	51.5	0.0	19.4	2.6	0.3	0.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.3	54.5	61.5	17.3	22.1	0.0	13.3	0.0	10.5	2.8	1.9	1.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	65.0	126.5	153.3	590.2	78.3	0.0	103.4	0.0	71.3	44.5	45.2	44.8
LnGrp LOS	E	F	F	F	F	A	F	A	E	D	D	D
Approach Vol, veh/h		2346			2653			633			212	
Approach Delay, s/veh		139.0			117.4			89.4			44.8	
Approach LOS		F			F			F			D	
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	12.0	78.6	11.0	28.4	10.2	80.3	11.0	28.4				
Change Period (Y+Rc), s	5.0	7.2	4.0	4.6	5.0	7.2	4.0	4.6				
Max Green Setting (Gmax), s	7.0	65.2	7.0	30.0	7.0	65.2	7.0	30.0				
Max Q Clear Time (g_c+l1), s	9.0	73.4	9.0	5.9	4.7	75.1	7.9	22.9				
Green Ext Time (p_c), s	0.0	0.0	0.0	0.5	0.0	0.0	0.0	1.0				
Intersection Summary												
HCM 6th Ctrl Delay				120.4								
HCM 6th LOS				F								

Intersection												
Int Delay, s/veh	8.1											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	↕
Traffic Vol, veh/h	112	0	27	5	0	56	34	409	5	18	348	143
Future Vol, veh/h	112	0	27	5	0	56	34	409	5	18	348	143
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	90
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	88	88	88	88	88	88	88	88	88	88	88	88
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	127	0	31	6	0	64	39	465	6	20	395	163
Major/Minor	Minor2		Minor1			Major1			Major2			
Conflicting Flow All	1013	984	395	1078	1144	468	558	0	0	471	0	0
Stage 1	435	435	-	546	546	-	-	-	-	-	-	-
Stage 2	578	549	-	532	598	-	-	-	-	-	-	-
Critical Hdwy	7.1	6.5	6.2	7.1	6.5	6.2	4.1	-	-	4.1	-	-
Critical Hdwy Stg 1	6.1	5.5	-	6.1	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.1	5.5	-	6.1	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.5	4	3.3	3.5	4	3.3	2.2	-	-	2.2	-	-
Pot Cap-1 Maneuver	219	250	659	198	202	599	1023	-	-	1101	-	-
Stage 1	604	584	-	526	521	-	-	-	-	-	-	-
Stage 2	505	520	-	535	494	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	184	231	659	178	186	599	1023	-	-	1101	-	-
Mov Cap-2 Maneuver	184	231	-	178	186	-	-	-	-	-	-	-
Stage 1	573	568	-	499	494	-	-	-	-	-	-	-
Stage 2	428	493	-	496	481	-	-	-	-	-	-	-
Approach	EB		WB			NB			SB			
HCM Control Delay, s	58.1		13.3			0.7			0.3			
HCM LOS	F		B									
Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR				
Capacity (veh/h)	1023	-	-	214	502	1101	-	-				
HCM Lane V/C Ratio	0.038	-	-	0.738	0.138	0.019	-	-				
HCM Control Delay (s)	8.7	0	-	58.1	13.3	8.3	0	-				
HCM Lane LOS	A	A	-	F	B	A	A	-				
HCM 95th %tile Q(veh)	0.1	-	-	5	0.5	0.1	-	-				

Intersection	
Intersection Delay, s/veh	129.3
Intersection LOS	F

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	65	564	3	2	637	143	23	34	13	126	16	55
Future Vol, veh/h	65	564	3	2	637	143	23	34	13	126	16	55
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	68	594	3	2	671	151	24	36	14	133	17	58
Number of Lanes	0	1	0	0	1	0	0	1	0	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	1	1	1
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	1	1	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	1	1	1	1
HCM Control Delay	100.6	191.1	13.9	17.2
HCM LOS	F	F	B	C

Lane	NBLn1	EBLn1	WBLn1	SBLn1
Vol Left, %	33%	10%	0%	64%
Vol Thru, %	49%	89%	81%	8%
Vol Right, %	19%	0%	18%	28%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	70	632	782	197
LT Vol	23	65	2	126
Through Vol	34	564	637	16
RT Vol	13	3	143	55
Lane Flow Rate	74	665	823	207
Geometry Grp	1	1	1	1
Degree of Util (X)	0.164	1.121	1.358	0.425
Departure Headway (Hd)	9.093	6.595	6.191	8.22
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	397	559	593	442
Service Time	7.093	4.595	4.191	6.22
HCM Lane V/C Ratio	0.186	1.19	1.388	0.468
HCM Control Delay	13.9	100.6	191.1	17.2
HCM Lane LOS	B	F	F	C
HCM 95th-tile Q	0.6	19.8	34.6	2.1

HCM 6th Signalized Intersection Summary

9: Wood Road & Van Buren Boulevard

Woodcrest Christian School Expansion
Cumulative (2045) Without Project AM



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	182	1555	463	522	1804	188	527	592	383	119	490	238
Future Volume (veh/h)	182	1555	463	522	1804	188	527	592	383	119	490	238
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.98	1.00		0.91	1.00		0.88
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No			No			No		
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	192	1637	487	549	1899	198	555	623	403	125	516	251
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	220	2760	1440	581	2918	1279	500	589	381	111	480	232
Arrive On Green	0.04	0.25	0.25	0.22	1.00	1.00	0.14	0.29	0.29	0.06	0.21	0.21
Sat Flow, veh/h	1810	3610	1584	3510	3610	1582	3510	2016	1303	1810	2247	1085
Grp Volume(v), veh/h	192	1637	487	549	1899	198	555	558	468	125	414	353
Grp Sat Flow(s),veh/h/ln	1810	1805	1584	1755	1805	1582	1755	1805	1515	1810	1805	1527
Q Serve(g_s), s	13.7	51.8	13.1	20.0	0.0	0.0	18.5	38.0	38.0	8.0	27.8	27.8
Cycle Q Clear(g_c), s	13.7	51.8	13.1	20.0	0.0	0.0	18.5	38.0	38.0	8.0	27.8	27.8
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.86	1.00		0.71
Lane Grp Cap(c), veh/h	220	2760	1440	581	2918	1279	500	528	443	111	386	326
V/C Ratio(X)	0.87	0.59	0.34	0.95	0.65	0.15	1.11	1.06	1.06	1.12	1.07	1.08
Avail Cap(c_a), veh/h	299	2760	1440	581	2918	1279	500	528	443	111	386	326
HCM Platoon Ratio	0.33	0.33	0.33	1.33	1.33	1.33	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.09	0.09	0.09	0.68	0.68	0.68	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	61.4	30.8	3.7	50.1	0.0	0.0	55.7	46.0	46.0	61.0	51.1	51.1
Incr Delay (d2), s/veh	1.7	0.1	0.1	18.7	0.8	0.2	74.2	55.1	58.9	122.0	66.4	73.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	6.7	24.9	1.8	9.5	0.3	0.1	13.2	24.6	21.1	7.4	19.4	17.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	63.0	30.9	3.8	68.8	0.8	0.2	130.0	101.1	104.9	183.0	117.5	124.5
LnGrp LOS	E	C	A	E	A	A	F	F	F	F	F	F
Approach Vol, veh/h	2316			2646			1581			892		
Approach Delay, s/veh	27.9			14.9			112.3			129.4		
Approach LOS	C			B			F			F		
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	37.0	108.4	24.0	33.6	21.3	114.1	13.8	43.8				
Change Period (Y+Rc), s	5.5	7.2	5.5	5.8	5.5	7.2	5.8	* 5.8				
Max Green Setting (Gmax), s	21.5	40.0	18.5	26.0	21.5	40.0	8.0	* 38				
Max Q Clear Time (g_c+Q_c), s	22.0	53.8	20.5	29.8	15.7	2.0	10.0	40.0				
Green Ext Time (p_c), s	0.0	0.0	0.0	0.0	0.1	21.4	0.0	0.0				

Intersection Summary

HCM 6th Ctrl Delay 53.4

HCM 6th LOS D

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

HCM 6th Signalized Intersection Summary

10: Van Buren Boulevard & Bountiful Street

Woodcrest Christian School Expansion
Cumulative (2045) Without Project AM



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations	↰	↑↑↑	↑↑↑		↰	↑↑
Traffic Volume (veh/h)	170	1949	1939	38	58	265
Future Volume (veh/h)	170	1949	1939	38	58	265
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00			0.98	1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No	No		No	
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	179	2052	2041	40	61	279
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	0	0	0	0	0	0
Cap, veh/h	174	3720	3069	60	349	311
Arrive On Green	0.19	1.00	1.00	1.00	0.19	0.19
Sat Flow, veh/h	1810	5358	5405	102	1810	1610
Grp Volume(v), veh/h	179	2052	1347	734	61	279
Grp Sat Flow(s), veh/h/ln	1810	1729	1729	1879	1810	1610
Q Serve(g_s), s	12.5	0.0	0.0	0.0	3.7	22.0
Cycle Q Clear(g_c), s	12.5	0.0	0.0	0.0	3.7	22.0
Prop In Lane	1.00			0.05	1.00	1.00
Lane Grp Cap(c), veh/h	174	3720	2028	1102	349	311
V/C Ratio(X)	1.03	0.55	0.66	0.67	0.17	0.90
Avail Cap(c_a), veh/h	174	3720	2028	1102	619	551
HCM Platoon Ratio	2.00	2.00	2.00	2.00	1.00	1.00
Upstream Filter(I)	0.09	0.09	0.17	0.17	1.00	1.00
Uniform Delay (d), s/veh	52.5	0.0	0.0	0.0	43.8	51.2
Incr Delay (d2), s/veh	28.2	0.1	0.3	0.6	0.2	9.6
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%), veh/ln	6.3	0.0	0.1	0.2	1.7	19.0
Unsig. Movement Delay, s/veh						
LnGrp Delay(d), s/veh	80.7	0.1	0.3	0.6	44.1	60.8
LnGrp LOS	F	A	A	A	D	E
Approach Vol, veh/h		2231	2081		340	
Approach Delay, s/veh		6.5	0.4		57.8	
Approach LOS		A	A		E	
Timer - Assigned Phs		2		4	5	6
Phs Duration (G+Y+Rc), s		100.4		29.6	17.0	83.4
Change Period (Y+Rc), s		7.2		4.5	4.5	7.2
Max Green Setting (Gmax), s		73.8		44.5	12.5	56.8
Max Q Clear Time (g_c+I1), s		2.0		24.0	14.5	2.0
Green Ext Time (p_c), s		27.0		1.1	0.0	23.3
Intersection Summary						
HCM 6th Ctrl Delay			7.5			
HCM 6th LOS			A			

HCM 6th Signalized Intersection Summary

11: Trautwein Road & Mission Grove Parkway S

Woodcrest Christian School Expansion
Cumulative (2045) Without Project AM



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	70	39	11	740	38	61	3	2087	634	218	1264	20
Future Volume (veh/h)	70	39	11	740	38	61	3	2087	634	218	1264	20
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		0.97	1.00		1.00	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No			No			No		
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	74	41	12	779	40	64	3	2197	667	229	1331	21
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	289	86	25	532	117	97	10	1941	1109	146	2213	965
Arrive On Green	0.16	0.06	0.06	0.15	0.06	0.06	0.00	0.36	0.36	0.08	0.61	0.61
Sat Flow, veh/h	1810	1410	413	3510	1900	1566	1810	3610	1608	1810	3610	1574
Grp Volume(v), veh/h	74	0	53	779	40	64	3	2197	667	229	1331	21
Grp Sat Flow(s),veh/h/ln	1810	0	1823	1755	1900	1566	1810	1805	1608	1810	1805	1574
Q Serve(g_s), s	4.7	0.0	3.7	19.7	2.6	4.4	0.2	69.9	11.9	10.5	29.4	0.2
Cycle Q Clear(g_c), s	4.7	0.0	3.7	19.7	2.6	4.4	0.2	69.9	11.9	10.5	29.4	0.2
Prop In Lane	1.00		0.23	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	289	0	111	532	117	97	10	1941	1109	146	2213	965
V/C Ratio(X)	0.26	0.00	0.48	1.46	0.34	0.66	0.30	1.13	0.60	1.57	0.60	0.02
Avail Cap(c_a), veh/h	289	0	449	532	693	571	244	1941	1109	146	2213	965
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	0.67	0.67	0.67	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	1.00	1.00	0.09	0.09	0.09	1.00	1.00	1.00
Uniform Delay (d), s/veh	47.8	0.0	59.1	55.2	58.5	42.0	64.5	41.6	4.5	59.7	15.4	1.2
Incr Delay (d2), s/veh	0.2	0.0	3.2	219.1	1.7	7.6	0.6	60.1	0.2	285.5	1.2	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.1	0.0	1.8	24.7	1.3	2.2	0.1	47.4	4.4	16.3	11.1	0.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	48.0	0.0	62.2	274.3	60.2	49.6	65.1	101.6	4.7	345.2	16.6	1.3
LnGrp LOS	D	A	E	F	E	D	E	F	A	F	B	A
Approach Vol, veh/h	127			883			2867			1581		
Approach Delay, s/veh	53.9			248.3			79.1			64.0		
Approach LOS	D			F			E			E		
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	5.0	76.1	25.2	13.7	5.2	85.9	26.3	12.6				
Change Period (Y+Rc), s	4.5	6.2	5.5	5.8	4.5	6.2	5.5	* 4.6				
Max Green Setting (Gmax), s	10.5	45.8	19.7	32.0	17.5	38.8	7.0	* 47				
Max Q Clear Time (g_c+1/2, s)	112.5	71.9	21.7	5.7	2.2	31.4	6.7	6.4				
Green Ext Time (p_c), s	0.0	0.0	0.0	0.2	0.0	4.7	0.0	0.4				

Intersection Summary

HCM 6th Ctrl Delay 101.5

HCM 6th LOS F

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

HCM 6th Signalized Intersection Summary

12: Trautwein Road & John F Kennedy Drive

Woodcrest Christian School Expansion
Cumulative (2045) Without Project AM



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	677	60	110	147	67	52	251	2351	103	11	1164	733
Future Volume (veh/h)	677	60	110	147	67	52	251	2351	103	11	1164	733
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		0.99	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No			No			No		
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	713	63	116	155	71	55	264	2475	108	12	1225	772
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	516	226	189	261	115	89	301	2004	892	34	1383	852
Arrive On Green	0.15	0.12	0.12	0.14	0.12	0.12	0.22	0.74	0.74	0.03	0.51	0.51
Sat Flow, veh/h	3510	1900	1590	1810	987	764	1810	3610	1607	1810	3610	1606
Grp Volume(v), veh/h	713	63	116	155	0	126	264	2475	108	12	1225	772
Grp Sat Flow(s),veh/h/ln	1755	1900	1590	1810	0	1751	1810	1805	1607	1810	1805	1606
Q Serve(g_s), s	19.1	3.9	9.0	10.4	0.0	8.9	18.3	72.2	1.2	0.8	39.4	21.8
Cycle Q Clear(g_c), s	19.1	3.9	9.0	10.4	0.0	8.9	18.3	72.2	1.2	0.8	39.4	21.8
Prop In Lane	1.00		1.00	1.00		0.44	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	516	226	189	261	0	204	301	2004	892	34	1383	852
V/C Ratio(X)	1.38	0.28	0.61	0.59	0.00	0.62	0.88	1.24	0.12	0.35	0.89	0.91
Avail Cap(c_a), veh/h	516	678	567	261	0	444	301	2004	892	97	1383	852
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.33	1.33	1.33	1.33	1.33	1.33
Upstream Filter(I)	1.00	1.00	1.00	1.00	0.00	1.00	0.21	0.21	0.21	0.58	0.58	0.58
Uniform Delay (d), s/veh	55.4	52.2	54.4	52.1	0.0	54.6	49.3	17.0	1.7	62.6	29.3	6.8
Incr Delay (d2), s/veh	183.9	0.7	3.2	3.6	0.0	3.0	6.5	106.8	0.1	3.5	5.3	9.7
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	21.5	1.9	3.8	5.0	0.0	4.1	8.1	46.7	0.9	0.4	15.2	7.6
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	239.3	52.9	57.6	55.7	0.0	57.6	55.8	123.8	1.7	66.1	34.6	16.4
LnGrp LOS	F	D	E	E	A	E	E	F	A	E	C	B
Approach Vol, veh/h	892			281			2847			2009		
Approach Delay, s/veh	202.5			56.6			112.9			27.8		
Approach LOS	F			E			F			C		
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	6.5	79.4	24.1	20.1	28.8	57.0	23.6	20.6				
Change Period (Y+Rc), s	4.0	7.2	5.4	* 4.6	7.2	* 7.2	4.5	5.4				
Max Green Setting (Gmax), s	7.0	49.8	7.0	* 46	7.0	* 50	19.1	33.0				
Max Q Clear Time (g_c+I2, s)	74.2	12.4	12.4	11.0	20.3	41.4	21.1	10.9				
Green Ext Time (p_c), s	0.0	0.0	0.0	0.7	0.0	6.1	0.0	0.7				

Intersection Summary

HCM 6th Ctrl Delay 95.2

HCM 6th LOS F

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

HCM 6th Signalized Intersection Summary 13: Trautwein Road & Grove Community Drive

Woodcrest Christian School Expansion
Cumulative (2045) Without Project AM



Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	128	638	2067	97	195	1226
Future Volume (veh/h)	128	638	2067	97	195	1226
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00		1.00	1.00	
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No		No		No	
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	135	672	2176	102	205	1291
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	0	0	0	0	0	0
Cap, veh/h	221	560	2430	1082	264	2855
Arrive On Green	0.12	0.12	0.67	0.67	0.15	1.00
Sat Flow, veh/h	1810	2834	3705	1608	3510	3705
Grp Volume(v), veh/h	135	672	2176	102	205	1291
Grp Sat Flow(s), veh/h/ln	1810	1417	1805	1608	1755	1805
Q Serve(g_s), s	9.2	15.9	64.5	2.9	7.3	0.0
Cycle Q Clear(g_c), s	9.2	15.9	64.5	2.9	7.3	0.0
Prop In Lane	1.00	1.00		1.00	1.00	
Lane Grp Cap(c), veh/h	221	560	2430	1082	264	2855
V/C Ratio(X)	0.61	1.20	0.90	0.09	0.78	0.45
Avail Cap(c_a), veh/h	221	560	2430	1082	608	2855
HCM Platoon Ratio	1.00	1.00	1.00	1.00	2.00	2.00
Upstream Filter(I)	1.00	1.00	0.09	0.09	0.75	0.75
Uniform Delay (d), s/veh	54.1	52.2	17.5	7.4	54.2	0.0
Incr Delay (d2), s/veh	4.8	106.3	0.6	0.0	3.7	0.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.5	17.3	22.2	0.9	3.1	0.2
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	58.9	158.4	18.0	7.4	57.8	0.4
LnGrp LOS	E	F	B	A	E	A
Approach Vol, veh/h	807		2278			1496
Approach Delay, s/veh	141.8		17.6			8.3
Approach LOS	F		B			A
Timer - Assigned Phs	1	2			6	8
Phs Duration (G+Y+Rc), s	5.3	93.7			109.0	21.0
Change Period (Y+Rc), s	5.5	6.2			6.2	5.1
Max Green Setting (Gmax), s	22.5	74.8			102.8	15.9
Max Q Clear Time (g_c+1.3), s	19.3	66.5			2.0	17.9
Green Ext Time (p_c), s	0.5	7.3			11.9	0.0
Intersection Summary						
HCM 6th Ctrl Delay			36.4			
HCM 6th LOS			D			

HCM 6th Signalized Intersection Summary

14: Trautwein Road & Orange Terrace Pkwy

Woodcrest Christian School Expansion
Cumulative (2045) Without Project AM



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	103	70	47	395	169	632	71	1429	280	368	1000	33
Future Volume (veh/h)	103	70	47	395	169	632	71	1429	280	368	1000	33
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		0.97	1.00		1.00	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No				No				No			
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	108	74	49	416	178	665	75	1504	295	387	1053	35
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	133	112	74	324	418	800	96	1752	778	243	1839	815
Arrive On Green	0.07	0.11	0.11	0.18	0.22	0.22	0.04	0.33	0.33	0.14	1.00	1.00
Sat Flow, veh/h	1810	1063	704	1810	1900	2744	1810	3610	1603	3510	3610	1599
Grp Volume(v), veh/h	108	0	123	416	178	665	75	1504	295	387	1053	35
Grp Sat Flow(s),veh/h/ln	1810	0	1766	1810	1900	1372	1810	1805	1603	1755	1805	1599
Q Serve(g_s), s	7.6	0.0	8.7	23.2	10.5	22.2	5.3	50.7	9.2	9.0	0.0	0.0
Cycle Q Clear(g_c), s	7.6	0.0	8.7	23.2	10.5	22.2	5.3	50.7	9.2	9.0	0.0	0.0
Prop In Lane	1.00		0.40	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	133	0	186	324	418	800	96	1752	778	243	1839	815
V/C Ratio(X)	0.81	0.00	0.66	1.29	0.43	0.83	0.78	0.86	0.38	1.59	0.57	0.04
Avail Cap(c_a), veh/h	237	0	492	324	547	986	139	1752	778	243	1839	815
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	0.67	0.67	0.67	2.00	2.00	2.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	1.00	1.00	0.84	0.84	0.84	0.88	0.88	0.88
Uniform Delay (d), s/veh	59.4	0.0	56.0	53.4	43.6	25.3	62.0	39.7	7.2	56.0	0.0	0.0
Incr Delay (d2), s/veh	4.6	0.0	4.0	150.0	0.7	5.1	8.1	4.9	1.2	283.1	1.1	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.7	0.0	4.1	24.0	5.0	7.7	2.6	24.0	3.5	13.1	0.3	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	63.9	0.0	60.0	203.3	44.3	30.4	70.0	44.5	8.4	339.1	1.1	0.1
LnGrp LOS	E	A	E	F	D	C	E	D	A	F	A	A
Approach Vol, veh/h	231				1259				1874			
Approach Delay, s/veh	61.8				89.5				39.9		89.8	
Approach LOS	E				F				D		F	
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	4.0	69.3	27.2	19.5	10.9	72.4	13.5	33.2				
Change Period (Y+Rc), s	5.0	6.2	4.0	5.8	4.0	6.2	4.0	4.6				
Max Green Setting (Gmax), s	4.0	46.8	17.0	36.2	10.0	46.8	17.0	37.4				
Max Q Clear Time (g_c+1/11), s	4.0	52.7	25.2	10.7	7.3	2.0	9.6	24.2				
Green Ext Time (p_c), s	0.0	0.0	0.0	0.7	0.0	8.4	0.1	3.4				

Intersection Summary

HCM 6th Ctrl Delay	69.0
HCM 6th LOS	E

HCM 6th Signalized Intersection Summary

15: Trautwein Road & Shopping Ctr Dwy

Woodcrest Christian School Expansion
Cumulative (2045) Without Project AM

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	65	11	58	34	8	59	89	1258	23	83	1099	46
Future Volume (veh/h)	65	11	58	34	8	59	89	1258	23	83	1099	46
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		0.99	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No			No			No		
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	68	12	61	36	8	62	94	1324	24	87	1157	48
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	162	32	163	160	22	171	104	2509	1118	110	2521	1124
Arrive On Green	0.12	0.12	0.12	0.12	0.12	0.12	0.12	1.00	1.00	0.04	0.47	0.47
Sat Flow, veh/h	1347	270	1374	1343	186	1445	1810	3610	1609	1810	3610	1609
Grp Volume(v), veh/h	68	0	73	36	0	70	94	1324	24	87	1157	48
Grp Sat Flow(s), veh/h/ln	1347	0	1644	1343	0	1631	1810	1805	1609	1810	1805	1609
Q Serve(g_s), s	6.4	0.0	5.3	3.3	0.0	5.1	6.7	0.0	0.0	6.2	28.2	2.1
Cycle Q Clear(g_c), s	11.5	0.0	5.3	8.6	0.0	5.1	6.7	0.0	0.0	6.2	28.2	2.1
Prop In Lane	1.00		0.84	1.00		0.89	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	162	0	195	160	0	193	104	2509	1118	110	2521	1124
V/C Ratio(X)	0.42	0.00	0.37	0.23	0.00	0.36	0.90	0.53	0.02	0.79	0.46	0.04
Avail Cap(c_a), veh/h	354	0	430	352	0	427	104	2509	1118	592	2521	1124
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00	2.00	0.67	0.67	0.67
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	0.09	0.09	0.09	0.57	0.57	0.57
Uniform Delay (d), s/veh	58.1	0.0	52.9	56.8	0.0	52.8	57.1	0.0	0.0	61.5	17.9	11.0
Incr Delay (d2), s/veh	1.7	0.0	1.2	0.7	0.0	1.1	9.5	0.1	0.0	2.7	0.3	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.3	0.0	2.3	1.2	0.0	2.2	3.1	0.0	0.0	2.9	12.4	0.6
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	59.8	0.0	54.0	57.5	0.0	53.9	66.6	0.1	0.0	64.2	18.3	11.0
LnGrp LOS	E	A	D	E	A	D	E	A	A	E	B	B
Approach Vol, veh/h	141			106			1442			1292		
Approach Delay, s/veh	56.8			55.1			4.4			21.1		
Approach LOS	E			E			A			C		
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	2.4	97.6		20.0	12.0	98.0		20.0				
Change Period (Y+Rc), s	4.5	7.2		4.6	4.5	7.2		4.6				
Max Green Setting (Gmax), s	42.5	37.2		34.0	7.5	72.2		34.0				
Max Q Clear Time (g_c+1.0), s	19.2	2.0		13.5	8.7	30.2		10.6				
Green Ext Time (p_c), s	0.1	11.2		0.6	0.0	9.6		0.5				
Intersection Summary												
HCM 6th Ctrl Delay	15.9											
HCM 6th LOS	B											

HCM 6th Signalized Intersection Summary

16: Trautwein Road & Van Buren Boulevard

Woodcrest Christian School Expansion
Cumulative (2045) Without Project AM



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	420	1444	145	204	1811	500	237	812	159	509	477	381
Future Volume (veh/h)	420	1444	145	204	1811	500	237	812	159	509	477	381
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No			No			No		
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	442	1520	153	215	1906	526	249	855	167	536	502	401
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	1681	2600	1370	238	1867	760	237	909	178	394	1035	1225
Arrive On Green	0.64	0.96	0.96	0.26	0.72	0.72	0.13	0.30	0.30	0.19	0.48	0.48
Sat Flow, veh/h	3510	3610	1609	1810	5187	1609	1810	3009	588	3510	3610	1585
Grp Volume(v), veh/h	442	1520	153	215	1906	526	249	513	509	536	502	401
Grp Sat Flow(s),veh/h/ln	1755	1805	1609	1810	1729	1609	1810	1805	1792	1755	1805	1585
Q Serve(g_s), s	7.1	5.2	0.3	14.9	46.8	0.0	17.0	36.0	36.0	14.6	12.3	7.0
Cycle Q Clear(g_c), s	7.1	5.2	0.3	14.9	46.8	0.0	17.0	36.0	36.0	14.6	12.3	7.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.33	1.00		1.00
Lane Grp Cap(c), veh/h	1681	2600	1370	238	1867	760	237	545	541	394	1035	1225
V/C Ratio(X)	0.26	0.58	0.11	0.90	1.02	0.69	1.05	0.94	0.94	1.36	0.48	0.33
Avail Cap(c_a), veh/h	1681	2600	1370	383	1867	760	237	555	551	394	1035	1225
HCM Platoon Ratio	1.33	1.33	1.33	2.00	2.00	2.00	1.00	1.00	1.00	1.67	1.67	1.67
Upstream Filter(I)	0.87	0.87	0.87	0.66	0.66	0.66	1.00	1.00	1.00	0.88	0.88	0.88
Uniform Delay (d), s/veh	13.6	0.9	0.2	47.1	18.2	9.2	56.5	44.2	44.2	52.8	27.4	11.4
Incr Delay (d2), s/veh	0.0	0.8	0.1	7.6	22.4	3.4	72.9	24.1	24.2	175.8	0.3	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.5	1.1	0.1	6.1	10.1	4.9	12.4	19.3	19.2	15.3	4.5	4.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	13.6	1.7	0.4	54.7	40.6	12.7	129.4	68.3	68.5	228.6	27.7	11.6
LnGrp LOS	B	A	A	D	F	B	F	E	E	F	C	B
Approach Vol, veh/h	2115		2647				1271		1439			
Approach Delay, s/veh	4.1		36.2				80.3		98.0			
Approach LOS	A		D				F		F			
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	31.6	101.5	22.0	43.5	70.1	53.0	20.8	44.7				
Change Period (Y+Rc), s	4.5	6.2	5.0	6.2	6.2	* 6.2	6.2	* 5.4				
Max Green Setting (Gmax), s	27.5	26.8	17.0	36.8	7.0	* 47	14.6	* 40				
Max Q Clear Time (g_c+11g), s	116.9	7.2	19.0	14.3	9.1	48.8	16.6	38.0				
Green Ext Time (p_c), s	0.2	10.9	0.0	4.4	0.0	0.0	0.0	1.2				

Intersection Summary

HCM 6th Ctrl Delay 46.5

HCM 6th LOS D

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

HCM 6th Signalized Intersection Summary

17: Van Buren Boulevard & Shopping Ctr Dwy

Woodcrest Christian School Expansion
Cumulative (2045) Without Project AM



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations	↰	↑↑	↑↑↑		↰	↰
Traffic Volume (veh/h)	39	2073	2108	108	89	37
Future Volume (veh/h)	39	2073	2108	108	89	37
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00			0.98	1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No	No		No	
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	41	2182	2219	114	94	39
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	0	0	0	0	0	0
Cap, veh/h	652	3051	2166	111	124	111
Arrive On Green	0.72	1.00	0.86	0.86	0.07	0.07
Sat Flow, veh/h	1810	3705	5218	257	1810	1610
Grp Volume(v), veh/h	41	2182	1516	817	94	39
Grp Sat Flow(s), veh/h/ln	1810	1805	1729	1846	1810	1610
Q Serve(g_s), s	0.9	0.0	55.8	55.8	6.6	3.0
Cycle Q Clear(g_c), s	0.9	0.0	55.8	55.8	6.6	3.0
Prop In Lane	1.00			0.14	1.00	1.00
Lane Grp Cap(c), veh/h	652	3051	1484	793	124	111
V/C Ratio(X)	0.06	0.72	1.02	1.03	0.76	0.35
Avail Cap(c_a), veh/h	652	3051	1484	793	487	434
HCM Platoon Ratio	2.00	2.00	2.00	2.00	1.00	1.00
Upstream Filter(I)	0.09	0.09	0.09	0.09	1.00	1.00
Uniform Delay (d), s/veh	11.7	0.0	9.2	9.2	59.5	57.8
Incr Delay (d2), s/veh	0.0	0.1	13.3	19.1	9.0	1.9
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%), veh/ln	0.3	0.1	6.2	7.9	3.4	2.8
Unsig. Movement Delay, s/veh						
LnGrp Delay(d), s/veh	11.7	0.1	22.5	28.3	68.5	59.7
LnGrp LOS	B	A	F	F	E	E
Approach Vol, veh/h		2223	2333		133	
Approach Delay, s/veh		0.3	24.5		65.9	
Approach LOS		A	C		E	
Timer - Assigned Phs		2		4	5	6
Phs Duration (G+Y+Rc), s		117.1		12.9	54.1	63.0
Change Period (Y+Rc), s		7.2		4.0	7.2	* 7.2
Max Green Setting (Gmax), s		83.8		35.0	23.5	* 56
Max Q Clear Time (g_c+l1), s		2.0		8.6	2.9	57.8
Green Ext Time (p_c), s		36.8		0.4	0.0	0.0

Intersection Summary

HCM 6th Ctrl Delay	14.2
HCM 6th LOS	B

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

HCM 6th Signalized Intersection Summary

18: Barton Street & Van Buren Boulevard

Woodcrest Christian School Expansion

Cumulative (2045) Without Project AM



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	202	1613	421	393	1941	37	454	116	483	91	172	366
Future Volume (veh/h)	202	1613	421	393	1941	37	454	116	483	91	172	366
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No			No			No		
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	213	1698	443	414	2043	39	478	122	508	96	181	385
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	1659	3111	777	437	2048	39	459	646	547	97	138	294
Arrive On Green	0.30	0.36	0.36	0.24	0.39	0.39	0.13	0.34	0.34	0.05	0.26	0.26
Sat Flow, veh/h	1810	2862	715	1810	5240	100	3510	1900	1610	1810	541	1151
Grp Volume(v), veh/h	213	1043	1098	414	1347	735	478	122	508	96	0	566
Grp Sat Flow(s),veh/h/ln	1810	1805	1771	1810	1729	1882	1755	1900	1610	1810	0	1693
Q Serve(g_s), s	11.1	0.0	0.0	29.3	50.6	50.7	17.0	5.9	39.5	6.9	0.0	33.2
Cycle Q Clear(g_c), s	11.1	0.0	0.0	29.3	50.6	50.7	17.0	5.9	39.5	6.9	0.0	33.2
Prop In Lane	1.00		0.40	1.00		0.05	1.00		1.00	1.00		0.68
Lane Grp Cap(c), veh/h	1659	1962	1926	437	1351	735	459	646	547	97	0	432
V/C Ratio(X)	0.13	0.53	0.57	0.95	1.00	1.00	1.04	0.19	0.93	0.99	0.00	1.31
Avail Cap(c_a), veh/h	1659	1962	1926	452	1351	735	459	646	547	97	0	432
HCM Platoon Ratio	0.33	0.33	0.33	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.61	0.61	0.61	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	7.6	0.0	0.0	48.5	39.5	39.6	56.5	30.3	41.4	61.4	0.0	48.4
Incr Delay (d2), s/veh	0.0	0.6	0.8	28.6	23.8	32.9	53.1	0.1	22.3	86.0	0.0	155.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	0.3	0.4	16.2	24.6	28.6	10.7	2.7	18.4	5.5	0.0	32.7
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	7.6	0.6	0.8	77.1	63.3	72.5	109.6	30.4	63.6	147.5	0.0	203.4
LnGrp LOS	A	A	A	E	E	E	F	C	E	F	A	F
Approach Vol, veh/h	2354			2496			1108			662		
Approach Delay, s/veh	1.3			68.3			79.8			195.3		
Approach LOS	A			E			E			F		
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	35.9	151.9	22.0	39.0	129.8	58.0	11.0	50.0				
Change Period (Y+Rc), s	4.5	7.2	5.0	* 5.8	7.2	* 7.2	4.0	5.8				
Max Green Setting (Gmax), s	32.5	26.0	17.0	* 33	7.2	* 51	7.0	43.0				
Max Q Clear Time (g_c+Y1), s	41.3	2.0	19.0	35.2	13.1	52.7	8.9	41.5				
Green Ext Time (p_c), s	0.1	17.6	0.0	0.0	0.0	0.0	0.0	0.4				

Intersection Summary

HCM 6th Ctrl Delay 59.1

HCM 6th LOS E

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Intersection												
Int Delay, s/veh	0											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↑↑			↑↑				↑			↑
Traffic Vol, veh/h	0	2228	0	0	2635	8	0	0	0	0	0	0
Future Vol, veh/h	0	2228	0	0	2635	8	0	0	0	0	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	0	-	-	0
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	94	94	94	94	94	94	94	94	94	94	94	94
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	0	2370	0	0	2803	9	0	0	0	0	0	0
Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	-	0	0	-	-	0	-	-	1185	-	-	1406
Stage 1	-	-	-	-	-	-	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-	-	-	-	-	-	-
Critical Hdwy	-	-	-	-	-	-	-	-	6.9	-	-	6.9
Critical Hdwy Stg 1	-	-	-	-	-	-	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-	-	-	-	-	-	-
Follow-up Hdwy	-	-	-	-	-	-	-	-	3.3	-	-	3.3
Pot Cap-1 Maneuver	0	-	-	0	-	-	0	0	*155	0	0	-
Stage 1	0	-	-	0	-	-	0	0	-	0	0	-
Stage 2	0	-	-	0	-	-	0	0	-	0	0	-
Platoon blocked, %		-	-		-	-			1			2
Mov Cap-1 Maneuver	-	-	-	-	-	-	-	-	*155	-	-	-
Mov Cap-2 Maneuver	-	-	-	-	-	-	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-	-	-	-	-	-	-
Approach	EB			WB			NB			SB		
HCM Control Delay, s	0			0			0			0		
HCM LOS							A			A		
Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBT	WBR	SBLn1						
Capacity (veh/h)	-	-	-	-	-	-						
HCM Lane V/C Ratio	-	-	-	-	-	-						
HCM Control Delay (s)	0	-	-	-	-	0						
HCM Lane LOS	A	-	-	-	-	A						
HCM 95th %tile Q(veh)	-	-	-	-	-	-						
Notes												
~: Volume exceeds capacity		\$: Delay exceeds 300s				+: Computation Not Defined				*: All major volume in platoon		

Intersection						
Int Delay, s/veh	0.2					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	0	0	15	448	259	114
Future Vol, veh/h	0	0	15	448	259	114
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	85	85	85	85	85	85
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	0	0	18	527	305	134
Major/Minor	Minor2	Major1		Major2		
Conflicting Flow All	935	372	439	0	-	0
Stage 1	372	-	-	-	-	-
Stage 2	563	-	-	-	-	-
Critical Hdwy	6.4	6.2	4.1	-	-	-
Critical Hdwy Stg 1	5.4	-	-	-	-	-
Critical Hdwy Stg 2	5.4	-	-	-	-	-
Follow-up Hdwy	3.5	3.3	2.2	-	-	-
Pot Cap-1 Maneuver	297	678	1132	-	-	-
Stage 1	702	-	-	-	-	-
Stage 2	574	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	290	678	1132	-	-	-
Mov Cap-2 Maneuver	290	-	-	-	-	-
Stage 1	687	-	-	-	-	-
Stage 2	574	-	-	-	-	-
Approach	EB	NB		SB		
HCM Control Delay, s	0	0.3		0		
HCM LOS	A					
Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR	
Capacity (veh/h)	1132	-	-	-	-	
HCM Lane V/C Ratio	0.016	-	-	-	-	
HCM Control Delay (s)	8.2	0	0	-	-	
HCM Lane LOS	A	A	A	-	-	
HCM 95th %tile Q(veh)	0	-	-	-	-	

Intersection						
Int Delay, s/veh	4.8					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	125	41	38	339	208	46
Future Vol, veh/h	125	41	38	339	208	46
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	85	85	85	85	85	85
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	147	48	45	399	245	54
Major/Minor	Minor2	Major1		Major2		
Conflicting Flow All	761	272	299	0	-	0
Stage 1	272	-	-	-	-	-
Stage 2	489	-	-	-	-	-
Critical Hdwy	6.4	6.2	4.1	-	-	-
Critical Hdwy Stg 1	5.4	-	-	-	-	-
Critical Hdwy Stg 2	5.4	-	-	-	-	-
Follow-up Hdwy	3.5	3.3	2.2	-	-	-
Pot Cap-1 Maneuver	376	772	1274	-	-	-
Stage 1	778	-	-	-	-	-
Stage 2	621	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	359	772	1274	-	-	-
Mov Cap-2 Maneuver	359	-	-	-	-	-
Stage 1	743	-	-	-	-	-
Stage 2	621	-	-	-	-	-
Approach	EB	NB		SB		
HCM Control Delay, s	21.2	0.8		0		
HCM LOS	C					
Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR	
Capacity (veh/h)	1274	-	414	-	-	
HCM Lane V/C Ratio	0.035	-	0.472	-	-	
HCM Control Delay (s)	7.9	0	21.2	-	-	
HCM Lane LOS	A	A	C	-	-	
HCM 95th %tile Q(veh)	0.1	-	2.5	-	-	

Intersection						
Int Delay, s/veh	0					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	1	0	0	376	248	1
Future Vol, veh/h	1	0	0	376	248	1
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	87	87	87	87	87	87
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	1	0	0	432	285	1
Major/Minor	Minor2	Major1		Major2		
Conflicting Flow All	718	286	286	0	-	0
Stage 1	286	-	-	-	-	-
Stage 2	432	-	-	-	-	-
Critical Hdwy	6.4	6.2	4.1	-	-	-
Critical Hdwy Stg 1	5.4	-	-	-	-	-
Critical Hdwy Stg 2	5.4	-	-	-	-	-
Follow-up Hdwy	3.5	3.3	2.2	-	-	-
Pot Cap-1 Maneuver	399	758	1288	-	-	-
Stage 1	767	-	-	-	-	-
Stage 2	659	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	399	758	1288	-	-	-
Mov Cap-2 Maneuver	399	-	-	-	-	-
Stage 1	767	-	-	-	-	-
Stage 2	659	-	-	-	-	-
Approach	EB	NB		SB		
HCM Control Delay, s	14	0		0		
HCM LOS	B					
Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR	
Capacity (veh/h)	1288	-	399	-	-	
HCM Lane V/C Ratio	-	-	0.003	-	-	
HCM Control Delay (s)	0	-	14	-	-	
HCM Lane LOS	A	-	B	-	-	
HCM 95th %tile Q(veh)	0	-	0	-	-	

HCM 6th Signalized Intersection Summary

1: Washington Street & Van Buren Boulevard

Woodcrest Christian School Expansion

Cumulative (2045) Without Project Afternoon

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	165	1613	202	233	1704	700	153	408	190	764	567	124
Future Volume (veh/h)	165	1613	202	233	1704	700	153	408	190	764	567	124
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		0.99	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	174	1698	213	245	1794	737	161	429	200	804	597	131
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	146	2013	248	146	2247	1001	213	500	221	618	931	414
Arrive On Green	0.08	0.62	0.62	0.08	0.62	0.62	0.06	0.14	0.14	0.18	0.26	0.26
Sat Flow, veh/h	1810	3235	398	1810	3610	1609	3510	3610	1600	3510	3610	1605
Grp Volume(v), veh/h	174	932	979	245	1794	737	161	429	200	804	597	131
Grp Sat Flow(s),veh/h/ln	1810	1805	1828	1810	1805	1609	1755	1805	1600	1755	1805	1605
Q Serve(g_s), s	10.5	52.5	56.6	10.5	48.5	41.5	5.9	15.1	16.0	22.9	19.1	8.6
Cycle Q Clear(g_c), s	10.5	52.5	56.6	10.5	48.5	41.5	5.9	15.1	16.0	22.9	19.1	8.6
Prop In Lane	1.00		0.22	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	146	1123	1138	146	2247	1001	213	500	221	618	931	414
V/C Ratio(X)	1.19	0.83	0.86	1.68	0.80	0.74	0.76	0.86	0.90	1.30	0.64	0.32
Avail Cap(c_a), veh/h	146	1123	1138	146	2247	1001	230	500	221	618	931	414
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	59.7	19.2	20.0	59.7	18.4	17.1	60.1	54.8	55.1	53.5	42.9	39.0
Incr Delay (d2), s/veh	134.7	7.2	8.6	332.3	3.1	4.8	12.6	13.9	35.4	146.7	1.5	0.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	10.7	35.9	38.0	18.8	33.3	38.0	3.3	8.7	15.6	23.8	11.0	8.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	194.5	26.3	28.5	392.0	21.5	21.9	72.7	68.7	90.5	200.2	44.4	39.4
LnGrp LOS	F	C	C	F	C	C	E	E	F	F	D	D
Approach Vol, veh/h		2085			2776			790			1532	
Approach Delay, s/veh		41.4			54.3			75.0			125.8	
Approach LOS		D			D			E			F	
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	15.0	87.8	12.4	39.3	15.0	87.8	27.9	23.8				
Change Period (Y+Rc), s	4.5	6.2	4.5	5.8	4.5	6.2	5.0	* 5.8				
Max Green Setting (Gmax), s	10.5	57.8	8.5	32.2	10.5	57.8	22.9	* 18				
Max Q Clear Time (g_c+I1), s	12.5	58.6	7.9	21.1	12.5	50.5	24.9	18.0				
Green Ext Time (p_c), s	0.0	0.0	0.0	3.1	0.0	6.4	0.0	0.0				

Intersection Summary

HCM 6th Ctrl Delay	68.1
HCM 6th LOS	E

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

HCM 6th Signalized Intersection Summary

Woodcrest Christian School Expansion

2: Alta Cresta Avenue/Chicago Avenue & Van Buren Boulevard Cumulative (2045) Without Project Afternoon

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	142	2360	189	54	2602	108	96	33	28	118	28	65
Future Volume (veh/h)	142	2360	189	54	2602	108	96	33	28	118	28	65
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		0.98	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	149	2484	199	57	2739	114	101	35	29	124	29	68
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	104	2393	1066	85	2301	95	111	73	61	111	38	90
Arrive On Green	0.06	0.66	0.66	0.06	0.87	0.87	0.06	0.08	0.08	0.06	0.08	0.08
Sat Flow, veh/h	1810	3610	1608	1810	3529	146	1810	959	794	1810	503	1179
Grp Volume(v), veh/h	149	2484	199	57	1390	1463	101	0	64	124	0	97
Grp Sat Flow(s),veh/h/ln	1810	1805	1608	1810	1805	1870	1810	0	1753	1810	0	1682
Q Serve(g_s), s	7.5	86.2	6.2	4.0	84.8	84.8	7.2	0.0	4.5	8.0	0.0	7.3
Cycle Q Clear(g_c), s	7.5	86.2	6.2	4.0	84.8	84.8	7.2	0.0	4.5	8.0	0.0	7.3
Prop In Lane	1.00		1.00	1.00		0.08	1.00		0.45	1.00		0.70
Lane Grp Cap(c), veh/h	104	2393	1066	85	1177	1219	111	0	134	111	0	128
V/C Ratio(X)	1.43	1.04	0.19	0.67	1.18	1.20	0.91	0.00	0.48	1.11	0.00	0.76
Avail Cap(c_a), veh/h	104	2393	1066	104	1177	1219	111	0	243	111	0	239
HCM Platoon Ratio	1.00	1.00	1.00	1.33	1.33	1.33	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	0.29	0.29	0.29	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	61.3	21.9	8.4	60.0	8.6	8.6	60.6	0.0	57.6	61.0	0.0	58.8
Incr Delay (d2), s/veh	238.7	29.2	0.4	3.5	84.2	92.5	57.0	0.0	2.6	119.1	0.0	8.7
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	10.7	52.9	9.7	2.1	70.0	75.3	5.4	0.0	2.4	7.7	0.0	3.8
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	299.9	51.1	8.8	63.5	92.8	101.1	117.6	0.0	60.2	180.1	0.0	67.5
LnGrp LOS	F	F	A	E	F	F	F	A	E	F	A	E
Approach Vol, veh/h		2832			2910			165			221	
Approach Delay, s/veh		61.2			96.4			95.4			130.7	
Approach LOS		E			F			F			F	
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	10.6	92.4	12.0	15.0	12.0	91.0	12.0	15.0				
Change Period (Y+Rc), s	4.5	6.2	4.0	* 5.1	4.5	6.2	4.0	5.1				
Max Green Setting (Gmax), s	7.5	76.7	8.0	* 19	7.5	76.7	8.0	18.0				
Max Q Clear Time (g_c+I1), s	6.0	88.2	9.2	9.3	9.5	86.8	10.0	6.5				
Green Ext Time (p_c), s	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.2				
Intersection Summary												
HCM 6th Ctrl Delay			81.4									
HCM 6th LOS			F									
Notes												
* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.												

HCM 6th Signalized Intersection Summary

3: Van Buren Village Driveway & Van Buren Boulevard

Woodcrest Christian School Expansion
Cumulative (2045) Without Project Afternoon

	→	↘	↙	←	↖	↗
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑↑	↑	↘	↑↑	↘	↑
Traffic Volume (veh/h)	2468	39	118	2719	45	134
Future Volume (veh/h)	2468	39	118	2719	45	134
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)		1.00	1.00		1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	2598	41	124	2862	47	141
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	0	0	0	0	0	0
Cap, veh/h	2573	1148	135	2954	187	166
Arrive On Green	0.95	0.95	0.15	1.00	0.10	0.10
Sat Flow, veh/h	3705	1610	1810	3705	1810	1610
Grp Volume(v), veh/h	2598	41	124	2862	47	141
Grp Sat Flow(s),veh/h/ln	1805	1610	1810	1805	1810	1610
Q Serve(g_s), s	92.7	0.2	8.8	0.0	3.1	11.2
Cycle Q Clear(g_c), s	92.7	0.2	8.8	0.0	3.1	11.2
Prop In Lane		1.00	1.00		1.00	1.00
Lane Grp Cap(c), veh/h	2573	1148	135	2954	187	166
V/C Ratio(X)	1.01	0.04	0.92	0.97	0.25	0.85
Avail Cap(c_a), veh/h	2573	1148	135	2954	259	230
HCM Platoon Ratio	1.33	1.33	2.00	2.00	1.00	1.00
Upstream Filter(I)	0.09	0.09	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	3.4	1.0	54.9	0.0	53.7	57.3
Incr Delay (d2), s/veh	7.9	0.0	53.3	10.7	0.7	18.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	49.2	1.6	6.5	56.0	1.7	10.5
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	11.3	1.0	108.3	10.7	54.4	75.9
LnGrp LOS	F	A	F	B	D	E
Approach Vol, veh/h	2639			2986	188	
Approach Delay, s/veh	11.1			14.8	70.5	
Approach LOS	B			B	E	
Timer - Assigned Phs	1	2			6	8
Phs Duration (G+Y+Rc), s	13.7	98.9			112.6	17.4
Change Period (Y+Rc), s	4.0	6.2			* 6.2	4.0
Max Green Setting (Gmax), s	9.7	87.5			* 1E2	18.6
Max Q Clear Time (g_c+I1), s	10.8	94.7			2.0	13.2
Green Ext Time (p_c), s	0.0	0.0			74.1	0.3
Intersection Summary						
HCM 6th Ctrl Delay			14.9			
HCM 6th LOS			B			
Notes						
* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.						

HCM 6th TWSC
4: Little Court & Van Buren Boulevard

Woodcrest Christian School Expansion
Cumulative (2045) Without Project Afternoon

Intersection						
Int Delay, s/veh	0.1					
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑↑	↗		↑↑		↗
Traffic Vol, veh/h	2598	5	0	2838	0	2
Future Vol, veh/h	2598	5	0	2838	0	2
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	0	-	-	-	0
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	95	95	95	95	95	95
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	2735	5	0	2987	0	2
Major/Minor	Major1	Major2		Minor1		
Conflicting Flow All	0	0	-	-	-	1368
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	-	-	-	-	6.9
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	-	-	-	-	3.3
Pot Cap-1 Maneuver	-	-	0	-	0	*12
Stage 1	-	-	0	-	0	-
Stage 2	-	-	0	-	0	-
Platoon blocked, %	-	-		-		1
Mov Cap-1 Maneuver	-	-	-	-	-	*12
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Approach	EB	WB		NB		
HCM Control Delay, s	0	0		\$ 360.5		
HCM LOS	F					
Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBT		
Capacity (veh/h)	12	-	-	-		
HCM Lane V/C Ratio	0.175	-	-	-		
HCM Control Delay (s)	\$ 360.5	-	-	-		
HCM Lane LOS	F	-	-	-		
HCM 95th %tile Q(veh)	0.5	-	-	-		
Notes						
~: Volume exceeds capacity		\$: Delay exceeds 300s		+: Computation Not Defined		*: All major volume in platoon

HCM 6th TWSC
5: Van Buren Boulevard & Ridgeway Avenue

Woodcrest Christian School Expansion
Cumulative (2045) Without Project Afternoon

Intersection						
Int Delay, s/veh	0					
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	128	2472	2760	24	2	78
Future Vol, veh/h	128	2472	2760	24	2	78
Conflicting Peds, #/hr	3	0	0	3	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	95	95	95	95	95	95
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	135	2602	2905	25	2	82
Major/Minor	Major1	Major2		Minor2		
Conflicting Flow All	2933	0	-	0	4492	1468
Stage 1	-	-	-	-	2921	-
Stage 2	-	-	-	-	1571	-
Critical Hdwy	4.1	-	-	-	6.8	6.9
Critical Hdwy Stg 1	-	-	-	-	5.8	-
Critical Hdwy Stg 2	-	-	-	-	5.8	-
Follow-up Hdwy	2.2	-	-	-	3.5	3.3
Pot Cap-1 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	*56	-
Platoon blocked, %	2	-	-	-	2	2
Mov Cap-1 Maneuver	-	-	-	-	-	-
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	*56	-
Approach	EB	WB		SB		
HCM Control Delay, s	0					
HCM LOS	-					
Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1	
Capacity (veh/h)	-	-	-	-	-	
HCM Lane V/C Ratio	-	-	-	-	-	
HCM Control Delay (s)	-	-	-	-	-	
HCM Lane LOS	-	-	-	-	-	
HCM 95th %tile Q(veh)	-	-	-	-	-	
Notes						
~: Volume exceeds capacity		\$: Delay exceeds 300s		+: Computation Not Defined		*: All major volume in platoon

HCM 6th Signalized Intersection Summary

6: Dauchy Avenue & Van Buren Boulevard

Woodcrest Christian School Expansion
Cumulative (2045) Without Project Afternoon

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	94	2101	279	150	2437	81	285	110	153	111	63	76
Future Volume (veh/h)	94	2101	279	150	2437	81	285	110	153	111	63	76
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		0.99	0.98		0.97	0.99		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	99	2212	294	158	2565	85	300	116	161	117	66	80
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	97	1763	229	97	1983	878	343	130	180	178	348	287
Arrive On Green	0.02	0.18	0.18	0.07	0.73	0.73	0.05	0.18	0.18	0.05	0.18	0.18
Sat Flow, veh/h	1810	3210	417	1810	3610	1598	1810	708	982	1810	1900	1565
Grp Volume(v), veh/h	99	1221	1285	158	2565	85	300	0	277	117	66	80
Grp Sat Flow(s),veh/h/ln	1810	1805	1821	1810	1805	1598	1810	0	1690	1810	1900	1565
Q Serve(g_s), s	7.0	71.4	71.4	7.0	71.4	2.0	7.0	0.0	20.8	6.9	3.8	5.7
Cycle Q Clear(g_c), s	7.0	71.4	71.4	7.0	71.4	2.0	7.0	0.0	20.8	6.9	3.8	5.7
Prop In Lane	1.00		0.23	1.00		1.00	1.00		0.58	1.00		1.00
Lane Grp Cap(c), veh/h	97	991	1000	97	1983	878	343	0	309	178	348	287
V/C Ratio(X)	1.02	1.23	1.28	1.62	1.29	0.10	0.88	0.00	0.90	0.66	0.19	0.28
Avail Cap(c_a), veh/h	97	991	1000	97	1983	878	343	0	390	178	438	361
HCM Platoon Ratio	0.33	0.33	0.33	1.33	1.33	1.33	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	0.09	0.09	0.09	1.00	0.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	63.8	53.2	53.2	60.3	17.5	8.2	49.8	0.0	51.9	42.3	44.9	45.7
Incr Delay (d2), s/veh	95.6	113.0	135.7	284.0	132.5	0.0	20.8	0.0	19.3	6.8	0.3	0.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	6.1	66.9	73.8	11.2	72.2	3.9	18.1	0.0	11.7	4.6	2.4	5.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	159.4	166.3	188.9	344.3	150.0	8.2	70.6	0.0	71.2	49.1	45.2	46.2
LnGrp LOS	F	F	F	F	F	A	E	A	E	D	D	D
Approach Vol, veh/h		2605			2808			577			263	
Approach Delay, s/veh		177.2			156.6			70.9			47.3	
Approach LOS		F			F			E			D	
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	12.0	78.6	11.0	28.4	12.0	78.6	11.0	28.4				
Change Period (Y+Rc), s	5.0	7.2	4.0	4.6	5.0	7.2	4.0	4.6				
Max Green Setting (Gmax), s	7.0	65.2	7.0	30.0	7.0	65.2	7.0	30.0				
Max Q Clear Time (g_c+I1), s	9.0	73.4	9.0	7.7	9.0	73.4	8.9	22.8				
Green Ext Time (p_c), s	0.0	0.0	0.0	0.6	0.0	0.0	0.0	1.0				
Intersection Summary												
HCM 6th Ctrl Delay			152.7									
HCM 6th LOS			F									

Intersection												
Int Delay, s/veh	12.2											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	119	1	29	6	0	26	14	314	9	19	378	62
Future Vol, veh/h	119	1	29	6	0	26	14	314	9	19	378	62
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	90
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	76	76	76	76	76	76	76	76	76	76	76	76
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	157	1	38	8	0	34	18	413	12	25	497	82
Major/Minor	Minor2		Minor1			Major1			Major2			
Conflicting Flow All	1019	1008	497	1063	1084	419	579	0	0	425	0	0
Stage 1	547	547	-	455	455	-	-	-	-	-	-	-
Stage 2	472	461	-	608	629	-	-	-	-	-	-	-
Critical Hdwy	7.1	6.5	6.2	7.1	6.5	6.2	4.1	-	-	4.1	-	-
Critical Hdwy Stg 1	6.1	5.5	-	6.1	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.1	5.5	-	6.1	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.5	4	3.3	3.5	4	3.3	2.2	-	-	2.2	-	-
Pot Cap-1 Maneuver	217	242	577	203	219	638	1005	-	-	1145	-	-
Stage 1	525	521	-	589	572	-	-	-	-	-	-	-
Stage 2	576	569	-	486	478	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	197	229	577	181	207	638	1005	-	-	1145	-	-
Mov Cap-2 Maneuver	197	229	-	181	207	-	-	-	-	-	-	-
Stage 1	513	504	-	575	559	-	-	-	-	-	-	-
Stage 2	533	556	-	438	462	-	-	-	-	-	-	-
Approach	EB		WB			NB			SB			
HCM Control Delay, s	75.4		14.2			0.4			0.3			
HCM LOS	F		B									
Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1WBLn1	SBL	SBT	SBR					
Capacity (veh/h)	1005	-	-	226	433	1145	-	-				
HCM Lane V/C Ratio	0.018	-	-	0.867	0.097	0.022	-	-				
HCM Control Delay (s)	8.6	0	-	75.4	14.2	8.2	0	-				
HCM Lane LOS	A	A	-	F	B	A	A	-				
HCM 95th %tile Q(veh)	0.1	-	-	6.9	0.3	0.1	-	-				

HCM 6th AWSC
8: Taft Street/Dauchy Avenue & Krameria Avenue

Woodcrest Christian School Expansion
Cumulative (2045) Without Project Afternoon

Intersection	
Intersection Delay, s/veh	101.2
Intersection LOS	F

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	58	527	40	10	428	82	19	32	14	237	40	108
Future Vol, veh/h	58	527	40	10	428	82	19	32	14	237	40	108
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	61	555	42	11	451	86	20	34	15	249	42	114
Number of Lanes	0	1	0	0	1	0	0	1	0	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	1	1	1
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	1	1	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	1	1	1	1
HCM Control Delay	162.6	84.2	15.1	39.1
HCM LOS	F	F	C	E

Lane	NBLn1	EBLn1	WBLn1	SBLn1
Vol Left, %	29%	9%	2%	62%
Vol Thru, %	49%	84%	82%	10%
Vol Right, %	22%	6%	16%	28%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	65	625	520	385
LT Vol	19	58	10	237
Through Vol	32	527	428	40
RT Vol	14	40	82	108
Lane Flow Rate	68	658	547	405
Geometry Grp	1	1	1	1
Degree of Util (X)	0.172	1.278	1.057	0.826
Departure Headway (Hd)	10.066	7.222	7.459	8.038
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	359	507	493	454
Service Time	8.066	5.222	5.459	6.038
HCM Lane V/C Ratio	0.189	1.298	1.11	0.892
HCM Control Delay	15.1	162.6	84.2	39.1
HCM Lane LOS	C	F	F	E
HCM 95th-tile Q	0.6	26.4	15.7	7.9

HCM 6th Signalized Intersection Summary

9: Wood Road & Van Buren Boulevard

Woodcrest Christian School Expansion
Cumulative (2045) Without Project Afternoon



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	253	1744	336	288	2035	129	419	472	281	135	374	281
Future Volume (veh/h)	253	1744	336	288	2035	129	419	472	281	135	374	281
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.95	1.00		0.96	1.00		0.76	1.00		0.71
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No			No			No		
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	266	1836	354	303	2142	136	441	497	296	142	394	296
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	291	3010	1470	338	2777	1190	419	565	333	111	428	271
Arrive On Green	0.16	0.83	0.83	0.10	0.77	0.77	0.12	0.29	0.29	0.06	0.24	0.24
Sat Flow, veh/h	1810	3610	1533	3510	3610	1547	3510	1932	1138	1810	1805	1145
Grp Volume(v), veh/h	266	1836	354	303	2142	136	441	464	329	142	394	296
Grp Sat Flow(s), veh/h/ln	1810	1805	1533	1755	1805	1547	1755	1805	1266	1810	1805	1145
Q Serve(g_s), s	18.8	22.4	1.8	11.1	43.8	6.8	15.5	31.8	32.3	8.0	27.7	30.8
Cycle Q Clear(g_c), s	18.8	22.4	1.8	11.1	43.8	6.8	15.5	31.8	32.3	8.0	27.7	30.8
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.90	1.00		1.00
Lane Grp Cap(c), veh/h	291	3010	1470	338	2777	1190	419	528	370	111	428	271
V/C Ratio(X)	0.92	0.61	0.24	0.90	0.77	0.11	1.05	0.88	0.89	1.28	0.92	1.09
Avail Cap(c_a), veh/h	313	3010	1470	338	2777	1190	419	528	370	111	428	271
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.09	0.09	0.09	0.49	0.49	0.49	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	53.7	3.7	0.2	58.1	8.5	20.8	57.3	43.8	44.0	61.0	48.4	49.6
Incr Delay (d2), s/veh	4.0	0.1	0.0	14.2	1.1	0.1	58.8	15.6	22.3	176.4	25.2	81.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	9.9	33.2	13.4	6.1	39.1	7.6	11.0	19.0	14.2	9.5	17.2	15.9
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	57.6	3.7	0.2	72.3	9.6	20.9	116.1	59.5	66.3	237.4	73.7	130.7
LnGrp LOS	E	A	A	E	A	C	F	E	E	F	E	F
Approach Vol, veh/h	2456			2581			1234			832		
Approach Delay, s/veh	9.1			17.5			81.5			121.9		
Approach LOS	A			B			F			F		
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	8.0	117.4	21.0	36.6	26.4	109.0	13.8	43.8				
Change Period (Y+Rc), s	5.5	7.2	5.5	5.8	5.5	7.2	5.8	* 5.8				
Max Green Setting (Gmax), s	12.5	49.0	15.5	29.0	22.5	39.0	8.0	* 38				
Max Q Clear Time (g_c+1/3, s)	11.3	24.4	17.5	32.8	20.8	45.8	10.0	34.3				
Green Ext Time (p_c), s	0.0	16.4	0.0	0.0	0.1	0.0	0.0	1.7				

Intersection Summary

HCM 6th Ctrl Delay	37.9
HCM 6th LOS	D

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

HCM 6th Signalized Intersection Summary

10: Van Buren Boulevard & Bountiful Street

Woodcrest Christian School Expansion
Cumulative (2045) Without Project Afternoon



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	285	2083	2239	29	18	233
Future Volume (veh/h)	285	2083	2239	29	18	233
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00			0.96	1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No	No		No	
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	300	2193	2357	31	19	245
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	0	0	0	0	0	0
Cap, veh/h	285	3835	2884	38	309	275
Arrive On Green	0.32	1.00	1.00	1.00	0.17	0.17
Sat Flow, veh/h	1810	5358	5444	69	1810	1610
Grp Volume(v), veh/h	300	2193	1544	844	19	245
Grp Sat Flow(s), veh/h/ln	1810	1729	1729	1884	1810	1610
Q Serve(g_s), s	20.5	0.0	0.0	0.0	1.1	19.3
Cycle Q Clear(g_c), s	20.5	0.0	0.0	0.0	1.1	19.3
Prop In Lane	1.00			0.04	1.00	1.00
Lane Grp Cap(c), veh/h	285	3835	1891	1030	309	275
V/C Ratio(X)	1.05	0.57	0.82	0.82	0.06	0.89
Avail Cap(c_a), veh/h	285	3835	1891	1030	619	551
HCM Platoon Ratio	2.00	2.00	2.00	2.00	1.00	1.00
Upstream Filter(I)	0.09	0.09	0.31	0.31	1.00	1.00
Uniform Delay (d), s/veh	44.5	0.0	0.0	0.0	45.2	52.7
Incr Delay (d2), s/veh	31.6	0.1	1.3	2.4	0.1	9.7
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%), veh/ft	2.8	26.4	28.2	31.1	0.7	16.9
Unsig. Movement Delay, s/veh						
LnGrp Delay(d), s/veh	76.1	0.1	1.3	2.4	45.3	62.4
LnGrp LOS	F	A	A	A	D	E
Approach Vol, veh/h		2493	2388		264	
Approach Delay, s/veh		9.2	1.7		61.2	
Approach LOS		A	A		E	
Timer - Assigned Phs		2		4	5	6
Phs Duration (G+Y+Rc), s		103.3		26.7	25.0	78.3
Change Period (Y+Rc), s		7.2		4.5	4.5	7.2
Max Green Setting (Gmax), s		73.8		44.5	20.5	48.8
Max Q Clear Time (g_c+I1), s		2.0		21.3	22.5	2.0
Green Ext Time (p_c), s		31.0		0.8	0.0	27.5
Intersection Summary						
HCM 6th Ctrl Delay			8.4			
HCM 6th LOS			A			

HCM 6th Signalized Intersection Summary

11: Trautwein Road & Mission Grove Parkway S

Woodcrest Christian School Expansion

Cumulative (2045) Without Project Afternoon



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	48	13	16	673	20	57	6	1831	563	159	1874	41
Future Volume (veh/h)	48	13	16	673	20	57	6	1831	563	159	1874	41
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.97	1.00		0.99	1.00		0.98	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No			No			No		
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	51	14	17	708	21	60	6	1927	593	167	1973	43
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	82	87	105	532	438	367	19	1808	1035	118	2006	887
Arrive On Green	0.05	0.11	0.11	0.15	0.23	0.23	0.00	0.17	0.17	0.07	0.56	0.56
Sat Flow, veh/h	1810	769	933	3510	1900	1589	1810	3610	1580	1810	3610	1596
Grp Volume(v), veh/h	51	0	31	708	21	60	6	1927	593	167	1973	43
Grp Sat Flow(s),veh/h/ln	1810	0	1702	1755	1900	1589	1810	1805	1580	1810	1805	1596
Q Serve(g_s), s	3.6	0.0	2.1	19.7	1.1	3.9	0.4	65.1	32.4	8.5	69.6	1.6
Cycle Q Clear(g_c), s	3.6	0.0	2.1	19.7	1.1	3.9	0.4	65.1	32.4	8.5	69.6	1.6
Prop In Lane	1.00		0.55	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	82	0	192	532	438	367	19	1808	1035	118	2006	887
V/C Ratio(X)	0.62	0.00	0.16	1.33	0.05	0.16	0.32	1.07	0.57	1.41	0.98	0.05
Avail Cap(c_a), veh/h	170	0	419	532	617	516	104	1808	1035	118	2006	887
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	0.33	0.33	0.33	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	1.00	1.00	0.17	0.17	0.17	1.00	1.00	1.00
Uniform Delay (d), s/veh	61.0	0.0	52.1	55.2	38.9	40.0	64.3	54.3	22.5	60.8	28.3	13.2
Incr Delay (d2), s/veh	2.9	0.0	0.4	161.5	0.0	0.2	0.6	32.1	0.4	227.6	16.5	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.9	0.0	1.1	21.5	0.8	3.9	0.2	40.7	33.9	11.8	40.2	2.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	63.8	0.0	52.5	216.6	38.9	40.2	64.9	86.4	22.9	288.4	44.8	13.3
LnGrp LOS	E	A	D	F	D	D	E	F	C	F	D	B
Approach Vol, veh/h	82		789				2526		2183			
Approach Delay, s/veh	59.5		198.5				71.4		62.8			
Approach LOS	E		F				E		E			
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	3.0	71.3	25.2	20.5	5.9	78.4	9.9	35.8				
Change Period (Y+Rc), s	4.5	6.2	5.5	5.8	4.5	6.2	4.0	* 5.8				
Max Green Setting (Gmax), s	3.5	47.8	19.7	32.0	7.5	48.8	12.2	* 42				
Max Q Clear Time (g_c+110, s)	110.5	67.1	21.7	4.1	2.4	71.6	5.6	5.9				
Green Ext Time (p_c), s	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.3				

Intersection Summary

HCM 6th Ctrl Delay 85.9

HCM 6th LOS F

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

HCM 6th Signalized Intersection Summary

12: Trautwein Road & John F Kennedy Drive

Woodcrest Christian School Expansion
Cumulative (2045) Without Project Afternoon



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	704	59	123	54	22	35	120	1684	97	17	1914	760
Future Volume (veh/h)	704	59	123	54	22	35	120	1684	97	17	1914	760
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		0.99	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No			No			No		
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	741	62	129	57	23	37	126	1773	102	18	2015	800
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	516	193	162	204	44	71	97	2155	960	47	2054	1151
Arrive On Green	0.15	0.10	0.10	0.11	0.07	0.07	0.05	0.60	0.60	0.05	1.00	1.00
Sat Flow, veh/h	3510	1900	1601	1810	652	1048	1810	3610	1607	1810	3610	1607
Grp Volume(v), veh/h	741	62	129	57	0	60	126	1773	102	18	2015	800
Grp Sat Flow(s),veh/h/ln	1755	1900	1601	1810	0	1700	1810	1805	1607	1810	1805	1607
Q Serve(g_s), s	19.1	3.9	8.9	3.8	0.0	4.4	7.0	50.6	1.7	1.3	0.0	0.0
Cycle Q Clear(g_c), s	19.1	3.9	8.9	3.8	0.0	4.4	7.0	50.6	1.7	1.3	0.0	0.0
Prop In Lane	1.00		1.00	1.00		0.62	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	516	193	162	204	0	116	97	2155	960	47	2054	1151
V/C Ratio(X)	1.44	0.32	0.79	0.28	0.00	0.52	1.29	0.82	0.11	0.39	0.98	0.70
Avail Cap(c_a), veh/h	516	634	534	204	0	432	97	2155	960	97	2054	1151
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00	2.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	0.00	1.00	0.63	0.63	0.63	0.21	0.21	0.21
Uniform Delay (d), s/veh	55.4	54.3	42.9	52.8	0.0	58.5	61.5	20.7	2.6	60.7	0.0	0.0
Incr Delay (d2), s/veh	207.4	1.0	8.5	0.7	0.0	3.6	171.4	2.4	0.1	1.1	5.7	0.7
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	24.2	2.3	8.7	2.1	0.0	2.3	8.2	32.7	4.4	0.7	37.9	29.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	262.8	55.2	51.4	53.6	0.0	62.1	232.9	23.1	2.7	61.8	5.7	0.7
LnGrp LOS	F	E	D	D	A	E	F	C	A	E	A	A
Approach Vol, veh/h	932			117			2001			2833		
Approach Delay, s/veh	219.8			57.9			35.3			4.7		
Approach LOS	F			E			D			A		
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	7.3	84.8	20.1	17.8	11.0	81.2	23.6	14.2				
Change Period (Y+Rc), s	4.0	7.2	5.4	* 4.6	4.0	7.2	4.5	5.4				
Max Green Setting (Gmax), s	7.0	49.8	10.0	* 43	7.0	49.8	19.1	33.0				
Max Q Clear Time (g_c+13, s)	13.3	52.6	5.8	10.9	9.0	2.0	21.1	6.4				
Green Ext Time (p_c), s	0.0	0.0	0.0	0.7	0.0	32.5	0.0	0.3				

Intersection Summary

HCM 6th Ctrl Delay 50.2

HCM 6th LOS D

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

HCM 6th Signalized Intersection Summary 13: Trautwein Road & Grove Community Drive

Woodcrest Christian School Expansion
Cumulative (2045) Without Project Afternoon



Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	123	273	1628	100	393	1698
Future Volume (veh/h)	123	273	1628	100	393	1698
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00		1.00	1.00	
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No		No		No	
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	129	287	1714	105	414	1787
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	0	0	0	0	0	0
Cap, veh/h	189	679	2279	1015	474	2919
Arrive On Green	0.10	0.10	1.00	1.00	0.27	1.00
Sat Flow, veh/h	1810	2834	3705	1608	3510	3705
Grp Volume(v), veh/h	129	287	1714	105	414	1787
Grp Sat Flow(s), veh/h/ln	1810	1417	1805	1608	1755	1805
Q Serve(g_s), s	8.9	11.1	0.0	0.0	14.6	0.0
Cycle Q Clear(g_c), s	8.9	11.1	0.0	0.0	14.6	0.0
Prop In Lane	1.00	1.00		1.00	1.00	
Lane Grp Cap(c), veh/h	189	679	2279	1015	474	2919
V/C Ratio(X)	0.68	0.42	0.75	0.10	0.87	0.61
Avail Cap(c_a), veh/h	221	729	2279	1015	662	2919
HCM Platoon Ratio	1.00	1.00	2.00	2.00	2.00	2.00
Upstream Filter(I)	1.00	1.00	0.63	0.63	0.09	0.09
Uniform Delay (d), s/veh	56.1	41.8	0.0	0.0	46.4	0.0
Incr Delay (d2), s/veh	6.7	0.4	1.5	0.1	1.0	0.1
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%), veh/ln	5.0	9.2	31.4	3.8	7.5	32.3
Unsig. Movement Delay, s/veh						
LnGrp Delay(d), s/veh	62.9	42.2	1.5	0.1	47.3	0.1
LnGrp LOS	E	D	A	A	D	A
Approach Vol, veh/h	416		1819			2201
Approach Delay, s/veh	48.6		1.4			9.0
Approach LOS	D		A			A
Timer - Assigned Phs	1	2			6	8
Phs Duration (G+Y+Rc), s	23.1	88.3			111.3	18.7
Change Period (Y+Rc), s	5.5	6.2			6.2	5.1
Max Green Setting (Gmax), s	24.5	72.8			102.8	15.9
Max Q Clear Time (g_c+10.6), s	110.6	2.0			2.0	13.1
Green Ext Time (p_c), s	0.9	21.5			23.6	0.4
Intersection Summary						
HCM 6th Ctrl Delay			9.6			
HCM 6th LOS			A			

HCM 6th Signalized Intersection Summary

14: Trautwein Road & Orange Terrace Pkwy

Woodcrest Christian School Expansion
Cumulative (2045) Without Project Afternoon



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	54	44	25	206	15	304	40	1369	282	329	1402	24
Future Volume (veh/h)	54	44	25	206	15	304	40	1369	282	329	1402	24
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		0.97	1.00		0.99	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No				No				No			
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	57	46	26	217	16	320	42	1441	297	346	1476	25
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	155	73	42	245	207	614	76	1904	842	390	2182	961
Arrive On Green	0.09	0.06	0.06	0.14	0.11	0.11	0.08	1.00	1.00	0.22	1.00	1.00
Sat Flow, veh/h	1810	1138	643	1810	1900	2736	1810	3610	1596	3510	3610	1590
Grp Volume(v), veh/h	57	0	72	217	16	320	42	1441	297	346	1476	25
Grp Sat Flow(s),veh/h/ln	1810	0	1781	1810	1900	1368	1810	1805	1596	1755	1805	1590
Q Serve(g_s), s	3.9	0.0	5.1	15.3	1.0	9.9	2.9	0.0	0.0	12.4	0.0	0.0
Cycle Q Clear(g_c), s	3.9	0.0	5.1	15.3	1.0	9.9	2.9	0.0	0.0	12.4	0.0	0.0
Prop In Lane	1.00		0.36	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	155	0	115	245	207	614	76	1904	842	390	2182	961
V/C Ratio(X)	0.37	0.00	0.63	0.89	0.08	0.52	0.55	0.76	0.35	0.89	0.68	0.03
Avail Cap(c_a), veh/h	362	0	452	434	576	1144	97	1904	842	405	2182	961
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00	2.00	2.00	2.00	2.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	1.00	1.00	0.53	0.53	0.53	0.75	0.75	0.75
Uniform Delay (d), s/veh	56.1	0.0	59.3	55.2	52.0	25.6	58.4	0.0	0.0	49.7	0.0	0.0
Incr Delay (d2), s/veh	0.5	0.0	5.5	4.3	0.2	0.7	1.2	1.5	0.6	15.2	1.3	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.1	0.0	2.8	8.1	0.6	9.2	1.5	26.4	10.9	7.1	27.0	0.9
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	56.6	0.0	64.8	59.5	52.2	26.3	59.6	1.5	0.6	64.9	1.3	0.0
LnGrp LOS	E	A	E	E	D	C	E	A	A	E	A	A
Approach Vol, veh/h	129				553		1780				1847	
Approach Delay, s/veh	61.2				40.1		2.8				13.2	
Approach LOS	E				D		A				B	
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	9.5	74.8	21.6	14.2	9.5	84.8	17.0	18.8				
Change Period (Y+Rc), s	5.0	6.2	4.0	5.8	4.0	6.2	5.8	* 4.6				
Max Green Setting (Gmax), s	15.0	29.8	31.2	33.0	7.0	38.8	26.0	* 39				
Max Q Clear Time (g_c+1/4), s	14.4	2.0	17.3	7.1	4.9	2.0	5.9	11.9				
Green Ext Time (p_c), s	0.0	13.0	0.3	0.3	0.0	13.4	0.1	1.4				

Intersection Summary

HCM 6th Ctrl Delay 13.8

HCM 6th LOS B

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

HCM 6th Signalized Intersection Summary

15: Trautwein Road & Shopping Ctr Dwy

Woodcrest Christian School Expansion
Cumulative (2045) Without Project Afternoon



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	175	47	139	101	34	97	185	1368	26	211	1160	176
Future Volume (veh/h)	175	47	139	101	34	97	185	1368	26	211	1160	176
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		0.98	1.00		0.97	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No			No			No		
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	184	49	146	106	36	102	195	1440	27	222	1221	185
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	264	98	293	216	101	287	219	1817	784	248	1875	827
Arrive On Green	0.23	0.23	0.23	0.23	0.23	0.23	0.24	1.00	1.00	0.18	0.69	0.69
Sat Flow, veh/h	1269	420	1251	1205	432	1225	1810	3610	1557	1810	3610	1592
Grp Volume(v), veh/h	184	0	195	106	0	138	195	1440	27	222	1221	185
Grp Sat Flow(s), veh/h/ln	1269	0	1671	1205	0	1657	1810	1805	1557	1810	1805	1592
Q Serve(g_s), s	18.4	0.0	13.2	10.9	0.0	9.0	13.5	0.0	0.0	15.6	24.7	5.5
Cycle Q Clear(g_c), s	27.5	0.0	13.2	24.0	0.0	9.0	13.5	0.0	0.0	15.6	24.7	5.5
Prop In Lane	1.00		0.75	1.00		0.74	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	264	0	391	216	0	388	219	1817	784	248	1875	827
V/C Ratio(X)	0.70	0.00	0.50	0.49	0.00	0.36	0.89	0.79	0.03	0.90	0.65	0.22
Avail Cap(c_a), veh/h	299	0	437	249	0	433	452	1817	784	452	1875	827
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00	2.00	1.33	1.33	1.33
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	0.09	0.09	0.09	0.65	0.65	0.65
Uniform Delay (d), s/veh	53.1	0.0	43.2	53.6	0.0	41.6	48.4	0.0	0.0	52.2	13.5	10.5
Incr Delay (d2), s/veh	5.9	0.0	1.0	1.7	0.0	0.6	0.5	0.3	0.0	3.0	1.2	0.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	7.1	0.0	7.1	3.9	0.0	5.0	7.1	26.0	1.0	8.2	22.3	6.8
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	59.0	0.0	44.1	55.3	0.0	42.1	48.9	0.3	0.0	55.3	14.6	10.9
LnGrp LOS	E	A	D	E	A	D	D	A	A	E	B	B
Approach Vol, veh/h	379			244			1662			1628		
Approach Delay, s/veh	51.4			47.9			6.0			19.8		
Approach LOS	D			D			A			B		
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	22.3	72.6		35.0	20.2	74.7		35.0				
Change Period (Y+Rc), s	4.5	7.2		4.6	4.5	7.2		4.6				
Max Green Setting (Gmax), s	32.5	47.2		34.0	32.5	47.2		34.0				
Max Q Clear Time (g_c+117,6	117.6	2.0		29.5	15.5	26.7		26.0				
Green Ext Time (p_c), s	0.2	13.7		0.8	0.2	8.8		0.7				

Intersection Summary

HCM 6th Ctrl Delay	18.7											
HCM 6th LOS	B											

HCM 6th Signalized Intersection Summary

16: Trautwein Road & Van Buren Boulevard

Woodcrest Christian School Expansion
Cumulative (2045) Without Project Afternoon



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↰↱	↑↑	↰	↰↱	↑↑↑	↰	↰	↑↑		↰↱	↑↑	↰
Traffic Volume (veh/h)	523	1357	221	192	1787	701	200	509	112	531	578	400
Future Volume (veh/h)	523	1357	221	192	1787	701	200	509	112	531	578	400
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		0.99	1.00		0.96	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No			No			No		
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	551	1428	233	202	1881	738	211	536	118	559	608	421
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	427	1411	827	146	1748	720	226	741	162	394	838	562
Arrive On Green	0.24	0.78	0.78	0.16	0.67	0.67	0.12	0.25	0.25	0.19	0.39	0.39
Sat Flow, veh/h	3510	3610	1603	1810	5187	1602	1810	2922	640	3510	3610	1577
Grp Volume(v), veh/h	551	1428	233	202	1881	738	211	330	324	559	608	421
Grp Sat Flow(s),veh/h/ln	1755	1805	1603	1810	1729	1602	1810	1805	1757	1755	1805	1577
Q Serve(g_s), s	15.8	50.8	1.1	10.5	43.8	43.8	15.0	21.7	21.9	14.6	18.7	9.2
Cycle Q Clear(g_c), s	15.8	50.8	1.1	10.5	43.8	43.8	15.0	21.7	21.9	14.6	18.7	9.2
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.36	1.00		1.00
Lane Grp Cap(c), veh/h	427	1411	827	146	1748	720	226	458	446	394	838	562
V/C Ratio(X)	1.29	1.01	0.28	1.38	1.08	1.02	0.93	0.72	0.73	1.42	0.73	0.75
Avail Cap(c_a), veh/h	427	1411	827	146	1748	720	226	555	541	394	1050	654
HCM Platoon Ratio	2.00	2.00	2.00	2.00	2.00	2.00	1.00	1.00	1.00	1.67	1.67	1.67
Upstream Filter(I)	0.86	0.86	0.86	0.38	0.38	0.38	1.00	1.00	1.00	0.73	0.73	0.73
Uniform Delay (d), s/veh	49.2	14.2	2.3	54.5	21.2	10.8	56.4	44.3	44.4	52.8	36.3	27.6
Incr Delay (d2), s/veh	145.3	25.2	0.7	187.5	39.2	27.1	41.6	3.6	3.9	198.7	1.4	3.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	6.3	30.4	8.9	12.9	27.3	35.2	10.2	12.4	12.2	18.0	11.1	17.9
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	194.4	39.4	3.0	242.0	60.4	38.0	98.0	47.9	48.2	251.6	37.7	30.6
LnGrp LOS	F	F	A	F	F	F	F	D	D	F	D	C
Approach Vol, veh/h	2212					2821		865		1588		
Approach Delay, s/veh	74.2					67.5		60.2		111.1		
Approach LOS	E					E		E		F		
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	57.0	57.0	21.6	36.4	22.0	50.0	19.6	38.4				
Change Period (Y+Rc), s	4.5	6.2	5.4	* 6.2	6.2	* 6.2	5.0	5.4				
Max Green Setting (Gmax), s	40.5	43.8	16.0	* 38	10.0	* 44	14.6	40.0				
Max Q Clear Time (g_c+1/2), s	112.5	52.8	17.0	20.7	17.8	45.8	16.6	23.9				
Green Ext Time (p_c), s	0.0	0.0	0.0	4.8	0.0	0.0	0.0	3.4				

Intersection Summary

HCM 6th Ctrl Delay 77.9

HCM 6th LOS E

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

HCM 6th Signalized Intersection Summary

17: Van Buren Boulevard & Shopping Ctr Dwy

Woodcrest Christian School Expansion
Cumulative (2045) Without Project Afternoon



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations	↰	↑↑	↑↑↑		↰	↑↑
Traffic Volume (veh/h)	94	1906	2486	111	214	59
Future Volume (veh/h)	94	1906	2486	111	214	59
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00			1.00	1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No	No		No	
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	99	2006	2617	117	225	62
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	0	0	0	0	0	0
Cap, veh/h	392	2782	2538	112	259	230
Arrive On Green	0.43	1.00	1.00	1.00	0.14	0.14
Sat Flow, veh/h	1810	3705	5263	225	1810	1610
Grp Volume(v), veh/h	99	2006	1768	966	225	62
Grp Sat Flow(s), veh/h/ln	1810	1805	1729	1859	1810	1610
Q Serve(g_s), s	4.5	0.0	64.8	64.8	15.8	4.5
Cycle Q Clear(g_c), s	4.5	0.0	64.8	64.8	15.8	4.5
Prop In Lane	1.00			0.12	1.00	1.00
Lane Grp Cap(c), veh/h	392	2782	1724	927	259	230
V/C Ratio(X)	0.25	0.72	1.03	1.04	0.87	0.27
Avail Cap(c_a), veh/h	392	2782	1724	927	487	434
HCM Platoon Ratio	2.00	2.00	2.00	2.00	1.00	1.00
Upstream Filter(I)	0.09	0.09	0.09	0.09	1.00	1.00
Uniform Delay (d), s/veh	30.1	0.0	0.2	0.2	54.5	49.6
Incr Delay (d2), s/veh	0.0	0.2	14.5	22.8	8.7	0.6
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%), veh/ln	3.6	36.2	34.5	39.3	8.7	4.2
Unsig. Movement Delay, s/veh						
LnGrp Delay(d), s/veh	30.1	0.2	14.7	23.0	63.2	50.3
LnGrp LOS	C	A	F	F	E	D
Approach Vol, veh/h		2105	2734		287	
Approach Delay, s/veh		1.6	17.6		60.4	
Approach LOS		A	B		E	
Timer - Assigned Phs		2		4	5	6
Phs Duration (G+Y+Rc), s		107.4		22.6	35.4	72.0
Change Period (Y+Rc), s		7.2		4.0	7.2	* 7.2
Max Green Setting (Gmax), s		83.8		35.0	14.5	* 65
Max Q Clear Time (g_c+l1), s		2.0		17.8	6.5	66.8
Green Ext Time (p_c), s		30.2		0.8	0.1	0.0

Intersection Summary

HCM 6th Ctrl Delay	13.4
HCM 6th LOS	B

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

HCM 6th Signalized Intersection Summary

18: Barton Street & Van Buren Boulevard

Woodcrest Christian School Expansion
Cumulative (2045) Without Project Afternoon



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	147	1482	420	369	1929	95	626	81	323	54	53	214
Future Volume (veh/h)	147	1482	420	369	1929	95	626	81	323	54	53	214
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No			No			No		
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	155	1560	442	388	2031	100	659	85	340	57	56	225
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	97	1033	279	1158	4917	241	711	635	537	85	56	227
Arrive On Green	0.02	0.12	0.12	0.64	0.97	0.97	0.20	0.33	0.33	0.05	0.17	0.17
Sat Flow, veh/h	1810	2809	759	1810	5065	249	3510	1900	1609	1810	330	1328
Grp Volume(v), veh/h	155	975	1027	388	1385	746	659	85	340	57	0	281
Grp Sat Flow(s),veh/h/ln	1810	1805	1762	1810	1729	1855	1755	1900	1609	1810	0	1658
Q Serve(g_s), s	7.0	47.8	47.8	12.8	2.5	2.6	24.0	4.1	17.4	4.0	0.0	22.0
Cycle Q Clear(g_c), s	7.0	47.8	47.8	12.8	2.5	2.6	24.0	4.1	17.4	4.0	0.0	22.0
Prop In Lane	1.00		0.43	1.00		0.13	1.00		1.00	1.00		0.80
Lane Grp Cap(c), veh/h	97	664	648	1158	3357	1801	711	635	537	85	0	283
V/C Ratio(X)	1.59	1.47	1.58	0.33	0.41	0.41	0.93	0.13	0.63	0.67	0.00	0.99
Avail Cap(c_a), veh/h	97	664	648	1158	3357	1801	756	635	537	97	0	283
HCM Platoon Ratio	0.33	0.33	0.33	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.59	0.59	0.59	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	63.8	57.1	57.1	10.7	0.1	0.1	50.9	30.2	20.7	61.0	0.0	53.8
Incr Delay (d2), s/veh	292.5	216.2	267.4	0.1	0.4	0.7	16.3	0.1	2.4	9.6	0.0	51.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.4	63.8	71.5	14.0	25.2	27.3	13.5	3.1	18.8	2.3	0.0	14.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	356.4	273.3	324.5	10.8	0.5	0.8	67.2	30.3	23.1	70.5	0.0	105.1
LnGrp LOS	F	F	F	B	A	A	E	C	C	E	A	F
Approach Vol, veh/h	2157			2519			1084			338		
Approach Delay, s/veh	303.6			2.2			50.5			99.2		
Approach LOS	F			A			D			F		
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	32.6	55.0	31.3	28.0	12.0	135.6	10.1	49.2				
Change Period (Y+Rc), s	7.2	* 7.2	5.0	* 5.8	5.0	7.2	4.0	5.8				
Max Green Setting (Gmax), s	40.8	* 48	28.0	* 22	7.0	51.0	7.0	43.0				
Max Q Clear Time (g_c+14.8), s	14.8	49.8	26.0	24.0	9.0	4.6	6.0	19.4				
Green Ext Time (p_c), s	0.0	0.0	0.4	0.0	0.0	22.8	0.0	1.5				

Intersection Summary

HCM 6th Ctrl Delay 122.8

HCM 6th LOS F

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Intersection												
Int Delay, s/veh	0											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↑↑			↑↑				↑			↑
Traffic Vol, veh/h	0	2474	0	0	2782	16	0	0	0	0	0	2
Future Vol, veh/h	0	2474	0	0	2782	16	0	0	0	0	0	2
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	0	-	-	0
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	0	2689	0	0	3024	17	0	0	0	0	0	2
Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	-	0	0	-	-	0	-	-	1345	-	-	1521
Stage 1	-	-	-	-	-	-	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-	-	-	-	-	-	-
Critical Hdwy	-	-	-	-	-	-	-	-	6.9	-	-	6.9
Critical Hdwy Stg 1	-	-	-	-	-	-	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-	-	-	-	-	-	-
Follow-up Hdwy	-	-	-	-	-	-	-	-	3.3	-	-	3.3
Pot Cap-1 Maneuver	0	-	-	0	-	-	0	0	*59	0	0	-
Stage 1	0	-	-	0	-	-	0	0	-	0	0	-
Stage 2	0	-	-	0	-	-	0	0	-	0	0	-
Platoon blocked, %		-	-		-	-			1			2
Mov Cap-1 Maneuver	-	-	-	-	-	-	-	-	*59	-	-	-
Mov Cap-2 Maneuver	-	-	-	-	-	-	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-	-	-	-	-	-	-
Approach	EB			WB			NB			SB		
HCM Control Delay, s	0			0			0					
HCM LOS							A			-		
Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBT	WBR	SBLn1						
Capacity (veh/h)	-	-	-	-	-	-						
HCM Lane V/C Ratio	-	-	-	-	-	-						
HCM Control Delay (s)	0	-	-	-	-	-						
HCM Lane LOS	A	-	-	-	-	-						
HCM 95th %tile Q(veh)	-	-	-	-	-	-						
Notes												
~: Volume exceeds capacity \$: Delay exceeds 300s +: Computation Not Defined *: All major volume in platoon												

HCM 6th TWSC
20: Dauchy Avenue & Project Driveway 3

Woodcrest Christian School Expansion
Cumulative (2045) Without Project Afternoon

Intersection						
Int Delay, s/veh	0.1					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	0	0	11	337	347	66
Future Vol, veh/h	0	0	11	337	347	66
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	83	83	83	83	83	83
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	0	0	13	406	418	80
Major/Minor	Minor2	Major1		Major2		
Conflicting Flow All	890	458	498	0	-	0
Stage 1	458	-	-	-	-	-
Stage 2	432	-	-	-	-	-
Critical Hdwy	6.4	6.2	4.1	-	-	-
Critical Hdwy Stg 1	5.4	-	-	-	-	-
Critical Hdwy Stg 2	5.4	-	-	-	-	-
Follow-up Hdwy	3.5	3.3	2.2	-	-	-
Pot Cap-1 Maneuver	316	607	1076	-	-	-
Stage 1	641	-	-	-	-	-
Stage 2	659	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	311	607	1076	-	-	-
Mov Cap-2 Maneuver	311	-	-	-	-	-
Stage 1	631	-	-	-	-	-
Stage 2	659	-	-	-	-	-
Approach	EB	NB		SB		
HCM Control Delay, s	0	0.3		0		
HCM LOS	A					
Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR	
Capacity (veh/h)	1076	-	-	-	-	
HCM Lane V/C Ratio	0.012	-	-	-	-	
HCM Control Delay (s)	8.4	0	0	-	-	
HCM Lane LOS	A	A	A	-	-	
HCM 95th %tile Q(veh)	0	-	-	-	-	

HCM 6th TWSC
21: Dauchy Avenue & Project Driveway 4

Woodcrest Christian School Expansion
Cumulative (2045) Without Project Afternoon

Intersection						
Int Delay, s/veh	4.2					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	106	42	14	240	334	13
Future Vol, veh/h	106	42	14	240	334	13
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	80	80	80	80	80	80
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	133	53	18	300	418	16
Major/Minor	Minor2	Major1		Major2		
Conflicting Flow All	762	426	434	0	-	0
Stage 1	426	-	-	-	-	-
Stage 2	336	-	-	-	-	-
Critical Hdwy	6.4	6.2	4.1	-	-	-
Critical Hdwy Stg 1	5.4	-	-	-	-	-
Critical Hdwy Stg 2	5.4	-	-	-	-	-
Follow-up Hdwy	3.5	3.3	2.2	-	-	-
Pot Cap-1 Maneuver	376	633	1136	-	-	-
Stage 1	663	-	-	-	-	-
Stage 2	728	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	369	633	1136	-	-	-
Mov Cap-2 Maneuver	369	-	-	-	-	-
Stage 1	650	-	-	-	-	-
Stage 2	728	-	-	-	-	-
Approach	EB	NB		SB		
HCM Control Delay, s	20.2	0.5		0		
HCM LOS	C					
Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR	
Capacity (veh/h)	1136	-	419	-	-	
HCM Lane V/C Ratio	0.015	-	0.442	-	-	
HCM Control Delay (s)	8.2	0	20.2	-	-	
HCM Lane LOS	A	A	C	-	-	
HCM 95th %tile Q(veh)	0	-	2.2	-	-	

HCM 6th TWSC
22: Dauchy Avenue & Project Driveway 5

Woodcrest Christian School Expansion
Cumulative (2045) Without Project Afternoon

Intersection						
Int Delay, s/veh	0.1					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	3	0	1	251	376	0
Future Vol, veh/h	3	0	1	251	376	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	81	81	81	81	81	81
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	4	0	1	310	464	0
Major/Minor	Minor2	Major1		Major2		
Conflicting Flow All	776	464	464	0	-	0
Stage 1	464	-	-	-	-	-
Stage 2	312	-	-	-	-	-
Critical Hdwy	6.4	6.2	4.1	-	-	-
Critical Hdwy Stg 1	5.4	-	-	-	-	-
Critical Hdwy Stg 2	5.4	-	-	-	-	-
Follow-up Hdwy	3.5	3.3	2.2	-	-	-
Pot Cap-1 Maneuver	369	602	1108	-	-	-
Stage 1	637	-	-	-	-	-
Stage 2	747	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	369	602	1108	-	-	-
Mov Cap-2 Maneuver	369	-	-	-	-	-
Stage 1	636	-	-	-	-	-
Stage 2	747	-	-	-	-	-
Approach	EB	NB		SB		
HCM Control Delay, s	14.9	0		0		
HCM LOS	B					
Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR	
Capacity (veh/h)	1108	-	369	-	-	
HCM Lane V/C Ratio	0.001	-	0.01	-	-	
HCM Control Delay (s)	8.3	0	14.9	-	-	
HCM Lane LOS	A	A	B	-	-	
HCM 95th %tile Q(veh)	0	-	0	-	-	

HCM 6th Signalized Intersection Summary

1: Washington Street & Van Buren Boulevard

Woodcrest Christian School Expansion
Cumulative (2045) With Project AM

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	164	1317	153	156	1733	929	283	995	243	605	181	93
Future Volume (veh/h)	164	1317	153	156	1733	929	283	995	243	605	181	93
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	173	1386	161	164	1824	978	298	1047	256	637	191	98
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	201	1372	158	1183	3527	1572	365	830	369	459	941	418
Arrive On Green	0.11	0.42	0.42	0.65	0.98	0.98	0.10	0.23	0.23	0.13	0.26	0.26
Sat Flow, veh/h	1810	3256	375	1810	3610	1609	3510	3610	1604	3510	3610	1605
Grp Volume(v), veh/h	173	764	783	164	1824	978	298	1047	256	637	191	98
Grp Sat Flow(s),veh/h/ln	1810	1805	1826	1810	1805	1609	1755	1805	1604	1755	1805	1605
Q Serve(g_s), s	12.2	54.8	54.8	4.5	3.0	4.6	10.8	29.9	15.8	17.0	5.4	6.3
Cycle Q Clear(g_c), s	12.2	54.8	54.8	4.5	3.0	4.6	10.8	29.9	15.8	17.0	5.4	6.3
Prop In Lane	1.00		0.21	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	201	761	770	1183	3527	1572	365	830	369	459	941	418
V/C Ratio(X)	0.86	1.00	1.02	0.14	0.52	0.62	0.82	1.26	0.69	1.39	0.20	0.23
Avail Cap(c_a), veh/h	313	761	770	1183	3527	1572	608	830	369	459	941	418
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	56.8	37.6	37.6	8.6	0.1	0.1	57.0	50.0	31.5	56.5	37.5	37.8
Incr Delay (d2), s/veh	13.5	33.5	36.9	0.1	0.5	1.9	4.5	127.1	5.5	187.5	0.1	0.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	6.2	29.6	30.6	1.6	0.3	0.8	5.0	28.0	6.6	19.3	2.3	2.5
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	70.3	71.1	74.5	8.6	0.6	1.9	61.5	177.2	37.1	244.0	37.6	38.1
LnGrp LOS	E	F	F	A	A	A	E	F	D	F	D	D
Approach Vol, veh/h		1720			2966			1601			926	
Approach Delay, s/veh		72.6			1.5			133.2			179.6	
Approach LOS		E			A			F			F	
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	93.1	61.0	18.0	39.7	18.9	135.1	22.0	35.7				
Change Period (Y+Rc), s	6.2	* 6.2	4.5	5.8	4.5	6.2	5.0	* 5.8				
Max Green Setting (Gmax), s	7.5	* 55	22.5	24.2	22.5	39.8	17.0	* 30				
Max Q Clear Time (g_c+I1), s	6.5	56.8	12.8	8.3	14.2	6.6	19.0	31.9				
Green Ext Time (p_c), s	0.0	0.0	0.7	1.2	0.3	24.4	0.0	0.0				
Intersection Summary												
HCM 6th Ctrl Delay			70.6									
HCM 6th LOS			E									
Notes												
* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.												

HCM 6th Signalized Intersection Summary

Woodcrest Christian School Expansion

2: Alta Cresta Avenue/Chicago Avenue & Van Buren Boulevard

Cumulative (2045) With Project AM

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	89	2024	91	92	2588	35	179	24	120	117	29	86
Future Volume (veh/h)	89	2024	91	92	2588	35	179	24	120	117	29	86
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		0.99	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No			No			No		
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	94	2131	96	97	2724	37	188	25	126	123	31	91
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	104	2234	995	104	2257	31	149	30	150	111	39	116
Arrive On Green	0.06	0.62	0.62	0.08	0.82	0.82	0.08	0.11	0.11	0.06	0.09	0.09
Sat Flow, veh/h	1810	3610	1608	1810	3647	49	1810	272	1372	1810	424	1243
Grp Volume(v), veh/h	94	2131	96	97	1345	1416	188	0	151	123	0	122
Grp Sat Flow(s),veh/h/ln	1810	1805	1608	1810	1805	1891	1810	0	1644	1810	0	1667
Q Serve(g_s), s	6.7	71.4	1.8	6.9	80.4	80.4	10.7	0.0	11.7	8.0	0.0	9.3
Cycle Q Clear(g_c), s	6.7	71.4	1.8	6.9	80.4	80.4	10.7	0.0	11.7	8.0	0.0	9.3
Prop In Lane	1.00		1.00	1.00		0.03	1.00		0.83	1.00		0.75
Lane Grp Cap(c), veh/h	104	2234	995	104	1117	1170	149	0	180	111	0	155
V/C Ratio(X)	0.90	0.95	0.10	0.93	1.20	1.21	1.27	0.00	0.84	1.10	0.00	0.79
Avail Cap(c_a), veh/h	104	2234	995	104	1117	1170	149	0	228	111	0	237
HCM Platoon Ratio	1.00	1.00	1.00	1.33	1.33	1.33	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	0.33	0.33	0.33	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	60.9	23.1	3.4	59.7	11.5	11.5	59.7	0.0	56.7	61.0	0.0	57.7
Incr Delay (d2), s/veh	57.6	10.9	0.2	32.7	95.0	97.3	162.2	0.0	19.2	116.2	0.0	9.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.7	29.3	1.1	4.0	38.1	40.7	11.6	0.0	5.8	7.3	0.0	4.4
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	118.5	34.0	3.6	92.5	106.5	108.8	221.9	0.0	76.0	177.2	0.0	67.0
LnGrp LOS	F	C	A	F	F	F	F	A	E	F	A	E
Approach Vol, veh/h	2321					2858		339		245		
Approach Delay, s/veh	36.1					107.2		156.9		122.3		
Approach LOS	D					F		F		F		
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	12.0	86.6	14.7	16.7	12.0	86.6	12.0	19.4				
Change Period (Y+Rc), s	4.5	6.2	4.0	4.6	4.5	6.2	4.0	5.1				
Max Green Setting (Gmax), s	7.5	76.7	8.0	18.5	7.5	76.7	8.0	18.0				
Max Q Clear Time (g_c+l1), s	8.9	73.4	12.7	11.3	8.7	82.4	10.0	13.7				
Green Ext Time (p_c), s	0.0	3.0	0.0	0.3	0.0	0.0	0.0	0.3				
Intersection Summary												
HCM 6th Ctrl Delay	82.1											
HCM 6th LOS	F											

HCM 6th Signalized Intersection Summary

3: Van Buren Village Driveway & Van Buren Boulevard

Woodcrest Christian School Expansion
Cumulative (2045) With Project AM

	→	↘	↙	←	↖	↗
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑↑	↑	↘	↑↑	↘	↑
Traffic Volume (veh/h)	2214	46	138	2677	38	114
Future Volume (veh/h)	2214	46	138	2677	38	114
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)		1.00	1.00		1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	2331	48	145	2818	40	120
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	0	0	0	0	0	0
Cap, veh/h	2613	1165	139	3001	163	145
Arrive On Green	0.96	0.96	0.15	1.00	0.09	0.09
Sat Flow, veh/h	3705	1610	1810	3705	1810	1610
Grp Volume(v), veh/h	2331	48	145	2818	40	120
Grp Sat Flow(s),veh/h/ln	1805	1610	1810	1805	1810	1610
Q Serve(g_s), s	22.3	0.2	10.0	0.0	2.7	9.5
Cycle Q Clear(g_c), s	22.3	0.2	10.0	0.0	2.7	9.5
Prop In Lane		1.00	1.00		1.00	1.00
Lane Grp Cap(c), veh/h	2613	1165	139	3001	163	145
V/C Ratio(X)	0.89	0.04	1.04	0.94	0.25	0.83
Avail Cap(c_a), veh/h	2613	1165	139	3001	251	223
HCM Platoon Ratio	1.33	1.33	2.00	2.00	1.00	1.00
Upstream Filter(I)	0.14	0.14	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	1.1	0.7	55.0	0.0	55.0	58.1
Incr Delay (d2), s/veh	0.8	0.0	87.8	7.3	0.8	13.9
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.4	0.1	7.4	3.0	1.3	4.5
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	1.9	0.7	142.8	7.3	55.8	72.0
LnGrp LOS	A	A	F	A	E	E
Approach Vol, veh/h	2379			2963	160	
Approach Delay, s/veh	1.9			13.9	68.0	
Approach LOS	A			B	E	
Timer - Assigned Phs	1	2			6	8
Phs Duration (G+Y+Rc), s	14.0	100.3			114.3	15.7
Change Period (Y+Rc), s	4.0	6.2			* 6.2	4.0
Max Green Setting (Gmax), s	10.0	87.8			* 1E2	18.0
Max Q Clear Time (g_c+I1), s	12.0	24.3			2.0	11.5
Green Ext Time (p_c), s	0.0	37.1			72.3	0.2
Intersection Summary						
HCM 6th Ctrl Delay			10.3			
HCM 6th LOS			B			
Notes						
User approved pedestrian interval to be less than phase max green.						
* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.						

HCM 6th TWSC
4: Little Court & Van Buren Boulevard

Woodcrest Christian School Expansion
Cumulative (2045) With Project AM

Intersection						
Int Delay, s/veh	0.1					
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑↑	↗		↑↑		↗
Traffic Vol, veh/h	2328	1	0	2816	0	8
Future Vol, veh/h	2328	1	0	2816	0	8
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	0	-	-	-	0
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	95	95	95	95	95	95
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	2451	1	0	2964	0	8
Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	-	-	-	1226
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	-	-	-	-	6.9
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	-	-	-	-	3.3
Pot Cap-1 Maneuver	-	-	0	-	0	*107
Stage 1	-	-	0	-	0	-
Stage 2	-	-	0	-	0	-
Platoon blocked, %	-	-		-		1
Mov Cap-1 Maneuver	-	-	-	-	-	*107
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Approach	EB		WB		NB	
HCM Control Delay, s	0		0		41.5	
HCM LOS	E					
Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBT		
Capacity (veh/h)	107	-	-	-		
HCM Lane V/C Ratio	0.079	-	-	-		
HCM Control Delay (s)	41.5	-	-	-		
HCM Lane LOS	E	-	-	-		
HCM 95th %tile Q(veh)	0.3	-	-	-		
Notes						
~: Volume exceeds capacity		\$: Delay exceeds 300s		+: Computation Not Defined		*: All major volume in platoon

HCM 6th TWSC
5: Van Buren Boulevard & Ridgeway Avenue

Woodcrest Christian School Expansion
Cumulative (2045) With Project AM

Intersection						
Int Delay, s/veh	0					
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	55	2281	2664	13	2	152
Future Vol, veh/h	55	2281	2664	13	2	152
Conflicting Peds, #/hr	3	0	0	3	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	95	95	95	95	95	95
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	58	2401	2804	14	2	160
Major/Minor	Major1	Major2		Minor2		
Conflicting Flow All	2821	0	-	0	4131	1412
Stage 1	-	-	-	-	2814	-
Stage 2	-	-	-	-	1317	-
Critical Hdwy	4.1	-	-	-	6.8	6.9
Critical Hdwy Stg 1	-	-	-	-	5.8	-
Critical Hdwy Stg 2	-	-	-	-	5.8	-
Follow-up Hdwy	2.2	-	-	-	3.5	3.3
Pot Cap-1 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	*124	-
Platoon blocked, %	2	-	-	-	2	2
Mov Cap-1 Maneuver	-	-	-	-	-	-
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	*123	-
Approach	EB	WB		SB		
HCM Control Delay, s	0					
HCM LOS	-					
Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1	
Capacity (veh/h)	-	-	-	-	-	
HCM Lane V/C Ratio	-	-	-	-	-	
HCM Control Delay (s)	-	-	-	-	-	
HCM Lane LOS	-	-	-	-	-	
HCM 95th %tile Q(veh)	-	-	-	-	-	
Notes						
~: Volume exceeds capacity		\$: Delay exceeds 300s		+: Computation Not Defined		*: All major volume in platoon

HCM 6th Signalized Intersection Summary

6: Dauchy Avenue & Van Buren Boulevard

Woodcrest Christian School Expansion
Cumulative (2045) With Project AM

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	36	1874	373	298	2263	56	381	73	263	96	67	41
Future Volume (veh/h)	36	1874	373	298	2263	56	381	73	263	96	67	41
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	38	1973	393	314	2382	59	401	77	277	101	71	43
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	73	1524	292	97	1877	837	407	82	294	171	429	364
Arrive On Green	0.01	0.17	0.17	0.11	1.00	1.00	0.05	0.23	0.23	0.05	0.23	0.23
Sat Flow, veh/h	1810	3010	577	1810	3610	1610	1810	362	1303	1810	1900	1610
Grp Volume(v), veh/h	38	1153	1213	314	2382	59	401	0	354	101	71	43
Grp Sat Flow(s),veh/h/ln	1810	1805	1782	1810	1805	1610	1810	0	1665	1810	1900	1610
Q Serve(g_s), s	2.7	65.8	65.8	7.0	67.6	0.0	7.0	0.0	27.2	5.5	3.9	2.8
Cycle Q Clear(g_c), s	2.7	65.8	65.8	7.0	67.6	0.0	7.0	0.0	27.2	5.5	3.9	2.8
Prop In Lane	1.00		0.32	1.00		1.00	1.00		0.78	1.00		1.00
Lane Grp Cap(c), veh/h	73	914	902	97	1877	837	407	0	376	171	429	364
V/C Ratio(X)	0.52	1.26	1.34	3.22	1.27	0.07	0.98	0.00	0.94	0.59	0.17	0.12
Avail Cap(c_a), veh/h	97	914	902	97	1877	837	407	0	384	171	438	372
HCM Platoon Ratio	0.33	0.33	0.33	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	0.09	0.09	0.09	1.00	0.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	62.9	54.1	54.1	58.0	0.0	0.0	48.9	0.0	49.5	38.8	40.5	40.0
Incr Delay (d2), s/veh	2.2	126.3	162.6	1002.6	121.4	0.0	40.3	0.0	30.9	3.8	0.2	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.3	63.7	72.0	30.1	31.6	0.0	14.5	0.0	14.6	2.7	1.9	1.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	65.0	180.5	216.7	1060.6	121.4	0.0	89.3	0.0	80.3	42.6	40.6	40.2
LnGrp LOS	E	F	F	F	F	A	F	A	F	D	D	D
Approach Vol, veh/h		2404			2755			755			215	
Approach Delay, s/veh		196.9			225.8			85.1			41.5	
Approach LOS		F			F			F			D	
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	12.0	73.0	11.0	34.0	10.2	74.8	11.0	34.0				
Change Period (Y+Rc), s	5.0	7.2	4.0	4.6	5.0	7.2	4.0	4.6				
Max Green Setting (Gmax), s	7.0	65.2	7.0	30.0	7.0	65.2	7.0	30.0				
Max Q Clear Time (g_c+l1), s	9.0	67.8	9.0	5.9	4.7	69.6	7.5	29.2				
Green Ext Time (p_c), s	0.0	0.0	0.0	0.5	0.0	0.0	0.0	0.2				
Intersection Summary												
HCM 6th Ctrl Delay			190.7									
HCM 6th LOS			F									

Intersection												
Int Delay, s/veh	27.3											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕	↗		↕			↗			↕	↗
Traffic Vol, veh/h	166	0	34	5	0	56	43	472	5	18	431	214
Future Vol, veh/h	166	0	34	5	0	56	43	472	5	18	431	214
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	0	-	-	-	-	-	-	-	-	90
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	95	95	95	88	95	88	95	88	88	88	88	95
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	175	0	36	6	0	64	45	536	6	20	490	225
Major/Minor	Minor2		Minor1			Major1			Major2			
Conflicting Flow All	1191	1162	490	1290	1384	539	715	0	0	542	0	0
Stage 1	530	530	-	629	629	-	-	-	-	-	-	-
Stage 2	661	632	-	661	755	-	-	-	-	-	-	-
Critical Hdwy	7.1	6.5	6.2	7.1	6.5	6.2	4.1	-	-	4.1	-	-
Critical Hdwy Stg 1	6.1	5.5	-	6.1	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.1	5.5	-	6.1	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.5	4	3.3	3.5	4	3.3	2.2	-	-	2.2	-	-
Pot Cap-1 Maneuver	~ 166	197	582	142	145	546	895	-	-	1037	-	-
Stage 1	536	530	-	474	478	-	-	-	-	-	-	-
Stage 2	455	477	-	455	420	-	-	-	-	-	-	-
Platoon blocked, %								-	-	-	-	-
Mov Cap-1 Maneuver	~ 135	177	582	123	130	546	895	-	-	1037	-	-
Mov Cap-2 Maneuver	~ 135	177	-	123	130	-	-	-	-	-	-	-
Stage 1	497	513	-	440	444	-	-	-	-	-	-	-
Stage 2	373	443	-	413	406	-	-	-	-	-	-	-
Approach	EB		WB			NB			SB			
HCM Control Delay, s	200.3		15.1			0.7			0.2			
HCM LOS	F		C									
Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	EBLn2	WBLn1	SBL	SBT	SBR			
Capacity (veh/h)	895	-	-	135	582	426	1037	-	-			
HCM Lane V/C Ratio	0.051	-	-	1.294	0.061	0.163	0.02	-	-			
HCM Control Delay (s)	9.2	-	-	239	11.6	15.1	8.5	0	-			
HCM Lane LOS	A	-	-	F	B	C	A	A	-			
HCM 95th %tile Q(veh)	0.2	-	-	11	0.2	0.6	0.1	-	-			
Notes												
~: Volume exceeds capacity		\$: Delay exceeds 300s			+: Computation Not Defined				*: All major volume in platoon			

Intersection	
Intersection Delay, s/veh	140.8
Intersection LOS	F

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	65	564	3	2	637	158	23	37	13	138	19	55
Future Vol, veh/h	65	564	3	2	637	158	23	37	13	138	19	55
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	68	594	3	2	671	166	24	39	14	145	20	58
Number of Lanes	0	1	0	0	1	0	0	1	0	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	1	1	1
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	1	1	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	1	1	1	1
HCM Control Delay	107.7	211.3	14.3	18.3
HCM LOS	F	F	B	C

Lane	NBLn1	EBLn1	WBLn1	SBLn1
Vol Left, %	32%	10%	0%	65%
Vol Thru, %	51%	89%	80%	9%
Vol Right, %	18%	0%	20%	26%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	73	632	797	212
LT Vol	23	65	2	138
Through Vol	37	564	637	19
RT Vol	13	3	158	55
Lane Flow Rate	77	665	839	223
Geometry Grp	1	1	1	1
Degree of Util (X)	0.173	1.139	1.405	0.459
Departure Headway (Hd)	9.33	6.767	6.312	8.356
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	387	539	579	435
Service Time	7.33	4.767	4.312	6.356
HCM Lane V/C Ratio	0.199	1.234	1.449	0.513
HCM Control Delay	14.3	107.7	211.3	18.3
HCM Lane LOS	B	F	F	C
HCM 95th-tile Q	0.6	20.4	37	2.4

HCM 6th Signalized Intersection Summary

9: Wood Road & Van Buren Boulevard

Woodcrest Christian School Expansion
Cumulative (2045) With Project AM



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	183	1617	473	522	1885	188	541	592	383	119	490	240
Future Volume (veh/h)	183	1617	473	522	1885	188	541	592	383	119	490	240
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.98	1.00		0.91	1.00		0.88
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No			No			No		
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	193	1702	498	549	1984	198	569	623	403	125	516	253
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	220	2844	1477	500	2919	1280	500	589	381	111	479	233
Arrive On Green	0.08	0.53	0.53	0.19	1.00	1.00	0.14	0.29	0.29	0.06	0.21	0.21
Sat Flow, veh/h	1810	3610	1584	3510	3610	1582	3510	2016	1303	1810	2239	1090
Grp Volume(v), veh/h	193	1702	498	549	1984	198	569	558	468	125	415	354
Grp Sat Flow(s),veh/h/ln	1810	1805	1584	1755	1805	1582	1755	1805	1515	1810	1805	1525
Q Serve(g_s), s	13.7	42.3	8.1	18.5	0.0	0.0	18.5	38.0	38.0	8.0	27.8	27.8
Cycle Q Clear(g_c), s	13.7	42.3	8.1	18.5	0.0	0.0	18.5	38.0	38.0	8.0	27.8	27.8
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.86	1.00		0.72
Lane Grp Cap(c), veh/h	220	2844	1477	500	2919	1280	500	528	443	111	386	326
V/C Ratio(X)	0.88	0.60	0.34	1.10	0.68	0.15	1.14	1.06	1.06	1.12	1.08	1.09
Avail Cap(c_a), veh/h	258	2844	1477	500	2919	1280	500	528	443	111	386	326
HCM Platoon Ratio	0.67	0.67	0.67	1.33	1.33	1.33	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.09	0.09	0.09	0.64	0.64	0.64	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	58.8	16.5	1.3	52.7	0.0	0.0	55.7	46.0	46.0	61.0	51.1	51.1
Incr Delay (d2), s/veh	2.8	0.1	0.1	62.7	0.8	0.2	84.4	55.1	58.9	122.0	67.5	74.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	6.5	18.2	0.0	11.8	0.3	0.1	13.9	24.6	21.1	7.4	19.5	17.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	61.5	16.6	1.4	115.4	0.8	0.2	140.2	101.1	104.9	183.0	118.6	125.6
LnGrp LOS	E	B	A	F	A	A	F	F	F	F	F	F
Approach Vol, veh/h	2393			2731			1595			894		
Approach Delay, s/veh	17.1			23.8			116.1			130.4		
Approach LOS	B			C			F			F		
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	24.0	111.4	24.0	33.6	21.3	114.1	13.8	43.8				
Change Period (Y+Rc), s	5.5	7.2	5.5	5.8	5.5	7.2	5.8	* 5.8				
Max Green Setting (Gmax), s	18.5	43.0	18.5	26.0	18.5	43.0	8.0	* 38				
Max Q Clear Time (g_c+20), s	20.5	44.3	20.5	29.8	15.7	2.0	10.0	40.0				
Green Ext Time (p_c), s	0.0	0.0	0.0	0.0	0.1	23.8	0.0	0.0				

Intersection Summary

HCM 6th Ctrl Delay 53.5

HCM 6th LOS D

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

HCM 6th Signalized Intersection Summary

10: Van Buren Boulevard & Bountiful Street

Woodcrest Christian School Expansion
Cumulative (2045) With Project AM



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations	↰	↑↑↑	↑↑↑		↰	↑↑
Traffic Volume (veh/h)	171	2009	2018	38	58	267
Future Volume (veh/h)	171	2009	2018	38	58	267
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00			0.98	1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No	No		No	
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	180	2115	2124	40	61	281
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	0	0	0	0	0	0
Cap, veh/h	174	3713	3066	58	351	313
Arrive On Green	0.19	1.00	1.00	1.00	0.19	0.19
Sat Flow, veh/h	1810	5358	5410	99	1810	1610
Grp Volume(v), veh/h	180	2115	1401	763	61	281
Grp Sat Flow(s), veh/h/ln	1810	1729	1729	1880	1810	1610
Q Serve(g_s), s	12.5	0.0	0.0	0.0	3.7	22.1
Cycle Q Clear(g_c), s	12.5	0.0	0.0	0.0	3.7	22.1
Prop In Lane	1.00			0.05	1.00	1.00
Lane Grp Cap(c), veh/h	174	3713	2023	1100	351	313
V/C Ratio(X)	1.03	0.57	0.69	0.69	0.17	0.90
Avail Cap(c_a), veh/h	174	3713	2023	1100	619	551
HCM Platoon Ratio	2.00	2.00	2.00	2.00	1.00	1.00
Upstream Filter(I)	0.09	0.09	0.12	0.12	1.00	1.00
Uniform Delay (d), s/veh	52.5	0.0	0.0	0.0	43.7	51.1
Incr Delay (d2), s/veh	30.0	0.1	0.2	0.4	0.2	9.8
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%), veh/ln	6.4	0.0	0.1	0.1	1.7	19.2
Unsig. Movement Delay, s/veh						
LnGrp Delay(d), s/veh	82.5	0.1	0.2	0.4	43.9	60.9
LnGrp LOS	F	A	A	A	D	E
Approach Vol, veh/h		2295	2164		342	
Approach Delay, s/veh		6.5	0.3		57.9	
Approach LOS		A	A		E	
Timer - Assigned Phs		2		4	5	6
Phs Duration (G+Y+Rc), s		100.3		29.7	17.0	83.3
Change Period (Y+Rc), s		7.2		4.5	4.5	7.2
Max Green Setting (Gmax), s		73.8		44.5	12.5	56.8
Max Q Clear Time (g_c+I1), s		2.0		24.1	14.5	2.0
Green Ext Time (p_c), s		28.8		1.1	0.0	25.1
Intersection Summary						
HCM 6th Ctrl Delay			7.4			
HCM 6th LOS			A			

HCM 6th Signalized Intersection Summary

11: Trautwein Road & Mission Grove Parkway S

Woodcrest Christian School Expansion
Cumulative (2045) With Project AM



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	70	39	11	755	38	61	3	2099	646	218	1279	20
Future Volume (veh/h)	70	39	11	755	38	61	3	2099	646	218	1279	20
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		0.97	1.00		1.00	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No				No				No			
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	74	41	12	795	40	64	3	2209	680	229	1346	21
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	289	86	25	532	117	97	10	1941	1109	146	2213	965
Arrive On Green	0.16	0.06	0.06	0.15	0.06	0.06	0.00	0.36	0.36	0.08	0.61	0.61
Sat Flow, veh/h	1810	1410	413	3510	1900	1566	1810	3610	1608	1810	3610	1574
Grp Volume(v), veh/h	74	0	53	795	40	64	3	2209	680	229	1346	21
Grp Sat Flow(s),veh/h/ln	1810	0	1823	1755	1900	1566	1810	1805	1608	1810	1805	1574
Q Serve(g_s), s	4.7	0.0	3.7	19.7	2.6	4.4	0.2	69.9	12.2	10.5	29.9	0.2
Cycle Q Clear(g_c), s	4.7	0.0	3.7	19.7	2.6	4.4	0.2	69.9	12.2	10.5	29.9	0.2
Prop In Lane	1.00		0.23	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	289	0	111	532	117	97	10	1941	1109	146	2213	965
V/C Ratio(X)	0.26	0.00	0.48	1.49	0.34	0.66	0.30	1.14	0.61	1.57	0.61	0.02
Avail Cap(c_a), veh/h	289	0	449	532	693	571	230	1941	1109	146	2213	965
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	0.67	0.67	0.67	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	1.00	1.00	0.09	0.09	0.09	1.00	1.00	1.00
Uniform Delay (d), s/veh	47.8	0.0	59.1	55.2	58.5	42.0	64.5	41.6	4.6	59.7	15.5	1.2
Incr Delay (d2), s/veh	0.2	0.0	3.2	232.3	1.7	7.6	0.6	62.8	0.2	285.5	1.3	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.1	0.0	1.8	25.6	1.3	2.2	0.1	48.2	4.5	16.3	11.3	0.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	48.0	0.0	62.2	287.4	60.2	49.6	65.1	104.4	4.8	345.2	16.8	1.3
LnGrp LOS	D	A	E	F	E	D	E	F	A	F	B	A
Approach Vol, veh/h	127				899		2892				1596	
Approach Delay, s/veh	53.9				260.4		80.9				63.7	
Approach LOS	D				F		F				E	
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	5.0	76.1	25.2	13.7	5.2	85.9	26.3	12.6				
Change Period (Y+Rc), s	4.5	6.2	5.5	5.8	4.5	6.2	5.5	* 4.6				
Max Green Setting (Gmax), s	10.5	45.8	19.7	32.0	16.5	39.8	7.0	* 47				
Max Q Clear Time (g_c+1/2, s)	11.5	71.9	21.7	5.7	2.2	31.9	6.7	6.4				
Green Ext Time (p_c), s	0.0	0.0	0.0	0.2	0.0	4.9	0.0	0.4				

Intersection Summary

HCM 6th Ctrl Delay 104.6

HCM 6th LOS F

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

HCM 6th Signalized Intersection Summary

12: Trautwein Road & John F Kennedy Drive

Woodcrest Christian School Expansion
Cumulative (2045) With Project AM



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	677	60	110	147	67	52	251	2375	103	11	1195	733
Future Volume (veh/h)	677	60	110	147	67	52	251	2375	103	11	1195	733
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		0.99	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No			No			No		
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	713	63	116	155	71	55	264	2500	108	12	1258	772
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	516	226	189	261	115	89	301	2004	892	34	1383	852
Arrive On Green	0.15	0.12	0.12	0.14	0.12	0.12	0.22	0.74	0.74	0.02	0.38	0.38
Sat Flow, veh/h	3510	1900	1590	1810	987	764	1810	3610	1607	1810	3610	1606
Grp Volume(v), veh/h	713	63	116	155	0	126	264	2500	108	12	1258	772
Grp Sat Flow(s),veh/h/ln	1755	1900	1590	1810	0	1751	1810	1805	1607	1810	1805	1606
Q Serve(g_s), s	19.1	3.9	9.0	10.4	0.0	8.9	18.3	72.2	1.2	0.9	42.9	26.5
Cycle Q Clear(g_c), s	19.1	3.9	9.0	10.4	0.0	8.9	18.3	72.2	1.2	0.9	42.9	26.5
Prop In Lane	1.00		1.00	1.00		0.44	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	516	226	189	261	0	204	301	2004	892	34	1383	852
V/C Ratio(X)	1.38	0.28	0.61	0.59	0.00	0.62	0.88	1.25	0.12	0.35	0.91	0.91
Avail Cap(c_a), veh/h	516	678	567	261	0	444	301	2004	892	97	1383	852
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.33	1.33	1.33	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	0.00	1.00	0.21	0.21	0.21	0.56	0.56	0.56
Uniform Delay (d), s/veh	55.4	52.2	54.4	52.1	0.0	54.6	49.3	17.0	1.7	63.0	38.0	11.7
Incr Delay (d2), s/veh	183.9	0.7	3.2	3.6	0.0	3.0	6.5	112.4	0.1	3.4	6.3	9.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	21.5	1.9	3.8	5.0	0.0	4.1	8.1	48.2	0.9	0.4	19.1	10.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	239.3	52.9	57.6	55.7	0.0	57.6	55.8	129.4	1.7	66.4	44.3	21.1
LnGrp LOS	F	D	E	E	A	E	E	F	A	E	D	C
Approach Vol, veh/h	892			281			2872			2042		
Approach Delay, s/veh	202.5			56.6			117.8			35.7		
Approach LOS	F			E			F			D		
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	6.5	79.4	24.1	20.1	28.8	57.0	23.6	20.6				
Change Period (Y+Rc), s	4.0	7.2	5.4	* 4.6	7.2	* 7.2	4.5	5.4				
Max Green Setting (Gmax), s	7.0	49.8	7.0	* 46	7.0	* 50	19.1	33.0				
Max Q Clear Time (g_c+12, s)	7.0	74.2	12.4	11.0	20.3	44.9	21.1	10.9				
Green Ext Time (p_c), s	0.0	0.0	0.0	0.7	0.0	3.9	0.0	0.7				

Intersection Summary

HCM 6th Ctrl Delay 99.9

HCM 6th LOS F

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

HCM 6th Signalized Intersection Summary 13: Trautwein Road & Grove Community Drive

Woodcrest Christian School Expansion
Cumulative (2045) With Project AM



Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	128	638	2091	97	195	1257
Future Volume (veh/h)	128	638	2091	97	195	1257
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00		1.00	1.00	
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No		No		No	
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	135	672	2201	102	205	1323
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	0	0	0	0	0	0
Cap, veh/h	221	559	2432	1083	263	2855
Arrive On Green	0.12	0.12	0.67	0.67	0.15	1.00
Sat Flow, veh/h	1810	2834	3705	1608	3510	3705
Grp Volume(v), veh/h	135	672	2201	102	205	1323
Grp Sat Flow(s), veh/h/ln	1810	1417	1805	1608	1755	1805
Q Serve(g_s), s	9.2	15.9	66.3	2.9	7.3	0.0
Cycle Q Clear(g_c), s	9.2	15.9	66.3	2.9	7.3	0.0
Prop In Lane	1.00	1.00		1.00	1.00	
Lane Grp Cap(c), veh/h	221	559	2432	1083	263	2855
V/C Ratio(X)	0.61	1.20	0.91	0.09	0.78	0.46
Avail Cap(c_a), veh/h	221	559	2432	1083	527	2855
HCM Platoon Ratio	1.00	1.00	1.00	1.00	2.00	2.00
Upstream Filter(I)	1.00	1.00	0.09	0.09	0.74	0.74
Uniform Delay (d), s/veh	54.1	52.2	17.7	7.4	54.2	0.0
Incr Delay (d2), s/veh	4.8	107.4	0.6	0.0	3.7	0.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.5	17.3	22.8	0.9	3.1	0.2
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	58.9	159.6	18.4	7.4	58.0	0.4
LnGrp LOS	E	F	B	A	E	A
Approach Vol, veh/h	807		2303			1528
Approach Delay, s/veh	142.7		17.9			8.1
Approach LOS	F		B			A
Timer - Assigned Phs	1	2			6	8
Phs Duration (G+Y+Rc), s	5.2	93.8			109.0	21.0
Change Period (Y+Rc), s	5.5	6.2			6.2	5.1
Max Green Setting (Gmax), s	19.5	77.8			102.8	15.9
Max Q Clear Time (g_c+19.3), s	19.3	68.3			2.0	17.9
Green Ext Time (p_c), s	0.4	8.3			12.4	0.0
Intersection Summary						
HCM 6th Ctrl Delay			36.4			
HCM 6th LOS			D			

HCM 6th Signalized Intersection Summary

14: Trautwein Road & Orange Terrace Pkwy

Woodcrest Christian School Expansion

Cumulative (2045) With Project AM



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	103	70	47	407	169	632	71	1453	289	368	1031	33
Future Volume (veh/h)	103	70	47	407	169	632	71	1453	289	368	1031	33
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		0.97	1.00		1.00	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No			No			No		
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	108	74	49	428	178	665	75	1529	304	387	1085	35
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	133	112	74	324	418	800	96	1752	778	243	1839	814
Arrive On Green	0.07	0.11	0.11	0.18	0.22	0.22	0.02	0.16	0.16	0.14	1.00	1.00
Sat Flow, veh/h	1810	1063	704	1810	1900	2744	1810	3610	1603	3510	3610	1599
Grp Volume(v), veh/h	108	0	123	428	178	665	75	1529	304	387	1085	35
Grp Sat Flow(s),veh/h/ln	1810	0	1766	1810	1900	1372	1810	1805	1603	1755	1805	1599
Q Serve(g_s), s	7.6	0.0	8.7	23.2	10.5	22.2	5.4	53.8	11.0	9.0	0.0	0.0
Cycle Q Clear(g_c), s	7.6	0.0	8.7	23.2	10.5	22.2	5.4	53.8	11.0	9.0	0.0	0.0
Prop In Lane	1.00		0.40	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	133	0	186	324	418	800	96	1752	778	243	1839	814
V/C Ratio(X)	0.81	0.00	0.66	1.32	0.43	0.83	0.78	0.87	0.39	1.59	0.59	0.04
Avail Cap(c_a), veh/h	237	0	492	324	547	986	139	1752	778	243	1839	814
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	0.33	0.33	0.33	2.00	2.00	2.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	1.00	1.00	0.83	0.83	0.83	0.87	0.87	0.87
Uniform Delay (d), s/veh	59.4	0.0	56.0	53.4	43.6	25.3	63.1	50.7	9.3	56.0	0.0	0.0
Incr Delay (d2), s/veh	4.6	0.0	4.0	165.2	0.7	5.1	7.8	5.3	1.2	282.9	1.2	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.7	0.0	4.1	25.4	5.0	7.7	2.7	27.2	4.9	13.1	0.3	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	63.9	0.0	60.0	218.6	44.3	30.4	71.0	56.0	10.6	338.9	1.2	0.1
LnGrp LOS	E	A	E	F	D	C	E	E	B	F	A	A
Approach Vol, veh/h	231					1271		1908		1507		
Approach Delay, s/veh	61.8					95.7		49.4		87.9		
Approach LOS	E					F		D		F		
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	4.0	69.3	27.2	19.5	10.9	72.4	13.5	33.2				
Change Period (Y+Rc), s	5.0	6.2	4.0	5.8	4.0	6.2	4.0	4.6				
Max Green Setting (Gmax), s	4.0	46.8	17.0	36.2	10.0	46.8	17.0	37.4				
Max Q Clear Time (g_c+1.1), s	4.0	55.8	25.2	10.7	7.4	2.0	9.6	24.2				
Green Ext Time (p_c), s	0.0	0.0	0.0	0.7	0.0	8.7	0.1	3.4				

Intersection Summary

HCM 6th Ctrl Delay	73.7
HCM 6th LOS	E

HCM 6th Signalized Intersection Summary

15: Trautwein Road & Shopping Ctr Dwy

Woodcrest Christian School Expansion
Cumulative (2045) With Project AM



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	65	11	58	34	8	59	89	1291	23	83	1142	46
Future Volume (veh/h)	65	11	58	34	8	59	89	1291	23	83	1142	46
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		0.99	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No			No			No		
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	68	12	61	36	8	62	94	1359	24	87	1202	48
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	162	32	163	160	22	171	104	2510	1119	110	2521	1124
Arrive On Green	0.12	0.12	0.12	0.12	0.12	0.12	0.12	1.00	1.00	0.04	0.47	0.47
Sat Flow, veh/h	1347	270	1374	1343	186	1445	1810	3610	1609	1810	3610	1609
Grp Volume(v), veh/h	68	0	73	36	0	70	94	1359	24	87	1202	48
Grp Sat Flow(s), veh/h/ln	1347	0	1644	1343	0	1631	1810	1805	1609	1810	1805	1609
Q Serve(g_s), s	6.4	0.0	5.3	3.3	0.0	5.1	6.7	0.0	0.0	6.2	29.6	2.1
Cycle Q Clear(g_c), s	11.5	0.0	5.3	8.6	0.0	5.1	6.7	0.0	0.0	6.2	29.6	2.1
Prop In Lane	1.00		0.84	1.00		0.89	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	162	0	195	160	0	193	104	2510	1119	110	2521	1124
V/C Ratio(X)	0.42	0.00	0.37	0.23	0.00	0.36	0.90	0.54	0.02	0.79	0.48	0.04
Avail Cap(c_a), veh/h	354	0	430	352	0	427	104	2510	1119	452	2521	1124
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00	2.00	0.67	0.67	0.67
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	0.09	0.09	0.09	0.54	0.54	0.54
Uniform Delay (d), s/veh	58.1	0.0	52.9	56.8	0.0	52.8	57.1	0.0	0.0	61.5	18.3	11.0
Incr Delay (d2), s/veh	1.7	0.0	1.2	0.7	0.0	1.1	9.5	0.1	0.0	2.6	0.4	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.3	0.0	2.3	1.2	0.0	2.2	3.1	0.0	0.0	2.9	13.1	0.6
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	59.8	0.0	54.0	57.5	0.0	53.9	66.6	0.1	0.0	64.1	18.7	11.0
LnGrp LOS	E	A	D	E	A	D	E	A	A	E	B	B
Approach Vol, veh/h	141			106			1477			1337		
Approach Delay, s/veh	56.8			55.1			4.3			21.3		
Approach LOS	E			E			A			C		
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	2.4	97.6		20.0	12.0	98.0		20.0				
Change Period (Y+Rc), s	4.5	7.2		4.6	4.5	7.2		4.6				
Max Green Setting (Gmax), s	32.5	47.2		34.0	7.5	72.2		34.0				
Max Q Clear Time (g_c+I), s	10.2	2.0		13.5	8.7	31.6		10.6				
Green Ext Time (p_c), s	0.1	12.4		0.6	0.0	10.1		0.5				

Intersection Summary

HCM 6th Ctrl Delay	15.9
HCM 6th LOS	B

HCM 6th Signalized Intersection Summary

16: Trautwein Road & Van Buren Boulevard

Woodcrest Christian School Expansion
Cumulative (2045) With Project AM



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	453	1466	150	204	1840	500	244	812	159	509	477	424
Future Volume (veh/h)	453	1466	150	204	1840	500	244	812	159	509	477	424
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No			No			No		
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	477	1543	158	215	1937	526	257	855	167	536	502	446
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	1681	2600	1370	238	1867	760	237	909	178	394	1035	1225
Arrive On Green	0.64	0.96	0.96	0.26	0.72	0.72	0.13	0.30	0.30	0.19	0.48	0.48
Sat Flow, veh/h	3510	3610	1609	1810	5187	1609	1810	3009	588	3510	3610	1585
Grp Volume(v), veh/h	477	1543	158	215	1937	526	257	513	509	536	502	446
Grp Sat Flow(s),veh/h/ln	1755	1805	1609	1810	1729	1609	1810	1805	1792	1755	1805	1585
Q Serve(g_s), s	7.8	5.4	0.3	14.9	46.8	0.0	17.0	36.0	36.0	14.6	12.3	8.5
Cycle Q Clear(g_c), s	7.8	5.4	0.3	14.9	46.8	0.0	17.0	36.0	36.0	14.6	12.3	8.5
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.33	1.00		1.00
Lane Grp Cap(c), veh/h	1681	2600	1370	238	1867	760	237	545	541	394	1035	1225
V/C Ratio(X)	0.28	0.59	0.12	0.90	1.04	0.69	1.09	0.94	0.94	1.36	0.48	0.36
Avail Cap(c_a), veh/h	1681	2600	1370	383	1867	760	237	555	551	394	1035	1225
HCM Platoon Ratio	1.33	1.33	1.33	2.00	2.00	2.00	1.00	1.00	1.00	1.67	1.67	1.67
Upstream Filter(I)	0.86	0.86	0.86	0.65	0.65	0.65	1.00	1.00	1.00	0.87	0.87	0.87
Uniform Delay (d), s/veh	13.7	0.9	0.2	47.1	18.2	9.2	56.5	44.2	44.2	52.8	27.4	11.8
Incr Delay (d2), s/veh	0.0	0.9	0.1	7.5	27.4	3.4	83.3	24.1	24.2	175.6	0.3	0.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.8	1.1	0.1	6.1	11.0	4.9	13.1	19.3	19.2	15.3	4.5	4.7
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	13.8	1.7	0.4	54.6	45.6	12.6	139.8	68.3	68.5	228.4	27.7	11.9
LnGrp LOS	B	A	A	D	F	B	F	E	E	F	C	B
Approach Vol, veh/h	2178			2678			1279			1484		
Approach Delay, s/veh	4.3			39.9			82.7			95.5		
Approach LOS	A			D			F			F		
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	31.6	101.5	22.0	43.5	70.1	53.0	20.8	44.7				
Change Period (Y+Rc), s	4.5	6.2	5.0	6.2	6.2	* 6.2	6.2	* 5.4				
Max Green Setting (Gmax), s	27.5	26.8	17.0	36.8	7.0	* 47	14.6	* 40				
Max Q Clear Time (g_c+11g), s	116.9	7.4	19.0	14.3	9.8	48.8	16.6	38.0				
Green Ext Time (p_c), s	0.2	11.0	0.0	4.6	0.0	0.0	0.0	1.2				

Intersection Summary

HCM 6th Ctrl Delay 47.7

HCM 6th LOS D

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

HCM 6th Signalized Intersection Summary

17: Van Buren Boulevard & Shopping Ctr Dwy

Woodcrest Christian School Expansion
Cumulative (2045) With Project AM



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations	↰	↑↑	↑↑↑		↰	↑↑
Traffic Volume (veh/h)	39	2095	2137	108	89	37
Future Volume (veh/h)	39	2095	2137	108	89	37
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00			0.98	1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No	No		No	
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	41	2205	2249	114	94	39
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	0	0	0	0	0	0
Cap, veh/h	652	3051	2168	109	124	111
Arrive On Green	0.72	1.00	0.86	0.86	0.07	0.07
Sat Flow, veh/h	1810	3705	5222	254	1810	1610
Grp Volume(v), veh/h	41	2205	1534	829	94	39
Grp Sat Flow(s), veh/h/ln	1810	1805	1729	1847	1810	1610
Q Serve(g_s), s	0.9	0.0	55.8	55.8	6.6	3.0
Cycle Q Clear(g_c), s	0.9	0.0	55.8	55.8	6.6	3.0
Prop In Lane	1.00			0.14	1.00	1.00
Lane Grp Cap(c), veh/h	652	3051	1484	793	124	111
V/C Ratio(X)	0.06	0.72	1.03	1.04	0.76	0.35
Avail Cap(c_a), veh/h	652	3051	1484	793	487	434
HCM Platoon Ratio	2.00	2.00	2.00	2.00	1.00	1.00
Upstream Filter(I)	0.09	0.09	0.09	0.09	1.00	1.00
Uniform Delay (d), s/veh	11.7	0.0	9.2	9.2	59.5	57.8
Incr Delay (d2), s/veh	0.0	0.1	18.0	24.2	9.0	1.9
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.3	0.1	7.2	9.0	3.4	2.8
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	11.7	0.1	27.2	33.4	68.5	59.7
LnGrp LOS	B	A	F	F	E	E
Approach Vol, veh/h		2246	2363		133	
Approach Delay, s/veh		0.3	29.4		65.9	
Approach LOS		A	C		E	
Timer - Assigned Phs		2		4	5	6
Phs Duration (G+Y+Rc), s		117.1		12.9	54.1	63.0
Change Period (Y+Rc), s		7.2		4.0	7.2	* 7.2
Max Green Setting (Gmax), s		83.8		35.0	23.5	* 56
Max Q Clear Time (g_c+I1), s		2.0		8.6	2.9	57.8
Green Ext Time (p_c), s		37.7		0.4	0.0	0.0

Intersection Summary

HCM 6th Ctrl Delay	16.7
HCM 6th LOS	B

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

HCM 6th Signalized Intersection Summary

18: Barton Street & Van Buren Boulevard

Woodcrest Christian School Expansion
Cumulative (2045) With Project AM



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	209	1629	421	393	1962	37	454	116	483	91	172	375
Future Volume (veh/h)	209	1629	421	393	1962	37	454	116	483	91	172	375
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No				No				No			
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	220	1715	443	414	2065	39	478	122	508	96	181	395
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	1659	3118	771	437	2048	39	459	646	547	97	136	296
Arrive On Green	0.30	0.36	0.36	0.24	0.39	0.39	0.13	0.34	0.34	0.05	0.26	0.26
Sat Flow, veh/h	1810	2868	709	1810	5241	99	3510	1900	1610	1810	531	1160
Grp Volume(v), veh/h	220	1051	1107	414	1362	742	478	122	508	96	0	576
Grp Sat Flow(s),veh/h/ln	1810	1805	1772	1810	1729	1882	1755	1900	1610	1810	0	1691
Q Serve(g_s), s	11.5	0.0	0.0	29.3	50.8	50.8	17.0	5.9	39.5	6.9	0.0	33.2
Cycle Q Clear(g_c), s	11.5	0.0	0.0	29.3	50.8	50.8	17.0	5.9	39.5	6.9	0.0	33.2
Prop In Lane	1.00		0.40	1.00		0.05	1.00		1.00	1.00		0.69
Lane Grp Cap(c), veh/h	1659	1962	1927	437	1351	736	459	646	547	97	0	432
V/C Ratio(X)	0.13	0.54	0.57	0.95	1.01	1.01	1.04	0.19	0.93	0.99	0.00	1.33
Avail Cap(c_a), veh/h	1659	1962	1927	452	1351	736	459	646	547	97	0	432
HCM Platoon Ratio	0.33	0.33	0.33	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.60	0.60	0.60	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	7.8	0.0	0.0	48.5	39.6	39.6	56.5	30.3	41.4	61.4	0.0	48.4
Incr Delay (d2), s/veh	0.0	0.6	0.8	28.6	26.3	35.5	53.1	0.1	22.3	86.0	0.0	165.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	0.3	0.4	16.2	25.1	29.2	10.7	2.7	18.4	5.5	0.0	33.9
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	7.8	0.6	0.8	77.1	65.9	75.1	109.6	30.4	63.6	147.5	0.0	213.7
LnGrp LOS	A	A	A	E	F	F	F	C	E	F	A	F
Approach Vol, veh/h	2378				2518		1108				672	
Approach Delay, s/veh	1.3				70.5		79.8				204.2	
Approach LOS	A				E		E				F	
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	35.9	151.9	22.0	39.0	129.8	58.0	11.0	50.0				
Change Period (Y+Rc), s	4.5	7.2	5.0	* 5.8	7.2	* 7.2	4.0	5.8				
Max Green Setting (Gmax), s	32.5	26.0	17.0	* 33	7.2	* 51	7.0	43.0				
Max Q Clear Time (g_c+D1), s	41.3	2.0	19.0	35.2	13.5	52.8	8.9	41.5				
Green Ext Time (p_c), s	0.1	17.8	0.0	0.0	0.0	0.0	0.0	0.4				

Intersection Summary

HCM 6th Ctrl Delay 60.9

HCM 6th LOS E

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Intersection												
Int Delay, s/veh	0											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↑↑			↑↑				↑			↑
Traffic Vol, veh/h	0	2283	0	0	2677	8	0	0	0	0	0	0
Future Vol, veh/h	0	2283	0	0	2677	8	0	0	0	0	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	0	-	-	0
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	94	94	94	94	94	94	94	94	94	94	94	94
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	0	2429	0	0	2848	9	0	0	0	0	0	0
Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	-	0	0	-	-	0	-	-	1215	-	-	1429
Stage 1	-	-	-	-	-	-	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-	-	-	-	-	-	-
Critical Hdwy	-	-	-	-	-	-	-	-	6.9	-	-	6.9
Critical Hdwy Stg 1	-	-	-	-	-	-	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-	-	-	-	-	-	-
Follow-up Hdwy	-	-	-	-	-	-	-	-	3.3	-	-	3.3
Pot Cap-1 Maneuver	0	-	-	0	-	-	0	0	*131	0	0	-
Stage 1	0	-	-	0	-	-	0	0	-	0	0	-
Stage 2	0	-	-	0	-	-	0	0	-	0	0	-
Platoon blocked, %		-	-		-	-			1			2
Mov Cap-1 Maneuver	-	-	-	-	-	-	-	-	*131	-	-	-
Mov Cap-2 Maneuver	-	-	-	-	-	-	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-	-	-	-	-	-	-
Approach	EB			WB			NB			SB		
HCM Control Delay, s	0			0			0			0		
HCM LOS							A			A		
Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBT	WBR	SBLn1						
Capacity (veh/h)	-	-	-	-	-	-						
HCM Lane V/C Ratio	-	-	-	-	-	-						
HCM Control Delay (s)	0	-	-	-	-	0						
HCM Lane LOS	A	-	-	-	-	A						
HCM 95th %tile Q(veh)	-	-	-	-	-	-						
Notes												
~: Volume exceeds capacity		\$: Delay exceeds 300s				+: Computation Not Defined				*: All major volume in platoon		

Intersection						
Int Delay, s/veh	0.2					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	0	0	22	520	297	166
Future Vol, veh/h	0	0	22	520	297	166
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	95	95	95	85	85	95
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	0	0	23	612	349	175
Major/Minor	Minor2	Major1		Major2		
Conflicting Flow All	1095	437	524	0	-	0
Stage 1	437	-	-	-	-	-
Stage 2	658	-	-	-	-	-
Critical Hdwy	6.4	6.2	4.1	-	-	-
Critical Hdwy Stg 1	5.4	-	-	-	-	-
Critical Hdwy Stg 2	5.4	-	-	-	-	-
Follow-up Hdwy	3.5	3.3	2.2	-	-	-
Pot Cap-1 Maneuver	239	624	1053	-	-	-
Stage 1	655	-	-	-	-	-
Stage 2	519	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	231	624	1053	-	-	-
Mov Cap-2 Maneuver	231	-	-	-	-	-
Stage 1	633	-	-	-	-	-
Stage 2	519	-	-	-	-	-
Approach	EB	NB		SB		
HCM Control Delay, s	0	0.3		0		
HCM LOS	A					
Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR	
Capacity (veh/h)	1053	-	-	-	-	
HCM Lane V/C Ratio	0.022	-	-	-	-	
HCM Control Delay (s)	8.5	0	0	-	-	
HCM Lane LOS	A	A	A	-	-	
HCM 95th %tile Q(veh)	0.1	-	-	-	-	

Intersection						
Int Delay, s/veh	7.5					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	188	49	41	354	215	77
Future Vol, veh/h	188	49	41	354	215	77
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	95	95	95	85	85	95
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	198	52	43	416	253	81
Major/Minor	Minor2	Major1		Major2		
Conflicting Flow All	796	294	334	0	-	0
Stage 1	294	-	-	-	-	-
Stage 2	502	-	-	-	-	-
Critical Hdwy	6.4	6.2	4.1	-	-	-
Critical Hdwy Stg 1	5.4	-	-	-	-	-
Critical Hdwy Stg 2	5.4	-	-	-	-	-
Follow-up Hdwy	3.5	3.3	2.2	-	-	-
Pot Cap-1 Maneuver	359	750	1237	-	-	-
Stage 1	761	-	-	-	-	-
Stage 2	612	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	343	750	1237	-	-	-
Mov Cap-2 Maneuver	343	-	-	-	-	-
Stage 1	727	-	-	-	-	-
Stage 2	612	-	-	-	-	-
Approach	EB	NB		SB		
HCM Control Delay, s	29.9	0.8		0		
HCM LOS	D					
Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR	
Capacity (veh/h)	1237	-	386	-	-	
HCM Lane V/C Ratio	0.035	-	0.646	-	-	
HCM Control Delay (s)	8	0	29.9	-	-	
HCM Lane LOS	A	A	D	-	-	
HCM 95th %tile Q(veh)	0.1	-	4.4	-	-	

Intersection						
Int Delay, s/veh	0					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	1	0	0	395	262	1
Future Vol, veh/h	1	0	0	395	262	1
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	95	95	95	87	87	95
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	1	0	0	454	301	1
Major/Minor	Minor2	Major1		Major2		
Conflicting Flow All	756	302	302	0	-	0
Stage 1	302	-	-	-	-	-
Stage 2	454	-	-	-	-	-
Critical Hdwy	6.4	6.2	4.1	-	-	-
Critical Hdwy Stg 1	5.4	-	-	-	-	-
Critical Hdwy Stg 2	5.4	-	-	-	-	-
Follow-up Hdwy	3.5	3.3	2.2	-	-	-
Pot Cap-1 Maneuver	379	742	1270	-	-	-
Stage 1	755	-	-	-	-	-
Stage 2	644	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	379	742	1270	-	-	-
Mov Cap-2 Maneuver	379	-	-	-	-	-
Stage 1	755	-	-	-	-	-
Stage 2	644	-	-	-	-	-
Approach	EB	NB		SB		
HCM Control Delay, s	14.5	0		0		
HCM LOS	B					
Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR	
Capacity (veh/h)	1270	-	379	-	-	
HCM Lane V/C Ratio	-	-	0.003	-	-	
HCM Control Delay (s)	0	-	14.5	-	-	
HCM Lane LOS	A	-	B	-	-	
HCM 95th %tile Q(veh)	0	-	0	-	-	

HCM 6th Signalized Intersection Summary

1: Washington Street & Van Buren Boulevard

Woodcrest Christian School Expansion
Cumulative (2045) With Project Afternoon

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	165	1622	202	243	1718	709	153	408	196	770	567	124
Future Volume (veh/h)	165	1622	202	243	1718	709	153	408	196	770	567	124
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		0.99	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No			No			No		
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	174	1707	213	256	1808	746	161	429	206	811	597	131
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	146	2015	246	146	2247	1001	213	500	221	618	931	414
Arrive On Green	0.08	0.62	0.62	0.08	0.62	0.62	0.06	0.14	0.14	0.18	0.26	0.26
Sat Flow, veh/h	1810	3237	396	1810	3610	1609	3510	3610	1600	3510	3610	1605
Grp Volume(v), veh/h	174	936	984	256	1808	746	161	429	206	811	597	131
Grp Sat Flow(s),veh/h/ln	1810	1805	1828	1810	1805	1609	1755	1805	1600	1755	1805	1605
Q Serve(g_s), s	10.5	52.9	57.2	10.5	49.3	42.5	5.9	15.1	16.6	22.9	19.1	8.6
Cycle Q Clear(g_c), s	10.5	52.9	57.2	10.5	49.3	42.5	5.9	15.1	16.6	22.9	19.1	8.6
Prop In Lane	1.00		0.22	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	146	1123	1138	146	2247	1001	213	500	221	618	931	414
V/C Ratio(X)	1.19	0.83	0.86	1.75	0.80	0.75	0.76	0.86	0.93	1.31	0.64	0.32
Avail Cap(c_a), veh/h	146	1123	1138	146	2247	1001	230	500	221	618	931	414
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	59.7	19.3	20.1	59.7	18.6	17.3	60.1	54.8	55.4	53.5	42.9	39.0
Incr Delay (d2), s/veh	134.7	7.3	8.8	364.8	3.2	5.0	12.6	13.9	41.5	151.5	1.5	0.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	10.1	21.5	23.8	19.5	18.9	16.0	3.0	7.8	9.2	22.8	8.5	3.4
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	194.5	26.6	28.9	424.6	21.8	22.3	72.7	68.7	96.9	205.1	44.4	39.4
LnGrp LOS	F	C	C	F	C	C	E	E	F	F	D	D
Approach Vol, veh/h	2094			2810			796			1539		
Approach Delay, s/veh	41.6			58.6			76.8			128.6		
Approach LOS	D			E			E			F		
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	15.0	87.8	12.4	39.3	15.0	87.8	27.9	23.8				
Change Period (Y+Rc), s	4.5	6.2	4.5	5.8	4.5	6.2	5.0	* 5.8				
Max Green Setting (Gmax), s	10.5	57.8	8.5	32.2	10.5	57.8	22.9	* 18				
Max Q Clear Time (g_c+I1), s	12.5	59.2	7.9	21.1	12.5	51.3	24.9	18.6				
Green Ext Time (p_c), s	0.0	0.0	0.0	3.1	0.0	5.8	0.0	0.0				

Intersection Summary

HCM 6th Ctrl Delay	70.6
HCM 6th LOS	E

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

HCM 6th Signalized Intersection Summary

Woodcrest Christian School Expansion

2: Alta Cresta Avenue/Chicago Avenue & Van Buren Boulevard

Cumulative (2045) With Project Afternoon

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	142	2384	189	57	2641	108	96	33	30	118	28	65
Future Volume (veh/h)	142	2384	189	57	2641	108	96	33	30	118	28	65
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		0.98	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No			No			No		
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	149	2509	199	60	2780	114	101	35	32	124	29	68
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	104	2390	1064	86	2303	94	111	70	64	111	38	90
Arrive On Green	0.06	0.66	0.66	0.06	0.87	0.87	0.06	0.08	0.08	0.06	0.08	0.08
Sat Flow, veh/h	1810	3610	1608	1810	3531	144	1810	912	834	1810	503	1179
Grp Volume(v), veh/h	149	2509	199	60	1410	1484	101	0	67	124	0	97
Grp Sat Flow(s),veh/h/ln	1810	1805	1608	1810	1805	1870	1810	0	1746	1810	0	1682
Q Serve(g_s), s	7.5	86.1	6.2	4.2	84.8	84.8	7.2	0.0	4.8	8.0	0.0	7.3
Cycle Q Clear(g_c), s	7.5	86.1	6.2	4.2	84.8	84.8	7.2	0.0	4.8	8.0	0.0	7.3
Prop In Lane	1.00		1.00	1.00		0.08	1.00		0.48	1.00		0.70
Lane Grp Cap(c), veh/h	104	2390	1064	86	1177	1219	111	0	133	111	0	128
V/C Ratio(X)	1.43	1.05	0.19	0.70	1.20	1.22	0.91	0.00	0.50	1.11	0.00	0.76
Avail Cap(c_a), veh/h	104	2390	1064	104	1177	1219	111	0	242	111	0	239
HCM Platoon Ratio	1.00	1.00	1.00	1.33	1.33	1.33	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	0.26	0.26	0.26	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	61.3	22.0	8.5	60.0	8.6	8.6	60.6	0.0	57.7	61.0	0.0	58.8
Incr Delay (d2), s/veh	238.7	33.1	0.4	4.0	91.4	99.7	57.0	0.0	2.9	119.1	0.0	8.7
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	10.3	40.8	2.2	2.0	35.1	39.2	5.1	0.0	2.2	7.4	0.0	3.5
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	299.9	55.1	8.9	64.0	100.0	108.4	117.6	0.0	60.6	180.1	0.0	67.5
LnGrp LOS	F	F	A	E	F	F	F	A	E	F	A	E
Approach Vol, veh/h	2857			2954			168			221		
Approach Delay, s/veh	64.6			103.5			94.9			130.7		
Approach LOS	E			F			F			F		
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	10.7	92.3	12.0	15.0	12.0	91.0	12.0	15.0				
Change Period (Y+Rc), s	4.5	6.2	4.0	* 5.1	4.5	6.2	4.0	5.1				
Max Green Setting (Gmax), s	7.5	76.7	8.0	* 19	7.5	76.7	8.0	18.0				
Max Q Clear Time (g_c+I1), s	6.2	88.1	9.2	9.3	9.5	86.8	10.0	6.8				
Green Ext Time (p_c), s	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.2				
Intersection Summary												
HCM 6th Ctrl Delay	86.3											
HCM 6th LOS	F											
Notes												

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

HCM 6th Signalized Intersection Summary

3: Van Buren Village Driveway & Van Buren Boulevard

Woodcrest Christian School Expansion
Cumulative (2045) With Project Afternoon

	→	↘	↙	←	↖	↗
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑↑	↑	↘	↑↑	↘	↑
Traffic Volume (veh/h)	2493	39	118	2761	45	134
Future Volume (veh/h)	2493	39	118	2761	45	134
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)		1.00	1.00		1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	2624	41	124	2906	47	141
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	0	0	0	0	0	0
Cap, veh/h	2573	1148	135	2954	187	166
Arrive On Green	0.95	0.95	0.15	1.00	0.10	0.10
Sat Flow, veh/h	3705	1610	1810	3705	1810	1610
Grp Volume(v), veh/h	2624	41	124	2906	47	141
Grp Sat Flow(s),veh/h/ln	1805	1610	1810	1805	1810	1610
Q Serve(g_s), s	92.7	0.2	8.8	0.0	3.1	11.2
Cycle Q Clear(g_c), s	92.7	0.2	8.8	0.0	3.1	11.2
Prop In Lane		1.00	1.00		1.00	1.00
Lane Grp Cap(c), veh/h	2573	1148	135	2954	187	166
V/C Ratio(X)	1.02	0.04	0.92	0.98	0.25	0.85
Avail Cap(c_a), veh/h	2573	1148	135	2954	259	230
HCM Platoon Ratio	1.33	1.33	2.00	2.00	1.00	1.00
Upstream Filter(I)	0.09	0.09	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	3.4	1.0	54.9	0.0	53.7	57.3
Incr Delay (d2), s/veh	11.4	0.0	53.3	13.2	0.7	18.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	5.8	0.1	5.6	5.4	1.5	5.4
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	14.7	1.0	108.3	13.2	54.4	75.9
LnGrp LOS	F	A	F	B	D	E
Approach Vol, veh/h	2665			3030	188	
Approach Delay, s/veh	14.5			17.1	70.5	
Approach LOS	B			B	E	
Timer - Assigned Phs	1	2			6	8
Phs Duration (G+Y+Rc), s	13.7	98.9			112.6	17.4
Change Period (Y+Rc), s	4.0	6.2			* 6.2	4.0
Max Green Setting (Gmax), s	9.7	87.5			* 1E2	18.6
Max Q Clear Time (g_c+I1), s	10.8	94.7			2.0	13.2
Green Ext Time (p_c), s	0.0	0.0			76.1	0.3
Intersection Summary						
HCM 6th Ctrl Delay			17.6			
HCM 6th LOS			B			
Notes						
* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.						

HCM 6th TWSC
4: Little Court & Van Buren Boulevard

Woodcrest Christian School Expansion
Cumulative (2045) With Project Afternoon

Intersection						
Int Delay, s/veh	0					
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑↑↑↑	↗		↑↑		↗
Traffic Vol, veh/h	2623	5	0	2880	0	2
Future Vol, veh/h	2623	5	0	2880	0	2
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	0	-	-	-	0
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	95	95	95	95	95	95
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	2761	5	0	3032	0	2
Major/Minor	Major1	Major2		Minor1		
Conflicting Flow All	0	0	-	-	-	1381
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	-	-	-	-	7.1
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	-	-	-	-	3.9
Pot Cap-1 Maneuver	-	-	0	-	0	*313
Stage 1	-	-	0	-	0	-
Stage 2	-	-	0	-	0	-
Platoon blocked, %	-	-		-		1
Mov Cap-1 Maneuver	-	-	-	-	-	*313
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Approach	EB	WB		NB		
HCM Control Delay, s	0	0		16.6		
HCM LOS	C					
Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBT		
Capacity (veh/h)	313	-	-	-		
HCM Lane V/C Ratio	0.007	-	-	-		
HCM Control Delay (s)	16.6	-	-	-		
HCM Lane LOS	C	-	-	-		
HCM 95th %tile Q(veh)	0	-	-	-		
Notes						
~: Volume exceeds capacity		\$: Delay exceeds 300s		+: Computation Not Defined		*: All major volume in platoon

HCM 6th TWSC
5: Van Buren Boulevard & Ridgeway Avenue

Woodcrest Christian School Expansion
Cumulative (2045) With Project Afternoon

Intersection						
Int Delay, s/veh	0					
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	128	2497	2802	24	2	78
Future Vol, veh/h	128	2497	2802	24	2	78
Conflicting Peds, #/hr	3	0	0	3	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	95	95	95	95	95	95
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	135	2628	2949	25	2	82
Major/Minor	Major1	Major2		Minor2		
Conflicting Flow All	2977	0	-	0	4549	1490
Stage 1	-	-	-	-	2965	-
Stage 2	-	-	-	-	1584	-
Critical Hdwy	4.1	-	-	-	6.8	6.9
Critical Hdwy Stg 1	-	-	-	-	5.8	-
Critical Hdwy Stg 2	-	-	-	-	5.8	-
Follow-up Hdwy	2.2	-	-	-	3.5	3.3
Pot Cap-1 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	*34	-
Platoon blocked, %	2	-	-	-	2	2
Mov Cap-1 Maneuver	-	-	-	-	-	-
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	*33	-
Approach	EB	WB		SB		
HCM Control Delay, s	0					
HCM LOS	-					
Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1	
Capacity (veh/h)	-	-	-	-	-	
HCM Lane V/C Ratio	-	-	-	-	-	
HCM Control Delay (s)	-	-	-	-	-	
HCM Lane LOS	-	-	-	-	-	
HCM 95th %tile Q(veh)	-	-	-	-	-	
Notes						
~: Volume exceeds capacity		\$: Delay exceeds 300s		+: Computation Not Defined		*: All major volume in platoon

HCM 6th Signalized Intersection Summary 6: Dauchy Avenue & Van Buren Boulevard

Woodcrest Christian School Expansion
Cumulative (2045) With Project Afternoon

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	94	2101	304	194	2437	81	327	111	225	111	64	76
Future Volume (veh/h)	94	2101	304	194	2437	81	327	111	225	111	64	76
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		0.99	0.98		0.98	0.99		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	99	2212	320	204	2565	85	344	117	237	117	67	80
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	97	1608	227	97	1829	809	397	124	252	170	429	355
Arrive On Green	0.02	0.17	0.17	0.07	0.67	0.67	0.05	0.23	0.23	0.05	0.23	0.23
Sat Flow, veh/h	1810	3173	447	1810	3610	1597	1810	551	1117	1810	1900	1574
Grp Volume(v), veh/h	99	1234	1298	204	2565	85	344	0	354	117	67	80
Grp Sat Flow(s),veh/h/ln	1810	1805	1815	1810	1805	1597	1810	0	1668	1810	1900	1574
Q Serve(g_s), s	7.0	65.9	65.9	7.0	65.9	2.4	7.0	0.0	27.1	6.5	3.7	5.4
Cycle Q Clear(g_c), s	7.0	65.9	65.9	7.0	65.9	2.4	7.0	0.0	27.1	6.5	3.7	5.4
Prop In Lane	1.00		0.25	1.00		1.00	1.00		0.67	1.00		1.00
Lane Grp Cap(c), veh/h	97	915	920	97	1829	809	397	0	376	170	429	355
V/C Ratio(X)	1.02	1.35	1.41	2.09	1.40	0.11	0.87	0.00	0.94	0.69	0.16	0.23
Avail Cap(c_a), veh/h	97	915	920	97	1829	809	397	0	385	170	438	363
HCM Platoon Ratio	0.33	0.33	0.33	1.33	1.33	1.33	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	0.09	0.09	0.09	1.00	0.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	63.8	54.1	54.1	60.3	21.2	10.9	46.6	0.0	49.5	39.2	40.4	41.1
Incr Delay (d2), s/veh	95.6	164.2	191.7	495.3	181.3	0.0	17.2	0.0	30.7	9.2	0.2	0.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	5.8	73.4	80.9	16.5	65.0	0.9	9.6	0.0	14.6	3.3	1.8	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	159.4	218.3	245.9	555.7	202.5	10.9	63.8	0.0	80.2	48.4	40.6	41.4
LnGrp LOS	F	F	F	F	F	B	E	A	F	D	D	D
Approach Vol, veh/h		2631			2854			698			264	
Approach Delay, s/veh		229.7			222.0			72.1			44.3	
Approach LOS		F			F			E			D	
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	12.0	73.1	11.0	33.9	12.0	73.1	11.0	33.9				
Change Period (Y+Rc), s	5.0	7.2	4.0	4.6	5.0	7.2	4.0	4.6				
Max Green Setting (Gmax), s	7.0	65.2	7.0	30.0	7.0	65.2	7.0	30.0				
Max Q Clear Time (g_c+I1), s	9.0	67.9	9.0	7.4	9.0	67.9	8.5	29.1				
Green Ext Time (p_c), s	0.0	0.0	0.0	0.6	0.0	0.0	0.0	0.2				
Intersection Summary												
HCM 6th Ctrl Delay			201.7									
HCM 6th LOS			F									

Intersection												
Int Delay, s/veh	23.4											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕	↗		↕			↖			↕	↗
Traffic Vol, veh/h	172	1	36	6	0	26	18	376	9	19	416	94
Future Vol, veh/h	172	1	36	6	0	26	18	376	9	19	416	94
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	0	-	-	-	-	-	-	-	-	90
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	95	95	95	76	95	76	95	76	76	76	76	95
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	181	1	38	8	0	34	19	495	12	25	547	99
Major/Minor	Minor2		Minor1			Major1			Major2			
Conflicting Flow All	1153	1142	547	1205	1235	501	646	0	0	507	0	0
Stage 1	597	597	-	539	539	-	-	-	-	-	-	-
Stage 2	556	545	-	666	696	-	-	-	-	-	-	-
Critical Hdwy	7.1	6.5	6.2	7.1	6.5	6.2	4.1	-	-	4.1	-	-
Critical Hdwy Stg 1	6.1	5.5	-	6.1	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.1	5.5	-	6.1	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.5	4	3.3	3.5	4	3.3	2.2	-	-	2.2	-	-
Pot Cap-1 Maneuver	~ 176	202	541	162	178	574	949	-	-	1068	-	-
Stage 1	493	495	-	530	525	-	-	-	-	-	-	-
Stage 2	519	522	-	452	446	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	~ 157	189	541	143	167	574	949	-	-	1068	-	-
Mov Cap-2 Maneuver	~ 157	189	-	143	167	-	-	-	-	-	-	-
Stage 1	479	477	-	515	510	-	-	-	-	-	-	-
Stage 2	474	507	-	404	429	-	-	-	-	-	-	-
Approach	EB		WB			NB			SB			
HCM Control Delay, s	150.4		16.1			0.3			0.3			
HCM LOS	F		C									
Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	EBLn2	WBLn1	SBL	SBT	SBR			
Capacity (veh/h)	949	-	-	157	541	367	1068	-	-			
HCM Lane V/C Ratio	0.02	-	-	1.16	0.07	0.115	0.023	-	-			
HCM Control Delay (s)	8.9	-	-	179.1	12.2	16.1	8.5	0	-			
HCM Lane LOS	A	-	-	F	B	C	A	A	-			
HCM 95th %tile Q(veh)	0.1	-	-	10	0.2	0.4	0.1	-	-			
Notes												
~: Volume exceeds capacity		\$: Delay exceeds 300s			+: Computation Not Defined				*: All major volume in platoon			

HCM 6th AWSC
8: Taft Street/Dauchy Avenue & Krameria Avenue

Woodcrest Christian School Expansion
Cumulative (2045) With Project Afternoon

Intersection	
Intersection Delay, s/veh	109.2
Intersection LOS	F

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	58	527	40	10	428	89	19	34	14	249	43	108
Future Vol, veh/h	58	527	40	10	428	89	19	34	14	249	43	108
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	61	555	42	11	451	94	20	36	15	262	45	114
Number of Lanes	0	1	0	0	1	0	0	1	0	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	1	1	1
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	1	1	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	1	1	1	1
HCM Control Delay	173.3	94.2	15.5	44.6
HCM LOS	F	F	C	E

Lane	NBLn1	EBLn1	WBLn1	SBLn1
Vol Left, %	28%	9%	2%	62%
Vol Thru, %	51%	84%	81%	11%
Vol Right, %	21%	6%	17%	27%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	67	625	527	400
LT Vol	19	58	10	249
Through Vol	34	527	428	43
RT Vol	14	40	89	108
Lane Flow Rate	71	658	555	421
Geometry Grp	1	1	1	1
Degree of Util (X)	0.178	1.303	1.087	0.864
Departure Headway (Hd)	10.325	7.376	7.605	8.143
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	350	500	483	446
Service Time	8.325	5.376	5.605	6.143
HCM Lane V/C Ratio	0.203	1.316	1.149	0.944
HCM Control Delay	15.5	173.3	94.2	44.6
HCM Lane LOS	C	F	F	E
HCM 95th-tile Q	0.6	27.2	16.7	8.8

HCM 6th Signalized Intersection Summary

9: Wood Road & Van Buren Boulevard

Woodcrest Christian School Expansion
Cumulative (2045) With Project Afternoon



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	254	1805	346	288	2072	129	425	472	281	135	374	282
Future Volume (veh/h)	254	1805	346	288	2072	129	425	472	281	135	374	282
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.95	1.00		0.96	1.00		0.76	1.00		0.71
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No			No			No		
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	267	1900	364	303	2181	136	447	497	296	142	394	297
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	292	3010	1470	338	2775	1189	419	565	333	111	428	271
Arrive On Green	0.16	0.83	0.83	0.10	0.77	0.77	0.12	0.29	0.29	0.06	0.24	0.24
Sat Flow, veh/h	1810	3610	1533	3510	3610	1547	3510	1932	1138	1810	1805	1145
Grp Volume(v), veh/h	267	1900	364	303	2181	136	447	464	329	142	394	297
Grp Sat Flow(s),veh/h/ln	1810	1805	1533	1755	1805	1547	1755	1805	1266	1810	1805	1145
Q Serve(g_s), s	18.9	24.0	1.9	11.1	45.9	6.8	15.5	31.8	32.3	8.0	27.7	30.8
Cycle Q Clear(g_c), s	18.9	24.0	1.9	11.1	45.9	6.8	15.5	31.8	32.3	8.0	27.7	30.8
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.90	1.00		1.00
Lane Grp Cap(c), veh/h	292	3010	1470	338	2775	1189	419	528	370	111	428	271
V/C Ratio(X)	0.92	0.63	0.25	0.90	0.79	0.11	1.07	0.88	0.89	1.28	0.92	1.09
Avail Cap(c_a), veh/h	313	3010	1470	338	2775	1189	419	528	370	111	428	271
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.09	0.09	0.09	0.47	0.47	0.47	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	53.7	3.8	0.2	58.1	8.8	20.8	57.3	43.8	44.0	61.0	48.4	49.6
Incr Delay (d2), s/veh	4.0	0.1	0.0	13.7	1.1	0.1	63.3	15.6	22.3	176.4	25.2	82.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	8.6	4.5	0.0	5.4	13.0	0.9	10.4	16.2	12.2	9.1	15.2	14.8
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	57.6	3.9	0.2	71.9	9.9	20.9	120.5	59.5	66.3	237.4	73.7	131.9
LnGrp LOS	E	A	A	E	A	C	F	E	E	F	E	F
Approach Vol, veh/h	2531		2620				1240			833		
Approach Delay, s/veh	9.0		17.6				83.3			122.3		
Approach LOS	A		B				F			F		
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	18.0	117.4	21.0	36.6	26.4	108.9	13.8	43.8				
Change Period (Y+Rc), s	5.5	7.2	5.5	5.8	5.5	7.2	5.8	* 5.8				
Max Green Setting (Gmax), s	12.5	49.0	15.5	29.0	22.5	39.0	8.0	* 38				
Max Q Clear Time (g_c+113, s)	113	26.0	17.5	32.8	20.9	47.9	10.0	34.3				
Green Ext Time (p_c), s	0.0	16.2	0.0	0.0	0.1	0.0	0.0	1.7				

Intersection Summary

HCM 6th Ctrl Delay 38.0

HCM 6th LOS D

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

HCM 6th Signalized Intersection Summary

10: Van Buren Boulevard & Bountiful Street

Woodcrest Christian School Expansion
Cumulative (2045) With Project Afternoon



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations	↰	↑↑↑	↑↑↑		↰	↑
Traffic Volume (veh/h)	286	2143	2275	29	18	234
Future Volume (veh/h)	286	2143	2275	29	18	234
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00			0.96	1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No	No		No	
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	301	2256	2395	31	19	246
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	0	0	0	0	0	0
Cap, veh/h	285	3831	2881	37	310	276
Arrive On Green	0.32	1.00	1.00	1.00	0.17	0.17
Sat Flow, veh/h	1810	5358	5445	68	1810	1610
Grp Volume(v), veh/h	301	2256	1568	858	19	246
Grp Sat Flow(s), veh/h/ln	1810	1729	1729	1884	1810	1610
Q Serve(g_s), s	20.5	0.0	0.0	0.0	1.1	19.4
Cycle Q Clear(g_c), s	20.5	0.0	0.0	0.0	1.1	19.4
Prop In Lane	1.00			0.04	1.00	1.00
Lane Grp Cap(c), veh/h	285	3831	1889	1029	310	276
V/C Ratio(X)	1.05	0.59	0.83	0.83	0.06	0.89
Avail Cap(c_a), veh/h	285	3831	1889	1029	619	551
HCM Platoon Ratio	2.00	2.00	2.00	2.00	1.00	1.00
Upstream Filter(I)	0.09	0.09	0.28	0.28	1.00	1.00
Uniform Delay (d), s/veh	44.5	0.0	0.0	0.0	45.1	52.7
Incr Delay (d2), s/veh	32.9	0.1	1.3	2.4	0.1	9.7
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%), veh/ln	9.8	0.0	0.3	0.7	0.5	17.0
Unsig. Movement Delay, s/veh						
LnGrp Delay(d), s/veh	77.4	0.1	1.3	2.4	45.2	62.4
LnGrp LOS	F	A	A	A	D	E
Approach Vol, veh/h		2557	2426		265	
Approach Delay, s/veh		9.2	1.7		61.1	
Approach LOS		A	A		E	
Timer - Assigned Phs		2		4	5	6
Phs Duration (G+Y+Rc), s		103.2		26.8	25.0	78.2
Change Period (Y+Rc), s		7.2		4.5	4.5	7.2
Max Green Setting (Gmax), s		73.8		44.5	20.5	48.8
Max Q Clear Time (g_c+I1), s		2.0		21.4	22.5	2.0
Green Ext Time (p_c), s		32.9		0.9	0.0	28.2
Intersection Summary						
HCM 6th Ctrl Delay			8.3			
HCM 6th LOS			A			

HCM 6th Signalized Intersection Summary

11: Trautwein Road & Mission Grove Parkway S

Woodcrest Christian School Expansion
Cumulative (2045) With Project Afternoon



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	48	13	16	680	20	57	6	1843	575	159	1881	41
Future Volume (veh/h)	48	13	16	680	20	57	6	1843	575	159	1881	41
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.97	1.00		0.99	1.00		0.98	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No			No			No		
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	51	14	17	716	21	60	6	1940	605	167	1980	43
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	82	87	105	532	438	367	19	1808	1035	118	2006	887
Arrive On Green	0.05	0.11	0.11	0.15	0.23	0.23	0.00	0.17	0.17	0.07	0.56	0.56
Sat Flow, veh/h	1810	769	933	3510	1900	1589	1810	3610	1580	1810	3610	1596
Grp Volume(v), veh/h	51	0	31	716	21	60	6	1940	605	167	1980	43
Grp Sat Flow(s),veh/h/ln	1810	0	1702	1755	1900	1589	1810	1805	1580	1810	1805	1596
Q Serve(g_s), s	3.6	0.0	2.1	19.7	1.1	3.9	0.4	65.1	33.1	8.5	70.2	1.6
Cycle Q Clear(g_c), s	3.6	0.0	2.1	19.7	1.1	3.9	0.4	65.1	33.1	8.5	70.2	1.6
Prop In Lane	1.00		0.55	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	82	0	192	532	438	367	19	1808	1035	118	2006	887
V/C Ratio(X)	0.62	0.00	0.16	1.35	0.05	0.16	0.32	1.07	0.58	1.41	0.99	0.05
Avail Cap(c_a), veh/h	170	0	419	532	617	516	104	1808	1035	118	2006	887
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	0.33	0.33	0.33	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	1.00	1.00	0.16	0.16	0.16	1.00	1.00	1.00
Uniform Delay (d), s/veh	61.0	0.0	52.1	55.2	38.9	40.0	64.3	54.3	22.8	60.8	28.4	13.2
Incr Delay (d2), s/veh	2.9	0.0	0.4	167.9	0.0	0.2	0.6	35.0	0.4	227.6	17.2	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.7	0.0	0.9	20.9	0.5	1.5	0.2	40.1	13.8	11.3	31.7	0.6
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	63.8	0.0	52.5	223.0	38.9	40.2	64.9	89.3	23.2	288.4	45.6	13.3
LnGrp LOS	E	A	D	F	D	D	E	F	C	F	D	B
Approach Vol, veh/h	82			797			2551			2190		
Approach Delay, s/veh	59.5			204.4			73.5			63.5		
Approach LOS	E			F			E			E		
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	3.0	71.3	25.2	20.5	5.9	78.4	9.9	35.8				
Change Period (Y+Rc), s	4.5	6.2	5.5	5.8	4.5	6.2	4.0	* 5.8				
Max Green Setting (Gmax), s	3.5	47.8	19.7	32.0	7.5	48.8	12.2	* 42				
Max Q Clear Time (g_c+110), s	110.5	67.1	21.7	4.1	2.4	72.2	5.6	5.9				
Green Ext Time (p_c), s	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.3				

Intersection Summary

HCM 6th Ctrl Delay 88.0

HCM 6th LOS F

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

HCM 6th Signalized Intersection Summary

12: Trautwein Road & John F Kennedy Drive

Woodcrest Christian School Expansion
Cumulative (2045) With Project Afternoon



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	704	59	123	54	22	35	120	1707	97	17	1928	760
Future Volume (veh/h)	704	59	123	54	22	35	120	1707	97	17	1928	760
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		0.99	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No			No			No		
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	741	62	129	57	23	37	126	1797	102	18	2029	800
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	516	193	162	204	44	71	97	2155	960	47	2054	1151
Arrive On Green	0.15	0.10	0.10	0.11	0.07	0.07	0.05	0.60	0.60	0.05	1.00	1.00
Sat Flow, veh/h	3510	1900	1601	1810	652	1048	1810	3610	1607	1810	3610	1607
Grp Volume(v), veh/h	741	62	129	57	0	60	126	1797	102	18	2029	800
Grp Sat Flow(s),veh/h/ln	1755	1900	1601	1810	0	1700	1810	1805	1607	1810	1805	1607
Q Serve(g_s), s	19.1	3.9	8.9	3.8	0.0	4.4	7.0	51.9	1.7	1.3	0.0	0.0
Cycle Q Clear(g_c), s	19.1	3.9	8.9	3.8	0.0	4.4	7.0	51.9	1.7	1.3	0.0	0.0
Prop In Lane	1.00		1.00	1.00		0.62	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	516	193	162	204	0	116	97	2155	960	47	2054	1151
V/C Ratio(X)	1.44	0.32	0.80	0.28	0.00	0.52	1.29	0.83	0.11	0.39	0.99	0.70
Avail Cap(c_a), veh/h	516	626	527	204	0	432	97	2155	960	97	2054	1151
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00	2.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	0.00	1.00	0.61	0.61	0.61	0.20	0.20	0.20
Uniform Delay (d), s/veh	55.4	54.3	42.9	52.8	0.0	58.5	61.5	21.0	2.6	60.7	0.0	0.0
Incr Delay (d2), s/veh	207.4	1.0	8.5	0.7	0.0	3.6	170.4	2.5	0.1	1.0	6.5	0.7
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	23.2	1.9	4.0	1.8	0.0	2.0	7.7	20.0	1.3	0.6	1.9	0.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	262.8	55.2	51.4	53.6	0.0	62.1	231.9	23.5	2.7	61.7	6.5	0.7
LnGrp LOS	F	E	D	D	A	E	F	C	A	E	A	A
Approach Vol, veh/h	932			117			2025			2847		
Approach Delay, s/veh	219.8			57.9			35.4			5.2		
Approach LOS	F			E			D			A		
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	7.3	84.8	20.1	17.8	11.0	81.2	23.6	14.2				
Change Period (Y+Rc), s	4.0	7.2	5.4	* 4.6	4.0	7.2	4.5	5.4				
Max Green Setting (Gmax), s	7.0	49.8	10.6	* 43	7.0	49.8	19.1	33.0				
Max Q Clear Time (g_c+I13, s)	13.3	53.9	5.8	10.9	9.0	2.0	21.1	6.4				
Green Ext Time (p_c), s	0.0	0.0	0.0	0.7	0.0	32.8	0.0	0.3				

Intersection Summary

HCM 6th Ctrl Delay 50.4

HCM 6th LOS D

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

HCM 6th Signalized Intersection Summary 13: Trautwein Road & Grove Community Drive

Woodcrest Christian School Expansion
Cumulative (2045) With Project Afternoon



Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	123	273	1651	100	393	1712
Future Volume (veh/h)	123	273	1651	100	393	1712
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00		1.00	1.00	
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No		No		No	
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	129	287	1738	105	414	1802
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	0	0	0	0	0	0
Cap, veh/h	189	679	2279	1015	474	2919
Arrive On Green	0.10	0.10	1.00	1.00	0.27	1.00
Sat Flow, veh/h	1810	2834	3705	1608	3510	3705
Grp Volume(v), veh/h	129	287	1738	105	414	1802
Grp Sat Flow(s), veh/h/ln	1810	1417	1805	1608	1755	1805
Q Serve(g_s), s	8.9	11.1	0.0	0.0	14.6	0.0
Cycle Q Clear(g_c), s	8.9	11.1	0.0	0.0	14.6	0.0
Prop In Lane	1.00	1.00		1.00	1.00	
Lane Grp Cap(c), veh/h	189	679	2279	1015	474	2919
V/C Ratio(X)	0.68	0.42	0.76	0.10	0.87	0.62
Avail Cap(c_a), veh/h	221	729	2279	1015	662	2919
HCM Platoon Ratio	1.00	1.00	2.00	2.00	2.00	2.00
Upstream Filter(I)	1.00	1.00	0.60	0.60	0.09	0.09
Uniform Delay (d), s/veh	56.1	41.8	0.0	0.0	46.4	0.0
Incr Delay (d2), s/veh	6.7	0.4	1.5	0.1	1.0	0.1
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%), veh/ln	4.4	3.9	0.5	0.0	5.4	0.0
Unsig. Movement Delay, s/veh						
LnGrp Delay(d), s/veh	62.9	42.2	1.5	0.1	47.3	0.1
LnGrp LOS	E	D	A	A	D	A
Approach Vol, veh/h	416		1843			2216
Approach Delay, s/veh	48.6		1.4			8.9
Approach LOS	D		A			A
Timer - Assigned Phs	1	2			6	8
Phs Duration (G+Y+Rc), s	23.1	88.3			111.3	18.7
Change Period (Y+Rc), s	5.5	6.2			6.2	5.1
Max Green Setting (Gmax), s	24.5	72.8			102.8	15.9
Max Q Clear Time (g_c+10), s	110.6	2.0			2.0	13.1
Green Ext Time (p_c), s	0.9	22.1			24.1	0.4
Intersection Summary						
HCM 6th Ctrl Delay			9.5			
HCM 6th LOS			A			

HCM 6th Signalized Intersection Summary 14: Trautwein Road & Orange Terrace Pkwy

Woodcrest Christian School Expansion
Cumulative (2045) With Project Afternoon

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	54	44	25	212	15	304	40	1392	291	329	1416	24
Future Volume (veh/h)	54	44	25	212	15	304	40	1392	291	329	1416	24
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		0.97	1.00		0.99	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No			No			No		
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	57	46	26	223	16	320	42	1465	306	346	1491	25
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	162	73	42	250	207	613	76	1893	837	390	2170	956
Arrive On Green	0.09	0.06	0.06	0.14	0.11	0.11	0.06	0.70	0.70	0.22	1.00	1.00
Sat Flow, veh/h	1810	1138	643	1810	1900	2736	1810	3610	1596	3510	3610	1590
Grp Volume(v), veh/h	57	0	72	223	16	320	42	1465	306	346	1491	25
Grp Sat Flow(s),veh/h/ln	1810	0	1781	1810	1900	1368	1810	1805	1596	1755	1805	1590
Q Serve(g_s), s	3.8	0.0	5.1	15.7	1.0	9.8	2.9	34.7	10.1	12.4	0.0	0.0
Cycle Q Clear(g_c), s	3.8	0.0	5.1	15.7	1.0	9.8	2.9	34.7	10.1	12.4	0.0	0.0
Prop In Lane	1.00		0.36	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	162	0	115	250	207	613	76	1893	837	390	2170	956
V/C Ratio(X)	0.35	0.00	0.63	0.89	0.08	0.52	0.55	0.77	0.37	0.89	0.69	0.03
Avail Cap(c_a), veh/h	362	0	452	434	576	1144	97	1893	837	405	2170	956
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.33	1.33	1.33	2.00	2.00	2.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	1.00	1.00	0.51	0.51	0.51	0.75	0.75	0.75
Uniform Delay (d), s/veh	55.6	0.0	59.3	55.0	52.1	25.4	60.2	14.6	10.9	49.7	0.0	0.0
Incr Delay (d2), s/veh	0.5	0.0	5.5	5.5	0.2	0.7	1.2	1.6	0.6	15.2	1.4	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.8	0.0	2.5	7.6	0.5	3.3	1.3	9.8	3.3	5.5	0.4	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	56.1	0.0	64.8	60.5	52.2	26.1	61.4	16.3	11.5	64.9	1.4	0.0
LnGrp LOS	E	A	E	E	D	C	E	B	B	E	A	A
Approach Vol, veh/h	129					559		1813		1862		
Approach Delay, s/veh	60.9					40.6		16.5		13.2		
Approach LOS	E					D		B		B		
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	9.5	74.4	22.0	14.2	9.5	84.3	17.4	18.7				
Change Period (Y+Rc), s	5.0	6.2	4.0	5.8	4.0	6.2	5.8	* 4.6				
Max Green Setting (Gmax), s	15.0	29.8	31.2	33.0	7.0	38.8	26.0	* 39				
Max Q Clear Time (g_c+1/4), s	14.4	36.7	17.7	7.1	4.9	2.0	5.8	11.8				
Green Ext Time (p_c), s	0.0	0.0	0.3	0.3	0.0	13.6	0.1	1.4				
Intersection Summary												
HCM 6th Ctrl Delay			19.5									
HCM 6th LOS			B									
Notes												

HCM 6th Signalized Intersection Summary

15: Trautwein Road & Shopping Ctr Dwy

Woodcrest Christian School Expansion
Cumulative (2045) With Project Afternoon



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	175	47	139	101	34	97	185	1401	26	211	1180	176
Future Volume (veh/h)	175	47	139	101	34	97	185	1401	26	211	1180	176
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		0.98	1.00		0.97	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No			No			No		
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	184	49	146	106	36	102	195	1475	27	222	1242	185
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	264	98	293	216	101	287	219	1812	781	250	1875	827
Arrive On Green	0.23	0.23	0.23	0.23	0.23	0.23	0.24	1.00	1.00	0.09	0.35	0.35
Sat Flow, veh/h	1269	420	1251	1205	432	1225	1810	3610	1557	1810	3610	1592
Grp Volume(v), veh/h	184	0	195	106	0	138	195	1475	27	222	1242	185
Grp Sat Flow(s), veh/h/ln	1269	0	1671	1205	0	1657	1810	1805	1557	1810	1805	1592
Q Serve(g_s), s	18.4	0.0	13.2	10.9	0.0	9.0	13.5	0.0	0.0	15.8	37.9	10.7
Cycle Q Clear(g_c), s	27.5	0.0	13.2	24.0	0.0	9.0	13.5	0.0	0.0	15.8	37.9	10.7
Prop In Lane	1.00		0.75	1.00		0.74	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	264	0	391	216	0	388	219	1812	781	250	1875	827
V/C Ratio(X)	0.70	0.00	0.50	0.49	0.00	0.36	0.89	0.81	0.03	0.89	0.66	0.22
Avail Cap(c_a), veh/h	299	0	437	249	0	433	452	1812	781	452	1875	827
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00	2.00	0.67	0.67	0.67
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	0.09	0.09	0.09	0.63	0.63	0.63
Uniform Delay (d), s/veh	53.1	0.0	43.2	53.6	0.0	41.6	48.4	0.0	0.0	58.0	32.7	23.9
Incr Delay (d2), s/veh	5.9	0.0	1.0	1.7	0.0	0.6	0.5	0.4	0.0	2.7	1.2	0.4
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%), veh/ln	6.4	0.0	5.6	3.4	0.0	3.8	5.2	0.1	0.0	7.5	17.3	4.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	59.0	0.0	44.1	55.3	0.0	42.1	48.9	0.4	0.0	60.7	33.9	24.2
LnGrp LOS	E	A	D	E	A	D	D	A	A	E	C	C
Approach Vol, veh/h	379			244			1697			1649		
Approach Delay, s/veh	51.4			47.9			6.0			36.4		
Approach LOS	D			D			A			D		
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	22.5	72.5		35.0	20.2	74.7		35.0				
Change Period (Y+Rc), s	4.5	7.2		4.6	4.5	7.2		4.6				
Max Green Setting (Gmax), s	32.5	47.2		34.0	32.5	47.2		34.0				
Max Q Clear Time (g_c+1/17.8), s	117.8	2.0		29.5	15.5	39.9		26.0				
Green Ext Time (p_c), s	0.2	14.2		0.8	0.2	4.6		0.7				

Intersection Summary

HCM 6th Ctrl Delay	25.5											
HCM 6th LOS	C											

HCM 6th Signalized Intersection Summary

16: Trautwein Road & Van Buren Boulevard

Woodcrest Christian School Expansion
Cumulative (2045) With Project Afternoon



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↰↱	↑↑	↰	↰↱	↑↑↑	↰	↰	↑↑		↰↱	↑↑	↰
Traffic Volume (veh/h)	556	1379	226	192	1800	701	203	509	112	531	578	420
Future Volume (veh/h)	556	1379	226	192	1800	701	203	509	112	531	578	420
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		0.99	1.00		0.96	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No			No			No		
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	585	1452	238	202	1895	738	214	536	118	559	608	442
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	427	1411	827	146	1748	720	225	741	162	394	839	562
Arrive On Green	0.24	0.78	0.78	0.16	0.67	0.67	0.12	0.25	0.25	0.19	0.39	0.39
Sat Flow, veh/h	3510	3610	1603	1810	5187	1602	1810	2922	640	3510	3610	1577
Grp Volume(v), veh/h	585	1452	238	202	1895	738	214	330	324	559	608	442
Grp Sat Flow(s),veh/h/ln	1755	1805	1603	1810	1729	1602	1810	1805	1757	1755	1805	1577
Q Serve(g_s), s	15.8	50.8	1.1	10.5	43.8	43.8	15.3	21.7	21.9	14.6	18.6	11.6
Cycle Q Clear(g_c), s	15.8	50.8	1.1	10.5	43.8	43.8	15.3	21.7	21.9	14.6	18.6	11.6
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.36	1.00		1.00
Lane Grp Cap(c), veh/h	427	1411	827	146	1748	720	225	458	446	394	839	562
V/C Ratio(X)	1.37	1.03	0.29	1.38	1.08	1.02	0.95	0.72	0.73	1.42	0.72	0.79
Avail Cap(c_a), veh/h	427	1411	827	146	1748	720	225	555	541	394	1050	654
HCM Platoon Ratio	2.00	2.00	2.00	2.00	2.00	2.00	1.00	1.00	1.00	1.67	1.67	1.67
Upstream Filter(I)	0.85	0.85	0.85	0.37	0.37	0.37	1.00	1.00	1.00	0.72	0.72	0.72
Uniform Delay (d), s/veh	49.2	14.2	2.3	54.5	21.2	10.8	56.5	44.3	44.4	52.8	36.2	28.0
Incr Delay (d2), s/veh	178.9	29.9	0.7	187.1	42.3	26.8	45.8	3.6	3.9	198.6	1.4	4.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	6.3	11.2	0.8	11.8	14.4	9.0	9.7	10.0	9.9	16.6	6.9	9.6
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	228.1	44.1	3.0	241.6	63.5	37.7	102.3	47.9	48.2	251.4	37.6	32.0
LnGrp LOS	F	F	A	F	F	F	F	D	D	F	D	C
Approach Vol, veh/h	2275					2835		868		1609		
Approach Delay, s/veh	87.1					69.5		61.4		110.3		
Approach LOS	F					E		E		F		
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	57.0	57.0	21.6	36.4	22.0	50.0	19.6	38.4				
Change Period (Y+Rc), s	4.5	6.2	5.4	* 6.2	6.2	* 6.2	5.0	5.4				
Max Green Setting (Gmax), s	40.5	43.8	16.0	* 38	10.0	* 44	14.6	40.0				
Max Q Clear Time (g_c+1/2), s	112.5	52.8	17.3	20.6	17.8	45.8	16.6	23.9				
Green Ext Time (p_c), s	0.0	0.0	0.0	4.9	0.0	0.0	0.0	3.4				

Intersection Summary

HCM 6th Ctrl Delay 82.5

HCM 6th LOS F

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

HCM 6th Signalized Intersection Summary

17: Van Buren Boulevard & Shopping Ctr Dwy

Woodcrest Christian School Expansion
Cumulative (2045) With Project Afternoon



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations	↰	↑↑	↑↑↑		↰	↑↑
Traffic Volume (veh/h)	94	1928	2499	111	214	59
Future Volume (veh/h)	94	1928	2499	111	214	59
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00			1.00	1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No	No		No	
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	99	2029	2631	117	225	62
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	0	0	0	0	0	0
Cap, veh/h	392	2782	2539	112	259	230
Arrive On Green	0.43	1.00	1.00	1.00	0.14	0.14
Sat Flow, veh/h	1810	3705	5264	224	1810	1610
Grp Volume(v), veh/h	99	2029	1777	971	225	62
Grp Sat Flow(s), veh/h/ln	1810	1805	1729	1859	1810	1610
Q Serve(g_s), s	4.5	0.0	64.8	64.8	15.8	4.5
Cycle Q Clear(g_c), s	4.5	0.0	64.8	64.8	15.8	4.5
Prop In Lane	1.00			0.12	1.00	1.00
Lane Grp Cap(c), veh/h	392	2782	1724	927	259	230
V/C Ratio(X)	0.25	0.73	1.03	1.05	0.87	0.27
Avail Cap(c_a), veh/h	392	2782	1724	927	487	434
HCM Platoon Ratio	2.00	2.00	2.00	2.00	1.00	1.00
Upstream Filter(I)	0.09	0.09	0.09	0.09	1.00	1.00
Uniform Delay (d), s/veh	30.1	0.0	0.2	0.2	54.5	49.6
Incr Delay (d2), s/veh	0.0	0.2	16.5	25.0	8.7	0.6
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%), veh/ln	1.8	0.1	4.0	6.5	7.9	4.2
Unsig. Movement Delay, s/veh						
LnGrp Delay(d), s/veh	30.1	0.2	16.7	25.2	63.2	50.3
LnGrp LOS	C	A	F	F	E	D
Approach Vol, veh/h		2128	2748		287	
Approach Delay, s/veh		1.6	19.7		60.4	
Approach LOS		A	B		E	
Timer - Assigned Phs		2		4	5	6
Phs Duration (G+Y+Rc), s		107.4		22.6	35.4	72.0
Change Period (Y+Rc), s		7.2		4.0	7.2	* 7.2
Max Green Setting (Gmax), s		83.8		35.0	14.5	* 65
Max Q Clear Time (g_c+l1), s		2.0		17.8	6.5	66.8
Green Ext Time (p_c), s		31.0		0.8	0.1	0.0

Intersection Summary

HCM 6th Ctrl Delay	14.5
HCM 6th LOS	B

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

HCM 6th Signalized Intersection Summary

18: Barton Street & Van Buren Boulevard

Woodcrest Christian School Expansion
Cumulative (2045) With Project Afternoon



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	154	1498	420	369	1938	95	626	81	323	54	53	218
Future Volume (veh/h)	154	1498	420	369	1938	95	626	81	323	54	53	218
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No			No			No		
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	162	1577	442	388	2040	100	659	85	340	57	56	229
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	97	1014	271	1172	4918	240	711	635	537	85	56	227
Arrive On Green	0.02	0.12	0.12	0.65	0.97	0.97	0.20	0.33	0.33	0.05	0.17	0.17
Sat Flow, veh/h	1810	2816	753	1810	5066	247	3510	1900	1609	1810	326	1332
Grp Volume(v), veh/h	162	984	1035	388	1390	750	659	85	340	57	0	285
Grp Sat Flow(s),veh/h/ln	1810	1805	1763	1810	1729	1855	1755	1900	1609	1810	0	1658
Q Serve(g_s), s	7.0	46.8	46.8	12.5	2.5	2.6	24.0	4.1	17.2	4.0	0.0	22.2
Cycle Q Clear(g_c), s	7.0	46.8	46.8	12.5	2.5	2.6	24.0	4.1	17.2	4.0	0.0	22.2
Prop In Lane	1.00		0.43	1.00		0.13	1.00		1.00	1.00		0.80
Lane Grp Cap(c), veh/h	97	650	635	1172	3357	1801	711	635	537	85	0	283
V/C Ratio(X)	1.66	1.51	1.63	0.33	0.41	0.42	0.93	0.13	0.63	0.67	0.00	1.01
Avail Cap(c_a), veh/h	97	650	635	1172	3357	1801	756	635	537	97	0	283
HCM Platoon Ratio	0.33	0.33	0.33	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.58	0.58	0.58	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	63.8	57.3	57.3	10.3	0.1	0.1	50.9	30.2	20.0	61.0	0.0	53.9
Incr Delay (d2), s/veh	323.0	235.8	288.2	0.1	0.4	0.7	16.3	0.1	2.4	9.6	0.0	55.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.0	65.1	72.8	4.4	0.2	0.4	11.8	1.8	6.5	2.1	0.0	13.7
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	386.8	293.1	345.5	10.3	0.5	0.8	67.2	30.3	22.5	70.5	0.0	109.1
LnGrp LOS	F	F	F	B	A	A	E	C	C	E	A	F
Approach Vol, veh/h	2181			2528			1084			342		
Approach Delay, s/veh	324.9			2.1			50.3			102.7		
Approach LOS	F			A			D			F		
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	93.6	54.0	31.3	28.0	12.0	135.6	10.1	49.2				
Change Period (Y+Rc), s	7.2	* 7.2	5.0	* 5.8	5.0	7.2	4.0	5.8				
Max Green Setting (Gmax), s	1.3	* 47	28.0	* 22	7.0	51.0	7.0	43.0				
Max Q Clear Time (g_c+14.5), s	14.5	48.8	26.0	24.2	9.0	4.6	6.0	19.2				
Green Ext Time (p_c), s	0.0	0.0	0.4	0.0	0.0	23.0	0.0	1.5				

Intersection Summary

HCM 6th Ctrl Delay 131.0

HCM 6th LOS F

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Intersection												
Int Delay, s/veh	0											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↑↑			↑↑				↗			↗
Traffic Vol, veh/h	0	2499	0	0	2824	16	0	0	0	0	0	2
Future Vol, veh/h	0	2499	0	0	2824	16	0	0	0	0	0	2
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	0	-	-	0
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	0	2716	0	0	3070	17	0	0	0	0	0	2
Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	-	0	0	-	-	0	-	-	1358	-	-	1544
Stage 1	-	-	-	-	-	-	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-	-	-	-	-	-	-
Critical Hdwy	-	-	-	-	-	-	-	-	6.9	-	-	6.9
Critical Hdwy Stg 1	-	-	-	-	-	-	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-	-	-	-	-	-	-
Follow-up Hdwy	-	-	-	-	-	-	-	-	3.3	-	-	3.3
Pot Cap-1 Maneuver	0	-	-	0	-	-	0	0	*36	0	0	-
Stage 1	0	-	-	0	-	-	0	0	-	0	0	-
Stage 2	0	-	-	0	-	-	0	0	-	0	0	-
Platoon blocked, %		-	-		-	-			1			2
Mov Cap-1 Maneuver	-	-	-	-	-	-	-	-	*36	-	-	-
Mov Cap-2 Maneuver	-	-	-	-	-	-	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-	-	-	-	-	-	-
Approach	EB			WB			NB			SB		
HCM Control Delay, s	0			0			0					
HCM LOS							A			-		
Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBT	WBR	SBLn1						
Capacity (veh/h)	-	-	-	-	-	-						
HCM Lane V/C Ratio	-	-	-	-	-	-						
HCM Control Delay (s)	0	-	-	-	-	-						
HCM Lane LOS	A	-	-	-	-	-						
HCM 95th %tile Q(veh)	-	-	-	-	-	-						
Notes												
~: Volume exceeds capacity		\$: Delay exceeds 300s				+: Computation Not Defined				*: All major volume in platoon		

Intersection						
Int Delay, s/veh	0.1					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	0	0	14	403	368	90
Future Vol, veh/h	0	0	14	403	368	90
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	95	95	95	83	83	95
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	0	0	15	486	443	95
Major/Minor	Minor2	Major1		Major2		
Conflicting Flow All	1007	491	538	0	-	0
Stage 1	491	-	-	-	-	-
Stage 2	516	-	-	-	-	-
Critical Hdwy	6.4	6.2	4.1	-	-	-
Critical Hdwy Stg 1	5.4	-	-	-	-	-
Critical Hdwy Stg 2	5.4	-	-	-	-	-
Follow-up Hdwy	3.5	3.3	2.2	-	-	-
Pot Cap-1 Maneuver	269	582	1040	-	-	-
Stage 1	619	-	-	-	-	-
Stage 2	603	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	264	582	1040	-	-	-
Mov Cap-2 Maneuver	264	-	-	-	-	-
Stage 1	607	-	-	-	-	-
Stage 2	603	-	-	-	-	-
Approach	EB	NB		SB		
HCM Control Delay, s	0	0.3		0		
HCM LOS	A					
Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR	
Capacity (veh/h)	1040	-	-	-	-	
HCM Lane V/C Ratio	0.014	-	-	-	-	
HCM Control Delay (s)	8.5	0	0	-	-	
HCM Lane LOS	A	A	A	-	-	
HCM 95th %tile Q(veh)	0	-	-	-	-	

Intersection						
Int Delay, s/veh	6					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	168	50	16	247	341	27
Future Vol, veh/h	168	50	16	247	341	27
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	95	95	95	80	80	95
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	177	53	17	309	426	28
Major/Minor	Minor2	Major1		Major2		
Conflicting Flow All	783	440	454	0	-	0
Stage 1	440	-	-	-	-	-
Stage 2	343	-	-	-	-	-
Critical Hdwy	6.4	6.2	4.1	-	-	-
Critical Hdwy Stg 1	5.4	-	-	-	-	-
Critical Hdwy Stg 2	5.4	-	-	-	-	-
Follow-up Hdwy	3.5	3.3	2.2	-	-	-
Pot Cap-1 Maneuver	365	621	1117	-	-	-
Stage 1	653	-	-	-	-	-
Stage 2	723	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	358	621	1117	-	-	-
Mov Cap-2 Maneuver	358	-	-	-	-	-
Stage 1	641	-	-	-	-	-
Stage 2	723	-	-	-	-	-
Approach	EB	NB		SB		
HCM Control Delay, s	25.8	0.4		0		
HCM LOS	D					
Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR	
Capacity (veh/h)	1117	-	397	-	-	
HCM Lane V/C Ratio	0.015	-	0.578	-	-	
HCM Control Delay (s)	8.3	0	25.8	-	-	
HCM Lane LOS	A	A	D	-	-	
HCM 95th %tile Q(veh)	0	-	3.5	-	-	

Intersection						
Int Delay, s/veh	0.1					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	3	0	1	260	390	0
Future Vol, veh/h	3	0	1	260	390	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	95	95	95	81	81	95
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	3	0	1	321	481	0
Major/Minor	Minor2	Major1		Major2		
Conflicting Flow All	804	481	481	0	-	0
Stage 1	481	-	-	-	-	-
Stage 2	323	-	-	-	-	-
Critical Hdwy	6.4	6.2	4.1	-	-	-
Critical Hdwy Stg 1	5.4	-	-	-	-	-
Critical Hdwy Stg 2	5.4	-	-	-	-	-
Follow-up Hdwy	3.5	3.3	2.2	-	-	-
Pot Cap-1 Maneuver	355	589	1092	-	-	-
Stage 1	626	-	-	-	-	-
Stage 2	738	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	355	589	1092	-	-	-
Mov Cap-2 Maneuver	355	-	-	-	-	-
Stage 1	625	-	-	-	-	-
Stage 2	738	-	-	-	-	-
Approach	EB	NB		SB		
HCM Control Delay, s	15.2	0		0		
HCM LOS	C					
Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR	
Capacity (veh/h)	1092	-	355	-	-	
HCM Lane V/C Ratio	0.001	-	0.009	-	-	
HCM Control Delay (s)	8.3	0	15.2	-	-	
HCM Lane LOS	A	A	C	-	-	
HCM 95th %tile Q(veh)	0	-	0	-	-	

HCM 6th Signalized Intersection Summary

1: Washington Street & Van Buren Boulevard

Woodcrest Christian School Expansion
Opening Year (2029) WP AM MIT

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		  			  			 		 	 	
Traffic Volume (veh/h)	155	1255	151	149	1651	885	190	637	232	577	177	88
Future Volume (veh/h)	155	1255	151	149	1651	885	190	637	232	577	177	88
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	163	1321	159	157	1738	932	200	671	244	607	186	93
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	160	2010	242	1091	3309	1540	261	664	295	567	992	441
Arrive On Green	0.09	0.43	0.43	0.60	0.96	0.96	0.07	0.18	0.18	0.16	0.27	0.27
Sat Flow, veh/h	1810	4683	564	1810	3458	1609	3510	3610	1602	3510	3610	1605
Grp Volume(v), veh/h	163	975	505	157	1738	932	200	671	244	607	186	93
Grp Sat Flow(s),veh/h/ln	1810	1729	1789	1810	1729	1609	1755	1805	1602	1755	1805	1605
Q Serve(g_s), s	11.5	29.2	29.2	4.9	5.7	7.7	7.3	23.9	15.8	21.0	5.1	5.8
Cycle Q Clear(g_c), s	11.5	29.2	29.2	4.9	5.7	7.7	7.3	23.9	15.8	21.0	5.1	5.8
Prop In Lane	1.00		0.32	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	160	1484	768	1091	3309	1540	261	664	295	567	992	441
V/C Ratio(X)	1.02	0.66	0.66	0.14	0.53	0.61	0.77	1.01	0.83	1.07	0.19	0.21
Avail Cap(c_a), veh/h	160	1484	768	1091	3309	1540	500	664	295	567	992	441
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	59.2	29.5	29.5	11.2	0.2	0.3	59.0	53.1	35.1	54.5	36.0	36.3
Incr Delay (d2), s/veh	76.0	2.3	4.4	0.1	0.6	1.8	4.7	37.7	17.6	58.0	0.1	0.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	8.5	11.9	12.7	1.8	0.3	0.8	3.4	14.2	7.6	13.6	2.2	2.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	135.3	31.8	33.9	11.3	0.8	2.1	63.7	90.7	52.7	112.5	36.1	36.5
LnGrp LOS	F	C	C	B	A	A	E	F	D	F	D	D
Approach Vol, veh/h		1643			2827			1115			886	
Approach Delay, s/veh		42.7			1.8			77.6			88.5	
Approach LOS		D			A			E			F	
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	85.5	62.0	14.2	41.5	16.0	131.5	26.0	29.7				
Change Period (Y+Rc), s	6.2	* 6.2	4.5	5.8	4.5	6.2	5.0	* 5.8				
Max Green Setting (Gmax), s	8.5	* 56	18.5	26.2	11.5	52.8	21.0	* 24				
Max Q Clear Time (g_c+I1), s	6.9	31.2	9.3	7.8	13.5	9.7	23.0	25.9				
Green Ext Time (p_c), s	0.1	10.3	0.4	1.2	0.0	31.7	0.0	0.0				
Intersection Summary												
HCM 6th Ctrl Delay				37.1								
HCM 6th LOS				D								
Notes												
* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.												

HCM 6th Signalized Intersection Summary

Woodcrest Christian School Expansion

2: Alta Cresta Avenue/Chicago Avenue & Van Buren Boulevard

Opening Year (2029) WP AM MIT



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	85	1921	87	89	2446	33	170	23	113	110	28	82
Future Volume (veh/h)	85	1921	87	89	2446	33	170	23	113	110	28	82
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		0.99	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No			No			No		
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	94	2134	97	99	2718	37	189	26	126	122	31	91
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	113	2990	927	122	3068	42	207	31	151	168	39	115
Arrive On Green	0.06	0.58	0.58	0.07	0.58	0.58	0.11	0.11	0.11	0.09	0.09	0.09
Sat Flow, veh/h	1810	5187	1607	1810	5273	72	1810	281	1364	1810	424	1243
Grp Volume(v), veh/h	94	2134	97	99	1779	976	189	0	152	122	0	122
Grp Sat Flow(s),veh/h/ln	1810	1729	1607	1810	1729	1887	1810	0	1646	1810	0	1667
Q Serve(g_s), s	6.7	38.5	1.9	7.0	57.6	58.3	13.4	0.0	11.8	8.5	0.0	9.3
Cycle Q Clear(g_c), s	6.7	38.5	1.9	7.0	57.6	58.3	13.4	0.0	11.8	8.5	0.0	9.3
Prop In Lane	1.00		1.00	1.00		0.04	1.00		0.83	1.00		0.75
Lane Grp Cap(c), veh/h	113	2990	927	122	2012	1098	207	0	182	168	0	155
V/C Ratio(X)	0.83	0.71	0.10	0.81	0.88	0.89	0.91	0.00	0.83	0.73	0.00	0.79
Avail Cap(c_a), veh/h	113	2990	927	146	2012	1098	207	0	253	173	0	231
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	0.78	0.78	0.78	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	60.3	19.8	3.7	59.8	23.4	23.6	56.9	0.0	56.6	57.4	0.0	57.7
Incr Delay (d2), s/veh	38.9	1.5	0.2	19.6	4.9	8.7	38.9	0.0	15.3	13.8	0.0	10.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.2	14.3	1.3	3.8	22.1	25.5	8.3	0.0	5.6	4.6	0.0	4.4
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	99.2	21.3	3.9	79.4	28.3	32.3	95.8	0.0	72.0	71.2	0.0	67.9
LnGrp LOS	F	C	A	E	C	C	F	A	E	E	A	E
Approach Vol, veh/h	2325			2854			341			244		
Approach Delay, s/veh	23.7			31.4			85.2			69.5		
Approach LOS	C			C			F			E		
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	3.3	81.1	18.9	16.7	12.6	81.8	16.1	19.5				
Change Period (Y+Rc), s	4.5	6.2	4.0	4.6	4.5	6.2	4.0	5.1				
Max Green Setting (Gmax), s	10.5	67.3	14.9	18.0	8.1	69.7	12.4	20.0				
Max Q Clear Time (g_c+19.0), s	19.0	40.5	15.4	11.3	8.7	60.3	10.5	13.8				
Green Ext Time (p_c), s	0.0	18.1	0.0	0.3	0.0	8.6	0.0	0.4				

Intersection Summary

HCM 6th Ctrl Delay	33.1
HCM 6th LOS	C

Notes

User approved ignoring U-Turning movement.

HCM 6th TWSC
4: Little Court & Van Buren Boulevard

Woodcrest Christian School Expansion
Opening Year (2029) WP AM MIT

Intersection						
Int Delay, s/veh	0					
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑↑↑			↑↑↑		↗
Traffic Vol, veh/h	2214	1	0	2681	0	8
Future Vol, veh/h	2214	1	0	2681	0	8
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	-	0
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	93	93	93	93	93	93
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	2381	1	0	2883	0	9
Major/Minor	Major1	Major2		Minor1		
Conflicting Flow All	0	0	-	-	-	1191
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	-	-	-	-	7.1
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	-	-	-	-	3.9
Pot Cap-1 Maneuver	-	-	0	-	0	*414
Stage 1	-	-	0	-	0	-
Stage 2	-	-	0	-	0	-
Platoon blocked, %	-	-		-		1
Mov Cap-1 Maneuver	-	-	-	-	-	*414
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Approach	EB	WB		NB		
HCM Control Delay, s	0	0		13.9		
HCM LOS	B					
Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBT		
Capacity (veh/h)	414	-	-	-		
HCM Lane V/C Ratio	0.021	-	-	-		
HCM Control Delay (s)	13.9	-	-	-		
HCM Lane LOS	B	-	-	-		
HCM 95th %tile Q(veh)	0.1	-	-	-		
Notes						
~: Volume exceeds capacity		\$: Delay exceeds 300s		+: Computation Not Defined		*: All major volume in platoon

HCM 6th TWSC
5: Van Buren Boulevard & Ridgeway Avenue

Woodcrest Christian School Expansion
Opening Year (2029) WP AM MIT

Intersection						
Int Delay, s/veh	0.9					
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	49	2173	2533	9	0	147
Future Vol, veh/h	49	2173	2533	9	0	147
Conflicting Peds, #/hr	3	0	0	3	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	0
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	93	93	93	93	93	93
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	53	2337	2724	10	0	158
Major/Minor	Major1	Major2		Minor2		
Conflicting Flow All	2737	0	-	0	-	1370
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	5.3	-	-	-	-	7.1
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	3.1	-	-	-	-	3.9
Pot Cap-1 Maneuver	*419	-	-	-	0	*333
Stage 1	-	-	-	-	0	-
Stage 2	-	-	-	-	0	-
Platoon blocked, %	1	-	-	-	-	1
Mov Cap-1 Maneuver	*418	-	-	-	-	*332
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Approach	EB	WB		SB		
HCM Control Delay, s	0.3	0		25.3		
HCM LOS	D					
Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1	
Capacity (veh/h)	* 418	-	-	-	332	
HCM Lane V/C Ratio	0.126	-	-	-	0.476	
HCM Control Delay (s)	14.9	-	-	-	25.3	
HCM Lane LOS	B	-	-	-	D	
HCM 95th %tile Q(veh)	0.4	-	-	-	2.5	
Notes						
~: Volume exceeds capacity		\$: Delay exceeds 300s		+: Computation Not Defined		*: All major volume in platoon

HCM 6th Signalized Intersection Summary

6: Dauchy Avenue & Van Buren Boulevard

Woodcrest Christian School Expansion
Opening Year (2029) WP AM MIT

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	34	1785	358	288	2155	53	365	49	254	91	63	39
Future Volume (veh/h)	34	1785	358	288	2155	53	365	49	254	91	63	39
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	35	1859	373	300	2245	55	380	51	265	95	66	41
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	70	1926	379	214	2818	69	435	55	288	150	102	87
Arrive On Green	0.01	0.15	0.15	0.24	1.00	1.00	0.21	0.21	0.21	0.05	0.05	0.05
Sat Flow, veh/h	1810	4332	851	1810	5208	127	1810	266	1384	1810	1900	1610
Grp Volume(v), veh/h	35	1476	756	300	1489	811	380	0	316	95	66	41
Grp Sat Flow(s),veh/h/ln	1810	1729	1725	1810	1729	1877	1810	0	1651	1810	1900	1610
Q Serve(g_s), s	2.5	55.1	56.8	15.4	0.0	0.0	21.9	0.0	24.4	2.6	4.4	2.8
Cycle Q Clear(g_c), s	2.5	55.1	56.8	15.4	0.0	0.0	21.9	0.0	24.4	2.6	4.4	2.8
Prop In Lane	1.00		0.49	1.00		0.07	1.00		0.84	1.00		1.00
Lane Grp Cap(c), veh/h	70	1537	767	214	1871	1016	435	0	344	150	102	87
V/C Ratio(X)	0.50	0.96	0.99	1.40	0.80	0.80	0.87	0.00	0.92	0.63	0.65	0.47
Avail Cap(c_a), veh/h	97	1537	767	214	1871	1016	435	0	381	153	438	372
HCM Platoon Ratio	0.33	0.33	0.33	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	0.09	0.09	0.09	0.81	0.00	0.81	1.00	1.00	1.00
Uniform Delay (d), s/veh	62.9	54.3	55.0	49.6	0.0	0.0	47.9	0.0	50.4	58.9	60.3	46.4
Incr Delay (d2), s/veh	2.1	15.2	29.1	183.5	0.3	0.6	14.3	0.0	22.1	6.1	6.6	4.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.2	28.6	32.3	16.7	0.1	0.2	13.6	0.0	12.2	3.3	2.3	1.4
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	65.0	69.5	84.2	233.1	0.3	0.6	62.2	0.0	72.5	65.0	66.9	50.3
LnGrp LOS	E	E	F	F	A	A	E	A	E	E	E	D
Approach Vol, veh/h		2267			2600			696			202	
Approach Delay, s/veh		74.4			27.3			66.9			62.6	
Approach LOS		E			C			E			E	
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	22.6	65.0	30.8	11.6	10.0	77.6	10.8	31.7				
Change Period (Y+Rc), s	7.2	* 7.2	4.0	4.6	5.0	7.2	4.0	4.6				
Max Green Setting (Gmax), s	14.4	* 58	7.0	30.0	7.0	65.2	7.0	30.0				
Max Q Clear Time (g_c+I1), s	17.4	58.8	23.9	6.4	4.5	2.0	4.6	26.4				
Green Ext Time (p_c), s	0.0	0.0	0.0	0.4	0.0	29.8	0.0	0.7				
Intersection Summary												
HCM 6th Ctrl Delay			51.8									
HCM 6th LOS			D									
Notes												
* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.												

HCM 6th Signalized Intersection Summary

Woodcrest Christian School Expansion

7: Dauchy Avenue & Project Driveway 2/Ardenwood Lane

Opening Year (2029) WP AM MIT



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕	↗		↕			↕			↕	↗
Traffic Volume (veh/h)	166	0	34	5	0	53	43	459	5	17	414	214
Future Volume (veh/h)	166	0	34	5	0	53	43	459	5	17	414	214
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No			No			No		
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	175	0	36	6	0	60	45	522	6	19	470	225
Peak Hour Factor	0.95	0.95	0.95	0.88	0.95	0.88	0.95	0.88	0.88	0.88	0.88	0.95
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	597	0	369	162	19	336	176	738	8	152	799	698
Arrive On Green	0.23	0.00	0.23	0.23	0.00	0.23	0.43	0.43	0.43	0.43	0.43	0.43
Sat Flow, veh/h	1427	0	1610	64	83	1466	70	1704	19	26	1844	1610
Grp Volume(v), veh/h	175	0	36	66	0	0	573	0	0	489	0	225
Grp Sat Flow(s),veh/h/ln	1427	0	1610	1613	0	0	1792	0	0	1870	0	1610
Q Serve(g_s), s	1.8	0.0	0.5	0.0	0.0	0.0	1.2	0.0	0.0	0.0	0.0	2.5
Cycle Q Clear(g_c), s	2.7	0.0	0.5	0.9	0.0	0.0	6.7	0.0	0.0	5.2	0.0	2.5
Prop In Lane	1.00		1.00	0.09		0.91	0.08		0.01	0.04		1.00
Lane Grp Cap(c), veh/h	597	0	369	517	0	0	922	0	0	951	0	698
V/C Ratio(X)	0.29	0.00	0.10	0.13	0.00	0.00	0.62	0.00	0.00	0.51	0.00	0.32
Avail Cap(c_a), veh/h	1206	0	1088	1226	0	0	1334	0	0	1392	0	1088
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	0.00	1.00	0.00	0.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	8.9	0.0	8.1	8.3	0.0	0.0	6.1	0.0	0.0	5.8	0.0	5.0
Incr Delay (d2), s/veh	0.3	0.0	0.1	0.1	0.0	0.0	0.7	0.0	0.0	0.4	0.0	0.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.6	0.0	0.1	0.2	0.0	0.0	1.4	0.0	0.0	1.1	0.0	0.4
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	9.2	0.0	8.2	8.4	0.0	0.0	6.8	0.0	0.0	6.2	0.0	5.2
LnGrp LOS	A	A	A	A	A	A	A	A	A	A	A	A
Approach Vol, veh/h	211		66			573			714			
Approach Delay, s/veh	9.0		8.4			6.8			5.9			
Approach LOS	A		A			A			A			
Timer - Assigned Phs	2		4		6		8					
Phs Duration (G+Y+Rc), s	16.0		10.6		16.0		10.6					
Change Period (Y+Rc), s	4.5		4.5		4.5		4.5					
Max Green Setting (Gmax), s	18.0		18.0		18.0		18.0					
Max Q Clear Time (g_c+I1), s	8.7		4.7		7.2		2.9					
Green Ext Time (p_c), s	2.8		0.9		3.1		0.2					
Intersection Summary												
HCM 6th Ctrl Delay			6.8									
HCM 6th LOS			A									

HCM 6th Signalized Intersection Summary

8: Taft Street/Dauchy Avenue & Krameria Avenue

Woodcrest Christian School Expansion
Opening Year (2029) WP AM MIT



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↔			↔			↔			↔	
Traffic Volume (veh/h)	46	393	2	1	444	125	16	35	9	110	18	39
Future Volume (veh/h)	46	393	2	1	444	125	16	35	9	110	18	39
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		0.99	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No			No			No		
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	58	497	3	1	562	158	20	44	11	139	23	49
Peak Hour Factor	0.79	0.79	0.79	0.79	0.79	0.79	0.79	0.79	0.79	0.79	0.79	0.79
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	113	709	4	60	642	180	214	445	100	469	85	137
Arrive On Green	0.45	0.45	0.45	0.45	0.45	0.45	0.40	0.40	0.40	0.40	0.40	0.40
Sat Flow, veh/h	105	1571	9	0	1423	399	346	1116	251	926	214	345
Grp Volume(v), veh/h	558	0	0	721	0	0	75	0	0	211	0	0
Grp Sat Flow(s),veh/h/ln	1685	0	0	1823	0	0	1714	0	0	1484	0	0
Q Serve(g_s), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	4.1	0.0	0.0
Cycle Q Clear(g_c), s	15.2	0.0	0.0	21.5	0.0	0.0	1.5	0.0	0.0	5.6	0.0	0.0
Prop In Lane	0.10		0.01	0.00		0.22	0.27		0.15	0.66		0.23
Lane Grp Cap(c), veh/h	827	0	0	883	0	0	759	0	0	691	0	0
V/C Ratio(X)	0.67	0.00	0.00	0.82	0.00	0.00	0.10	0.00	0.00	0.31	0.00	0.00
Avail Cap(c_a), veh/h	974	0	0	1047	0	0	759	0	0	691	0	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	0.00	1.00	0.00	0.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	12.9	0.0	0.0	14.9	0.0	0.0	11.3	0.0	0.0	12.5	0.0	0.0
Incr Delay (d2), s/veh	1.5	0.0	0.0	4.4	0.0	0.0	0.3	0.0	0.0	1.1	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	5.5	0.0	0.0	8.8	0.0	0.0	0.6	0.0	0.0	2.0	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	14.4	0.0	0.0	19.3	0.0	0.0	11.6	0.0	0.0	13.6	0.0	0.0
LnGrp LOS	B	A	A	B	A	A	B	A	A	B	A	A
Approach Vol, veh/h	558		721			75			211			
Approach Delay, s/veh	14.4		19.3			11.6			13.6			
Approach LOS	B		B			B			B			
Timer - Assigned Phs	2		4			6			8			
Phs Duration (G+Y+Rc), s	28.4		31.6			28.4			31.6			
Change Period (Y+Rc), s	4.5		4.5			4.5			4.5			
Max Green Setting (Gmax), s	18.5		32.5			18.5			32.5			
Max Q Clear Time (g_c+I1), s	3.5		17.2			7.6			23.5			
Green Ext Time (p_c), s	0.3		3.7			0.9			3.6			
Intersection Summary												
HCM 6th Ctrl Delay	16.4											
HCM 6th LOS	B											

HCM 6th Signalized Intersection Summary

11: Trautwein Road & Mission Grove Parkway S

Woodcrest Christian School Expansion
Opening Year (2029) WP AM MIT



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	67	37	10	720	36	58	3	2000	616	208	1219	19
Future Volume (veh/h)	67	37	10	720	36	58	3	2000	616	208	1219	19
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		0.97	1.00		1.00	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No			No			No		
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	70	39	10	750	38	60	3	2083	642	217	1270	20
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	273	89	23	500	117	97	10	1974	1109	146	2246	980
Arrive On Green	0.15	0.06	0.06	0.14	0.06	0.06	0.00	0.37	0.37	0.08	0.62	0.62
Sat Flow, veh/h	1810	1457	374	3510	1900	1566	1810	3610	1608	1810	3610	1574
Grp Volume(v), veh/h	70	0	49	750	38	60	3	2083	642	217	1270	20
Grp Sat Flow(s),veh/h/ln	1810	0	1831	1755	1900	1566	1810	1805	1608	1810	1805	1574
Q Serve(g_s), s	4.4	0.0	3.4	18.5	2.5	4.1	0.2	71.1	11.4	10.5	26.7	0.2
Cycle Q Clear(g_c), s	4.4	0.0	3.4	18.5	2.5	4.1	0.2	71.1	11.4	10.5	26.7	0.2
Prop In Lane	1.00		0.20	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	273	0	111	500	117	97	10	1974	1109	146	2246	980
V/C Ratio(X)	0.26	0.00	0.44	1.50	0.32	0.62	0.30	1.06	0.58	1.48	0.57	0.02
Avail Cap(c_a), veh/h	273	0	467	500	693	571	104	1974	1109	146	2246	980
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	0.67	0.67	0.67	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	1.00	1.00	0.09	0.09	0.09	1.00	1.00	1.00
Uniform Delay (d), s/veh	48.8	0.0	58.9	55.7	58.4	41.9	64.5	41.2	4.4	59.7	14.3	1.2
Incr Delay (d2), s/veh	0.2	0.0	2.7	235.9	1.6	6.4	0.6	26.2	0.2	250.9	1.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.1	0.0	1.7	24.3	1.2	2.0	0.1	39.0	4.2	14.9	10.0	0.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	49.0	0.0	61.6	291.7	60.0	48.3	65.1	67.4	4.6	310.7	15.4	1.3
LnGrp LOS	D	A	E	F	E	D	E	F	A	F	B	A
Approach Vol, veh/h	119					848		2728		1507		
Approach Delay, s/veh	54.2					264.1		52.6		57.7		
Approach LOS	D					F		D		E		
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	5.0	77.3	24.0	13.7	5.2	87.1	25.1	12.6				
Change Period (Y+Rc), s	4.5	6.2	5.5	5.8	4.5	6.2	5.5	* 4.6				
Max Green Setting (Gmax), s	10.5	45.8	18.5	33.2	7.5	48.8	7.0	* 47				
Max Q Clear Time (g_c+1/2), s	112.5	73.1	20.5	5.4	2.2	28.7	6.4	6.1				
Green Ext Time (p_c), s	0.0	0.0	0.0	0.2	0.0	8.5	0.0	0.4				

Intersection Summary

HCM 6th Ctrl Delay 88.6

HCM 6th LOS F

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

HCM 6th Signalized Intersection Summary

12: Trautwein Road & John F Kennedy Drive

Woodcrest Christian School Expansion
Opening Year (2029) WP AM MIT



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	634	57	105	140	64	48	239	2263	98	10	1140	680
Future Volume (veh/h)	634	57	105	140	64	48	239	2263	98	10	1140	680
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		0.99	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No			No			No		
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	682	61	113	151	69	52	257	2433	105	11	1226	731
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	516	223	186	259	114	86	306	2018	898	32	1383	852
Arrive On Green	0.15	0.12	0.12	0.14	0.11	0.11	0.17	0.56	0.56	0.02	0.38	0.38
Sat Flow, veh/h	3510	1900	1590	1810	999	753	1810	3610	1607	1810	3610	1606
Grp Volume(v), veh/h	682	61	113	151	0	121	257	2433	105	11	1226	731
Grp Sat Flow(s),veh/h/ln	1755	1900	1590	1810	0	1753	1810	1805	1607	1810	1805	1606
Q Serve(g_s), s	19.1	3.8	8.8	10.1	0.0	8.5	17.9	72.7	1.8	0.8	41.2	22.1
Cycle Q Clear(g_c), s	19.1	3.8	8.8	10.1	0.0	8.5	17.9	72.7	1.8	0.8	41.2	22.1
Prop In Lane	1.00		1.00	1.00		0.43	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	516	223	186	259	0	200	306	2018	898	32	1383	852
V/C Ratio(X)	1.32	0.27	0.61	0.58	0.00	0.60	0.84	1.21	0.12	0.34	0.89	0.86
Avail Cap(c_a), veh/h	516	678	567	259	0	445	306	2018	898	97	1383	852
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	0.00	1.00	0.20	0.20	0.20	0.63	0.63	0.63
Uniform Delay (d), s/veh	55.4	52.3	54.5	52.1	0.0	54.8	52.3	28.7	2.8	63.1	37.5	10.6
Incr Delay (d2), s/veh	158.2	0.7	3.2	3.3	0.0	2.9	4.4	93.7	0.1	4.0	5.8	7.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/lt	9.6	1.8	3.7	4.9	0.0	4.0	8.2	54.0	1.4	0.4	18.3	9.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	213.6	53.0	57.7	55.4	0.0	57.7	56.8	122.4	2.9	67.1	43.2	17.9
LnGrp LOS	F	D	E	E	A	E	E	F	A	E	D	B
Approach Vol, veh/h	856			272			2795			1968		
Approach Delay, s/veh	181.6			56.4			111.8			33.9		
Approach LOS	F			E			F			C		
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	6.3	79.9	24.0	19.8	29.1	57.0	23.6	20.3				
Change Period (Y+Rc), s	4.0	7.2	5.4	* 4.6	7.2	* 7.2	4.5	5.4				
Max Green Setting (Gmax), s	7.0	49.8	7.0	* 46	7.0	* 50	19.1	33.0				
Max Q Clear Time (g_c+1/2), s	12.8	74.7	12.1	10.8	19.9	43.2	21.1	10.5				
Green Ext Time (p_c), s	0.0	0.0	0.0	0.7	0.0	4.9	0.0	0.6				

Intersection Summary

HCM 6th Ctrl Delay 93.4

HCM 6th LOS F

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

HCM 6th Signalized Intersection Summary

14: Trautwein Road & Orange Terrace Pkwy

Woodcrest Christian School Expansion
Opening Year (2029) WP AM MIT



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	97	67	45	388	161	593	68	1366	276	350	983	31
Future Volume (veh/h)	97	67	45	388	161	593	68	1366	276	350	983	31
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		0.97	1.00		1.00	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No			No			No		
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	118	82	55	473	196	723	83	1666	337	427	1199	38
Peak Hour Factor	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	143	119	80	326	423	938	106	1554	690	405	1788	792
Arrive On Green	0.08	0.11	0.11	0.18	0.22	0.22	0.02	0.14	0.14	0.23	0.99	0.99
Sat Flow, veh/h	1810	1057	709	1810	1900	2744	1810	3610	1602	3510	3610	1599
Grp Volume(v), veh/h	118	0	137	473	196	723	83	1666	337	427	1199	38
Grp Sat Flow(s),veh/h/ln	1810	0	1766	1810	1900	1372	1810	1805	1602	1755	1805	1599
Q Serve(g_s), s	8.4	0.0	9.7	23.4	11.6	22.2	5.9	56.0	13.8	15.0	1.2	0.0
Cycle Q Clear(g_c), s	8.4	0.0	9.7	23.4	11.6	22.2	5.9	56.0	13.8	15.0	1.2	0.0
Prop In Lane	1.00		0.40	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	143	0	199	326	423	938	106	1554	690	405	1788	792
V/C Ratio(X)	0.82	0.00	0.69	1.45	0.46	0.77	0.79	1.07	0.49	1.05	0.67	0.05
Avail Cap(c_a), veh/h	237	0	492	326	547	1117	223	1554	690	405	1788	792
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	0.33	0.33	0.33	2.00	2.00	2.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	1.00	1.00	0.80	0.80	0.80	0.88	0.88	0.88
Uniform Delay (d), s/veh	59.0	0.0	55.5	53.3	43.8	21.2	62.9	55.8	12.7	50.0	0.3	0.1
Incr Delay (d2), s/veh	4.5	0.0	4.2	219.8	0.8	2.8	3.9	42.8	2.0	57.0	1.8	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.0	0.0	4.6	30.5	5.6	7.4	2.9	36.2	6.2	8.7	0.6	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	63.5	0.0	59.7	273.1	44.6	24.0	66.8	98.6	14.7	107.0	2.1	0.2
LnGrp LOS	E	A	E	F	D	C	E	F	B	F	A	A
Approach Vol, veh/h	255		1392			2086			1664			
Approach Delay, s/veh	61.5		111.6			83.7			29.0			
Approach LOS	E		F			F			C			
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	30.0	62.2	27.4	20.4	11.6	70.6	14.3	33.6				
Change Period (Y+Rc), s	5.0	6.2	4.0	5.8	4.0	6.2	4.0	4.6				
Max Green Setting (Gmax), s	15.0	40.8	17.0	36.2	16.0	40.8	17.0	37.4				
Max Q Clear Time (g_c+117, s)	117.0	58.0	25.4	11.7	7.9	3.2	10.4	24.2				
Green Ext Time (p_c), s	0.0	0.0	0.0	0.8	0.0	9.9	0.1	3.8				

Intersection Summary

HCM 6th Ctrl Delay	73.0
HCM 6th LOS	E

HCM 6th Signalized Intersection Summary

16: Trautwein Road & Van Buren Boulevard

Woodcrest Christian School Expansion
Opening Year (2029) WP AM MIT



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↰↱	↑↑↑		↰↱	↑↑↑	↰	↰	↑↑		↰↱	↑↑	↰
Traffic Volume (veh/h)	441	1389	142	194	1754	494	233	773	151	485	454	406
Future Volume (veh/h)	441	1389	142	194	1754	494	233	773	151	485	454	406
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No			No			No		
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	479	1510	154	211	1907	537	253	840	164	527	493	441
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	1378	3042	310	234	1867	760	237	902	176	394	1026	1082
Arrive On Green	0.78	1.00	1.00	0.26	0.72	0.72	0.13	0.30	0.30	0.19	0.47	0.47
Sat Flow, veh/h	3510	4783	487	1810	5187	1609	1810	3010	588	3510	3610	1585
Grp Volume(v), veh/h	479	1092	572	211	1907	537	253	504	500	527	493	441
Grp Sat Flow(s),veh/h/ln	1755	1729	1812	1810	1729	1609	1810	1805	1792	1755	1805	1585
Q Serve(g_s), s	5.2	0.0	0.0	14.6	46.8	0.0	17.0	35.3	35.3	14.6	12.1	8.4
Cycle Q Clear(g_c), s	5.2	0.0	0.0	14.6	46.8	0.0	17.0	35.3	35.3	14.6	12.1	8.4
Prop In Lane	1.00		0.27	1.00		1.00	1.00		0.33	1.00		1.00
Lane Grp Cap(c), veh/h	1378	2199	1152	234	1867	760	237	541	537	394	1026	1082
V/C Ratio(X)	0.35	0.50	0.50	0.90	1.02	0.71	1.07	0.93	0.93	1.34	0.48	0.41
Avail Cap(c_a), veh/h	1378	2199	1152	383	1867	760	237	555	551	394	1026	1082
HCM Platoon Ratio	2.00	2.00	2.00	2.00	2.00	2.00	1.00	1.00	1.00	1.67	1.67	1.67
Upstream Filter(I)	0.87	0.87	0.87	0.68	0.68	0.68	1.00	1.00	1.00	0.86	0.86	0.86
Uniform Delay (d), s/veh	9.1	0.0	0.0	47.4	18.2	9.3	56.5	44.2	44.2	52.8	27.6	11.8
Incr Delay (d2), s/veh	0.0	0.7	1.3	7.1	22.8	3.8	78.0	22.4	22.6	165.8	0.3	0.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.6	0.2	0.4	6.0	10.2	5.1	12.8	18.7	18.6	14.8	4.5	4.7
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	9.1	0.7	1.3	54.5	41.0	13.0	134.5	66.7	66.8	218.6	27.9	12.0
LnGrp LOS	A	A	A	D	F	B	F	E	E	F	C	B
Approach Vol, veh/h	2143		2655			1257			1461			
Approach Delay, s/veh	2.7		36.4			80.4			91.9			
Approach LOS	A		D			F			F			
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	31.3	90.2	22.0	43.1	58.6	53.0	20.8	44.3				
Change Period (Y+Rc), s	4.5	6.2	5.0	6.2	6.2	* 6.2	6.2	* 5.4				
Max Green Setting (Gmax), s	27.5	26.8	17.0	36.8	7.0	* 47	14.6	* 40				
Max Q Clear Time (g_c+11g), s	116.6	2.0	19.0	14.1	7.2	48.8	16.6	37.3				
Green Ext Time (p_c), s	0.2	11.9	0.0	4.6	0.0	0.0	0.0	1.6				

Intersection Summary

HCM 6th Ctrl Delay 44.9

HCM 6th LOS D

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

HCM 6th Signalized Intersection Summary

18: Barton Street & Van Buren Boulevard

Woodcrest Christian School Expansion
Opening Year (2029) WP AM MIT



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↵ ↑↑↑			↵ ↵ ↑↑↑			↵ ↵ ↑		↵	↵	↵	
Traffic Volume (veh/h)	205	1552	401	374	1870	35	447	110	460	87	164	358
Future Volume (veh/h)	205	1552	401	374	1870	35	447	110	460	87	164	358
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No			No			No		
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	220	1669	431	402	2011	38	481	118	495	94	176	385
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	1640	4885	1241	465	2048	39	459	646	547	97	135	296
Arrive On Green	0.91	1.00	1.00	0.13	0.39	0.39	0.13	0.34	0.34	0.05	0.26	0.26
Sat Flow, veh/h	1810	4122	1047	3510	5241	99	3510	1900	1610	1810	531	1161
Grp Volume(v), veh/h	220	1396	704	402	1326	723	481	118	495	94	0	561
Grp Sat Flow(s),veh/h/ln	1810	1729	1711	1755	1729	1882	1755	1900	1610	1810	0	1691
Q Serve(g_s), s	1.7	0.0	0.0	14.6	49.3	49.4	17.0	5.7	38.1	6.7	0.0	33.2
Cycle Q Clear(g_c), s	1.7	0.0	0.0	14.6	49.3	49.4	17.0	5.7	38.1	6.7	0.0	33.2
Prop In Lane	1.00		0.61	1.00		0.05	1.00		1.00	1.00		0.69
Lane Grp Cap(c), veh/h	1640	4098	2028	465	1351	736	459	646	547	97	0	432
V/C Ratio(X)	0.13	0.34	0.35	0.86	0.98	0.98	1.05	0.18	0.90	0.96	0.00	1.30
Avail Cap(c_a), veh/h	1640	4098	2028	878	1351	736	459	646	547	97	0	432
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.86	0.86	0.86	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	0.7	0.0	0.0	55.2	39.1	39.2	56.5	30.2	40.9	61.4	0.0	48.4
Incr Delay (d2), s/veh	0.0	0.2	0.4	1.9	20.4	29.3	55.1	0.1	18.5	79.0	0.0	150.7
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	0.1	0.2	6.4	23.4	27.3	10.8	2.6	17.3	5.3	0.0	32.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	0.7	0.2	0.4	57.2	59.6	68.4	111.6	30.3	59.3	140.4	0.0	199.1
LnGrp LOS	A	A	A	E	E	E	F	C	E	F	A	F
Approach Vol, veh/h	2320				2451		1094				655	
Approach Delay, s/veh	0.3				61.8		79.2				190.7	
Approach LOS	A				E		E				F	
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	11.7	164.5	22.0	39.0	128.2	58.0	11.0	50.0				
Change Period (Y+Rc), s	4.5	7.2	5.0	* 5.8	7.2	* 7.2	4.0	5.8				
Max Green Setting (Gmax), s	32.5	26.0	17.0	* 33	7.2	* 51	7.0	43.0				
Max Q Clear Time (g_c+10), s	110.6	2.0	19.0	35.2	3.7	51.4	8.7	40.1				
Green Ext Time (p_c), s	0.6	15.7	0.0	0.0	0.1	0.0	0.0	0.8				

Intersection Summary

HCM 6th Ctrl Delay 55.8

HCM 6th LOS E

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Intersection												
Int Delay, s/veh	0											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↑↑↑			↑↑↑			↑			↑		
Traffic Vol, veh/h	0	2173	0	0	2542	8	0	0	0	0	0	0
Future Vol, veh/h	0	2173	0	0	2542	8	0	0	0	0	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	0	-	-	0
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	94	94	94	94	94	94	94	94	94	94	94	94
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	0	2312	0	0	2704	9	0	0	0	0	0	0
Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	-	0	0	-	-	0	-	-	1156	-	-	1357
Stage 1	-	-	-	-	-	-	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-	-	-	-	-	-	-
Critical Hdwy	-	-	-	-	-	-	-	-	7.1	-	-	7.1
Critical Hdwy Stg 1	-	-	-	-	-	-	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-	-	-	-	-	-	-
Follow-up Hdwy	-	-	-	-	-	-	-	-	3.9	-	-	3.9
Pot Cap-1 Maneuver	0	-	-	0	-	-	0	0	*414	0	0	*333
Stage 1	0	-	-	0	-	-	0	0	-	0	0	-
Stage 2	0	-	-	0	-	-	0	0	-	0	0	-
Platoon blocked, %	-	-	-	-	-	-	-	-	1	-	-	1
Mov Cap-1 Maneuver	-	-	-	-	-	-	-	-	*414	-	-	*333
Mov Cap-2 Maneuver	-	-	-	-	-	-	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-	-	-	-	-	-	-
Approach	EB			WB			NB			SB		
HCM Control Delay, s	0			0			0			0		
HCM LOS							A			A		
Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBT	WBR	SBLn1						
Capacity (veh/h)	-	-	-	-	-	-						
HCM Lane V/C Ratio	-	-	-	-	-	-						
HCM Control Delay (s)	0	-	-	-	-	0						
HCM Lane LOS	A	-	-	-	-	A						
HCM 95th %tile Q(veh)	-	-	-	-	-	-						
Notes												
~: Volume exceeds capacity \$: Delay exceeds 300s +: Computation Not Defined *: All major volume in platoon												

Intersection						
Int Delay, s/veh	4.6					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	188	49	41	330	187	77
Future Vol, veh/h	188	49	41	330	187	77
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	50	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	95	95	95	85	85	95
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	198	52	43	388	220	81
Major/Minor	Minor2	Major1		Major2		
Conflicting Flow All	735	261	301	0	-	0
Stage 1	261	-	-	-	-	-
Stage 2	474	-	-	-	-	-
Critical Hdwy	6.4	6.2	4.1	-	-	-
Critical Hdwy Stg 1	5.4	-	-	-	-	-
Critical Hdwy Stg 2	5.4	-	-	-	-	-
Follow-up Hdwy	3.5	3.3	2.2	-	-	-
Pot Cap-1 Maneuver	415	783	1272	-	-	-
Stage 1	787	-	-	-	-	-
Stage 2	680	-	-	-	-	-
Platoon blocked, %	1			-	-	-
Mov Cap-1 Maneuver	400	783	1272	-	-	-
Mov Cap-2 Maneuver	509	-	-	-	-	-
Stage 1	760	-	-	-	-	-
Stage 2	680	-	-	-	-	-
Approach	EB	NB		SB		
HCM Control Delay, s	16.9	0.8		0		
HCM LOS	C					
Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR	
Capacity (veh/h)	1272	-	549	-	-	
HCM Lane V/C Ratio	0.034	-	0.454	-	-	
HCM Control Delay (s)	7.9	-	16.9	-	-	
HCM Lane LOS	A	-	C	-	-	
HCM 95th %tile Q(veh)	0.1	-	2.4	-	-	

HCM 6th Signalized Intersection Summary

1: Washington Street & Van Buren Boulevard

Woodcrest Christian School Expansion
Opening Year (2029) WP Afternoon MIT

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		  			  			 			 	
Traffic Volume (veh/h)	150	1545	117	230	1637	676	134	353	187	734	341	118
Future Volume (veh/h)	150	1545	117	230	1637	676	134	353	187	734	341	118
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		0.99	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	160	1644	124	245	1741	719	143	376	199	781	363	126
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	146	2477	187	260	2081	808	199	499	221	775	1105	491
Arrive On Green	0.08	0.50	0.50	0.14	0.57	0.57	0.06	0.14	0.14	0.22	0.31	0.31
Sat Flow, veh/h	1810	4920	371	1810	3674	1426	3510	3610	1600	3510	3610	1605
Grp Volume(v), veh/h	160	1155	613	245	1632	828	143	376	199	781	363	126
Grp Sat Flow(s),veh/h/ln	1810	1729	1833	1810	1729	1642	1755	1805	1600	1755	1805	1605
Q Serve(g_s), s	10.5	32.4	32.4	17.4	50.4	57.3	5.2	13.0	15.9	28.7	10.1	7.7
Cycle Q Clear(g_c), s	10.5	32.4	32.4	17.4	50.4	57.3	5.2	13.0	15.9	28.7	10.1	7.7
Prop In Lane	1.00		0.20	1.00		0.87	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	146	1741	923	260	1959	930	199	499	221	775	1105	491
V/C Ratio(X)	1.09	0.66	0.66	0.94	0.83	0.89	0.72	0.75	0.90	1.01	0.33	0.26
Avail Cap(c_a), veh/h	146	1741	923	260	1959	930	367	500	221	775	1105	491
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	59.7	24.1	24.1	55.1	23.1	24.6	60.3	53.9	55.1	50.7	34.8	34.0
Incr Delay (d2), s/veh	102.1	2.0	3.8	40.0	4.3	12.5	4.8	6.4	34.9	34.2	0.2	0.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	8.8	12.8	14.0	10.6	19.5	23.1	2.4	6.3	8.5	15.9	4.4	3.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	161.8	26.1	27.8	95.1	27.5	37.1	65.1	60.3	90.1	84.9	35.0	34.2
LnGrp LOS	F	C	C	F	C	D	E	E	F	F	C	C
Approach Vol, veh/h		1928			2705			718			1270	
Approach Delay, s/veh		37.9			36.6			69.5			65.6	
Approach LOS		D			D			E			E	
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	23.2	72.3	11.9	45.6	15.0	80.5	33.7	23.8				
Change Period (Y+Rc), s	4.5	6.2	4.5	5.8	4.5	6.2	5.0	* 5.8				
Max Green Setting (Gmax), s	18.7	43.8	13.6	32.9	10.5	52.0	28.7	* 18				
Max Q Clear Time (g_c+I1), s	19.4	34.4	7.2	12.1	12.5	59.3	30.7	17.9				
Green Ext Time (p_c), s	0.0	6.6	0.2	2.4	0.0	0.0	0.0	0.0				

Intersection Summary

HCM 6th Ctrl Delay	46.1
HCM 6th LOS	D

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

HCM 6th Signalized Intersection Summary

Woodcrest Christian School Expansion

2: Alta Cresta Avenue/Chicago Avenue & Van Buren Boulevard

Opening Year (2029) WP Afternoon MIT



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	135	2264	180	55	2488	102	91	31	29	112	27	62
Future Volume (veh/h)	135	2264	180	55	2488	102	91	31	29	112	27	62
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		0.98	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No			No			No		
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	147	2461	196	60	2704	111	99	34	32	122	29	67
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	161	3417	1059	86	3152	128	118	61	57	134	39	89
Arrive On Green	0.09	0.66	0.66	0.10	1.00	1.00	0.07	0.07	0.07	0.07	0.08	0.08
Sat Flow, veh/h	1810	5187	1608	1810	5108	207	1810	898	845	1810	508	1175
Grp Volume(v), veh/h	147	2461	196	60	1819	996	99	0	66	122	0	96
Grp Sat Flow(s),veh/h/ln	1810	1729	1608	1810	1729	1857	1810	0	1743	1810	0	1683
Q Serve(g_s), s	10.5	40.1	6.2	4.2	0.0	0.0	7.0	0.0	4.8	8.7	0.0	7.3
Cycle Q Clear(g_c), s	10.5	40.1	6.2	4.2	0.0	0.0	7.0	0.0	4.8	8.7	0.0	7.3
Prop In Lane	1.00		1.00	1.00		0.11	1.00		0.48	1.00		0.70
Lane Grp Cap(c), veh/h	161	3417	1059	86	2134	1146	118	0	118	134	0	128
V/C Ratio(X)	0.91	0.72	0.19	0.70	0.85	0.87	0.84	0.00	0.56	0.91	0.00	0.75
Avail Cap(c_a), veh/h	161	3417	1059	99	2134	1146	118	0	241	134	0	254
HCM Platoon Ratio	1.00	1.00	1.00	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	0.76	0.76	0.76	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	58.7	14.4	8.6	57.9	0.0	0.0	60.1	0.0	58.7	59.8	0.0	58.9
Incr Delay (d2), s/veh	45.7	1.3	0.4	12.7	3.5	7.1	38.2	0.0	4.1	52.3	0.0	8.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	6.7	13.8	2.2	2.1	1.0	2.3	4.5	0.0	2.2	6.0	0.0	3.4
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	104.3	15.7	9.0	70.6	3.5	7.1	98.2	0.0	62.9	112.1	0.0	67.4
LnGrp LOS	F	B	A	E	A	A	F	A	E	F	A	E
Approach Vol, veh/h	2804			2875			165			218		
Approach Delay, s/veh	19.9			6.2			84.1			92.4		
Approach LOS	B			A			F			F		
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), \$0.7	91.8	12.5	15.0	16.1	86.4	13.6	13.9					
Change Period (Y+Rc), s	4.5	6.2	4.0	* 5.1	4.5	6.2	4.0	5.1				
Max Green Setting (Gmax), \$0.7	75.5	8.5	* 20	11.6	71.0	9.6	18.0					
Max Q Clear Time (g_c+16, s)	42.1	9.0	9.3	12.5	2.0	10.7	6.8					
Green Ext Time (p_c), s	0.0	25.2	0.0	0.3	0.0	45.7	0.0	0.2				

Intersection Summary

HCM 6th Ctrl Delay 17.7

HCM 6th LOS B

Notes

User approved ignoring U-Turning movement.

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

HCM 6th TWSC
4: Little Court & Van Buren Boulevard

Woodcrest Christian School Expansion
Opening Year (2029) WP Afternoon MIT

Intersection						
Int Delay, s/veh	0					
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑↑↑			↑↑↑		↗
Traffic Vol, veh/h	2496	5	0	2730	0	2
Future Vol, veh/h	2496	5	0	2730	0	2
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	-	0
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	90	90	90	90	90	90
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	2773	6	0	3033	0	2
Major/Minor	Major1	Major2		Minor1		
Conflicting Flow All	0	0	-	-	-	1390
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	-	-	-	-	7.1
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	-	-	-	-	3.9
Pot Cap-1 Maneuver	-	-	0	-	0	*333
Stage 1	-	-	0	-	0	-
Stage 2	-	-	0	-	0	-
Platoon blocked, %	-	-		-		1
Mov Cap-1 Maneuver	-	-	-	-	-	*333
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Approach	EB	WB		NB		
HCM Control Delay, s	0	0		15.9		
HCM LOS	C					
Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBT		
Capacity (veh/h)	333	-	-	-		
HCM Lane V/C Ratio	0.007	-	-	-		
HCM Control Delay (s)	15.9	-	-	-		
HCM Lane LOS	C	-	-	-		
HCM 95th %tile Q(veh)	0	-	-	-		
Notes						
~: Volume exceeds capacity		\$: Delay exceeds 300s		+: Computation Not Defined		*: All major volume in platoon

HCM 6th TWSC
5: Van Buren Boulevard & Ridgeway Avenue

Woodcrest Christian School Expansion
Opening Year (2029) WP Afternoon MIT

Intersection						
Int Delay, s/veh	0.8					
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations	↰	↑↑↑	↑↑↑			↱
Traffic Vol, veh/h	122	2377	2655	21	0	74
Future Vol, veh/h	122	2377	2655	21	0	74
Conflicting Peds, #/hr	3	0	0	3	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	0
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	90	90	90	90	90	90
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	136	2641	2950	23	0	82
Major/Minor	Major1	Major2		Minor2		
Conflicting Flow All	2976	0	-	0	-	1490
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	5.3	-	-	-	-	7.1
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	3.1	-	-	-	-	3.9
Pot Cap-1 Maneuver	*368	-	-	-	0	*293
Stage 1	-	-	-	-	0	-
Stage 2	-	-	-	-	0	-
Platoon blocked, %	1	-	-	-	-	1
Mov Cap-1 Maneuver	*367	-	-	-	-	*292
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Approach	EB	WB		SB		
HCM Control Delay, s	1	0		22.1		
HCM LOS	C					
Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1	
Capacity (veh/h)	* 367	-	-	-	292	
HCM Lane V/C Ratio	0.369	-	-	-	0.282	
HCM Control Delay (s)	20.4	-	-	-	22.1	
HCM Lane LOS	C	-	-	-	C	
HCM 95th %tile Q(veh)	1.7	-	-	-	1.1	
Notes						
~: Volume exceeds capacity		\$: Delay exceeds 300s		+: Computation Not Defined		*: All major volume in platoon

HCM 6th Signalized Intersection Summary 6: Dauchy Avenue & Van Buren Boulevard

Woodcrest Christian School Expansion
Opening Year (2029) WP Afternoon MIT

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	89	2001	291	176	2321	77	313	83	218	106	40	63
Future Volume (veh/h)	89	2001	291	176	2321	77	313	83	218	106	40	63
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		0.99	0.98		0.98	0.99		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	97	2175	316	191	2523	84	340	90	237	115	43	68
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	109	2231	316	153	2546	84	408	98	257	175	394	326
Arrive On Green	0.06	0.49	0.49	0.17	0.99	0.99	0.06	0.22	0.22	0.05	0.21	0.21
Sat Flow, veh/h	1810	4585	650	1810	5155	170	1810	454	1196	1810	1900	1571
Grp Volume(v), veh/h	97	1627	864	191	1686	921	340	0	327	115	43	68
Grp Sat Flow(s),veh/h/ln	1810	1729	1777	1810	1729	1868	1810	0	1650	1810	1900	1571
Q Serve(g_s), s	6.9	59.3	63.2	11.0	31.7	55.4	8.0	0.0	25.2	6.5	2.4	3.8
Cycle Q Clear(g_c), s	6.9	59.3	63.2	11.0	31.7	55.4	8.0	0.0	25.2	6.5	2.4	3.8
Prop In Lane	1.00		0.37	1.00		0.09	1.00		0.72	1.00		1.00
Lane Grp Cap(c), veh/h	109	1682	864	153	1708	922	408	0	355	175	394	326
V/C Ratio(X)	0.89	0.97	1.00	1.25	0.99	1.00	0.83	0.00	0.92	0.66	0.11	0.21
Avail Cap(c_a), veh/h	109	1682	864	153	1708	922	408	0	394	175	438	362
HCM Platoon Ratio	1.00	1.00	1.00	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	0.09	0.09	0.09	0.88	0.00	0.88	1.00	1.00	1.00
Uniform Delay (d), s/veh	60.6	32.4	33.4	54.0	0.6	0.7	46.2	0.0	49.9	40.4	41.8	28.0
Incr Delay (d2), s/veh	51.4	15.4	30.5	116.4	4.3	8.5	11.7	0.0	23.2	6.9	0.1	0.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.6	26.3	32.1	9.4	1.3	2.5	8.2	0.0	12.8	3.3	1.2	1.9
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	112.1	47.8	63.9	170.4	4.9	9.2	57.9	0.0	73.2	47.3	41.9	28.3
LnGrp LOS	F	D	E	F	A	A	E	A	E	D	D	C
Approach Vol, veh/h		2588			2798			667			226	
Approach Delay, s/veh		55.6			17.6			65.4			40.6	
Approach LOS		E			B			E			D	
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	16.0	70.4	12.0	31.6	15.0	71.4	11.0	32.6				
Change Period (Y+Rc), s	5.0	7.2	4.0	4.6	7.2	* 7.2	4.0	4.6				
Max Green Setting (Gmax), s	11.0	60.2	8.0	30.0	7.0	* 64	7.0	31.0				
Max Q Clear Time (g_c+I1), s	13.0	65.2	10.0	5.8	8.9	57.4	8.5	27.2				
Green Ext Time (p_c), s	0.0	0.0	0.0	0.4	0.0	6.2	0.0	0.7				
Intersection Summary												
HCM 6th Ctrl Delay			39.1									
HCM 6th LOS			D									
Notes												
* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.												

HCM 6th Signalized Intersection Summary

Woodcrest Christian School Expansion

7: Dauchy Avenue & Project Driveway 2/Ardenwood Lane

Opening Year (2029) WP Afternoon MIT



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↰	↱		↰	↱		↰	↱		↰	↱
Traffic Volume (veh/h)	172	1	36	6	0	25	18	345	9	18	352	94
Future Volume (veh/h)	172	1	36	6	0	25	18	345	9	18	352	94
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No			No			No		
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	181	1	38	8	0	33	19	454	12	24	463	99
Peak Hour Factor	0.95	0.95	0.95	0.76	0.95	0.76	0.95	0.76	0.76	0.76	0.76	0.95
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	626	3	380	208	40	307	163	714	18	168	729	643
Arrive On Green	0.24	0.24	0.24	0.24	0.00	0.24	0.40	0.40	0.40	0.40	0.40	0.40
Sat Flow, veh/h	1422	11	1610	144	171	1299	30	1786	46	37	1825	1610
Grp Volume(v), veh/h	182	0	38	41	0	0	485	0	0	487	0	99
Grp Sat Flow(s),veh/h/ln	1434	0	1610	1613	0	0	1862	0	0	1862	0	1610
Q Serve(g_s), s	2.2	0.0	0.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.0
Cycle Q Clear(g_c), s	2.7	0.0	0.5	0.5	0.0	0.0	5.1	0.0	0.0	5.1	0.0	1.0
Prop In Lane	0.99		1.00	0.20		0.80	0.04		0.02	0.05		1.00
Lane Grp Cap(c), veh/h	629	0	380	555	0	0	895	0	0	897	0	643
V/C Ratio(X)	0.29	0.00	0.10	0.07	0.00	0.00	0.54	0.00	0.00	0.54	0.00	0.15
Avail Cap(c_a), veh/h	1318	0	1173	1324	0	0	1494	0	0	1492	0	1173
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	0.00	1.00	0.00	0.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	8.2	0.0	7.4	7.4	0.0	0.0	6.0	0.0	0.0	6.0	0.0	4.7
Incr Delay (d2), s/veh	0.3	0.0	0.1	0.1	0.0	0.0	0.5	0.0	0.0	0.5	0.0	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.5	0.0	0.1	0.1	0.0	0.0	1.1	0.0	0.0	1.1	0.0	0.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	8.4	0.0	7.5	7.4	0.0	0.0	6.5	0.0	0.0	6.5	0.0	4.9
LnGrp LOS	A	A	A	A	A	A	A	A	A	A	A	A
Approach Vol, veh/h		220			41			485			586	
Approach Delay, s/veh		8.3			7.4			6.5			6.2	
Approach LOS		A			A			A			A	
Timer - Assigned Phs		2		4		6		8				
Phs Duration (G+Y+Rc), s		14.4		10.3		14.4		10.3				
Change Period (Y+Rc), s		4.5		4.5		4.5		4.5				
Max Green Setting (Gmax), s		18.0		18.0		18.0		18.0				
Max Q Clear Time (g_c+I1), s		7.1		4.7		7.1		2.5				
Green Ext Time (p_c), s		2.5		0.9		2.8		0.1				
Intersection Summary												
HCM 6th Ctrl Delay				6.7								
HCM 6th LOS				A								

HCM 6th Signalized Intersection Summary

8: Taft Street/Dauchy Avenue & Krameria Avenue

Woodcrest Christian School Expansion
Opening Year (2029) WP Afternoon MIT



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	39	350	27	7	284	71	13	32	9	179	41	73
Future Volume (veh/h)	39	350	27	7	284	71	13	32	9	179	41	73
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	0.99		0.98	0.99		0.98	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	50	449	35	9	364	91	17	41	12	229	53	94
Peak Hour Factor	0.78	0.78	0.78	0.78	0.78	0.78	0.78	0.78	0.78	0.78	0.78	0.78
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	114	549	41	77	501	123	234	533	140	523	129	179
Arrive On Green	0.34	0.34	0.34	0.34	0.34	0.34	0.48	0.48	0.48	0.48	0.48	0.48
Sat Flow, veh/h	102	1593	119	11	1457	358	305	1120	295	855	271	376
Grp Volume(v), veh/h	534	0	0	464	0	0	70	0	0	376	0	0
Grp Sat Flow(s),veh/h/ln	1814	0	0	1827	0	0	1720	0	0	1502	0	0
Q Serve(g_s), s	2.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	7.2	0.0	0.0
Cycle Q Clear(g_c), s	13.4	0.0	0.0	11.2	0.0	0.0	1.0	0.0	0.0	8.5	0.0	0.0
Prop In Lane	0.09		0.07	0.02		0.20	0.24		0.17	0.61		0.25
Lane Grp Cap(c), veh/h	703	0	0	702	0	0	908	0	0	831	0	0
V/C Ratio(X)	0.76	0.00	0.00	0.66	0.00	0.00	0.08	0.00	0.00	0.45	0.00	0.00
Avail Cap(c_a), veh/h	816	0	0	820	0	0	908	0	0	831	0	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	0.00	1.00	0.00	0.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	15.1	0.0	0.0	14.4	0.0	0.0	7.1	0.0	0.0	9.0	0.0	0.0
Incr Delay (d2), s/veh	3.6	0.0	0.0	1.6	0.0	0.0	0.2	0.0	0.0	1.8	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	5.5	0.0	0.0	4.3	0.0	0.0	0.4	0.0	0.0	2.7	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	18.6	0.0	0.0	16.0	0.0	0.0	7.3	0.0	0.0	10.8	0.0	0.0
LnGrp LOS	B	A	A	B	A	A	A	A	A	B	A	A
Approach Vol, veh/h	534		464				70		376			
Approach Delay, s/veh	18.6		16.0				7.3		10.8			
Approach LOS	B		B				A		B			
Timer - Assigned Phs	2		4				6		8			
Phs Duration (G+Y+Rc), s	28.3		21.7				28.3		21.7			
Change Period (Y+Rc), s	4.5		4.5				4.5		4.5			
Max Green Setting (Gmax), s	20.5		20.5				20.5		20.5			
Max Q Clear Time (g_c+I1), s	3.0		15.4				10.5		13.2			
Green Ext Time (p_c), s	0.3		1.7				1.8		1.8			
Intersection Summary												
HCM 6th Ctrl Delay			15.2									
HCM 6th LOS			B									

HCM 6th Signalized Intersection Summary

11: Trautwein Road & Mission Grove Parkway S

Woodcrest Christian School Expansion

Opening Year (2029) WP Afternoon MIT



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	43	12	15	648	19	43	6	1756	548	151	1792	39
Future Volume (veh/h)	43	12	15	648	19	43	6	1756	548	151	1792	39
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.97	1.00		0.99	1.00		0.98	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No			No			No		
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	44	12	15	668	20	44	6	1810	565	156	1847	40
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	78	85	107	532	443	370	19	1809	1036	118	2007	887
Arrive On Green	0.04	0.11	0.11	0.15	0.23	0.23	0.00	0.17	0.17	0.07	0.56	0.56
Sat Flow, veh/h	1810	755	944	3510	1900	1589	1810	3610	1580	1810	3610	1596
Grp Volume(v), veh/h	44	0	27	668	20	44	6	1810	565	156	1847	40
Grp Sat Flow(s),veh/h/ln	1810	0	1700	1755	1900	1589	1810	1805	1580	1810	1805	1596
Q Serve(g_s), s	3.1	0.0	1.9	19.7	1.1	2.8	0.4	65.1	30.6	8.5	60.5	1.5
Cycle Q Clear(g_c), s	3.1	0.0	1.9	19.7	1.1	2.8	0.4	65.1	30.6	8.5	60.5	1.5
Prop In Lane	1.00		0.56	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	78	0	192	532	443	370	19	1809	1036	118	2007	887
V/C Ratio(X)	0.57	0.00	0.14	1.26	0.05	0.12	0.32	1.00	0.55	1.32	0.92	0.05
Avail Cap(c_a), veh/h	170	0	418	532	617	516	104	1809	1036	118	2007	887
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	0.33	0.33	0.33	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	1.00	1.00	0.38	0.38	0.38	1.00	1.00	1.00
Uniform Delay (d), s/veh	61.0	0.0	52.0	55.2	38.6	39.3	64.3	54.3	22.0	60.8	26.2	13.1
Incr Delay (d2), s/veh	2.4	0.0	0.3	129.8	0.0	0.1	1.3	13.2	0.8	190.7	8.4	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.5	0.0	0.8	18.1	0.5	1.1	0.2	34.6	12.9	10.1	25.5	0.5
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	63.4	0.0	52.3	184.9	38.7	39.5	65.6	67.5	22.8	251.4	34.6	13.2
LnGrp LOS	E	A	D	F	D	D	E	F	C	F	C	B
Approach Vol, veh/h	71			732			2381			2043		
Approach Delay, s/veh	59.2			172.2			56.9			50.8		
Approach LOS	E			F			E			D		
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	3.0	71.3	25.2	20.5	5.9	78.5	9.6	36.1				
Change Period (Y+Rc), s	4.5	6.2	5.5	5.8	4.5	6.2	4.0	* 5.8				
Max Green Setting (Gmax), s	4.5	47.8	19.7	32.0	7.5	48.8	12.2	* 42				
Max Q Clear Time (g_c+110, s)	4.5	67.1	21.7	3.9	2.4	62.5	5.1	4.8				
Green Ext Time (p_c), s	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.2				

Intersection Summary

HCM 6th Ctrl Delay 70.7

HCM 6th LOS E

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

HCM 6th Signalized Intersection Summary

12: Trautwein Road & John F Kennedy Drive

Woodcrest Christian School Expansion
Opening Year (2029) WP Afternoon MIT



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	623	56	117	51	21	30	114	1627	92	13	1837	690
Future Volume (veh/h)	623	56	117	51	21	30	114	1627	92	13	1837	690
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		0.99	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No			No			No		
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	642	58	121	53	22	31	118	1677	95	13	1894	711
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	516	329	277	83	48	68	97	2175	969	37	2054	1151
Arrive On Green	0.15	0.17	0.17	0.05	0.07	0.07	0.04	0.40	0.40	0.03	0.76	0.76
Sat Flow, veh/h	3510	1900	1605	1810	710	1000	1810	3610	1607	1810	3610	1607
Grp Volume(v), veh/h	642	58	121	53	0	53	118	1677	95	13	1894	711
Grp Sat Flow(s),veh/h/ln	1755	1900	1605	1810	0	1710	1810	1805	1607	1810	1805	1607
Q Serve(g_s), s	19.1	3.4	8.8	3.7	0.0	3.9	7.0	52.3	4.8	0.9	54.9	22.4
Cycle Q Clear(g_c), s	19.1	3.4	8.8	3.7	0.0	3.9	7.0	52.3	4.8	0.9	54.9	22.4
Prop In Lane	1.00		1.00	1.00		0.58	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	516	329	277	83	0	116	97	2175	969	37	2054	1151
V/C Ratio(X)	1.24	0.18	0.44	0.64	0.00	0.46	1.21	0.77	0.10	0.36	0.92	0.62
Avail Cap(c_a), veh/h	516	626	528	148	0	434	97	2175	969	97	2054	1151
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	0.67	0.67	0.67	1.33	1.33	1.33
Upstream Filter(I)	1.00	1.00	1.00	1.00	0.00	1.00	0.63	0.63	0.63	0.34	0.34	0.34
Uniform Delay (d), s/veh	55.4	45.9	48.1	61.0	0.0	58.3	62.7	31.0	16.8	62.4	13.5	4.8
Incr Delay (d2), s/veh	125.7	0.3	1.1	7.9	0.0	2.8	140.2	1.7	0.1	2.0	3.2	0.9
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	7.3	1.6	3.6	1.9	0.0	1.8	7.0	23.7	1.9	0.4	12.7	4.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	181.1	46.1	49.2	68.8	0.0	61.0	202.9	32.7	17.0	64.4	16.7	5.6
LnGrp LOS	F	D	D	E	A	E	F	C	B	E	B	A
Approach Vol, veh/h	821		106			1890			2618			
Approach Delay, s/veh	152.1		64.9			42.5			14.0			
Approach LOS	F		E			D			B			
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	6.6	85.5	10.0	27.9	11.0	81.2	23.6	14.2				
Change Period (Y+Rc), s	4.0	7.2	4.0	* 5.4	4.0	7.2	4.5	5.4				
Max Green Setting (Gmax), s	7.0	49.8	10.6	* 43	7.0	49.8	19.1	33.0				
Max Q Clear Time (g_c+I), s	12.9	54.3	5.7	10.8	9.0	56.9	21.1	5.9				
Green Ext Time (p_c), s	0.0	0.0	0.0	0.7	0.0	0.0	0.0	0.2				

Intersection Summary

HCM 6th Ctrl Delay 45.8

HCM 6th LOS D

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

HCM 6th Signalized Intersection Summary

14: Trautwein Road & Orange Terrace Pkwy

Woodcrest Christian School Expansion
Opening Year (2029) WP Afternoon MIT



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	51	42	24	202	14	288	38	1317	278	313	1349	23
Future Volume (veh/h)	51	42	24	202	14	288	38	1317	278	313	1349	23
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		0.97	1.00		0.99	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No			No			No		
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	55	45	26	217	15	310	41	1416	299	337	1451	25
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	159	72	42	245	203	600	75	1915	847	382	2186	963
Arrive On Green	0.09	0.06	0.06	0.14	0.11	0.11	0.06	0.71	0.71	0.22	1.00	1.00
Sat Flow, veh/h	1810	1128	652	1810	1900	2735	1810	3610	1597	3510	3610	1590
Grp Volume(v), veh/h	55	0	71	217	15	310	41	1416	299	337	1451	25
Grp Sat Flow(s),veh/h/ln	1810	0	1779	1810	1900	1367	1810	1805	1597	1755	1805	1590
Q Serve(g_s), s	3.7	0.0	5.1	15.3	0.9	9.6	2.9	31.4	9.5	12.1	0.0	0.0
Cycle Q Clear(g_c), s	3.7	0.0	5.1	15.3	0.9	9.6	2.9	31.4	9.5	12.1	0.0	0.0
Prop In Lane	1.00		0.37	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	159	0	114	245	203	600	75	1915	847	382	2186	963
V/C Ratio(X)	0.35	0.00	0.62	0.89	0.07	0.52	0.54	0.74	0.35	0.88	0.66	0.03
Avail Cap(c_a), veh/h	362	0	452	434	576	1137	97	1915	847	405	2186	963
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.33	1.33	1.33	2.00	2.00	2.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	1.00	1.00	0.62	0.62	0.62	0.76	0.76	0.76
Uniform Delay (d), s/veh	55.8	0.0	59.3	55.2	52.3	25.8	60.2	13.6	10.4	50.0	0.0	0.0
Incr Delay (d2), s/veh	0.5	0.0	5.5	4.3	0.2	0.7	1.4	1.6	0.7	14.5	1.2	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.7	0.0	2.5	7.3	0.5	3.2	1.3	8.7	3.2	5.4	0.4	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	56.2	0.0	64.8	59.5	52.4	26.5	61.6	15.2	11.1	64.5	1.2	0.0
LnGrp LOS	E	A	E	E	D	C	E	B	B	E	A	A
Approach Vol, veh/h	126		542			1756			1813			
Approach Delay, s/veh	61.1		40.4			15.6			13.0			
Approach LOS	E		D			B			B			
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	9.2	75.2	21.6	14.1	9.4	84.9	17.2	18.5				
Change Period (Y+Rc), s	5.0	6.2	4.0	5.8	4.0	6.2	5.8	* 4.6				
Max Green Setting (Gmax), s	15.0	29.8	31.2	33.0	7.0	38.8	26.0	* 39				
Max Q Clear Time (g_c+14), s	14.1	33.4	17.3	7.1	4.9	2.0	5.7	11.6				
Green Ext Time (p_c), s	0.1	0.0	0.3	0.3	0.0	13.1	0.1	1.4				

Intersection Summary

HCM 6th Ctrl Delay	19.0
HCM 6th LOS	B

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

HCM 6th Signalized Intersection Summary

16: Trautwein Road & Van Buren Boulevard

Woodcrest Christian School Expansion
Opening Year (2029) WP Afternoon MIT



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	531	1314	215	183	1715	668	193	485	107	487	550	357
Future Volume (veh/h)	531	1314	215	183	1715	668	193	485	107	487	550	357
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		0.99	1.00		0.96	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No			No			No		
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	559	1383	226	193	1805	703	203	511	113	513	579	376
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	450	1581	258	204	1748	733	238	726	160	421	822	565
Arrive On Green	0.26	0.70	0.70	0.23	0.67	0.67	0.13	0.25	0.25	0.20	0.38	0.38
Sat Flow, veh/h	3510	4489	733	1810	5187	1602	1810	2919	642	3510	3610	1576
Grp Volume(v), veh/h	559	1065	544	193	1805	703	203	315	309	513	579	376
Grp Sat Flow(s),veh/h/ln	1755	1729	1764	1810	1729	1602	1810	1805	1756	1755	1805	1576
Q Serve(g_s), s	16.7	30.8	30.9	13.7	43.8	43.8	14.3	20.6	20.9	15.6	17.6	3.7
Cycle Q Clear(g_c), s	16.7	30.8	30.9	13.7	43.8	43.8	14.3	20.6	20.9	15.6	17.6	3.7
Prop In Lane	1.00		0.42	1.00		1.00	1.00		0.37	1.00		1.00
Lane Grp Cap(c), veh/h	450	1218	621	204	1748	733	238	449	437	421	822	565
V/C Ratio(X)	1.24	0.87	0.88	0.95	1.03	0.96	0.85	0.70	0.71	1.22	0.70	0.67
Avail Cap(c_a), veh/h	450	1218	621	204	1748	733	238	555	540	421	1161	713
HCM Platoon Ratio	2.00	2.00	2.00	2.00	2.00	2.00	1.00	1.00	1.00	1.67	1.67	1.67
Upstream Filter(I)	0.85	0.85	0.85	0.44	0.44	0.44	1.00	1.00	1.00	0.78	0.78	0.78
Uniform Delay (d), s/veh	48.3	17.0	17.0	50.0	21.2	9.5	55.2	44.4	44.5	52.0	36.6	26.7
Incr Delay (d2), s/veh	124.6	7.7	13.8	28.4	23.7	14.3	23.3	2.9	3.2	114.0	0.9	1.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ft	3.7	6.8	8.0	6.9	11.4	6.1	7.9	9.4	9.3	12.7	6.5	7.6
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	173.0	24.7	30.8	78.3	44.9	23.8	78.5	47.4	47.7	166.0	37.4	27.9
LnGrp LOS	F	C	C	E	F	C	E	D	D	F	D	C
Approach Vol, veh/h	2168					2701		827		1468		
Approach Delay, s/veh	64.5					41.8		55.1		79.9		
Approach LOS	E					D		E		E		
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), \$9.7	52.0	52.0	22.5	35.8	21.7	50.0	20.6	37.7				
Change Period (Y+Rc), s	5.0	* 6.2	5.4	* 6.2	5.0	6.2	5.0	5.4				
Max Green Setting (Gmax),s	5	* 46	13.0	* 42	9.0	43.8	15.6	40.0				
Max Q Clear Time (g_c+11g),s	32.9	16.3	19.6	18.7	45.8	17.6	22.9					
Green Ext Time (p_c), s	0.0	7.8	0.0	4.8	0.0	0.0	0.0	3.3				

Intersection Summary

HCM 6th Ctrl Delay 58.0

HCM 6th LOS E

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

HCM 6th Signalized Intersection Summary

18: Barton Street & Van Buren Boulevard

Woodcrest Christian School Expansion
Opening Year (2029) WP Afternoon MIT



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↰ ↑↑ ↱			↰ ↑↑ ↱			↰ ↑		↱	↰ ↱	↰ ↱	
Traffic Volume (veh/h)	147	1427	400	347	1846	90	596	77	321	51	38	188
Future Volume (veh/h)	147	1427	400	347	1846	90	596	77	321	51	38	188
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No			No			No		
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	152	1471	412	358	1903	93	614	79	331	53	39	194
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	186	1583	440	356	1980	97	594	553	468	83	44	220
Arrive On Green	0.07	0.26	0.26	0.10	0.39	0.39	0.17	0.29	0.29	0.05	0.16	0.16
Sat Flow, veh/h	1810	4034	1121	3510	5066	247	3510	1900	1609	1810	276	1374
Grp Volume(v), veh/h	152	1259	624	358	1298	698	614	79	331	53	0	233
Grp Sat Flow(s),veh/h/ln	1810	1729	1697	1755	1729	1855	1755	1900	1609	1810	0	1650
Q Serve(g_s), s	10.8	46.2	46.7	13.2	47.6	47.8	22.0	4.0	17.7	3.7	0.0	18.0
Cycle Q Clear(g_c), s	10.8	46.2	46.7	13.2	47.6	47.8	22.0	4.0	17.7	3.7	0.0	18.0
Prop In Lane	1.00		0.66	1.00		0.13	1.00		1.00	1.00		0.83
Lane Grp Cap(c), veh/h	186	1357	666	356	1351	725	594	553	468	83	0	264
V/C Ratio(X)	0.82	0.93	0.94	1.01	0.96	0.96	1.03	0.14	0.71	0.64	0.00	0.88
Avail Cap(c_a), veh/h	186	1357	666	356	1351	725	594	628	532	97	0	358
HCM Platoon Ratio	0.67	0.67	0.67	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.85	0.85	0.85	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	59.3	46.1	46.3	58.4	38.6	38.7	54.0	34.1	22.5	61.0	0.0	53.4
Incr Delay (d2), s/veh	19.6	10.9	20.0	49.4	16.7	25.6	45.8	0.1	3.7	5.9	0.0	17.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	6.0	22.1	23.6	8.1	22.1	25.6	13.2	1.8	6.9	1.9	0.0	8.8
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	78.9	57.0	66.3	107.8	55.3	64.3	99.8	34.2	26.2	66.9	0.0	70.7
LnGrp LOS	E	E	E	F	E	E	F	C	C	E	A	E
Approach Vol, veh/h	2035		2354			1024			286			
Approach Delay, s/veh	61.5		65.9			71.0			70.0			
Approach LOS	E		E			E			E			
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	58.2	58.2	27.0	26.6	18.4	58.0	10.0	43.7				
Change Period (Y+Rc), s	5.0	* 7.2	5.0	* 5.8	5.0	7.2	4.0	5.8				
Max Green Setting (Gmax), s	51	* 51	22.0	* 28	7.2	50.8	7.0	43.0				
Max Q Clear Time (g_c+11g), s	48.7	48.7	24.0	20.0	12.8	49.8	5.7	19.7				
Green Ext Time (p_c), s	0.0	1.9	0.0	0.9	0.0	0.9	0.0	1.5				

Intersection Summary

HCM 6th Ctrl Delay 65.5

HCM 6th LOS E

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Intersection												
Int Delay, s/veh	0											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↑↑↑			↑↑↑			↗			↗		
Traffic Vol, veh/h	0	2377	0	0	2674	15	0	0	0	0	0	2
Future Vol, veh/h	0	2377	0	0	2674	15	0	0	0	0	0	2
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	0	-	-	0
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	0	2584	0	0	2907	16	0	0	0	0	0	2
Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	-	0	0	-	-	0	-	-	1292	-	-	1462
Stage 1	-	-	-	-	-	-	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-	-	-	-	-	-	-
Critical Hdwy	-	-	-	-	-	-	-	-	7.1	-	-	7.1
Critical Hdwy Stg 1	-	-	-	-	-	-	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-	-	-	-	-	-	-
Follow-up Hdwy	-	-	-	-	-	-	-	-	3.9	-	-	3.9
Pot Cap-1 Maneuver	0	-	-	0	-	-	0	0	*373	0	0	*293
Stage 1	0	-	-	0	-	-	0	0	-	0	0	-
Stage 2	0	-	-	0	-	-	0	0	-	0	0	-
Platoon blocked, %	-	-	-	-	-	-	-	-	1	-	-	1
Mov Cap-1 Maneuver	-	-	-	-	-	-	-	-	*373	-	-	*293
Mov Cap-2 Maneuver	-	-	-	-	-	-	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-	-	-	-	-	-	-
Approach	EB		WB			NB			SB			
HCM Control Delay, s	0		0			0			17.4			
HCM LOS						A			C			
Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBT	WBR	SBLn1						
Capacity (veh/h)	-	-	-	-	-	293						
HCM Lane V/C Ratio	-	-	-	-	-	0.007						
HCM Control Delay (s)	0	-	-	-	-	17.4						
HCM Lane LOS	A	-	-	-	-	C						
HCM 95th %tile Q(veh)	-	-	-	-	-	0						
Notes												
~: Volume exceeds capacity \$: Delay exceeds 300s +: Computation Not Defined *: All major volume in platoon												

Intersection						
Int Delay, s/veh	4.2					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	168	50	16	197	270	27
Future Vol, veh/h	168	50	16	197	270	27
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	50	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	95	95	95	80	80	95
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	177	53	17	246	338	28
Major/Minor	Minor2	Major1		Major2		
Conflicting Flow All	632	352	366	0	-	0
Stage 1	352	-	-	-	-	-
Stage 2	280	-	-	-	-	-
Critical Hdwy	6.4	6.2	4.1	-	-	-
Critical Hdwy Stg 1	5.4	-	-	-	-	-
Critical Hdwy Stg 2	5.4	-	-	-	-	-
Follow-up Hdwy	3.5	3.3	2.2	-	-	-
Pot Cap-1 Maneuver	465	696	1204	-	-	-
Stage 1	716	-	-	-	-	-
Stage 2	814	-	-	-	-	-
Platoon blocked, %	1			-	-	-
Mov Cap-1 Maneuver	458	696	1204	-	-	-
Mov Cap-2 Maneuver	551	-	-	-	-	-
Stage 1	706	-	-	-	-	-
Stage 2	814	-	-	-	-	-
Approach	EB	NB		SB		
HCM Control Delay, s	15.2	0.5		0		
HCM LOS	C					
Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR	
Capacity (veh/h)	1204	-	579	-	-	
HCM Lane V/C Ratio	0.014	-	0.396	-	-	
HCM Control Delay (s)	8	-	15.2	-	-	
HCM Lane LOS	A	-	C	-	-	
HCM 95th %tile Q(veh)	0	-	1.9	-	-	

HCM 6th Signalized Intersection Summary

1: Washington Street & Van Buren Boulevard

Woodcrest Christian School Expansion
Cumulative (2045) WP AM MIT

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	164	1317	153	156	1733	929	283	995	243	605	181	93
Future Volume (veh/h)	164	1317	153	156	1733	929	283	995	243	605	181	93
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	173	1386	161	164	1824	978	298	1047	256	637	191	98
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	201	1585	184	1183	3086	1436	372	997	443	594	1239	551
Arrive On Green	0.11	0.34	0.34	0.65	0.89	0.89	0.11	0.28	0.28	0.17	0.34	0.34
Sat Flow, veh/h	1810	4704	546	1810	3458	1609	3510	3610	1605	3510	3610	1606
Grp Volume(v), veh/h	173	1019	528	164	1824	978	298	1047	256	637	191	98
Grp Sat Flow(s),veh/h/ln	1810	1729	1792	1810	1729	1609	1755	1805	1605	1755	1805	1606
Q Serve(g_s), s	12.2	36.0	36.0	4.5	15.6	21.7	10.8	35.9	14.6	22.0	4.8	5.5
Cycle Q Clear(g_c), s	12.2	36.0	36.0	4.5	15.6	21.7	10.8	35.9	14.6	22.0	4.8	5.5
Prop In Lane	1.00		0.30	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	201	1165	604	1183	3086	1436	372	997	443	594	1239	551
V/C Ratio(X)	0.86	0.87	0.87	0.14	0.59	0.68	0.80	1.05	0.58	1.07	0.15	0.18
Avail Cap(c_a), veh/h	313	1165	604	1183	3086	1436	959	997	443	594	1239	551
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	56.8	40.5	40.5	8.6	1.6	1.9	56.8	47.1	27.1	54.0	29.6	29.9
Incr Delay (d2), s/veh	13.5	9.2	16.2	0.1	0.8	2.6	4.0	42.6	1.9	57.8	0.1	0.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	6.2	16.1	17.8	1.6	0.6	1.3	5.0	21.8	5.8	14.2	2.0	2.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	70.3	49.8	56.7	8.6	2.4	4.5	60.8	89.7	29.0	111.8	29.7	30.0
LnGrp LOS	E	D	E	A	A	A	E	F	C	F	C	C
Approach Vol, veh/h		1720			2966			1601			926	
Approach Delay, s/veh		54.0			3.5			74.6			86.2	
Approach LOS		D			A			E			F	
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	93.1	50.0	18.3	50.4	18.9	124.1	27.0	41.7				
Change Period (Y+Rc), s	6.2	* 6.2	4.5	5.8	4.5	6.2	5.0	* 5.8				
Max Green Setting (Gmax), s	7.5	* 44	35.5	22.2	22.5	28.8	22.0	* 36				
Max Q Clear Time (g_c+I1), s	6.5	38.0	12.8	7.5	14.2	23.7	24.0	37.9				
Green Ext Time (p_c), s	0.0	4.0	1.0	1.1	0.3	4.9	0.0	0.0				
Intersection Summary												
HCM 6th Ctrl Delay			41.9									
HCM 6th LOS			D									
Notes												
* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.												

HCM 6th Signalized Intersection Summary

Woodcrest Christian School Expansion

2: Alta Cresta Avenue/Chicago Avenue & Van Buren Boulevard

Cumulative (2045) WP AM MIT



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	89	2024	91	94	2588	35	179	24	120	117	29	86
Future Volume (veh/h)	89	2024	91	94	2588	35	179	24	120	117	29	86
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		0.99	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No			No			No		
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	94	2131	96	99	2724	37	188	25	126	123	31	91
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	113	2995	928	122	3072	42	206	30	151	168	39	115
Arrive On Green	0.06	0.58	0.58	0.09	0.77	0.77	0.11	0.11	0.11	0.09	0.09	0.09
Sat Flow, veh/h	1810	5187	1607	1810	5274	71	1810	272	1372	1810	424	1243
Grp Volume(v), veh/h	94	2131	96	99	1783	978	188	0	151	123	0	122
Grp Sat Flow(s),veh/h/ln	1810	1729	1607	1810	1729	1887	1810	0	1644	1810	0	1667
Q Serve(g_s), s	6.7	38.3	1.9	7.0	48.0	48.9	13.4	0.0	11.7	8.6	0.0	9.3
Cycle Q Clear(g_c), s	6.7	38.3	1.9	7.0	48.0	48.9	13.4	0.0	11.7	8.6	0.0	9.3
Prop In Lane	1.00		1.00	1.00		0.04	1.00		0.83	1.00		0.75
Lane Grp Cap(c), veh/h	113	2995	928	122	2014	1099	206	0	181	168	0	155
V/C Ratio(X)	0.83	0.71	0.10	0.81	0.89	0.89	0.91	0.00	0.83	0.73	0.00	0.79
Avail Cap(c_a), veh/h	113	2995	928	146	2014	1099	206	0	252	173	0	231
HCM Platoon Ratio	1.00	1.00	1.00	1.33	1.33	1.33	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	0.74	0.74	0.74	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	60.3	19.7	3.7	58.4	11.5	11.6	57.0	0.0	56.7	57.4	0.0	57.7
Incr Delay (d2), s/veh	38.9	1.5	0.2	19.1	4.7	8.4	39.4	0.0	15.3	14.5	0.0	10.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.2	14.3	1.3	3.7	10.1	12.3	8.3	0.0	5.6	4.7	0.0	4.4
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	99.2	21.2	3.9	77.4	16.2	20.0	96.3	0.0	72.0	72.0	0.0	67.9
LnGrp LOS	F	C	A	E	B	B	F	A	E	E	A	E
Approach Vol, veh/h	2321		2860				339			245		
Approach Delay, s/veh	23.6		19.6				85.5			70.0		
Approach LOS	C		B				F			E		
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	3.3	81.3	18.8	16.7	12.6	81.9	16.0	19.4				
Change Period (Y+Rc), s	4.5	6.2	4.0	4.6	4.5	6.2	4.0	5.1				
Max Green Setting (Gmax), s	10.5	67.4	14.8	18.0	8.1	69.8	12.4	19.9				
Max Q Clear Time (g_c+1.0), s	19.0	40.3	15.4	11.3	8.7	50.9	10.6	13.7				
Green Ext Time (p_c), s	0.0	18.2	0.0	0.3	0.0	16.3	0.0	0.4				

Intersection Summary

HCM 6th Ctrl Delay 27.2

HCM 6th LOS C

Notes

User approved ignoring U-Turning movement.

HCM 6th TWSC
4: Little Court & Van Buren Boulevard

Woodcrest Christian School Expansion
Cumulative (2045) WP AM MIT

Intersection						
Int Delay, s/veh	0					
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑↑↑			↑↑↑		↗
Traffic Vol, veh/h	2330	1	0	2818	0	8
Future Vol, veh/h	2330	1	0	2818	0	8
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	-	0
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	95	95	95	95	95	95
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	2453	1	0	2966	0	8
Major/Minor	Major1	Major2		Minor1		
Conflicting Flow All	0	0	-	-	-	1227
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	-	-	-	-	7.1
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	-	-	-	-	3.9
Pot Cap-1 Maneuver	-	-	0	-	0	*373
Stage 1	-	-	0	-	0	-
Stage 2	-	-	0	-	0	-
Platoon blocked, %	-	-		-		1
Mov Cap-1 Maneuver	-	-	-	-	-	*373
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Approach	EB	WB		NB		
HCM Control Delay, s	0	0		14.9		
HCM LOS	B					
Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBT		
Capacity (veh/h)	373	-	-	-		
HCM Lane V/C Ratio	0.023	-	-	-		
HCM Control Delay (s)	14.9	-	-	-		
HCM Lane LOS	B	-	-	-		
HCM 95th %tile Q(veh)	0.1	-	-	-		
Notes						
~: Volume exceeds capacity		\$: Delay exceeds 300s		+: Computation Not Defined		*: All major volume in platoon

HCM 6th TWSC
5: Van Buren Boulevard & Ridgeway Avenue

Woodcrest Christian School Expansion
Cumulative (2045) WP AM MIT

Intersection						
Int Delay, s/veh	1.1					
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	55	2283	2664	13	0	154
Future Vol, veh/h	55	2283	2664	13	0	154
Conflicting Peds, #/hr	3	0	0	3	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	0
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	95	95	95	95	95	95
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	58	2403	2804	14	0	162
Major/Minor	Major1	Major2		Minor2		
Conflicting Flow All	2821	0	-	0	-	1412
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	5.3	-	-	-	-	7.1
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	3.1	-	-	-	-	3.9
Pot Cap-1 Maneuver	*368	-	-	-	0	*293
Stage 1	-	-	-	-	0	-
Stage 2	-	-	-	-	0	-
Platoon blocked, %	1	-	-	-	-	1
Mov Cap-1 Maneuver	*367	-	-	-	-	*292
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Approach	EB	WB		SB		
HCM Control Delay, s	0.4	0		31.7		
HCM LOS	D					
Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1	
Capacity (veh/h)	* 367	-	-	-	292	
HCM Lane V/C Ratio	0.158	-	-	-	0.555	
HCM Control Delay (s)	16.6	-	-	-	31.7	
HCM Lane LOS	C	-	-	-	D	
HCM 95th %tile Q(veh)	0.6	-	-	-	3.1	
Notes						
~: Volume exceeds capacity		\$: Delay exceeds 300s		+: Computation Not Defined		*: All major volume in platoon

HCM 6th Signalized Intersection Summary 6: Dauchy Avenue & Van Buren Boulevard

Woodcrest Christian School Expansion
Cumulative (2045) WP AM MIT

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		  			  						 	
Traffic Volume (veh/h)	36	1874	373	298	2263	56	381	73	263	96	67	41
Future Volume (veh/h)	36	1874	373	298	2263	56	381	73	263	96	67	41
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	38	1973	393	314	2382	59	401	77	277	101	71	43
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	73	1865	361	571	3757	93	407	82	294	171	429	364
Arrive On Green	0.05	0.57	0.57	0.63	1.00	1.00	0.05	0.23	0.23	0.05	0.23	0.23
Sat Flow, veh/h	1810	4344	841	1810	5206	128	1810	362	1303	1810	1900	1610
Grp Volume(v), veh/h	38	1559	807	314	1579	862	401	0	354	101	71	43
Grp Sat Flow(s),veh/h/ln	1810	1729	1727	1810	1729	1877	1810	0	1665	1810	1900	1610
Q Serve(g_s), s	2.7	55.8	55.8	12.7	0.0	0.0	7.0	0.0	27.2	5.5	3.9	2.8
Cycle Q Clear(g_c), s	2.7	55.8	55.8	12.7	0.0	0.0	7.0	0.0	27.2	5.5	3.9	2.8
Prop In Lane	1.00		0.49	1.00		0.07	1.00		0.78	1.00		1.00
Lane Grp Cap(c), veh/h	73	1484	741	571	2495	1354	407	0	376	171	429	364
V/C Ratio(X)	0.52	1.05	1.09	0.55	0.63	0.64	0.98	0.00	0.94	0.59	0.17	0.12
Avail Cap(c_a), veh/h	97	1484	741	571	2495	1354	407	0	384	171	438	372
HCM Platoon Ratio	1.33	1.33	1.33	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	0.09	0.09	0.09	0.80	0.00	0.80	1.00	1.00	1.00
Uniform Delay (d), s/veh	60.3	27.9	27.9	18.8	0.0	0.0	48.9	0.0	49.5	38.8	40.5	40.0
Incr Delay (d2), s/veh	2.2	37.8	59.7	0.1	0.1	0.2	35.7	0.0	26.7	3.8	0.2	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.2	25.9	30.4	3.9	0.0	0.1	13.9	0.0	14.2	2.7	1.9	1.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	62.5	65.7	87.6	18.8	0.1	0.2	84.7	0.0	76.1	42.6	40.6	40.2
LnGrp LOS	E	F	F	B	A	A	F	A	E	D	D	D
Approach Vol, veh/h		2404			2755			755			215	
Approach Delay, s/veh		73.0			2.3			80.7			41.5	
Approach LOS		E			A			F			D	
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	48.2	63.0	11.0	34.0	10.2	101.0	11.0	34.0				
Change Period (Y+Rc), s	7.2	* 7.2	4.0	4.6	5.0	7.2	4.0	4.6				
Max Green Setting (Gmax), s	16.4	* 56	7.0	30.0	7.0	65.2	7.0	30.0				
Max Q Clear Time (g_c+I1), s	14.7	57.8	9.0	5.9	4.7	2.0	7.5	29.2				
Green Ext Time (p_c), s	0.1	0.0	0.0	0.5	0.0	33.5	0.0	0.2				

Intersection Summary

HCM 6th Ctrl Delay	41.0
HCM 6th LOS	D

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

HCM 6th Signalized Intersection Summary

Woodcrest Christian School Expansion

7: Dauchy Avenue & Project Driveway 2/Ardenwood Lane

Cumulative (2045) WP AM MIT



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↰	↱		↰	↱		↰	↱		↰	↱
Traffic Volume (veh/h)	166	0	34	5	0	56	43	472	5	18	431	214
Future Volume (veh/h)	166	0	34	5	0	56	43	472	5	18	431	214
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No			No			No		
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	175	0	36	6	0	64	45	536	6	20	490	225
Peak Hour Factor	0.95	0.95	0.95	0.88	0.95	0.88	0.95	0.88	0.88	0.88	0.88	0.95
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	594	0	368	159	18	337	175	757	8	151	805	703
Arrive On Green	0.23	0.00	0.23	0.23	0.00	0.23	0.44	0.44	0.44	0.44	0.44	0.44
Sat Flow, veh/h	1427	0	1610	60	78	1475	70	1733	19	27	1843	1610
Grp Volume(v), veh/h	175	0	36	70	0	0	587	0	0	510	0	225
Grp Sat Flow(s),veh/h/ln	1427	0	1610	1613	0	0	1822	0	0	1869	0	1610
Q Serve(g_s), s	1.8	0.0	0.5	0.0	0.0	0.0	1.3	0.0	0.0	0.0	0.0	2.5
Cycle Q Clear(g_c), s	2.7	0.0	0.5	0.9	0.0	0.0	6.9	0.0	0.0	5.6	0.0	2.5
Prop In Lane	1.00		1.00	0.09		0.91	0.08		0.01	0.04		1.00
Lane Grp Cap(c), veh/h	594	0	368	514	0	0	940	0	0	956	0	703
V/C Ratio(X)	0.29	0.00	0.10	0.14	0.00	0.00	0.62	0.00	0.00	0.53	0.00	0.32
Avail Cap(c_a), veh/h	1193	0	1078	1215	0	0	1348	0	0	1378	0	1078
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	0.00	1.00	0.00	0.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	9.0	0.0	8.2	8.4	0.0	0.0	6.2	0.0	0.0	5.8	0.0	5.0
Incr Delay (d2), s/veh	0.3	0.0	0.1	0.1	0.0	0.0	0.7	0.0	0.0	0.5	0.0	0.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.6	0.0	0.1	0.2	0.0	0.0	1.5	0.0	0.0	1.2	0.0	0.5
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	9.2	0.0	8.3	8.5	0.0	0.0	6.9	0.0	0.0	6.3	0.0	5.2
LnGrp LOS	A	A	A	A	A	A	A	A	A	A	A	A
Approach Vol, veh/h		211			70			587			735	
Approach Delay, s/veh		9.1			8.5			6.9			6.0	
Approach LOS		A			A			A			A	
Timer - Assigned Phs		2		4		6		8				
Phs Duration (G+Y+Rc), s		16.2		10.6		16.2		10.6				
Change Period (Y+Rc), s		4.5		4.5		4.5		4.5				
Max Green Setting (Gmax), s		18.0		18.0		18.0		18.0				
Max Q Clear Time (g_c+I1), s		8.9		4.7		7.6		2.9				
Green Ext Time (p_c), s		2.8		0.9		3.2		0.3				
Intersection Summary												
HCM 6th Ctrl Delay				6.8								
HCM 6th LOS				A								

HCM 6th Signalized Intersection Summary

8: Taft Street/Dauchy Avenue & Krameria Avenue

Woodcrest Christian School Expansion
Cumulative (2045) WP AM MIT



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	65	564	3	2	637	158	23	37	13	138	19	55
Future Volume (veh/h)	65	564	3	2	637	158	23	37	13	138	19	55
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		0.99	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No			No			No		
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	68	594	3	2	671	166	24	39	14	145	20	58
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	117	752	4	60	736	182	222	341	108	415	68	135
Arrive On Green	0.50	0.50	0.50	0.50	0.50	0.50	0.35	0.35	0.35	0.35	0.35	0.35
Sat Flow, veh/h	101	1499	7	1	1467	362	411	979	309	908	194	387
Grp Volume(v), veh/h	665	0	0	839	0	0	77	0	0	223	0	0
Grp Sat Flow(s),veh/h/ln	1607	0	0	1830	0	0	1699	0	0	1490	0	0
Q Serve(g_s), s	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	4.8	0.0	0.0
Cycle Q Clear(g_c), s	20.0	0.0	0.0	25.3	0.0	0.0	1.7	0.0	0.0	6.5	0.0	0.0
Prop In Lane	0.10		0.00	0.00		0.20	0.31		0.18	0.65		0.26
Lane Grp Cap(c), veh/h	872	0	0	978	0	0	671	0	0	618	0	0
V/C Ratio(X)	0.76	0.00	0.00	0.86	0.00	0.00	0.11	0.00	0.00	0.36	0.00	0.00
Avail Cap(c_a), veh/h	936	0	0	1051	0	0	671	0	0	618	0	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	0.00	1.00	0.00	0.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	11.9	0.0	0.0	13.8	0.0	0.0	13.3	0.0	0.0	14.8	0.0	0.0
Incr Delay (d2), s/veh	3.5	0.0	0.0	6.9	0.0	0.0	0.3	0.0	0.0	1.6	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	6.8	0.0	0.0	10.6	0.0	0.0	0.7	0.0	0.0	2.4	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	15.4	0.0	0.0	20.6	0.0	0.0	13.6	0.0	0.0	16.4	0.0	0.0
LnGrp LOS	B	A	A	C	A	A	B	A	A	B	A	A
Approach Vol, veh/h	665		839			77			223			
Approach Delay, s/veh	15.4		20.6			13.6			16.4			
Approach LOS	B		C			B			B			
Timer - Assigned Phs	2		4			6			8			
Phs Duration (G+Y+Rc), s	25.4		34.6			25.4			34.6			
Change Period (Y+Rc), s	4.5		4.5			4.5			4.5			
Max Green Setting (Gmax), s	18.5		32.5			18.5			32.5			
Max Q Clear Time (g_c+I1), s	3.7		22.0			8.5			27.3			
Green Ext Time (p_c), s	0.3		3.8			0.9			2.8			
Intersection Summary												
HCM 6th Ctrl Delay	17.9											
HCM 6th LOS	B											

HCM 6th Signalized Intersection Summary

11: Trautwein Road & Mission Grove Parkway S

Woodcrest Christian School Expansion
Cumulative (2045) WP AM MIT



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	70	39	11	755	38	61	3	2099	646	218	1279	20
Future Volume (veh/h)	70	39	11	755	38	61	3	2099	646	218	1279	20
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		0.97	1.00		1.00	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No				No				No			
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	74	41	12	795	40	64	3	2209	680	229	1346	21
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	289	86	25	532	117	97	10	1941	1109	146	2213	965
Arrive On Green	0.16	0.06	0.06	0.15	0.06	0.06	0.00	0.36	0.36	0.08	0.61	0.61
Sat Flow, veh/h	1810	1410	413	3510	1900	1566	1810	3610	1608	1810	3610	1574
Grp Volume(v), veh/h	74	0	53	795	40	64	3	2209	680	229	1346	21
Grp Sat Flow(s),veh/h/ln	1810	0	1823	1755	1900	1566	1810	1805	1608	1810	1805	1574
Q Serve(g_s), s	4.7	0.0	3.7	19.7	2.6	4.4	0.2	69.9	12.2	10.5	29.9	0.2
Cycle Q Clear(g_c), s	4.7	0.0	3.7	19.7	2.6	4.4	0.2	69.9	12.2	10.5	29.9	0.2
Prop In Lane	1.00		0.23	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	289	0	111	532	117	97	10	1941	1109	146	2213	965
V/C Ratio(X)	0.26	0.00	0.48	1.49	0.34	0.66	0.30	1.14	0.61	1.57	0.61	0.02
Avail Cap(c_a), veh/h	289	0	449	532	693	571	230	1941	1109	146	2213	965
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	0.67	0.67	0.67	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	1.00	1.00	0.09	0.09	0.09	1.00	1.00	1.00
Uniform Delay (d), s/veh	47.8	0.0	59.1	55.2	58.5	42.0	64.5	41.6	4.6	59.7	15.5	1.2
Incr Delay (d2), s/veh	0.2	0.0	3.2	232.3	1.7	7.6	0.6	62.8	0.2	285.5	1.3	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.1	0.0	1.8	25.6	1.3	2.2	0.1	48.2	4.5	16.3	11.3	0.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	48.0	0.0	62.2	287.4	60.2	49.6	65.1	104.4	4.8	345.2	16.8	1.3
LnGrp LOS	D	A	E	F	E	D	E	F	A	F	B	A
Approach Vol, veh/h	127				899		2892				1596	
Approach Delay, s/veh	53.9				260.4		80.9				63.7	
Approach LOS	D				F		F				E	
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	5.0	76.1	25.2	13.7	5.2	85.9	26.3	12.6				
Change Period (Y+Rc), s	4.5	6.2	5.5	5.8	4.5	6.2	5.5	* 4.6				
Max Green Setting (Gmax), s	40.5	45.8	19.7	32.0	16.5	39.8	7.0	* 47				
Max Q Clear Time (g_c+1/2, s)	112.5	71.9	21.7	5.7	2.2	31.9	6.7	6.4				
Green Ext Time (p_c), s	0.0	0.0	0.0	0.2	0.0	4.9	0.0	0.4				

Intersection Summary

HCM 6th Ctrl Delay 104.6

HCM 6th LOS F

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

HCM 6th Signalized Intersection Summary

12: Trautwein Road & John F Kennedy Drive

Woodcrest Christian School Expansion
Cumulative (2045) WP AM MIT



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	677	60	110	147	67	52	251	2375	103	11	1195	733
Future Volume (veh/h)	677	60	110	147	67	52	251	2375	103	11	1195	733
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		0.99	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No			No			No		
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	713	63	116	155	71	55	264	2500	108	12	1258	772
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	516	226	189	261	115	89	301	2004	892	34	1383	852
Arrive On Green	0.15	0.12	0.12	0.14	0.12	0.12	0.22	0.74	0.74	0.02	0.38	0.38
Sat Flow, veh/h	3510	1900	1590	1810	987	764	1810	3610	1607	1810	3610	1606
Grp Volume(v), veh/h	713	63	116	155	0	126	264	2500	108	12	1258	772
Grp Sat Flow(s),veh/h/ln	1755	1900	1590	1810	0	1751	1810	1805	1607	1810	1805	1606
Q Serve(g_s), s	19.1	3.9	9.0	10.4	0.0	8.9	18.3	72.2	1.2	0.9	42.9	26.5
Cycle Q Clear(g_c), s	19.1	3.9	9.0	10.4	0.0	8.9	18.3	72.2	1.2	0.9	42.9	26.5
Prop In Lane	1.00		1.00	1.00		0.44	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	516	226	189	261	0	204	301	2004	892	34	1383	852
V/C Ratio(X)	1.38	0.28	0.61	0.59	0.00	0.62	0.88	1.25	0.12	0.35	0.91	0.91
Avail Cap(c_a), veh/h	516	678	567	261	0	444	301	2004	892	97	1383	852
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.33	1.33	1.33	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	0.00	1.00	0.19	0.19	0.19	0.56	0.56	0.56
Uniform Delay (d), s/veh	55.4	52.2	54.4	52.1	0.0	54.6	49.3	17.0	1.7	63.0	38.0	11.7
Incr Delay (d2), s/veh	183.9	0.7	3.2	3.6	0.0	3.0	5.9	112.3	0.1	3.4	6.3	9.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	21.5	1.9	3.8	5.0	0.0	4.1	8.1	48.2	0.9	0.4	19.1	10.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	239.3	52.9	57.6	55.7	0.0	57.6	55.3	129.3	1.7	66.4	44.3	21.1
LnGrp LOS	F	D	E	E	A	E	E	F	A	E	D	C
Approach Vol, veh/h	892			281			2872			2042		
Approach Delay, s/veh	202.5			56.6			117.7			35.7		
Approach LOS	F			E			F			D		
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	6.5	79.4	24.1	20.1	28.8	57.0	23.6	20.6				
Change Period (Y+Rc), s	4.0	7.2	5.4	* 4.6	7.2	* 7.2	4.5	5.4				
Max Green Setting (Gmax), s	7.0	49.8	7.0	* 46	7.0	* 50	19.1	33.0				
Max Q Clear Time (g_c+12, s)	74.2	12.4	12.4	11.0	20.3	44.9	21.1	10.9				
Green Ext Time (p_c), s	0.0	0.0	0.0	0.7	0.0	3.9	0.0	0.7				

Intersection Summary

HCM 6th Ctrl Delay 99.8

HCM 6th LOS F

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

HCM 6th Signalized Intersection Summary

14: Trautwein Road & Orange Terrace Pkwy

Woodcrest Christian School Expansion
Cumulative (2045) WP AM MIT



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	103	70	47	407	169	632	71	1453	289	368	1031	33
Future Volume (veh/h)	103	70	47	407	169	632	71	1453	289	368	1031	33
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		0.97	1.00		1.00	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No				No				No			
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	108	74	49	428	178	665	75	1529	304	387	1085	35
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	133	112	74	324	418	800	96	1752	778	243	1839	814
Arrive On Green	0.07	0.11	0.11	0.18	0.22	0.22	0.02	0.16	0.16	0.14	1.00	1.00
Sat Flow, veh/h	1810	1063	704	1810	1900	2744	1810	3610	1603	3510	3610	1599
Grp Volume(v), veh/h	108	0	123	428	178	665	75	1529	304	387	1085	35
Grp Sat Flow(s),veh/h/ln	1810	0	1766	1810	1900	1372	1810	1805	1603	1755	1805	1599
Q Serve(g_s), s	7.6	0.0	8.7	23.2	10.5	22.2	5.4	53.8	11.0	9.0	0.0	0.0
Cycle Q Clear(g_c), s	7.6	0.0	8.7	23.2	10.5	22.2	5.4	53.8	11.0	9.0	0.0	0.0
Prop In Lane	1.00		0.40	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	133	0	186	324	418	800	96	1752	778	243	1839	814
V/C Ratio(X)	0.81	0.00	0.66	1.32	0.43	0.83	0.78	0.87	0.39	1.59	0.59	0.04
Avail Cap(c_a), veh/h	237	0	492	324	547	986	139	1752	778	243	1839	814
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	0.33	0.33	0.33	2.00	2.00	2.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	1.00	1.00	0.83	0.83	0.83	0.87	0.87	0.87
Uniform Delay (d), s/veh	59.4	0.0	56.0	53.4	43.6	25.3	63.1	50.7	9.3	56.0	0.0	0.0
Incr Delay (d2), s/veh	4.6	0.0	4.0	165.2	0.7	5.1	7.8	5.3	1.2	282.9	1.2	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.7	0.0	4.1	25.4	5.0	7.7	2.7	27.2	4.9	13.1	0.3	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	63.9	0.0	60.0	218.6	44.3	30.4	71.0	56.0	10.6	338.9	1.2	0.1
LnGrp LOS	E	A	E	F	D	C	E	E	B	F	A	A
Approach Vol, veh/h	231				1271				1908		1507	
Approach Delay, s/veh	61.8				95.7				49.4		87.9	
Approach LOS	E				F				D		F	
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	4.0	69.3	27.2	19.5	10.9	72.4	13.5	33.2				
Change Period (Y+Rc), s	5.0	6.2	4.0	5.8	4.0	6.2	4.0	4.6				
Max Green Setting (Gmax), s	4.0	46.8	17.0	36.2	10.0	46.8	17.0	37.4				
Max Q Clear Time (g_c+1.1), s	4.0	55.8	25.2	10.7	7.4	2.0	9.6	24.2				
Green Ext Time (p_c), s	0.0	0.0	0.0	0.7	0.0	8.7	0.1	3.4				

Intersection Summary

HCM 6th Ctrl Delay	73.7
HCM 6th LOS	E

HCM 6th Signalized Intersection Summary

16: Trautwein Road & Van Buren Boulevard

Woodcrest Christian School Expansion
Cumulative (2045) WP AM MIT



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	453	1466	150	204	1840	500	244	812	159	509	477	424
Future Volume (veh/h)	453	1466	150	204	1840	500	244	812	159	509	477	424
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No			No			No		
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	477	1543	158	215	1937	526	257	855	167	536	502	446
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	1681	3443	352	238	1867	760	237	909	178	394	1035	1225
Arrive On Green	0.96	1.00	1.00	0.26	0.72	0.72	0.13	0.30	0.30	0.19	0.48	0.48
Sat Flow, veh/h	3510	4781	489	1810	5187	1609	1810	3009	588	3510	3610	1585
Grp Volume(v), veh/h	477	1116	585	215	1937	526	257	513	509	536	502	446
Grp Sat Flow(s),veh/h/ln	1755	1729	1812	1810	1729	1609	1810	1805	1792	1755	1805	1585
Q Serve(g_s), s	1.0	0.0	0.0	14.9	46.8	0.0	17.0	36.0	36.0	14.6	12.3	8.5
Cycle Q Clear(g_c), s	1.0	0.0	0.0	14.9	46.8	0.0	17.0	36.0	36.0	14.6	12.3	8.5
Prop In Lane	1.00		0.27	1.00		1.00	1.00		0.33	1.00		1.00
Lane Grp Cap(c), veh/h	1681	2490	1305	238	1867	760	237	545	541	394	1035	1225
V/C Ratio(X)	0.28	0.45	0.45	0.90	1.04	0.69	1.09	0.94	0.94	1.36	0.48	0.36
Avail Cap(c_a), veh/h	1681	2490	1305	383	1867	760	237	555	551	394	1035	1225
HCM Platoon Ratio	2.00	2.00	2.00	2.00	2.00	2.00	1.00	1.00	1.00	1.67	1.67	1.67
Upstream Filter(I)	0.86	0.86	0.86	0.65	0.65	0.65	1.00	1.00	1.00	0.87	0.87	0.87
Uniform Delay (d), s/veh	1.5	0.0	0.0	47.1	18.2	9.2	56.5	44.2	44.2	52.8	27.4	11.8
Incr Delay (d2), s/veh	0.0	0.5	1.0	7.5	27.4	3.4	83.3	24.1	24.2	175.6	0.3	0.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.3	0.2	0.3	6.1	11.0	4.9	13.1	19.3	19.2	15.3	4.5	4.7
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	1.5	0.5	1.0	54.6	45.6	12.6	139.8	68.3	68.5	228.4	27.7	11.9
LnGrp LOS	A	A	A	D	F	B	F	E	E	F	C	B
Approach Vol, veh/h	2178				2678				1279		1484	
Approach Delay, s/veh	0.8				39.9				82.7		95.5	
Approach LOS	A				D				F		F	
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	11.6	101.5	22.0	43.5	70.1	53.0	20.8	44.7				
Change Period (Y+Rc), s	4.5	6.2	5.0	6.2	6.2	* 6.2	6.2	* 5.4				
Max Green Setting (Gmax), s	27.5	26.8	17.0	36.8	7.0	* 47	14.6	* 40				
Max Q Clear Time (g_c+11g), s	116.9	2.0	19.0	14.3	3.0	48.8	16.6	38.0				
Green Ext Time (p_c), s	0.2	12.3	0.0	4.6	0.4	0.0	0.0	1.2				

Intersection Summary

HCM 6th Ctrl Delay 46.7
HCM 6th LOS D

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

HCM 6th Signalized Intersection Summary

18: Barton Street & Van Buren Boulevard

Woodcrest Christian School Expansion

Cumulative (2045) WP AM MIT



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↰ ↱ ↲ ↳			↰ ↱ ↲ ↳			↰ ↱ ↲ ↳		↱	↰ ↱	↰ ↱	↰ ↱
Traffic Volume (veh/h)	209	1629	421	393	1962	37	454	116	483	91	172	375
Future Volume (veh/h)	209	1629	421	393	1962	37	454	116	483	91	172	375
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No			No			No		
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	220	1715	443	414	2065	39	478	122	508	96	181	395
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	1640	4874	1235	477	2048	39	459	646	547	97	136	296
Arrive On Green	0.91	1.00	1.00	0.14	0.39	0.39	0.13	0.34	0.34	0.05	0.26	0.26
Sat Flow, veh/h	1810	4125	1045	3510	5241	99	3510	1900	1610	1810	531	1160
Grp Volume(v), veh/h	220	1432	726	414	1362	742	478	122	508	96	0	576
Grp Sat Flow(s),veh/h/ln	1810	1729	1712	1755	1729	1882	1755	1900	1610	1810	0	1691
Q Serve(g_s), s	1.7	0.0	0.0	15.0	50.8	50.8	17.0	5.9	39.5	6.9	0.0	33.2
Cycle Q Clear(g_c), s	1.7	0.0	0.0	15.0	50.8	50.8	17.0	5.9	39.5	6.9	0.0	33.2
Prop In Lane	1.00		0.61	1.00		0.05	1.00		1.00	1.00		0.69
Lane Grp Cap(c), veh/h	1640	4086	2023	477	1351	736	459	646	547	97	0	432
V/C Ratio(X)	0.13	0.35	0.36	0.87	1.01	1.01	1.04	0.19	0.93	0.99	0.00	1.33
Avail Cap(c_a), veh/h	1640	4086	2023	878	1351	736	459	646	547	97	0	432
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.84	0.84	0.84	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	0.7	0.0	0.0	55.0	39.6	39.6	56.5	30.3	41.4	61.4	0.0	48.4
Incr Delay (d2), s/veh	0.0	0.2	0.4	1.9	26.3	35.5	53.1	0.1	22.3	86.0	0.0	165.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	0.1	0.2	6.6	25.1	29.2	10.7	2.7	18.4	5.5	0.0	33.9
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	0.7	0.2	0.4	56.9	65.9	75.1	109.6	30.4	63.6	147.5	0.0	213.7
LnGrp LOS	A	A	A	E	F	F	F	C	E	F	A	F
Approach Vol, veh/h	2378			2518			1108			672		
Approach Delay, s/veh	0.3			67.2			79.8			204.2		
Approach LOS	A			E			E			F		
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	32.2	164.0	22.0	39.0	128.2	58.0	11.0	50.0				
Change Period (Y+Rc), s	4.5	7.2	5.0	* 5.8	7.2	* 7.2	4.0	5.8				
Max Green Setting (Gmax), s	32.5	26.0	17.0	* 33	7.2	* 51	7.0	43.0				
Max Q Clear Time (g_c+117), s	117.0	2.0	19.0	35.2	3.7	52.8	8.9	41.5				
Green Ext Time (p_c), s	0.7	16.1	0.0	0.0	0.1	0.0	0.0	0.4				

Intersection Summary

HCM 6th Ctrl Delay 59.2

HCM 6th LOS E

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Intersection

Int Delay, s/veh 0

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↑↑↑			↑↑↑			↑			↑		
Traffic Vol, veh/h	0	2283	0	0	2677	8	0	0	0	0	0	0
Future Vol, veh/h	0	2283	0	0	2677	8	0	0	0	0	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	0	-	-	0
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	94	94	94	94	94	94	94	94	94	94	94	94
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	0	2429	0	0	2848	9	0	0	0	0	0	0

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	-	0	0	-	-	0	-	-	1215	-	-	1429
Stage 1	-	-	-	-	-	-	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-	-	-	-	-	-	-
Critical Hdwy	-	-	-	-	-	-	-	-	7.1	-	-	7.1
Critical Hdwy Stg 1	-	-	-	-	-	-	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-	-	-	-	-	-	-
Follow-up Hdwy	-	-	-	-	-	-	-	-	3.9	-	-	3.9
Pot Cap-1 Maneuver	0	-	-	0	-	-	0	0	*394	0	0	*293
Stage 1	0	-	-	0	-	-	0	0	-	0	0	-
Stage 2	0	-	-	0	-	-	0	0	-	0	0	-
Platoon blocked, %	-	-	-	-	-	-	-	-	1	-	-	1
Mov Cap-1 Maneuver	-	-	-	-	-	-	-	-	*394	-	-	*293
Mov Cap-2 Maneuver	-	-	-	-	-	-	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0	0	0	0
HCM LOS			A	A

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBT	WBR	SBLn1
Capacity (veh/h)	-	-	-	-	-	-
HCM Lane V/C Ratio	-	-	-	-	-	-
HCM Control Delay (s)	0	-	-	-	-	0
HCM Lane LOS	A	-	-	-	-	A
HCM 95th %tile Q(veh)	-	-	-	-	-	-

Notes

~: Volume exceeds capacity \$: Delay exceeds 300s +: Computation Not Defined *: All major volume in platoon

Intersection						
Int Delay, s/veh	4.7					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	188	49	41	354	215	77
Future Vol, veh/h	188	49	41	354	215	77
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	50	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	95	95	95	85	85	95
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	198	52	43	416	253	81
Major/Minor	Minor2	Major1		Major2		
Conflicting Flow All	796	294	334	0	-	0
Stage 1	294	-	-	-	-	-
Stage 2	502	-	-	-	-	-
Critical Hdwy	6.4	6.2	4.1	-	-	-
Critical Hdwy Stg 1	5.4	-	-	-	-	-
Critical Hdwy Stg 2	5.4	-	-	-	-	-
Follow-up Hdwy	3.5	3.3	2.2	-	-	-
Pot Cap-1 Maneuver	371	750	1237	-	-	-
Stage 1	761	-	-	-	-	-
Stage 2	654	-	-	-	-	-
Platoon blocked, %	1			-	-	-
Mov Cap-1 Maneuver	358	750	1237	-	-	-
Mov Cap-2 Maneuver	478	-	-	-	-	-
Stage 1	734	-	-	-	-	-
Stage 2	654	-	-	-	-	-
Approach	EB	NB		SB		
HCM Control Delay, s	18.3	0.8		0		
HCM LOS	C					
Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR	
Capacity (veh/h)	1237	-	517	-	-	
HCM Lane V/C Ratio	0.035	-	0.483	-	-	
HCM Control Delay (s)	8	-	18.3	-	-	
HCM Lane LOS	A	-	C	-	-	
HCM 95th %tile Q(veh)	0.1	-	2.6	-	-	

HCM 6th Signalized Intersection Summary

1: Washington Street & Van Buren Boulevard

Woodcrest Christian School Expansion
Cumulative (2045) WP Afternoon MIT

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		  			  			 		 	 	
Traffic Volume (veh/h)	165	1622	202	243	1718	709	153	408	196	770	567	124
Future Volume (veh/h)	165	1622	202	243	1718	709	153	408	196	770	567	124
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		0.99	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	174	1707	213	256	1808	746	161	429	206	811	597	131
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	188	2271	282	281	1983	760	220	500	221	834	1145	509
Arrive On Green	0.10	0.49	0.49	0.16	0.54	0.54	0.06	0.14	0.14	0.24	0.32	0.32
Sat Flow, veh/h	1810	4672	581	1810	3688	1414	3510	3610	1600	3510	3610	1606
Grp Volume(v), veh/h	174	1262	658	256	1687	867	161	429	206	811	597	131
Grp Sat Flow(s),veh/h/ln	1810	1729	1795	1810	1729	1644	1755	1805	1600	1755	1805	1606
Q Serve(g_s), s	12.4	38.4	38.7	18.1	57.2	67.2	5.9	15.1	16.6	29.8	17.6	7.9
Cycle Q Clear(g_c), s	12.4	38.4	38.7	18.1	57.2	67.2	5.9	15.1	16.6	29.8	17.6	7.9
Prop In Lane	1.00		0.32	1.00		0.86	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	188	1681	873	281	1859	884	220	500	221	834	1145	509
V/C Ratio(X)	0.93	0.75	0.75	0.91	0.91	0.98	0.73	0.86	0.93	0.97	0.52	0.26
Avail Cap(c_a), veh/h	188	1681	873	299	1859	884	473	500	221	834	1145	509
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	57.8	27.0	27.1	54.0	27.1	29.4	59.9	54.8	55.4	49.1	36.3	33.0
Incr Delay (d2), s/veh	45.0	3.1	6.0	29.2	7.9	26.1	4.6	13.9	41.5	24.4	0.4	0.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	8.6	23.5	25.2	11.5	32.5	37.7	3.0	8.7	16.4	17.5	10.8	8.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	102.8	30.2	33.1	83.2	35.1	55.5	64.5	68.7	96.9	73.5	36.7	33.2
LnGrp LOS	F	C	C	F	D	E	E	E	F	E	D	C
Approach Vol, veh/h		2094			2810			796			1539	
Approach Delay, s/veh		37.1			45.8			75.1			55.8	
Approach LOS		D			D			E			E	
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	24.7	70.1	12.7	47.0	18.0	76.8	35.9	23.8				
Change Period (Y+Rc), s	4.5	6.2	4.5	5.8	4.5	6.2	5.0	* 5.8				
Max Green Setting (Gmax), s	21.5	38.8	17.5	31.2	13.5	46.8	30.9	* 18				
Max Q Clear Time (g_c+I1), s	20.1	40.7	7.9	19.6	14.4	69.2	31.8	18.6				
Green Ext Time (p_c), s	0.1	0.0	0.3	3.2	0.0	0.0	0.0	0.0				

Intersection Summary

HCM 6th Ctrl Delay	48.6
HCM 6th LOS	D

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

HCM 6th Signalized Intersection Summary

Woodcrest Christian School Expansion

2: Alta Cresta Avenue/Chicago Avenue & Van Buren Boulevard

Cumulative (2045) WP Afternoon MIT



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	142	2384	189	59	2641	108	96	33	30	118	28	65
Future Volume (veh/h)	142	2384	189	59	2641	108	96	33	30	118	28	65
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		0.98	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No			No			No		
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	149	2509	199	62	2780	114	101	35	32	124	29	68
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	163	3407	1056	87	3142	127	120	61	56	136	39	90
Arrive On Green	0.09	0.66	0.66	0.06	0.82	0.82	0.07	0.07	0.07	0.08	0.08	0.08
Sat Flow, veh/h	1810	5187	1608	1810	5109	206	1810	912	834	1810	503	1179
Grp Volume(v), veh/h	149	2509	199	62	1868	1026	101	0	67	124	0	97
Grp Sat Flow(s),veh/h/ln	1810	1729	1608	1810	1729	1857	1810	0	1746	1810	0	1682
Q Serve(g_s), s	10.6	41.8	6.3	4.4	45.4	49.3	7.2	0.0	4.8	8.8	0.0	7.3
Cycle Q Clear(g_c), s	10.6	41.8	6.3	4.4	45.4	49.3	7.2	0.0	4.8	8.8	0.0	7.3
Prop In Lane	1.00		1.00	1.00		0.11	1.00		0.48	1.00		0.70
Lane Grp Cap(c), veh/h	163	3407	1056	87	2127	1142	120	0	118	136	0	129
V/C Ratio(X)	0.91	0.74	0.19	0.71	0.88	0.90	0.84	0.00	0.57	0.91	0.00	0.75
Avail Cap(c_a), veh/h	163	3407	1056	99	2127	1142	120	0	242	136	0	255
HCM Platoon Ratio	1.00	1.00	1.00	1.33	1.33	1.33	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	0.72	0.72	0.72	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	58.7	14.8	8.7	60.0	8.7	9.0	60.0	0.0	58.8	59.7	0.0	58.8
Incr Delay (d2), s/veh	46.5	1.5	0.4	13.8	4.1	8.4	39.3	0.0	4.3	50.6	0.0	8.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	7.5	30.6	9.8	2.6	34.9	39.7	5.0	0.0	2.6	6.4	0.0	3.8
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	105.2	16.3	9.1	73.8	12.8	17.5	99.3	0.0	63.1	110.2	0.0	67.4
LnGrp LOS	F	B	A	E	B	B	F	A	E	F	A	E
Approach Vol, veh/h	2857		2956				168			221		
Approach Delay, s/veh	20.4		15.7				84.9			91.4		
Approach LOS	C		B				F			F		
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	0.8	91.6	12.6	15.1	16.2	86.1	13.8	13.9				
Change Period (Y+Rc), s	4.5	6.2	4.0	* 5.1	4.5	6.2	4.0	5.1				
Max Green Setting (Gmax), s	75.3	8.6	* 20	11.7	70.7	9.8	18.0					
Max Q Clear Time (g_c+1/4), s	43.8	9.2	9.3	12.6	51.3	10.8	6.8					
Green Ext Time (p_c), s	0.0	24.5	0.0	0.3	0.0	17.2	0.0	0.2				

Intersection Summary

HCM 6th Ctrl Delay 22.4

HCM 6th LOS C

Notes

User approved ignoring U-Turning movement.

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

HCM 6th TWSC
4: Little Court & Van Buren Boulevard

Woodcrest Christian School Expansion
Cumulative (2045) WP Afternoon MIT

Intersection						
Int Delay, s/veh	0					
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑↑↑			↑↑↑		↗
Traffic Vol, veh/h	2625	5	0	2882	0	2
Future Vol, veh/h	2625	5	0	2882	0	2
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	-	0
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	95	95	95	95	95	95
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	2763	5	0	3034	0	2
Major/Minor	Major1	Major2		Minor1		
Conflicting Flow All	0	0	-	-	-	1384
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	-	-	-	-	7.1
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	-	-	-	-	3.9
Pot Cap-1 Maneuver	-	-	0	-	0	*313
Stage 1	-	-	0	-	0	-
Stage 2	-	-	0	-	0	-
Platoon blocked, %	-	-		-		1
Mov Cap-1 Maneuver	-	-	-	-	-	*313
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Approach	EB	WB		NB		
HCM Control Delay, s	0	0		16.6		
HCM LOS	C					
Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBT		
Capacity (veh/h)	313	-	-	-		
HCM Lane V/C Ratio	0.007	-	-	-		
HCM Control Delay (s)	16.6	-	-	-		
HCM Lane LOS	C	-	-	-		
HCM 95th %tile Q(veh)	0	-	-	-		
Notes						
~: Volume exceeds capacity		\$: Delay exceeds 300s		+: Computation Not Defined		*: All major volume in platoon

HCM 6th TWSC
5: Van Buren Boulevard & Ridgeway Avenue

Woodcrest Christian School Expansion
Cumulative (2045) WP Afternoon MIT

Intersection						
Int Delay, s/veh	0.9					
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations	↰	↑↑↑↑	↑↑↑↱			↱
Traffic Vol, veh/h	128	2499	2802	24	0	80
Future Vol, veh/h	128	2499	2802	24	0	80
Conflicting Peds, #/hr	3	0	0	3	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	0
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	95	95	95	95	95	95
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	135	2631	2949	25	0	84
Major/Minor	Major1	Major2		Minor2		
Conflicting Flow All	2977	0	-	0	-	1490
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	5.3	-	-	-	-	7.1
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	3.1	-	-	-	-	3.9
Pot Cap-1 Maneuver	*343	-	-	-	0	*272
Stage 1	-	-	-	-	0	-
Stage 2	-	-	-	-	0	-
Platoon blocked, %	1	-	-	-	-	1
Mov Cap-1 Maneuver	*342	-	-	-	-	*272
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Approach	EB	WB		SB		
HCM Control Delay, s	1.1	0		24.1		
HCM LOS	C					
Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1	
Capacity (veh/h)	* 342	-	-	-	-	272
HCM Lane V/C Ratio	0.394	-	-	-	-	0.31
HCM Control Delay (s)	22.2	-	-	-	-	24.1
HCM Lane LOS	C	-	-	-	-	C
HCM 95th %tile Q(veh)	1.8	-	-	-	-	1.3
Notes						
~: Volume exceeds capacity		\$: Delay exceeds 300s		+: Computation Not Defined		*: All major volume in platoon

HCM 6th Signalized Intersection Summary 6: Dauchy Avenue & Van Buren Boulevard

Woodcrest Christian School Expansion
Cumulative (2045) WP Afternoon MIT

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	94	2101	304	194	2437	81	327	111	225	111	64	76
Future Volume (veh/h)	94	2101	304	194	2437	81	327	111	225	111	64	76
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		0.99	0.98		0.98	0.99		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	99	2212	320	204	2565	85	344	117	237	117	67	80
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	123	2111	297	482	3484	115	397	124	252	170	429	355
Arrive On Green	0.02	0.15	0.15	0.53	1.00	1.00	0.05	0.23	0.23	0.05	0.23	0.23
Sat Flow, veh/h	1810	4589	646	1810	5157	170	1810	551	1117	1810	1900	1574
Grp Volume(v), veh/h	99	1652	880	204	1714	936	344	0	354	117	67	80
Grp Sat Flow(s),veh/h/ln	1810	1729	1777	1810	1729	1868	1810	0	1668	1810	1900	1574
Q Serve(g_s), s	7.1	59.8	59.8	8.8	0.0	0.0	7.0	0.0	27.1	6.5	3.7	5.4
Cycle Q Clear(g_c), s	7.1	59.8	59.8	8.8	0.0	0.0	7.0	0.0	27.1	6.5	3.7	5.4
Prop In Lane	1.00		0.36	1.00		0.09	1.00		0.67	1.00		1.00
Lane Grp Cap(c), veh/h	123	1591	817	482	2336	1262	397	0	376	170	429	355
V/C Ratio(X)	0.81	1.04	1.08	0.42	0.73	0.74	0.87	0.00	0.94	0.69	0.16	0.23
Avail Cap(c_a), veh/h	131	1591	817	482	2336	1262	397	0	385	170	438	363
HCM Platoon Ratio	0.33	0.33	0.33	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	0.09	0.09	0.09	0.86	0.00	0.86	1.00	1.00	1.00
Uniform Delay (d), s/veh	62.7	55.1	55.1	24.3	0.0	0.0	46.6	0.0	49.5	39.2	40.4	41.1
Incr Delay (d2), s/veh	25.9	33.3	54.1	0.0	0.2	0.4	15.2	0.0	27.8	9.2	0.2	0.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.5	36.1	41.8	7.4	31.0	33.9	20.2	0.0	15.7	4.7	2.4	5.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	88.6	88.4	109.2	24.3	0.2	0.4	61.8	0.0	77.3	48.4	40.6	41.4
LnGrp LOS	F	F	F	C	A	A	E	A	E	D	D	D
Approach Vol, veh/h		2631			2854			698			264	
Approach Delay, s/veh		95.4			2.0			69.6			44.3	
Approach LOS		F			A			E			D	
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	41.9	67.0	11.0	33.9	13.8	95.0	11.0	33.9				
Change Period (Y+Rc), s	7.2	* 7.2	4.0	4.6	5.0	7.2	4.0	4.6				
Max Green Setting (Gmax), s	12.4	* 60	7.0	30.0	9.4	62.8	7.0	30.0				
Max Q Clear Time (g_c+I1), s	10.8	61.8	9.0	7.4	9.1	2.0	8.5	29.1				
Green Ext Time (p_c), s	0.0	0.0	0.0	0.6	0.0	38.1	0.0	0.2				
Intersection Summary												
HCM 6th Ctrl Delay			49.2									
HCM 6th LOS			D									
Notes												
* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.												

HCM 6th Signalized Intersection Summary

Woodcrest Christian School Expansion

7: Dauchy Avenue & Project Driveway 2/Ardenwood Lane

Cumulative (2045) WP Afternoon MIT



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↰	↱		↰	↱		↰	↱		↰	↱
Traffic Volume (veh/h)	172	1	36	6	0	26	18	376	9	19	416	94
Future Volume (veh/h)	172	1	36	6	0	26	18	376	9	19	416	94
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No			No			No		
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	181	1	38	8	0	34	19	495	12	25	547	99
Peak Hour Factor	0.95	0.95	0.95	0.76	0.95	0.76	0.95	0.76	0.76	0.76	0.76	0.95
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	593	3	364	193	38	295	152	779	18	156	796	699
Arrive On Green	0.23	0.23	0.23	0.23	0.00	0.23	0.43	0.43	0.43	0.43	0.43	0.43
Sat Flow, veh/h	1424	11	1610	140	168	1306	26	1794	42	32	1833	1610
Grp Volume(v), veh/h	182	0	38	42	0	0	526	0	0	572	0	99
Grp Sat Flow(s),veh/h/ln	1435	0	1610	1614	0	0	1862	0	0	1865	0	1610
Q Serve(g_s), s	2.4	0.0	0.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.0
Cycle Q Clear(g_c), s	2.9	0.0	0.5	0.5	0.0	0.0	5.8	0.0	0.0	6.5	0.0	1.0
Prop In Lane	0.99		1.00	0.19		0.81	0.04		0.02	0.04		1.00
Lane Grp Cap(c), veh/h	595	0	364	526	0	0	949	0	0	952	0	699
V/C Ratio(X)	0.31	0.00	0.10	0.08	0.00	0.00	0.55	0.00	0.00	0.60	0.00	0.14
Avail Cap(c_a), veh/h	1230	0	1095	1236	0	0	1395	0	0	1397	0	1095
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	0.00	1.00	0.00	0.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	9.0	0.0	8.1	8.1	0.0	0.0	5.9	0.0	0.0	6.1	0.0	4.5
Incr Delay (d2), s/veh	0.3	0.0	0.1	0.1	0.0	0.0	0.5	0.0	0.0	0.6	0.0	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.4	0.0	0.3	0.3	0.0	0.0	4.0	0.0	0.0	4.4	0.0	0.7
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	9.3	0.0	8.2	8.2	0.0	0.0	6.4	0.0	0.0	6.7	0.0	4.6
LnGrp LOS	A	A	A	A	A	A	A	A	A	A	A	A
Approach Vol, veh/h		220			42			526			671	
Approach Delay, s/veh		9.1			8.2			6.4			6.4	
Approach LOS		A			A			A			A	
Timer - Assigned Phs		2		4		6		8				
Phs Duration (G+Y+Rc), s		16.0		10.5		16.0		10.5				
Change Period (Y+Rc), s		4.5		4.5		4.5		4.5				
Max Green Setting (Gmax), s		18.0		18.0		18.0		18.0				
Max Q Clear Time (g_c+I1), s		7.8		4.9		8.5		2.5				
Green Ext Time (p_c), s		2.6		0.9		3.0		0.1				
Intersection Summary												
HCM 6th Ctrl Delay				6.8								
HCM 6th LOS				A								

HCM 6th Signalized Intersection Summary

8: Taft Street/Dauchy Avenue & Krameria Avenue

Woodcrest Christian School Expansion
Cumulative (2045) WP Afternoon MIT



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↔			↔			↔			↔	
Traffic Volume (veh/h)	58	527	40	10	428	89	19	34	14	249	43	108
Future Volume (veh/h)	58	527	40	10	428	89	19	34	14	249	43	108
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.98	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No			No			No		
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	61	555	42	11	451	94	20	36	15	262	45	114
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	114	645	47	72	625	128	239	410	151	481	88	172
Arrive On Green	0.41	0.41	0.41	0.41	0.41	0.41	0.42	0.42	0.42	0.42	0.42	0.42
Sat Flow, veh/h	104	1565	114	12	1516	311	365	965	356	883	207	405
Grp Volume(v), veh/h	658	0	0	556	0	0	71	0	0	421	0	0
Grp Sat Flow(s),veh/h/ln	1783	0	0	1839	0	0	1686	0	0	1494	0	0
Q Serve(g_s), s	4.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	10.9	0.0	0.0
Cycle Q Clear(g_c), s	18.6	0.0	0.0	14.0	0.0	0.0	1.3	0.0	0.0	12.2	0.0	0.0
Prop In Lane	0.09		0.06	0.02		0.17	0.28		0.21	0.62		0.27
Lane Grp Cap(c), veh/h	806	0	0	825	0	0	799	0	0	740	0	0
V/C Ratio(X)	0.82	0.00	0.00	0.67	0.00	0.00	0.09	0.00	0.00	0.57	0.00	0.00
Avail Cap(c_a), veh/h	894	0	0	917	0	0	799	0	0	740	0	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	0.00	1.00	0.00	0.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	14.8	0.0	0.0	13.6	0.0	0.0	9.5	0.0	0.0	12.5	0.0	0.0
Incr Delay (d2), s/veh	5.5	0.0	0.0	1.7	0.0	0.0	0.2	0.0	0.0	3.2	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.3	0.0	0.0	8.9	0.0	0.0	1.1	0.0	0.0	7.1	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	20.2	0.0	0.0	15.3	0.0	0.0	9.7	0.0	0.0	15.7	0.0	0.0
LnGrp LOS	C	A	A	B	A	A	A	A	A	B	A	A
Approach Vol, veh/h	658		556			71			421			
Approach Delay, s/veh	20.2		15.3			9.7			15.7			
Approach LOS	C		B			A			B			
Timer - Assigned Phs	2		4			6			8			
Phs Duration (G+Y+Rc), s	27.8		27.2			27.8			27.2			
Change Period (Y+Rc), s	4.5		4.5			4.5			4.5			
Max Green Setting (Gmax), s	20.5		25.5			20.5			25.5			
Max Q Clear Time (g_c+I1), s	3.3		20.6			14.2			16.0			
Green Ext Time (p_c), s	0.3		2.1			1.5			2.7			
Intersection Summary												
HCM 6th Ctrl Delay			17.1									
HCM 6th LOS			B									

HCM 6th Signalized Intersection Summary

11: Trautwein Road & Mission Grove Parkway S

Woodcrest Christian School Expansion

Cumulative (2045) WP Afternoon MIT



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	48	13	16	680	20	57	6	1843	575	159	1881	41
Future Volume (veh/h)	48	13	16	680	20	57	6	1843	575	159	1881	41
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.97	1.00		0.99	1.00		0.98	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No			No			No		
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	51	14	17	716	21	60	6	1940	605	167	1980	43
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	82	87	105	532	438	367	19	1808	1035	118	2006	887
Arrive On Green	0.05	0.11	0.11	0.15	0.23	0.23	0.00	0.17	0.17	0.07	0.56	0.56
Sat Flow, veh/h	1810	769	933	3510	1900	1589	1810	3610	1580	1810	3610	1596
Grp Volume(v), veh/h	51	0	31	716	21	60	6	1940	605	167	1980	43
Grp Sat Flow(s),veh/h/ln	1810	0	1702	1755	1900	1589	1810	1805	1580	1810	1805	1596
Q Serve(g_s), s	3.6	0.0	2.1	19.7	1.1	3.9	0.4	65.1	33.1	8.5	70.2	1.6
Cycle Q Clear(g_c), s	3.6	0.0	2.1	19.7	1.1	3.9	0.4	65.1	33.1	8.5	70.2	1.6
Prop In Lane	1.00		0.55	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	82	0	192	532	438	367	19	1808	1035	118	2006	887
V/C Ratio(X)	0.62	0.00	0.16	1.35	0.05	0.16	0.32	1.07	0.58	1.41	0.99	0.05
Avail Cap(c_a), veh/h	170	0	419	532	617	516	104	1808	1035	118	2006	887
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	0.33	0.33	0.33	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	1.00	1.00	0.16	0.16	0.16	1.00	1.00	1.00
Uniform Delay (d), s/veh	61.0	0.0	52.1	55.2	38.9	40.0	64.3	54.3	22.8	60.8	28.4	13.2
Incr Delay (d2), s/veh	2.9	0.0	0.4	167.9	0.0	0.2	0.6	35.0	0.4	227.6	17.2	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.9	0.0	1.1	22.0	0.8	3.9	0.2	41.4	34.6	11.8	40.5	2.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	63.8	0.0	52.5	223.0	38.9	40.2	64.9	89.3	23.2	288.4	45.6	13.3
LnGrp LOS	E	A	D	F	D	D	E	F	C	F	D	B
Approach Vol, veh/h	82					797		2551		2190		
Approach Delay, s/veh	59.5					204.4		73.5		63.5		
Approach LOS	E					F		E		E		
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	3.0	71.3	25.2	20.5	5.9	78.4	9.9	35.8				
Change Period (Y+Rc), s	4.5	6.2	5.5	5.8	4.5	6.2	4.0	* 5.8				
Max Green Setting (Gmax), s	3.5	47.8	19.7	32.0	7.5	48.8	12.2	* 42				
Max Q Clear Time (g_c+110, s)	110.5	67.1	21.7	4.1	2.4	72.2	5.6	5.9				
Green Ext Time (p_c), s	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.3				

Intersection Summary

HCM 6th Ctrl Delay 88.0

HCM 6th LOS F

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

HCM 6th Signalized Intersection Summary

12: Trautwein Road & John F Kennedy Drive

Woodcrest Christian School Expansion
Cumulative (2045) WP Afternoon MIT



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	704	59	123	54	22	35	120	1707	97	17	1928	760
Future Volume (veh/h)	704	59	123	54	22	35	120	1707	97	17	1928	760
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		0.99	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No			No			No		
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	741	62	129	57	23	37	126	1797	102	18	2029	800
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	516	193	162	204	44	71	97	2155	960	47	2054	1151
Arrive On Green	0.15	0.10	0.10	0.11	0.07	0.07	0.05	0.60	0.60	0.05	1.00	1.00
Sat Flow, veh/h	3510	1900	1601	1810	652	1048	1810	3610	1607	1810	3610	1607
Grp Volume(v), veh/h	741	62	129	57	0	60	126	1797	102	18	2029	800
Grp Sat Flow(s),veh/h/ln	1755	1900	1601	1810	0	1700	1810	1805	1607	1810	1805	1607
Q Serve(g_s), s	19.1	3.9	8.9	3.8	0.0	4.4	7.0	51.9	1.7	1.3	0.0	0.0
Cycle Q Clear(g_c), s	19.1	3.9	8.9	3.8	0.0	4.4	7.0	51.9	1.7	1.3	0.0	0.0
Prop In Lane	1.00		1.00	1.00		0.62	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	516	193	162	204	0	116	97	2155	960	47	2054	1151
V/C Ratio(X)	1.44	0.32	0.80	0.28	0.00	0.52	1.29	0.83	0.11	0.39	0.99	0.70
Avail Cap(c_a), veh/h	516	626	527	204	0	432	97	2155	960	97	2054	1151
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00	2.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	0.00	1.00	0.61	0.61	0.61	0.20	0.20	0.20
Uniform Delay (d), s/veh	55.4	54.3	42.9	52.8	0.0	58.5	61.5	21.0	2.6	60.7	0.0	0.0
Incr Delay (d2), s/veh	207.4	1.0	8.5	0.7	0.0	3.6	170.4	2.5	0.1	1.0	6.5	0.7
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	24.2	2.3	8.7	2.1	0.0	2.3	8.1	33.2	4.4	0.7	38.4	29.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	262.8	55.2	51.4	53.6	0.0	62.1	231.9	23.5	2.7	61.7	6.5	0.7
LnGrp LOS	F	E	D	D	A	E	F	C	A	E	A	A
Approach Vol, veh/h	932			117			2025			2847		
Approach Delay, s/veh	219.8			57.9			35.4			5.2		
Approach LOS	F			E			D			A		
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	7.3	84.8	20.1	17.8	11.0	81.2	23.6	14.2				
Change Period (Y+Rc), s	4.0	7.2	5.4	* 4.6	4.0	7.2	4.5	5.4				
Max Green Setting (Gmax), s	7.0	49.8	10.6	* 43	7.0	49.8	19.1	33.0				
Max Q Clear Time (g_c+13, s)	13.3	53.9	5.8	10.9	9.0	2.0	21.1	6.4				
Green Ext Time (p_c), s	0.0	0.0	0.0	0.7	0.0	32.8	0.0	0.3				

Intersection Summary

HCM 6th Ctrl Delay 50.4
HCM 6th LOS D

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

HCM 6th Signalized Intersection Summary 14: Trautwein Road & Orange Terrace Pkwy

Woodcrest Christian School Expansion
Cumulative (2045) WP Afternoon MIT

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	54	44	25	212	15	304	40	1392	291	329	1416	24
Future Volume (veh/h)	54	44	25	212	15	304	40	1392	291	329	1416	24
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		0.97	1.00		0.99	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No			No			No		
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	57	46	26	223	16	320	42	1465	306	346	1491	25
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	162	73	42	250	207	613	76	1893	837	390	2170	956
Arrive On Green	0.09	0.06	0.06	0.14	0.11	0.11	0.06	0.70	0.70	0.22	1.00	1.00
Sat Flow, veh/h	1810	1138	643	1810	1900	2736	1810	3610	1596	3510	3610	1590
Grp Volume(v), veh/h	57	0	72	223	16	320	42	1465	306	346	1491	25
Grp Sat Flow(s),veh/h/ln	1810	0	1781	1810	1900	1368	1810	1805	1596	1755	1805	1590
Q Serve(g_s), s	3.8	0.0	5.1	15.7	1.0	9.8	2.9	34.7	10.1	12.4	0.0	0.0
Cycle Q Clear(g_c), s	3.8	0.0	5.1	15.7	1.0	9.8	2.9	34.7	10.1	12.4	0.0	0.0
Prop In Lane	1.00		0.36	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	162	0	115	250	207	613	76	1893	837	390	2170	956
V/C Ratio(X)	0.35	0.00	0.63	0.89	0.08	0.52	0.55	0.77	0.37	0.89	0.69	0.03
Avail Cap(c_a), veh/h	362	0	452	434	576	1144	97	1893	837	405	2170	956
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.33	1.33	1.33	2.00	2.00	2.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	1.00	1.00	0.51	0.51	0.51	0.75	0.75	0.75
Uniform Delay (d), s/veh	55.6	0.0	59.3	55.0	52.1	25.4	60.2	14.6	10.9	49.7	0.0	0.0
Incr Delay (d2), s/veh	0.5	0.0	5.5	5.5	0.2	0.7	1.2	1.6	0.6	15.2	1.4	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.1	0.0	2.8	8.4	0.6	9.1	1.5	26.8	14.5	7.1	27.3	0.9
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	56.1	0.0	64.8	60.5	52.2	26.1	61.4	16.3	11.5	64.9	1.4	0.0
LnGrp LOS	E	A	E	E	D	C	E	B	B	E	A	A
Approach Vol, veh/h	129				559		1813				1862	
Approach Delay, s/veh	60.9				40.6		16.5				13.2	
Approach LOS	E				D		B				B	
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	9.5	74.4	22.0	14.2	9.5	84.3	17.4	18.7				
Change Period (Y+Rc), s	5.0	6.2	4.0	5.8	4.0	6.2	5.8	* 4.6				
Max Green Setting (Gmax), s	15.0	29.8	31.2	33.0	7.0	38.8	26.0	* 39				
Max Q Clear Time (g_c+14.4), s	14.4	36.7	17.7	7.1	4.9	2.0	5.8	11.8				
Green Ext Time (p_c), s	0.0	0.0	0.3	0.3	0.0	13.6	0.1	1.4				
Intersection Summary												
HCM 6th Ctrl Delay	19.5											
HCM 6th LOS	B											
Notes												

HCM 6th Signalized Intersection Summary

16: Trautwein Road & Van Buren Boulevard

Woodcrest Christian School Expansion
Cumulative (2045) WP Afternoon MIT



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	556	1379	226	192	1800	701	203	509	112	531	578	420
Future Volume (veh/h)	556	1379	226	192	1800	701	203	509	112	531	578	420
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		0.99	1.00		0.96	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No			No			No		
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	585	1452	238	202	1895	738	214	536	118	559	608	442
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	432	1615	264	195	1788	733	225	741	162	394	839	565
Arrive On Green	0.25	0.72	0.72	0.07	0.23	0.23	0.12	0.25	0.25	0.19	0.39	0.39
Sat Flow, veh/h	3510	4487	734	1810	5187	1602	1810	2922	640	3510	3610	1577
Grp Volume(v), veh/h	585	1119	571	202	1895	738	214	330	324	559	608	442
Grp Sat Flow(s),veh/h/ln	1755	1729	1763	1810	1729	1602	1810	1805	1757	1755	1805	1577
Q Serve(g_s), s	16.0	33.3	33.5	14.0	44.8	36.1	15.3	21.7	21.9	14.6	18.6	11.2
Cycle Q Clear(g_c), s	16.0	33.3	33.5	14.0	44.8	36.1	15.3	21.7	21.9	14.6	18.6	11.2
Prop In Lane	1.00		0.42	1.00		1.00	1.00		0.36	1.00		1.00
Lane Grp Cap(c), veh/h	432	1245	635	195	1788	733	225	458	446	394	839	565
V/C Ratio(X)	1.35	0.90	0.90	1.04	1.06	1.01	0.95	0.72	0.73	1.42	0.72	0.78
Avail Cap(c_a), veh/h	432	1245	635	195	1788	733	225	555	541	394	1050	657
HCM Platoon Ratio	2.00	2.00	2.00	0.67	0.67	0.67	1.00	1.00	1.00	1.67	1.67	1.67
Upstream Filter(I)	0.85	0.85	0.85	0.42	0.42	0.42	1.00	1.00	1.00	0.72	0.72	0.72
Uniform Delay (d), s/veh	49.0	16.3	16.3	60.3	50.0	21.1	56.5	44.3	44.4	52.8	36.2	27.8
Incr Delay (d2), s/veh	171.5	9.1	16.0	51.3	33.1	23.3	45.8	3.6	3.9	198.6	1.4	3.9
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	8.1	21.7	23.4	9.8	27.0	42.3	10.6	12.4	12.2	18.0	11.1	19.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	220.4	25.4	32.4	111.6	83.1	44.3	102.3	47.9	48.2	251.4	37.6	31.7
LnGrp LOS	F	C	C	F	F	F	F	D	D	F	D	C
Approach Vol, veh/h	2275			2835			868			1609		
Approach Delay, s/veh	77.3			75.1			61.4			110.3		
Approach LOS	E			E			E			F		
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	9.0	53.0	21.6	36.4	21.0	51.0	19.6	38.4				
Change Period (Y+Rc), s	5.0	* 6.2	5.4	* 6.2	5.0	6.2	5.0	5.4				
Max Green Setting (Gmax), s	5	* 47	16.0	* 38	9.0	44.8	14.6	40.0				
Max Q Clear Time (g_c+11g), s	11.0	35.5	17.3	20.6	18.0	46.8	16.6	23.9				
Green Ext Time (p_c), s	0.0	7.4	0.0	4.9	0.0	0.0	0.0	3.4				

Intersection Summary

HCM 6th Ctrl Delay	81.6
HCM 6th LOS	F

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

HCM 6th Signalized Intersection Summary

18: Barton Street & Van Buren Boulevard

Woodcrest Christian School Expansion
Cumulative (2045) WP Afternoon MIT



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↰ ↱ ↱ ↱			↰ ↱ ↱ ↱			↰ ↱		↱	↰ ↱		↱ ↱
Traffic Volume (veh/h)	154	1498	420	369	1938	95	626	81	323	54	53	218
Future Volume (veh/h)	154	1498	420	369	1938	95	626	81	323	54	53	218
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No			No			No		
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	162	1577	442	388	2040	100	659	85	340	57	56	229
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	130	1357	375	1839	4081	199	713	661	560	87	60	247
Arrive On Green	0.07	0.34	0.34	0.52	0.81	0.81	0.20	0.35	0.35	0.05	0.19	0.19
Sat Flow, veh/h	1810	4039	1117	3510	5066	247	3510	1900	1609	1810	326	1332
Grp Volume(v), veh/h	162	1347	672	388	1390	750	659	85	340	57	0	285
Grp Sat Flow(s),veh/h/ln	1810	1729	1698	1755	1729	1855	1755	1900	1609	1810	0	1658
Q Serve(g_s), s	9.0	42.0	42.0	7.4	16.3	16.5	23.0	3.8	15.9	3.9	0.0	21.1
Cycle Q Clear(g_c), s	9.0	42.0	42.0	7.4	16.3	16.5	23.0	3.8	15.9	3.9	0.0	21.1
Prop In Lane	1.00		0.66	1.00		0.13	1.00		1.00	1.00		0.80
Lane Grp Cap(c), veh/h	130	1162	570	1839	2786	1495	713	661	560	87	0	307
V/C Ratio(X)	1.24	1.16	1.18	0.21	0.50	0.50	0.92	0.13	0.61	0.65	0.00	0.93
Avail Cap(c_a), veh/h	130	1162	570	1839	2786	1495	758	661	560	101	0	308
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.82	0.82	0.82	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	58.0	41.5	41.5	15.9	4.0	4.0	48.9	27.8	17.8	58.5	0.0	50.1
Incr Delay (d2), s/veh	151.4	80.0	94.5	0.0	0.6	1.2	15.9	0.1	1.9	7.2	0.0	33.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	33.1	34.8	6.7	24.4	26.5	13.0	3.0	17.7	2.2	0.0	12.7
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	209.4	121.5	136.0	15.9	4.6	5.2	64.8	27.9	19.7	65.7	0.0	83.2
LnGrp LOS	F	F	F	B	A	A	E	C	B	E	A	F
Approach Vol, veh/h	2181				2528				1084		342	
Approach Delay, s/veh	132.5				6.5				47.8		80.3	
Approach LOS	F				A				D		F	
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	33.0	49.2	30.4	29.0	14.0	108.2	10.0	49.3				
Change Period (Y+Rc), s	7.2	* 7.2	5.0	* 5.8	5.0	7.2	4.0	5.8				
Max Green Setting (Gmax), s	1.5	* 42	27.0	* 23	9.0	44.0	7.0	43.0				
Max Q Clear Time (g_c+19.4), s	19.4	44.0	25.0	23.1	11.0	18.5	5.9	17.9				
Green Ext Time (p_c), s	0.2	0.0	0.4	0.0	0.0	16.4	0.0	1.6				

Intersection Summary

HCM 6th Ctrl Delay 62.7

HCM 6th LOS E

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Intersection												
Int Delay, s/veh	0											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↑↑↑			↑↑↑			↑			↑		
Traffic Vol, veh/h	0	2499	0	0	2824	16	0	0	0	0	0	2
Future Vol, veh/h	0	2499	0	0	2824	16	0	0	0	0	0	2
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	0	-	-	0
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	0	2716	0	0	3070	17	0	0	0	0	0	2
Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	-	0	0	-	-	0	-	-	1358	-	-	1544
Stage 1	-	-	-	-	-	-	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-	-	-	-	-	-	-
Critical Hdwy	-	-	-	-	-	-	-	-	7.1	-	-	7.1
Critical Hdwy Stg 1	-	-	-	-	-	-	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-	-	-	-	-	-	-
Follow-up Hdwy	-	-	-	-	-	-	-	-	3.9	-	-	3.9
Pot Cap-1 Maneuver	0	-	-	0	-	-	0	0	*333	0	0	*252
Stage 1	0	-	-	0	-	-	0	0	-	0	0	-
Stage 2	0	-	-	0	-	-	0	0	-	0	0	-
Platoon blocked, %	-	-	-	-	-	-	-	-	1	-	-	1
Mov Cap-1 Maneuver	-	-	-	-	-	-	-	-	*333	-	-	*252
Mov Cap-2 Maneuver	-	-	-	-	-	-	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-	-	-	-	-	-	-
Approach	EB			WB			NB			SB		
HCM Control Delay, s	0			0			0			19.4		
HCM LOS							A			C		
Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBT	WBR	SBLn1						
Capacity (veh/h)	-	-	-	-	-	252						
HCM Lane V/C Ratio	-	-	-	-	-	0.009						
HCM Control Delay (s)	0	-	-	-	-	19.4						
HCM Lane LOS	A	-	-	-	-	C						
HCM 95th %tile Q(veh)	-	-	-	-	-	0						
Notes												
~: Volume exceeds capacity		\$: Delay exceeds 300s				+: Computation Not Defined				*: All major volume in platoon		

Intersection						
Int Delay, s/veh	4.2					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	168	50	16	247	341	27
Future Vol, veh/h	168	50	16	247	341	27
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	50	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	95	95	95	80	80	95
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	177	53	17	309	426	28
Major/Minor	Minor2	Major1		Major2		
Conflicting Flow All	783	440	454	0	-	0
Stage 1	440	-	-	-	-	-
Stage 2	343	-	-	-	-	-
Critical Hdwy	6.4	6.2	4.1	-	-	-
Critical Hdwy Stg 1	5.4	-	-	-	-	-
Critical Hdwy Stg 2	5.4	-	-	-	-	-
Follow-up Hdwy	3.5	3.3	2.2	-	-	-
Pot Cap-1 Maneuver	370	621	1117	-	-	-
Stage 1	653	-	-	-	-	-
Stage 2	771	-	-	-	-	-
Platoon blocked, %	1			-	-	-
Mov Cap-1 Maneuver	365	621	1117	-	-	-
Mov Cap-2 Maneuver	484	-	-	-	-	-
Stage 1	643	-	-	-	-	-
Stage 2	771	-	-	-	-	-
Approach	EB	NB		SB		
HCM Control Delay, s	17.7	0.4		0		
HCM LOS	C					
Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR	
Capacity (veh/h)	1117	-	510	-	-	
HCM Lane V/C Ratio	0.015	-	0.45	-	-	
HCM Control Delay (s)	8.3	-	17.7	-	-	
HCM Lane LOS	A	-	C	-	-	
HCM 95th %tile Q(veh)	0	-	2.3	-	-	

APPENDIX E

ENROLLMENT PROJECTS AND INTERIM TRIP GENERATION

Middle School - High School Enrollment Projection 11/8/22



Grade	Campus	2021-22	2022-23	2023-24	2024-25	2025-26	2026-27	2027-28	2028-29	2029-30	2030-31
9th - 12th	Van Buren Campus	382	393	451	484	506	538	570	602	634	668
7th - 8th	Van Buren Campus	265	287	292	295	300	300	305	310	315	320
TOTALS		647	680	743	779	806	838	875	912	949	988

APPENDIX F

QUEUING ANALYSIS WORKSHEETS

Queues
6: Dauchy Avenue & Van Buren Boulevard

Woodcrest Christian School Expansion

Existing (2021) Without Project AM



Lane Group	EBL	EBT	WBL	WBT	WBR	NBL	NBT	SBL	SBT	SBR
Lane Group Flow (vph)	20	1350	163	1596	16	249	187	39	47	24
v/c Ratio	0.20	0.70	0.73	0.66	0.01	0.86	0.55	0.22	0.36	0.09
Control Delay	48.4	33.6	72.8	15.6	0.0	74.6	19.2	43.0	65.1	0.7
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	48.4	33.6	72.8	15.6	0.0	74.6	19.2	43.0	65.1	0.7
Queue Length 50th (ft)	0	454	124	217	0	191	27	26	39	0
Queue Length 95th (ft)	m32	423	m121	m770	m0	#289	100	56	78	0
Internal Link Dist (ft)		483		2566			678		609	
Turn Bay Length (ft)	305		420		375	65		75		55
Base Capacity (vph)	100	1930	319	2425	1114	291	501	288	438	490
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.20	0.70	0.51	0.66	0.01	0.86	0.37	0.14	0.11	0.05

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

m Volume for 95th percentile queue is metered by upstream signal.

Queuing and Blocking Report

Intersection: 7: Dauchy Avenue & Project Driveway 2/Ardenwood Lane

Movement	EB	WB	NB	SB
Directions Served	LTR	LTR	LTR	LT
Maximum Queue (ft)	108	49	68	43
Average Queue (ft)	41	19	16	2
95th Queue (ft)	78	44	52	16
Link Distance (ft)	732	538	63	666
Upstream Blk Time (%)			0	
Queuing Penalty (veh)			1	
Storage Bay Dist (ft)				
Storage Blk Time (%)				
Queuing Penalty (veh)				

Queuing and Blocking Report

Intersection: 8: Taft Street/Dauchy Avenue & Krameria Avenue

Movement	EB	WB	NB	SB
Directions Served	LTR	LTR	LTR	LTR
Maximum Queue (ft)	158	225	31	56
Average Queue (ft)	71	97	23	44
95th Queue (ft)	112	177	45	67
Link Distance (ft)	1157	955	779	1295
Upstream Blk Time (%)				
Queuing Penalty (veh)				
Storage Bay Dist (ft)				
Storage Blk Time (%)				
Queuing Penalty (veh)				

Queuing and Blocking Report

Intersection: 20: Dauchy Avenue & Project Driveway 3

Movement	NB
Directions Served	LT
Maximum Queue (ft)	119
Average Queue (ft)	13
95th Queue (ft)	57
Link Distance (ft)	173
Upstream Blk Time (%)	
Queuing Penalty (veh)	
Storage Bay Dist (ft)	
Storage Blk Time (%)	
Queuing Penalty (veh)	

Queuing and Blocking Report

Intersection: 21: Dauchy Avenue & Project Driveway 4

Movement	EB	NB
Directions Served	LR	LT
Maximum Queue (ft)	104	56
Average Queue (ft)	57	10
95th Queue (ft)	94	41
Link Distance (ft)	452	84
Upstream Blk Time (%)		
Queuing Penalty (veh)		
Storage Bay Dist (ft)		
Storage Blk Time (%)		
Queuing Penalty (veh)		

Queues
6: Dauchy Avenue & Van Buren Boulevard

Woodcrest Christian School Expansion
Existing (2021) Without Project Afternoon



Lane Group	EBL	EBT	WBL	WBT	WBR	NBL	NBT	SBL	SBT	SBR
Lane Group Flow (vph)	72	1648	112	1600	29	211	194	67	30	48
v/c Ratio	0.51	0.81	0.60	0.73	0.03	0.89	0.74	0.42	0.13	0.17
Control Delay	81.7	13.5	77.1	15.0	0.5	84.7	53.5	48.7	49.6	1.3
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	81.7	13.5	77.1	15.0	0.5	84.7	53.5	48.7	49.6	1.3
Queue Length 50th (ft)	61	361	84	576	0	160	109	47	23	0
Queue Length 95th (ft)	m84	#612	m103	792	m0	226	183	83	50	0
Internal Link Dist (ft)		483		2566			678		609	
Turn Bay Length (ft)	305		420		375	65		75		55
Base Capacity (vph)	142	2046	188	2178	968	237	444	160	438	445
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.51	0.81	0.60	0.73	0.03	0.89	0.44	0.42	0.07	0.11

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

m Volume for 95th percentile queue is metered by upstream signal.

Queuing and Blocking Report**Intersection: 7: Dauchy Avenue & Project Driveway 2/Ardenwood Lane**

Movement	EB	WB	NB	SB
Directions Served	LTR	LTR	LTR	LT
Maximum Queue (ft)	76	50	25	19
Average Queue (ft)	34	19	5	1
95th Queue (ft)	61	44	21	7
Link Distance (ft)	732	538	63	666
Upstream Blk Time (%)				
Queuing Penalty (veh)				
Storage Bay Dist (ft)				
Storage Blk Time (%)				
Queuing Penalty (veh)				

Queuing and Blocking Report

Intersection: 8: Taft Street/Dauchy Avenue & Krameria Avenue

Movement	EB	WB	NB	SB
Directions Served	LTR	LTR	LTR	LTR
Maximum Queue (ft)	101	102	54	124
Average Queue (ft)	62	60	21	55
95th Queue (ft)	92	95	49	89
Link Distance (ft)	1157	955	779	1295
Upstream Blk Time (%)				
Queuing Penalty (veh)				
Storage Bay Dist (ft)				
Storage Blk Time (%)				
Queuing Penalty (veh)				

Queuing and Blocking Report

Intersection: 20: Dauchy Avenue & Project Driveway 3

Movement	NB
Directions Served	LT
Maximum Queue (ft)	31
Average Queue (ft)	4
95th Queue (ft)	22
Link Distance (ft)	173
Upstream Blk Time (%)	
Queuing Penalty (veh)	
Storage Bay Dist (ft)	
Storage Blk Time (%)	
Queuing Penalty (veh)	

Queuing and Blocking Report

Intersection: 21: Dauchy Avenue & Project Driveway 4

Movement	EB	NB
Directions Served	LR	LT
Maximum Queue (ft)	77	31
Average Queue (ft)	47	1
95th Queue (ft)	71	11
Link Distance (ft)	452	84
Upstream Blk Time (%)		
Queuing Penalty (veh)		
Storage Bay Dist (ft)		
Storage Blk Time (%)		
Queuing Penalty (veh)		

Queues
6: Dauchy Avenue & Van Buren Boulevard

Woodcrest Christian School Expansion
Opening Year (2029) Without Project AM



Lane Group	EBL	EBT	WBL	WBT	WBR	NBL	NBT	SBL	SBT	SBR
Lane Group Flow (vph)	35	2175	199	2245	55	336	239	95	64	41
v/c Ratio	0.32	1.26	0.58	0.95	0.05	1.35	0.78	0.60	0.31	0.15
Control Delay	56.7	161.1	55.4	18.8	1.0	223.5	40.3	59.6	54.8	1.1
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	56.7	161.1	55.4	18.8	1.0	223.5	40.3	59.6	54.8	1.1
Queue Length 50th (ft)	27	~1152	116	1038	1	~376	80	69	51	0
Queue Length 95th (ft)	m32	#1292	m97	m727	m0	#478	153	110	90	0
Internal Link Dist (ft)		483		2566			678		609	
Turn Bay Length (ft)	305		420		375	65		75		55
Base Capacity (vph)	108	1722	342	2357	1085	248	490	158	438	458
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.32	1.26	0.58	0.95	0.05	1.35	0.49	0.60	0.15	0.09

Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.

Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

m Volume for 95th percentile queue is metered by upstream signal.

Queuing and Blocking Report**Intersection: 7: Dauchy Avenue & Project Driveway 2/Ardenwood Lane**

Movement	EB	WB	NB	SB
Directions Served	LTR	LTR	LTR	LT
Maximum Queue (ft)	747	553	74	124
Average Queue (ft)	621	353	67	9
95th Queue (ft)	987	677	82	51
Link Distance (ft)	732	538	63	666
Upstream Blk Time (%)	71	40	60	
Queuing Penalty (veh)	0	0	269	
Storage Bay Dist (ft)				
Storage Blk Time (%)				0
Queuing Penalty (veh)				1

Queuing and Blocking Report

Intersection: 8: Taft Street/Dauchy Avenue & Krameria Avenue

Movement	EB	WB	NB	SB
Directions Served	LTR	LTR	LTR	LTR
Maximum Queue (ft)	195	276	53	96
Average Queue (ft)	84	124	27	44
95th Queue (ft)	143	232	49	82
Link Distance (ft)	1157	955	779	1295
Upstream Blk Time (%)				
Queuing Penalty (veh)				
Storage Bay Dist (ft)				
Storage Blk Time (%)				
Queuing Penalty (veh)				

Queuing and Blocking Report

Intersection: 20: Dauchy Avenue & Project Driveway 3

Movement	NB
Directions Served	LT
Maximum Queue (ft)	188
Average Queue (ft)	170
95th Queue (ft)	241
Link Distance (ft)	173
Upstream Blk Time (%)	53
Queuing Penalty (veh)	236
Storage Bay Dist (ft)	
Storage Blk Time (%)	
Queuing Penalty (veh)	

Queuing and Blocking Report

Intersection: 21: Dauchy Avenue & Project Driveway 4

Movement	EB	NB	SB
Directions Served	LR	LT	TR
Maximum Queue (ft)	467	104	30
Average Queue (ft)	362	82	1
95th Queue (ft)	614	136	10
Link Distance (ft)	452	84	173
Upstream Blk Time (%)	67	42	
Queuing Penalty (veh)	0	155	
Storage Bay Dist (ft)			
Storage Blk Time (%)			
Queuing Penalty (veh)			

Queues
6: Dauchy Avenue & Van Buren Boulevard

Woodcrest Christian School Expansion
Opening Year (2029) Without Project Afternoon



Lane Group	EBL	EBT	WBL	WBT	WBR	NBL	NBT	SBL	SBT	SBR
Lane Group Flow (vph)	97	2464	143	2523	84	295	248	115	42	68
v/c Ratio	0.58	1.38	0.60	1.29	0.10	0.99	0.79	0.69	0.15	0.21
Control Delay	59.6	211.4	58.8	158.7	4.0	97.1	55.9	62.0	46.3	3.1
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	59.6	211.4	58.8	158.7	4.0	97.1	55.9	62.0	46.3	3.1
Queue Length 50th (ft)	72	~1328	92	~1484	15	~233	147	79	31	0
Queue Length 95th (ft)	m79	m#1340	m79	m808	m9	#322	217	123	62	9
Internal Link Dist (ft)		483		2566			678		609	
Turn Bay Length (ft)	305		420		375	65		75		55
Base Capacity (vph)	168	1780	240	1953	878	299	445	167	438	445
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.58	1.38	0.60	1.29	0.10	0.99	0.56	0.69	0.10	0.15

Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.

Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

m Volume for 95th percentile queue is metered by upstream signal.

Queuing and Blocking Report

Intersection: 7: Dauchy Avenue & Project Driveway 2/Ardenwood Lane

Movement	EB	WB	NB	SB
Directions Served	LTR	LTR	LTR	LT
Maximum Queue (ft)	747	117	87	222
Average Queue (ft)	469	35	53	11
95th Queue (ft)	898	85	93	81
Link Distance (ft)	732	538	63	666
Upstream Blk Time (%)	34		25	
Queuing Penalty (veh)	0		82	
Storage Bay Dist (ft)				
Storage Blk Time (%)				2
Queuing Penalty (veh)				2

Queuing and Blocking Report

Intersection: 8: Taft Street/Dauchy Avenue & Krameria Avenue

Movement	EB	WB	NB	SB
Directions Served	LTR	LTR	LTR	LTR
Maximum Queue (ft)	207	260	56	101
Average Queue (ft)	82	96	28	57
95th Queue (ft)	147	197	46	93
Link Distance (ft)	1157	955	779	1295
Upstream Blk Time (%)				
Queuing Penalty (veh)				
Storage Bay Dist (ft)				
Storage Blk Time (%)				
Queuing Penalty (veh)				

Queuing and Blocking Report

Intersection: 20: Dauchy Avenue & Project Driveway 3

Movement	NB	SB
Directions Served	LT	TR
Maximum Queue (ft)	185	162
Average Queue (ft)	70	6
95th Queue (ft)	176	55
Link Distance (ft)	173	63
Upstream Blk Time (%)	4	0
Queuing Penalty (veh)	13	1
Storage Bay Dist (ft)		
Storage Blk Time (%)		
Queuing Penalty (veh)		

Queuing and Blocking Report

Intersection: 21: Dauchy Avenue & Project Driveway 4

Movement	EB	NB
Directions Served	LR	LT
Maximum Queue (ft)	200	92
Average Queue (ft)	56	11
95th Queue (ft)	120	52
Link Distance (ft)	452	84
Upstream Blk Time (%)		2
Queuing Penalty (veh)		3
Storage Bay Dist (ft)		
Storage Blk Time (%)		
Queuing Penalty (veh)		

Queues
6: Dauchy Avenue & Van Buren Boulevard

Woodcrest Christian School Expansion
Opening Year (2029) With Project AM



Lane Group	EBL	EBT	WBL	WBT	WBR	NBL	NBT	SBL	SBT	SBR
Lane Group Flow (vph)	35	2232	300	2245	55	380	316	95	66	41
v/c Ratio	0.35	1.30	1.16	1.02	0.05	1.24	0.85	0.61	0.23	0.12
Control Delay	59.3	176.5	127.5	32.3	1.7	173.1	48.5	54.6	47.2	0.7
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	59.3	176.5	127.5	32.3	1.7	173.1	48.5	54.6	47.2	0.7
Queue Length 50th (ft)	27	~1253	~293	~1135	2	~376	141	64	49	0
Queue Length 95th (ft)	m33	#1343	m#248	m703	m0	#442	210	101	85	0
Internal Link Dist (ft)		483		2566			678		609	
Turn Bay Length (ft)	305		420		375	65		75		55
Base Capacity (vph)	100	1718	258	2205	1021	306	487	157	438	458
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.35	1.30	1.16	1.02	0.05	1.24	0.65	0.61	0.15	0.09

Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.

Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

m Volume for 95th percentile queue is metered by upstream signal.

Queuing and Blocking Report

Intersection: 7: Dauchy Avenue & Project Driveway 2/Ardenwood Lane

Movement	EB	EB	WB	NB	SB
Directions Served	LT	R	LTR	LTR	LT
Maximum Queue (ft)	629	644	553	80	38
Average Queue (ft)	600	594	444	76	4
95th Queue (ft)	667	802	706	81	21
Link Distance (ft)	629	629	538	71	667
Upstream Blk Time (%)	90	88	62	67	
Queuing Penalty (veh)	0	0	0	343	
Storage Bay Dist (ft)					
Storage Blk Time (%)					
Queuing Penalty (veh)					

Queuing and Blocking Report**Intersection: 8: Taft Street/Dauchy Avenue & Krameria Avenue**

Movement	EB	WB	NB	SB
Directions Served	LTR	LTR	LTR	LTR
Maximum Queue (ft)	260	259	53	74
Average Queue (ft)	92	114	30	37
95th Queue (ft)	160	193	45	63
Link Distance (ft)	1157	955	779	1295
Upstream Blk Time (%)				
Queuing Penalty (veh)				
Storage Bay Dist (ft)				
Storage Blk Time (%)				
Queuing Penalty (veh)				

Queuing and Blocking Report

Intersection: 20: Dauchy Avenue & Project Driveway 3

Movement	NB
Directions Served	LT
Maximum Queue (ft)	190
Average Queue (ft)	181
95th Queue (ft)	193
Link Distance (ft)	173
Upstream Blk Time (%)	65
Queuing Penalty (veh)	336
Storage Bay Dist (ft)	
Storage Blk Time (%)	
Queuing Penalty (veh)	

Queuing and Blocking Report

Intersection: 21: Dauchy Avenue & Project Driveway 4

Movement	EB	NB
Directions Served	LR	LT
Maximum Queue (ft)	467	104
Average Queue (ft)	445	94
95th Queue (ft)	522	125
Link Distance (ft)	452	84
Upstream Blk Time (%)	93	61
Queuing Penalty (veh)	0	233
Storage Bay Dist (ft)		
Storage Blk Time (%)		
Queuing Penalty (veh)		

Queues
6: Dauchy Avenue & Van Buren Boulevard

Woodcrest Christian School Expansion
Opening Year (2029) With Project Afternoon



Lane Group	EBL	EBT	WBL	WBT	WBR	NBL	NBT	SBL	SBT	SBR
Lane Group Flow (vph)	97	2491	191	2523	84	340	327	115	43	68
v/c Ratio	0.66	1.40	1.01	1.33	0.10	1.02	0.86	0.73	0.13	0.19
Control Delay	65.7	218.6	81.0	176.3	3.9	100.3	55.9	64.8	43.0	2.7
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	65.7	218.6	81.0	176.3	3.9	100.3	55.9	64.8	43.0	2.7
Queue Length 50th (ft)	72	~1384	~170	~1535	17	~248	178	75	31	0
Queue Length 95th (ft)	m81	m#1344	m#152	m792	m8	#341	246	#121	62	9
Internal Link Dist (ft)		483		2566			678		609	
Turn Bay Length (ft)	305		420		375	65		75		55
Base Capacity (vph)	147	1778	190	1896	854	333	463	157	438	445
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.66	1.40	1.01	1.33	0.10	1.02	0.71	0.73	0.10	0.15

Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.

Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

m Volume for 95th percentile queue is metered by upstream signal.

Queuing and Blocking Report

Intersection: 7: Dauchy Avenue & Project Driveway 2/Ardenwood Lane

Movement	EB	EB	WB	NB	SB
Directions Served	LT	R	LTR	LTR	LT
Maximum Queue (ft)	644	644	109	79	20
Average Queue (ft)	426	344	41	48	3
95th Queue (ft)	851	855	92	102	15
Link Distance (ft)	629	629	538	71	667
Upstream Blk Time (%)	53	50		20	
Queuing Penalty (veh)	0	0		78	
Storage Bay Dist (ft)					
Storage Blk Time (%)					
Queuing Penalty (veh)					

Queuing and Blocking Report

Intersection: 8: Taft Street/Dauchy Avenue & Krameria Avenue

Movement	EB	WB	NB	SB
Directions Served	LTR	LTR	LTR	LTR
Maximum Queue (ft)	199	141	54	120
Average Queue (ft)	88	73	28	60
95th Queue (ft)	154	121	52	97
Link Distance (ft)	1157	955	779	1295
Upstream Blk Time (%)				
Queuing Penalty (veh)				
Storage Bay Dist (ft)				
Storage Blk Time (%)				
Queuing Penalty (veh)				

Queuing and Blocking Report

Intersection: 20: Dauchy Avenue & Project Driveway 3

Movement	NB
Directions Served	LT
Maximum Queue (ft)	184
Average Queue (ft)	78
95th Queue (ft)	195
Link Distance (ft)	173
Upstream Blk Time (%)	8
Queuing Penalty (veh)	31
Storage Bay Dist (ft)	
Storage Blk Time (%)	
Queuing Penalty (veh)	

Queuing and Blocking Report**Intersection: 21: Dauchy Avenue & Project Driveway 4**

Movement	EB	NB
Directions Served	LR	LT
Maximum Queue (ft)	352	100
Average Queue (ft)	97	18
95th Queue (ft)	226	69
Link Distance (ft)	452	84
Upstream Blk Time (%)		5
Queuing Penalty (veh)		12
Storage Bay Dist (ft)		
Storage Blk Time (%)		
Queuing Penalty (veh)		

Queues
6: Dauchy Avenue & Van Buren Boulevard

Woodcrest Christian School Expansion

Cumulative (2045) Without Project AM



Lane Group	EBL	EBT	WBL	WBT	WBR	NBL	NBT	SBL	SBT	SBR
Lane Group Flow (vph)	38	2308	212	2382	59	357	276	101	68	43
v/c Ratio	0.37	1.30	0.90	1.11	0.06	1.18	0.81	0.64	0.24	0.13
Control Delay	61.7	174.4	74.2	71.1	0.5	153.5	52.0	58.1	48.1	0.8
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	61.7	174.4	74.2	71.1	0.5	153.5	52.0	58.1	48.1	0.8
Queue Length 50th (ft)	30	~1342	160	~1257	0	~358	149	69	51	0
Queue Length 95th (ft)	m35	#1478	m#166	m801	m1	#467	225	108	89	0
Internal Link Dist (ft)		483		2566			678		609	
Turn Bay Length (ft)	305		420		375	65		75		55
Base Capacity (vph)	104	1775	236	2140	994	302	463	157	438	458
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.37	1.30	0.90	1.11	0.06	1.18	0.60	0.64	0.16	0.09

Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.

Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

m Volume for 95th percentile queue is metered by upstream signal.

Queuing and Blocking Report

Intersection: 7: Dauchy Avenue & Project Driveway 2/Ardenwood Lane

Movement	EB	WB	NB	SB	SB
Directions Served	LTR	LTR	LTR	LT	R
Maximum Queue (ft)	747	553	74	19	18
Average Queue (ft)	515	263	61	2	1
95th Queue (ft)	986	541	99	11	9
Link Distance (ft)	732	538	63	666	
Upstream Blk Time (%)	56	1	46		
Queuing Penalty (veh)	0	0	207		
Storage Bay Dist (ft)					90
Storage Blk Time (%)					
Queuing Penalty (veh)					

Queuing and Blocking Report**Intersection: 8: Taft Street/Dauchy Avenue & Krameria Avenue**

Movement	EB	WB	NB	SB
Directions Served	LTR	LTR	LTR	LTR
Maximum Queue (ft)	263	970	55	77
Average Queue (ft)	134	814	35	50
95th Queue (ft)	209	1193	55	71
Link Distance (ft)	1157	955	779	1295
Upstream Blk Time (%)		50		
Queuing Penalty (veh)		0		
Storage Bay Dist (ft)				
Storage Blk Time (%)				
Queuing Penalty (veh)				

Queuing and Blocking Report

Intersection: 20: Dauchy Avenue & Project Driveway 3

Movement	NB
Directions Served	LT
Maximum Queue (ft)	184
Average Queue (ft)	141
95th Queue (ft)	255
Link Distance (ft)	173
Upstream Blk Time (%)	32
Queuing Penalty (veh)	145
Storage Bay Dist (ft)	
Storage Blk Time (%)	
Queuing Penalty (veh)	

Queuing and Blocking Report

Intersection: 21: Dauchy Avenue & Project Driveway 4

Movement	EB	NB
Directions Served	LR	LT
Maximum Queue (ft)	432	101
Average Queue (ft)	167	64
95th Queue (ft)	358	128
Link Distance (ft)	452	84
Upstream Blk Time (%)	0	21
Queuing Penalty (veh)	0	77
Storage Bay Dist (ft)		
Storage Blk Time (%)		
Queuing Penalty (veh)		

Queues
6: Dauchy Avenue & Van Buren Boulevard

Woodcrest Christian School Expansion
Cumulative (2045) Without Project Afternoon



Lane Group	EBL	EBT	WBL	WBT	WBR	NBL	NBT	SBL	SBT	SBR
Lane Group Flow (vph)	99	2506	158	2565	85	300	277	117	66	80
v/c Ratio	0.63	1.41	0.79	1.35	0.10	0.90	0.81	0.72	0.20	0.22
Control Delay	58.8	221.6	63.2	185.2	4.1	75.4	60.0	61.9	45.3	4.2
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	58.8	221.6	63.2	185.2	4.1	75.4	60.0	61.9	45.3	4.2
Queue Length 50th (ft)	76	~1492	111	~1560	17	222	186	78	48	0
Queue Length 95th (ft)	m#94	m#1490	m#93	m746	m7	295	268	#126	85	20
Internal Link Dist (ft)		483		2566			678		609	
Turn Bay Length (ft)	305		420		375	65		75		55
Base Capacity (vph)	157	1780	201	1898	855	333	438	163	438	445
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.63	1.41	0.79	1.35	0.10	0.90	0.63	0.72	0.15	0.18

Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.

Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

m Volume for 95th percentile queue is metered by upstream signal.

Queuing and Blocking Report

Intersection: 7: Dauchy Avenue & Project Driveway 2/Ardenwood Lane

Movement	EB	WB	NB	SB
Directions Served	LTR	LTR	LTR	LT
Maximum Queue (ft)	321	52	72	19
Average Queue (ft)	68	21	11	4
95th Queue (ft)	196	50	47	16
Link Distance (ft)	732	538	63	666
Upstream Blk Time (%)			3	
Queuing Penalty (veh)			11	
Storage Bay Dist (ft)				
Storage Blk Time (%)				
Queuing Penalty (veh)				

Queuing and Blocking Report**Intersection: 8: Taft Street/Dauchy Avenue & Krameria Avenue**

Movement	EB	WB	NB	SB
Directions Served	LTR	LTR	LTR	LTR
Maximum Queue (ft)	204	257	55	210
Average Queue (ft)	130	136	27	87
95th Queue (ft)	191	224	51	153
Link Distance (ft)	1157	955	779	1295
Upstream Blk Time (%)				
Queuing Penalty (veh)				
Storage Bay Dist (ft)				
Storage Blk Time (%)				
Queuing Penalty (veh)				

Queuing and Blocking Report**Intersection: 20: Dauchy Avenue & Project Driveway 3**

Movement	NB	SB
Directions Served	LT	TR
Maximum Queue (ft)	160	47
Average Queue (ft)	18	2
95th Queue (ft)	74	16
Link Distance (ft)	173	63
Upstream Blk Time (%)	0	0
Queuing Penalty (veh)	0	0
Storage Bay Dist (ft)		
Storage Blk Time (%)		
Queuing Penalty (veh)		

Queuing and Blocking Report

Intersection: 21: Dauchy Avenue & Project Driveway 4

Movement	EB	NB
Directions Served	LR	LT
Maximum Queue (ft)	88	53
Average Queue (ft)	50	6
95th Queue (ft)	78	29
Link Distance (ft)	452	84
Upstream Blk Time (%)		
Queuing Penalty (veh)		
Storage Bay Dist (ft)		
Storage Blk Time (%)		
Queuing Penalty (veh)		

Queues
6: Dauchy Avenue & Van Buren Boulevard

Woodcrest Christian School Expansion

Cumulative (2045) With Project AM



Lane Group	EBL	EBT	WBL	WBT	WBR	NBL	NBT	SBL	SBT	SBR
Lane Group Flow (vph)	38	2366	314	2382	59	401	354	101	71	43
v/c Ratio	0.38	1.34	1.65	1.16	0.06	1.20	0.87	0.65	0.22	0.12
Control Delay	59.7	191.5	334.0	96.2	2.1	157.5	53.9	56.0	45.2	0.7
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	59.7	191.5	334.0	96.2	2.1	157.5	53.9	56.0	45.2	0.7
Queue Length 50th (ft)	31	~1397	~389	~1315	3	~386	183	65	51	0
Queue Length 95th (ft)	m35	#1532	m#301	m765	m0	#538	271	107	91	0
Internal Link Dist (ft)		483		2566			678		609	
Turn Bay Length (ft)	305		420		375	65		75		55
Base Capacity (vph)	101	1772	190	2054	957	333	484	156	438	458
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.38	1.34	1.65	1.16	0.06	1.20	0.73	0.65	0.16	0.09

Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.

Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

m Volume for 95th percentile queue is metered by upstream signal.

Queuing and Blocking Report

Intersection: 7: Dauchy Avenue & Project Driveway 2/Ardenwood Lane

Movement	EB	EB	WB	NB	SB
Directions Served	LT	R	LTR	LTR	LT
Maximum Queue (ft)	644	644	545	101	39
Average Queue (ft)	585	276	294	76	3
95th Queue (ft)	744	787	524	85	16
Link Distance (ft)	629	629	538	71	667
Upstream Blk Time (%)	80	41	7	47	
Queuing Penalty (veh)	0	0	0	241	
Storage Bay Dist (ft)					
Storage Blk Time (%)					
Queuing Penalty (veh)					

Queuing and Blocking Report

Intersection: 8: Taft Street/Dauchy Avenue & Krameria Avenue

Movement	EB	WB	NB	SB
Directions Served	LTR	LTR	LTR	LTR
Maximum Queue (ft)	431	788	56	75
Average Queue (ft)	203	471	30	48
95th Queue (ft)	362	788	48	69
Link Distance (ft)	1157	955	779	1295
Upstream Blk Time (%)				
Queuing Penalty (veh)				
Storage Bay Dist (ft)				
Storage Blk Time (%)				
Queuing Penalty (veh)				

Queuing and Blocking Report**Intersection: 20: Dauchy Avenue & Project Driveway 3**

Movement	NB
Directions Served	LT
Maximum Queue (ft)	187
Average Queue (ft)	170
95th Queue (ft)	213
Link Distance (ft)	173
Upstream Blk Time (%)	34
Queuing Penalty (veh)	181
Storage Bay Dist (ft)	
Storage Blk Time (%)	
Queuing Penalty (veh)	

Queuing and Blocking Report**Intersection: 21: Dauchy Avenue & Project Driveway 4**

Movement	EB	NB
Directions Served	LR	LT
Maximum Queue (ft)	467	124
Average Queue (ft)	305	70
95th Queue (ft)	593	136
Link Distance (ft)	452	84
Upstream Blk Time (%)	45	24
Queuing Penalty (veh)	0	95
Storage Bay Dist (ft)		
Storage Blk Time (%)		
Queuing Penalty (veh)		

Queues
6: Dauchy Avenue & Van Buren Boulevard

Woodcrest Christian School Expansion

Cumulative (2045) With Project Afternoon



Lane Group	EBL	EBT	WBL	WBT	WBR	NBL	NBT	SBL	SBT	SBR
Lane Group Flow (vph)	99	2532	204	2565	85	344	354	117	67	80
v/c Ratio	0.74	1.42	1.34	1.39	0.10	0.93	0.89	0.75	0.18	0.20
Control Delay	65.7	228.3	204.4	201.5	4.0	77.1	62.9	63.6	42.6	4.0
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	65.7	228.3	204.4	201.5	4.0	77.1	62.9	63.6	42.6	4.0
Queue Length 50th (ft)	81	~1553	~242	~1562	17	243	225	73	46	0
Queue Length 95th (ft)	m#92	m#1492	m#143	m732	m6	#356	324	#125	87	20
Internal Link Dist (ft)		483		2566			678		609	
Turn Bay Length (ft)	305		420		375	65		75		55
Base Capacity (vph)	133	1778	152	1848	835	369	450	157	438	445
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.74	1.42	1.34	1.39	0.10	0.93	0.79	0.75	0.15	0.18

Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.

Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

m Volume for 95th percentile queue is metered by upstream signal.

Queuing and Blocking Report

Intersection: 7: Dauchy Avenue & Project Driveway 2/Ardenwood Lane

Movement	EB	EB	WB	NB	SB
Directions Served	LT	R	LTR	LTR	LT
Maximum Queue (ft)	644	644	137	98	43
Average Queue (ft)	439	261	45	64	4
95th Queue (ft)	783	761	116	95	20
Link Distance (ft)	629	629	538	71	667
Upstream Blk Time (%)	38	24		25	
Queuing Penalty (veh)	0	0		104	
Storage Bay Dist (ft)					
Storage Blk Time (%)					
Queuing Penalty (veh)					

Queuing and Blocking Report**Intersection: 8: Taft Street/Dauchy Avenue & Krameria Avenue**

Movement	EB	WB	NB	SB
Directions Served	LTR	LTR	LTR	LTR
Maximum Queue (ft)	367	258	73	134
Average Queue (ft)	185	133	36	81
95th Queue (ft)	295	209	55	128
Link Distance (ft)	1157	955	779	1295
Upstream Blk Time (%)				
Queuing Penalty (veh)				
Storage Bay Dist (ft)				
Storage Blk Time (%)				
Queuing Penalty (veh)				

Queuing and Blocking Report

Intersection: 20: Dauchy Avenue & Project Driveway 3

Movement	NB	SB
Directions Served	LT	TR
Maximum Queue (ft)	186	29
Average Queue (ft)	102	1
95th Queue (ft)	233	10
Link Distance (ft)	173	71
Upstream Blk Time (%)	11	
Queuing Penalty (veh)	51	
Storage Bay Dist (ft)		
Storage Blk Time (%)		
Queuing Penalty (veh)		

Queuing and Blocking Report

Intersection: 21: Dauchy Avenue & Project Driveway 4

Movement	EB	NB
Directions Served	LR	LT
Maximum Queue (ft)	467	96
Average Queue (ft)	122	27
95th Queue (ft)	317	83
Link Distance (ft)	452	84
Upstream Blk Time (%)	1	1
Queuing Penalty (veh)	0	5
Storage Bay Dist (ft)		
Storage Blk Time (%)		
Queuing Penalty (veh)		

Queues
6: Dauchy Avenue & Van Buren Boulevard

Woodcrest Christian School Expansion

Opening Year (2029) WP AM MIT



Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT	SBR
Lane Group Flow (vph)	35	2232	300	2300	380	316	95	66	41
v/c Ratio	0.35	0.90	1.51	0.77	0.84	0.83	0.37	0.45	0.15
Control Delay	83.9	34.3	268.3	17.4	61.9	40.0	44.4	66.4	1.1
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	83.9	34.3	268.3	17.4	61.9	40.0	44.4	66.4	1.1
Queue Length 50th (ft)	31	710	~358	723	290	109	60	54	0
Queue Length 95th (ft)	m52	#751	m#259	m530	390	201	101	100	0
Internal Link Dist (ft)		483		2566		678		609	
Turn Bay Length (ft)	305		420		200		75		55
Base Capacity (vph)	100	2488	199	3005	454	527	258	438	504
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.35	0.90	1.51	0.77	0.84	0.60	0.37	0.15	0.08

Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.

Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

m Volume for 95th percentile queue is metered by upstream signal.

Queues

Woodcrest Christian School Expansion

7: Dauchy Avenue & Project Driveway 2/Ardenwood Lane

Opening Year (2029) WP AM MIT



Lane Group	EBT	EBR	WBT	NBT	SBT	SBR
Lane Group Flow (vph)	175	36	66	573	489	225
v/c Ratio	0.46	0.07	0.13	0.55	0.46	0.22
Control Delay	15.2	4.6	4.6	10.7	9.1	2.1
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	15.2	4.6	4.6	10.7	9.1	2.1
Queue Length 50th (ft)	29	0	1	68	59	0
Queue Length 95th (ft)	66	12	17	152	149	26
Internal Link Dist (ft)	642		487	69	678	
Turn Bay Length (ft)						90
Base Capacity (vph)	690	839	845	1037	1072	1030
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.25	0.04	0.08	0.55	0.46	0.22
Intersection Summary						

Queues
8: Taft Street/Dauchy Avenue & Krameria Avenue

Woodcrest Christian School Expansion
Opening Year (2029) WP AM MIT

	→	←	↑	↓
Lane Group	EBT	WBT	NBT	SBT
Lane Group Flow (vph)	558	721	75	211
v/c Ratio	0.69	0.81	0.12	0.39
Control Delay	16.7	20.3	13.4	16.3
Queue Delay	0.0	0.0	0.0	0.0
Total Delay	16.7	20.3	13.4	16.3
Queue Length 50th (ft)	136	183	16	49
Queue Length 95th (ft)	169	220	36	86
Internal Link Dist (ft)	1105	903	727	1265
Turn Bay Length (ft)				
Base Capacity (vph)	915	1007	638	540
Starvation Cap Reductn	0	0	0	0
Spillback Cap Reductn	0	0	0	0
Storage Cap Reductn	0	0	0	0
Reduced v/c Ratio	0.61	0.72	0.12	0.39
Intersection Summary				

Queuing and Blocking Report

Opening Year (2029) WP AM MIT

Intersection: 20: Dauchy Avenue & Project Driveway 3

Movement	NB	NB
Directions Served	L	T
Maximum Queue (ft)	74	186
Average Queue (ft)	12	72
95th Queue (ft)	43	169
Link Distance (ft)		173
Upstream Blk Time (%)		2
Queuing Penalty (veh)		12
Storage Bay Dist (ft)	50	
Storage Blk Time (%)	0	14
Queuing Penalty (veh)	0	3

Queuing and Blocking Report

Intersection: 21: Dauchy Avenue & Project Driveway 4

Movement	EB	NB	NB	SB
Directions Served	LR	L	T	TR
Maximum Queue (ft)	137	45	93	31
Average Queue (ft)	75	15	6	1
95th Queue (ft)	123	41	39	11
Link Distance (ft)	446		84	173
Upstream Blk Time (%)			1	
Queuing Penalty (veh)			3	
Storage Bay Dist (ft)		50		
Storage Blk Time (%)		0	2	
Queuing Penalty (veh)		0	1	

Queues
6: Dauchy Avenue & Van Buren Boulevard

Woodcrest Christian School Expansion

Opening Year (2029) WP Afternoon MIT



Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT	SBR
Lane Group Flow (vph)	97	2491	191	2607	340	327	115	43	68
v/c Ratio	1.00	1.05	0.74	0.92	0.99	0.85	0.73	0.14	0.17
Control Delay	155.9	81.1	62.5	14.3	92.9	56.2	64.7	43.6	0.9
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	155.9	81.1	62.5	14.3	92.9	56.2	64.7	43.6	0.9
Queue Length 50th (ft)	77	~741	130	733	~273	194	75	31	0
Queue Length 95th (ft)	m#146	#784	m#155	m606	#411	290	118	62	0
Internal Link Dist (ft)		483		2566		678		609	
Turn Bay Length (ft)	305		420		200		75		55
Base Capacity (vph)	97	2362	257	2847	343	476	157	438	491
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	1.00	1.05	0.74	0.92	0.99	0.69	0.73	0.10	0.14

Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.

Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

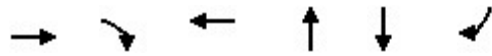
m Volume for 95th percentile queue is metered by upstream signal.

Queues

7: Dauchy Avenue & Project Driveway 2/Ardenwood Lane

Woodcrest Christian School Expansion

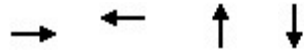
Opening Year (2029) WP Afternoon MIT



Lane Group	EBT	EBR	WBT	NBT	SBT	SBR
Lane Group Flow (vph)	182	38	41	485	487	99
v/c Ratio	0.46	0.07	0.08	0.47	0.48	0.11
Control Delay	14.6	4.5	5.0	9.3	9.7	2.5
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	14.6	4.5	5.0	9.3	9.7	2.5
Queue Length 50th (ft)	26	0	1	53	60	0
Queue Length 95th (ft)	69	12	14	95	122	18
Internal Link Dist (ft)	642		487	69	678	
Turn Bay Length (ft)						90
Base Capacity (vph)	705	878	847	1105	1098	1004
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.26	0.04	0.05	0.44	0.44	0.10
Intersection Summary						

Queues
8: Taft Street/Dauchy Avenue & Krameria Avenue

Woodcrest Christian School Expansion
Opening Year (2029) WP Afternoon MIT



Lane Group	EBT	WBT	NBT	SBT
Lane Group Flow (vph)	534	464	70	376
v/c Ratio	0.82	0.67	0.09	0.57
Control Delay	25.6	17.3	8.3	13.8
Queue Delay	0.0	0.0	0.0	0.0
Total Delay	25.6	17.3	8.3	13.8
Queue Length 50th (ft)	123	94	10	68
Queue Length 95th (ft)	174	136	24	100
Internal Link Dist (ft)	1105	903	727	1265
Turn Bay Length (ft)				
Base Capacity (vph)	724	761	756	660
Starvation Cap Reductn	0	0	0	0
Spillback Cap Reductn	0	0	0	0
Storage Cap Reductn	0	0	0	0
Reduced v/c Ratio	0.74	0.61	0.09	0.57
Intersection Summary				

Queuing and Blocking Report

Intersection: 20: Dauchy Avenue & Project Driveway 3

Movement	NB	NB	SB
Directions Served	L	T	TR
Maximum Queue (ft)	73	97	55
Average Queue (ft)	7	16	2
95th Queue (ft)	34	57	19
Link Distance (ft)		173	68
Upstream Blk Time (%)			0
Queuing Penalty (veh)			0
Storage Bay Dist (ft)	50		
Storage Blk Time (%)	0	1	
Queuing Penalty (veh)	0	0	

Queuing and Blocking Report

Intersection: 21: Dauchy Avenue & Project Driveway 4

Movement	EB	NB
Directions Served	LR	L
Maximum Queue (ft)	151	31
Average Queue (ft)	67	5
95th Queue (ft)	115	24
Link Distance (ft)	446	
Upstream Blk Time (%)		
Queuing Penalty (veh)		
Storage Bay Dist (ft)		50
Storage Blk Time (%)		0
Queuing Penalty (veh)		0

Queues
6: Dauchy Avenue & Van Buren Boulevard

Woodcrest Christian School Expansion

Cumulative (2045) WP AM MIT



Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT	SBR
Lane Group Flow (vph)	38	2366	314	2441	401	354	101	71	43
v/c Ratio	0.38	0.96	1.38	0.83	1.21	0.88	0.65	0.22	0.10
Control Delay	68.4	30.0	210.7	12.6	160.3	54.4	56.1	45.4	0.5
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	68.4	30.0	210.7	12.6	160.3	54.4	56.1	45.4	0.5
Queue Length 50th (ft)	35	358	~360	640	~411	190	66	51	0
Queue Length 95th (ft)	m56	#881	m#249	m513	#584	295	107	91	0
Internal Link Dist (ft)		483		2566		678		609	
Turn Bay Length (ft)	305		420		200		75		55
Base Capacity (vph)	101	2452	227	2950	331	487	156	438	504
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.38	0.96	1.38	0.83	1.21	0.73	0.65	0.16	0.09

Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.

Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

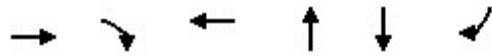
m Volume for 95th percentile queue is metered by upstream signal.

Queues

Woodcrest Christian School Expansion

7: Dauchy Avenue & Project Driveway 2/Ardenwood Lane

Cumulative (2045) WP AM MIT



Lane Group	EBT	EBR	WBT	NBT	SBT	SBR
Lane Group Flow (vph)	175	36	70	587	510	225
v/c Ratio	0.46	0.08	0.14	0.57	0.48	0.22
Control Delay	15.5	4.6	4.6	11.5	9.3	2.1
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	15.5	4.6	4.6	11.5	9.3	2.1
Queue Length 50th (ft)	29	0	1	73	63	0
Queue Length 95th (ft)	66	12	18	#178	158	26
Internal Link Dist (ft)	642		487	69	678	
Turn Bay Length (ft)						90
Base Capacity (vph)	675	825	835	1038	1073	1032
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.26	0.04	0.08	0.57	0.48	0.22

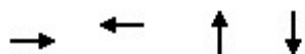
Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

Queues
8: Taft Street/Dauchy Avenue & Krameria Avenue

Woodcrest Christian School Expansion
Cumulative (2045) WP AM MIT



Lane Group	EBT	WBT	NBT	SBT
Lane Group Flow (vph)	665	839	77	223
v/c Ratio	0.79	0.88	0.14	0.46
Control Delay	19.8	25.0	13.6	18.0
Queue Delay	0.0	0.0	0.0	0.0
Total Delay	19.8	25.0	13.6	18.0
Queue Length 50th (ft)	166	220	16	55
Queue Length 95th (ft)	#292	#450	43	113
Internal Link Dist (ft)	1105	903	727	1265
Turn Bay Length (ft)				
Base Capacity (vph)	894	1008	562	489
Starvation Cap Reductn	0	0	0	0
Spillback Cap Reductn	0	0	0	0
Storage Cap Reductn	0	0	0	0
Reduced v/c Ratio	0.74	0.83	0.14	0.46

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Queuing and Blocking Report

Intersection: 20: Dauchy Avenue & Project Driveway 3

Movement	NB	NB
Directions Served	L	T
Maximum Queue (ft)	74	190
Average Queue (ft)	11	176
95th Queue (ft)	50	215
Link Distance (ft)		173
Upstream Blk Time (%)		46
Queuing Penalty (veh)		249
Storage Bay Dist (ft)	50	
Storage Blk Time (%)	0	72
Queuing Penalty (veh)	0	16

Queuing and Blocking Report

Intersection: 21: Dauchy Avenue & Project Driveway 4

Movement	EB	NB	NB	SB
Directions Served	LR	L	T	TR
Maximum Queue (ft)	461	74	102	21
Average Queue (ft)	417	20	76	1
95th Queue (ft)	575	70	130	7
Link Distance (ft)	446		84	173
Upstream Blk Time (%)	78	0	35	
Queuing Penalty (veh)	0	0	137	
Storage Bay Dist (ft)		50		
Storage Blk Time (%)		0	43	
Queuing Penalty (veh)		1	17	

Queues
6: Dauchy Avenue & Van Buren Boulevard

Woodcrest Christian School Expansion

Cumulative (2045) WP Afternoon MIT



Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT	SBR
Lane Group Flow (vph)	99	2532	204	2650	344	354	117	67	80
v/c Ratio	0.74	1.01	1.19	1.00	0.93	0.89	0.75	0.18	0.18
Control Delay	80.6	38.8	126.1	20.6	77.4	63.3	63.6	42.6	0.9
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	80.6	38.8	126.1	20.6	77.4	63.3	63.6	42.6	0.9
Queue Length 50th (ft)	75	~863	~206	~895	249	233	73	46	0
Queue Length 95th (ft)	m#120	#942	m139	m89	#399	#369	#125	87	0
Internal Link Dist (ft)		483		2566		678		609	
Turn Bay Length (ft)	305		420		200		75		55
Base Capacity (vph)	138	2501	172	2642	369	450	157	438	491
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.72	1.01	1.19	1.00	0.93	0.79	0.75	0.15	0.16

Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.

Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

m Volume for 95th percentile queue is metered by upstream signal.

Queues

Woodcrest Christian School Expansion

7: Dauchy Avenue & Project Driveway 2/Ardenwood Lane

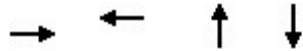
Cumulative (2045) WP Afternoon MIT



Lane Group	EBT	EBR	WBT	NBT	SBT	SBR
Lane Group Flow (vph)	182	38	42	526	572	99
v/c Ratio	0.48	0.08	0.09	0.50	0.54	0.10
Control Delay	15.5	4.5	5.1	9.6	11.5	2.5
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	15.5	4.5	5.1	9.6	11.5	2.5
Queue Length 50th (ft)	31	0	1	64	76	0
Queue Length 95th (ft)	69	12	14	120	149	18
Internal Link Dist (ft)	642		487	69	678	
Turn Bay Length (ft)						90
Base Capacity (vph)	668	836	808	1061	1058	969
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.27	0.05	0.05	0.50	0.54	0.10
Intersection Summary						

Queues
8: Taft Street/Dauchy Avenue & Krameria Avenue

Woodcrest Christian School Expansion
Cumulative (2045) WP Afternoon MIT



Lane Group	EBT	WBT	NBT	SBT
Lane Group Flow (vph)	658	556	71	421
v/c Ratio	0.88	0.69	0.11	0.71
Control Delay	29.0	17.0	10.0	22.1
Queue Delay	0.0	0.0	0.0	0.0
Total Delay	29.0	17.0	10.0	22.1
Queue Length 50th (ft)	171	124	12	102
Queue Length 95th (ft)	#353	216	33	#219
Internal Link Dist (ft)	1105	903	727	1265
Turn Bay Length (ft)				
Base Capacity (vph)	805	856	655	591
Starvation Cap Reductn	0	0	0	0
Spillback Cap Reductn	0	0	0	0
Storage Cap Reductn	0	0	0	0
Reduced v/c Ratio	0.82	0.65	0.11	0.71

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Queuing and Blocking Report

Intersection: 20: Dauchy Avenue & Project Driveway 3

Movement	NB	NB	SB
Directions Served	L	T	TR
Maximum Queue (ft)	31	180	43
Average Queue (ft)	5	32	3
95th Queue (ft)	25	95	19
Link Distance (ft)		173	68
Upstream Blk Time (%)		1	
Queuing Penalty (veh)		2	
Storage Bay Dist (ft)	50		
Storage Blk Time (%)	0	3	
Queuing Penalty (veh)	0	0	

Queuing and Blocking Report

Intersection: 21: Dauchy Avenue & Project Driveway 4

Movement	EB	NB	NB
Directions Served	LR	L	T
Maximum Queue (ft)	180	31	75
Average Queue (ft)	74	6	3
95th Queue (ft)	131	27	26
Link Distance (ft)	446		84
Upstream Blk Time (%)			0
Queuing Penalty (veh)			0
Storage Bay Dist (ft)		50	
Storage Blk Time (%)		0	0
Queuing Penalty (veh)		0	0