














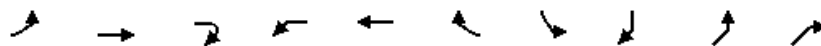


## **ANEXO 15**

### **CENÁRIO 03 – MAPAS E RELATÓRIOS DE CÁLCULOS**



											
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	SBL	SBR	NEL	NER	
Lane Configurations											
Volume (vph)	0	986	0	0	27	13	0	0	32	3	
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
Frt					0.956					0.850	
Flt Protected									0.950		
Satd. Flow (prot)	0	1863	0	0	1781	0	0	0	1770	1583	
Flt Permitted									0.950		
Satd. Flow (perm)	0	1863	0	0	1781	0	0	0	1770	1583	
Right Turn on Red			No			No				No	
Satd. Flow (RTOR)											
Link Speed (k/h)		50			50		50		50		
Link Distance (m)		65.5			128.2		30.3		47.9		
Travel Time (s)		4.7			9.2		2.2		3.4		
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	
Adj. Flow (vph)	0	1072	0	0	29	14	0	0	35	3	
Shared Lane Traffic (%)											
Lane Group Flow (vph)	0	1072	0	0	43	0	0	0	35	3	
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Right	Left	Right	
Median Width(m)		0.0			0.0		0.0		3.6		
Link Offset(m)		0.0			0.0		0.0		0.0		
Crosswalk Width(m)		4.8			4.8		4.8		4.8		
Two way Left Turn Lane											
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
Turning Speed (k/h)	25		15	25		15	25	15	25	15	
Turn Type		NA			NA				NA	Perm	
Protected Phases		4			8				2		
Permitted Phases										2	
Minimum Split (s)		50.0			50.0				20.0	20.0	
Total Split (s)		50.0			50.0				30.0	30.0	
Total Split (%)		62.5%			62.5%				37.5%	37.5%	
Maximum Green (s)		46.0			46.0				26.0	26.0	
Yellow Time (s)		4.0			4.0				4.0	4.0	
All-Red Time (s)		0.0			0.0				0.0	0.0	
Lost Time Adjust (s)		0.0			0.0				0.0	0.0	
Total Lost Time (s)		4.0			4.0				4.0	4.0	
Lead/Lag											
Lead-Lag Optimize?											
Act Effct Green (s)		46.0			46.0				26.0	26.0	
Actuated g/C Ratio		0.58			0.58				0.32	0.32	
v/c Ratio		1.00			0.04				0.06	0.01	
Control Delay		15.7			7.6				21.1	20.7	
Queue Delay		8.0			0.0				0.0	0.0	
Total Delay		23.6			7.6				21.1	20.7	
LOS		C			A				C	C	
Approach Delay		23.6			7.6				21.1		
Approach LOS		C			A				C		
Queue Length 50th (m)		~19.7			2.7				5.0	0.4	
Queue Length 95th (m)		m18.8			6.9				m0.0	m0.7	
Internal Link Dist (m)		41.5			104.2		6.3		23.9		
Turn Bay Length (m)											
Base Capacity (vph)		1071			1024				575	514	



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	SBL	SBR	NEL	NER
Starvation Cap Reductn		29			0				0	0
Spillback Cap Reductn		0			0				0	0
Storage Cap Reductn		0			0				0	0
Reduced v/c Ratio		1.03			0.04				0.06	0.01

#### Intersection Summary

Area Type: Other

Cycle Length: 80

Actuated Cycle Length: 80

Offset: 0 (0%), Referenced to phase 2:NEL and 6:, Start of Green

Natural Cycle: 70

Control Type: Pretimed

Maximum v/c Ratio: 1.00

Intersection Signal Delay: 23.0

Intersection LOS: C

Intersection Capacity Utilization 63.8%

ICU Level of Service B

Analysis Period (min) 15















~ Volume exceeds capacity, queue is theoretically infinite.












Queue shown is maximum after two cycles.

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

Splits and Phases: 100: Av. Anchieta

  30 s	 50 s
 50 s	 50 s

										
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBR	SWL	SWR
Lane Configurations										
Volume (vph)	0	986	32	0	27	0	0	0	3	6
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.996								0.850
Flt Protected									0.950	
Satd. Flow (prot)	0	1855	0	0	1863	0	0	0	1770	1583
Flt Permitted									0.950	
Satd. Flow (perm)	0	1855	0	0	1863	0	0	0	1770	1583
Right Turn on Red			No			No				No
Satd. Flow (RTOR)										
Link Speed (k/h)		50			50		50		50	
Link Distance (m)		133.4			65.5		35.6		42.8	
Travel Time (s)		9.6			4.7		2.6		3.1	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	1072	35	0	29	0	0	0	3	7
Shared Lane Traffic (%)										
Lane Group Flow (vph)	0	1107	0	0	29	0	0	0	3	7
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Right	Left	Right
Median Width(m)		0.0			0.0		0.0		3.6	
Link Offset(m)		0.0			0.0		0.0		0.0	
Crosswalk Width(m)		4.8			4.8		4.8		4.8	
Two way Left Turn Lane										
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (k/h)	25		15	25		15	25	15	25	15
Turn Type		NA			NA				NA	Perm
Protected Phases		4			8				6	
Permitted Phases										6
Minimum Split (s)		50.0			50.0				30.0	30.0
Total Split (s)		50.0			50.0				30.0	30.0
Total Split (%)		62.5%			62.5%				37.5%	37.5%
Maximum Green (s)		46.0			46.0				26.0	26.0
Yellow Time (s)		4.0			4.0				4.0	4.0
All-Red Time (s)		0.0			0.0				0.0	0.0
Lost Time Adjust (s)		0.0			0.0				0.0	0.0
Total Lost Time (s)		4.0			4.0				4.0	4.0
Lead/Lag										
Lead-Lag Optimize?										
Walk Time (s)		5.0			5.0				5.0	5.0
Flash Dont Walk (s)		11.0			11.0				11.0	11.0
Pedestrian Calls (#/hr)		0			0				0	0
Act Effct Green (s)		46.0			46.0				26.0	26.0
Actuated g/C Ratio		0.58			0.58				0.32	0.32
v/c Ratio		1.04			0.03				0.01	0.01
Control Delay		57.5			2.0				12.7	12.5
Queue Delay		5.7			0.0				0.0	0.0
Total Delay		63.2			2.0				12.7	12.5
LOS		E			A				B	B
Approach Delay		63.2			2.0				12.6	
Approach LOS		E			A				B	
Queue Length 50th (m)		~193.9			0.2				0.3	0.5
Queue Length 95th (m)		#268.3			0.8				1.5	2.3

											
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBR	SWL	SWR	
Internal Link Dist (m)		109.4			41.5		11.6		18.8		
Turn Bay Length (m)											
Base Capacity (vph)		1066			1071				575	514	
Starvation Cap Reductn		0			0				0	0	
Spillback Cap Reductn		16			0				0	0	
Storage Cap Reductn		0			0				0	0	
Reduced v/c Ratio		1.05			0.03				0.01	0.01	

#### Intersection Summary

Area Type: Other

Cycle Length: 80

Actuated Cycle Length: 80

Offset: 0 (0%), Referenced to phase 2: and 6:SWL, Start of Green

Natural Cycle: 90

Control Type: Pretimed

Maximum v/c Ratio: 1.04

Intersection Signal Delay: 61.2

Intersection LOS: E

Intersection Capacity Utilization 63.8%

ICU Level of Service B

Analysis Period (min) 15

~ 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.









Splits and Phases: 101: Av. Anchieta











		
		
30 s	50 s	50 s

						
Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Volume (vph)	0	0	0	0	35	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt						
Flt Protected					0.950	
Satd. Flow (prot)	0	0	0	1863	1770	1863
Flt Permitted					0.950	
Satd. Flow (perm)	0	0	0	1863	1770	1863
Link Speed (k/h)	50		50			50
Link Distance (m)	47.9		32.5			35.6
Travel Time (s)	3.4		2.3			2.6
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	0	0	0	38	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	0	0	38	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Right	Left	Left
Median Width(m)	0.0		3.6			3.6
Link Offset(m)	0.0		0.0			0.0
Crosswalk Width(m)	4.8		4.8			4.8
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (k/h)	25	15		15	25	
Sign Control	Stop		Stop			Free
Intersection Summary						
Area Type:	Other					
Control Type:	Unsignalized					
Intersection Capacity Utilization	6.7%			ICU Level of Service A		
Analysis Period (min)	15					

						
Lane Group	WBL	WBR	SBL	SBR	NEL	NER
Lane Configurations						
Volume (vph)	6	35	0	3	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt	0.886			0.865		
Flt Protected	0.992					
Satd. Flow (prot)	1637	0	0	1611	0	0
Flt Permitted	0.992					
Satd. Flow (perm)	1637	0	0	1611	0	0
Link Speed (k/h)	50		50		50	
Link Distance (m)	26.7		127.7		42.8	
Travel Time (s)	1.9		9.2		3.1	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	7	38	0	3	0	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	45	0	0	3	0	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Right	Left	Right
Median Width(m)	3.6		0.0		0.0	
Link Offset(m)	0.0		0.0		0.0	
Crosswalk Width(m)	4.8		4.8		4.8	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (k/h)	25	15	25	15	25	15
Sign Control	Free		Stop		Stop	
Intersection Summary						
Area Type:	Other					
Control Type:	Unsignalized					
Intersection Capacity Utilization	6.7%			ICU Level of Service A		
Analysis Period (min)	15					




















						
Lane Group	EBL	EBR	NBL	NBR	SWL	SWR
Lane Configurations						
Volume (vph)	0	0	37	8	0	3
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt			0.975			0.865
Flt Protected			0.961			
Satd. Flow (prot)	0	0	1745	0	0	1611
Flt Permitted			0.961			
Satd. Flow (perm)	0	0	1745	0	0	1611
Link Speed (k/h)	50		50		50	
Link Distance (m)	26.7		30.3		92.7	
Travel Time (s)	1.9		2.2		6.7	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	0	40	9	0	3
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	49	0	0	3
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Right	Left	Right
Median Width(m)	0.0		3.6		0.0	
Link Offset(m)	0.0		0.0		0.0	
Crosswalk Width(m)	4.8		4.8		4.8	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (k/h)	25	15	25	15	25	15
Sign Control	Stop		Free		Stop	
Intersection Summary						
Area Type:	Other					
Control Type:	Unsignalized					
Intersection Capacity Utilization 6.7%	ICU Level of Service A					
Analysis Period (min) 15						

						
Lane Group	EBL	EBT	WBT	WBR	SEL	SER
Lane Configurations						
Volume (vph)	0	646	33	0	363	363
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt						0.850
Flt Protected					0.950	
Satd. Flow (prot)	0	1863	1863	0	1770	1583
Flt Permitted					0.950	
Satd. Flow (perm)	0	1863	1863	0	1770	1583
Link Speed (k/h)		50	50		50	
Link Distance (m)		678.6	931.9		225.5	
Travel Time (s)		48.9	67.1		16.2	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	702	36	0	395	395
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	702	36	0	395	395
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Left	Left	Right	Left	Right
Median Width(m)		0.0	0.0		3.6	
Link Offset(m)		0.0	0.0		0.0	
Crosswalk Width(m)		4.8	4.8		4.8	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (k/h)	25			15	25	15
Sign Control		Free	Free		Stop	
Intersection Summary						
Area Type:	Other					
Control Type:	Unsignalized					
Intersection Capacity Utilization	60.8%			ICU Level of Service B		
Analysis Period (min)	15					



















Lanes, Volumes, Timings  
300: Av. Vina del Mar/Alameda La Plata & Av. Meaípe

Cenário 03 Noite  
28/07/2023

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	0	22	0	0	1021	0	0	0	0	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt												
Flt Protected												
Satd. Flow (prot)	0	1863	1863	0	1863	0	0	1863	0	0	1863	0
Flt Permitted												
Satd. Flow (perm)	0	1863	1863	0	1863	0	0	1863	0	0	1863	0
Link Speed (k/h)	50			50			50			50		
Link Distance (m)	139.2			404.9			40.0			74.8		
Travel Time (s)	10.0			29.2			2.9			5.4		
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
Adj. Flow (vph)	0	24	0	0	1110	0	0	0	0	0	0	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	24	0	0	1110	0	0	0	0	0	0	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(m)	0.0			0.0			0.0			0.0		
Link Offset(m)	0.0			0.0			0.0			0.0		
Crosswalk Width(m)	4.8			4.8			4.8			4.8		
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (k/h)	25		15	25		15	25		15	25		15
Sign Control	Free			Free			Stop			Stop		
Intersection Summary												
Area Type:	Other											
Control Type:	Unsignalized											
Intersection Capacity Utilization	57.1%				ICU Level of Service B							
Analysis Period (min)	15											













Lanes, Volumes, Timings  
400: Alameda LAs Palmas & Av. Meaípe

Cenário 03 Noite  
28/07/2023

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	0	25	0	0	1017	0	0	0	0	5	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt												
Flt Protected											0.950	
Satd. Flow (prot)	1863	1863	0	1863	1863	0	0	1863	0	0	1770	0
Flt Permitted											0.757	
Satd. Flow (perm)	1863	1863	0	1863	1863	0	0	1863	0	0	1410	0
Right Turn on Red			No			No			No			No
Satd. Flow (RTOR)												
Link Speed (k/h)		50			50			50			50	
Link Distance (m)		87.5			183.7			58.8			28.0	
Travel Time (s)		6.3			13.2			4.2			2.0	
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
Adj. Flow (vph)	0	27	0	0	1105	0	0	0	0	5	0	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	27	0	0	1105	0	0	0	0	0	5	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(m)		3.6			3.6			0.0			0.0	
Link Offset(m)		0.0			0.0			0.0			0.0	
Crosswalk Width(m)		4.8			4.8			4.8			4.8	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (k/h)	25		15	25		15	25		15	25		15
Turn Type	Prot	NA		Prot	NA		Perm			Perm	NA	
Protected Phases	1	6		5	2			8			4	
Permitted Phases							8			4		
Minimum Split (s)	15.0	45.0		15.0	45.0		15.0	15.0		20.0	20.0	
Total Split (s)	20.0	50.0		20.0	50.0		20.0	20.0		20.0	20.0	
Total Split (%)	22.2%	55.6%		22.2%	55.6%		22.2%	22.2%		22.2%	22.2%	
Maximum Green (s)	16.0	46.0		16.0	46.0		16.0	16.0		16.0	16.0	
Yellow Time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
All-Red Time (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0			0.0			0.0	
Total Lost Time (s)	4.0	4.0		4.0	4.0			4.0			4.0	
Lead/Lag	Lead	Lag		Lead	Lag							
Lead-Lag Optimize?	Yes	Yes		Yes	Yes							
Walk Time (s)										5.0	5.0	
Flash Dont Walk (s)										11.0	11.0	
Pedestrian Calls (#/hr)										0	0	
Act Effct Green (s)		46.0			46.0						16.0	
Actuated g/C Ratio		0.51			0.51						0.18	
v/c Ratio		0.03			1.16						0.02	
Control Delay		11.1			107.9						31.0	
Queue Delay		0.0			0.0						0.0	
Total Delay		11.1			107.9						31.0	
LOS		B			F						C	
Approach Delay		11.1			107.9						31.0	
Approach LOS		B			F						C	
Queue Length 50th (m)		2.3			~240.5						0.8	
Queue Length 95th (m)		6.4			#317.4						3.8	

Lanes, Volumes, Timings  
400: Alameda LAs Palmas & Av. Meaípe

Cenário 03 Noite  
28/07/2023

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Internal Link Dist (m)		63.5			159.7			34.8			4.0	
Turn Bay Length (m)												
Base Capacity (vph)		952			952						250	
Starvation Cap Reductn		0			0						0	
Spillback Cap Reductn		0			0						0	
Storage Cap Reductn		0			0						0	
Reduced v/c Ratio		0.03			1.16						0.02	

Intersection Summary

Area Type: Other

Cycle Length: 90

Actuated Cycle Length: 90

Offset: 0 (0%), Referenced to phase 2:WBT, Start of Green

Natural Cycle: 90

Control Type: Pretimed

Maximum v/c Ratio: 1.16

Intersection Signal Delay: 105.3

Intersection LOS: F

Intersection Capacity Utilization 63.5%

ICU Level of Service B

Analysis Period (min) 15







~ Volume exceeds capacity, queue is theoretically infinite.

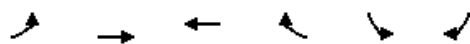
Queue shown is maximum after two cycles.

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

Queue shown is maximum after two cycles.

Splits and Phases: 400: Alameda LAs Palmas & Av. Meaípe

 ø1	 ø2 (P)	 ø4
20 s	50 s	20 s
 ø5	 ø6	 ø8
20 s	50 s	20 s



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Volume (vph)	0	22	396	0	623	623
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt						0.850
Flt Protected					0.950	
Satd. Flow (prot)	0	1863	1863	0	1770	1583
Flt Permitted					0.950	
Satd. Flow (perm)	0	1863	1863	0	1770	1583
Link Speed (k/h)		50	50		50	
Link Distance (m)		404.9	504.9		68.0	
Travel Time (s)		29.2	36.4		4.9	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	24	430	0	677	677
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	24	430	0	677	677
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Left	Left	Right	Left	Right
Median Width(m)		0.0	0.0		3.6	
Link Offset(m)		0.0	0.0		0.0	
Crosswalk Width(m)		4.8	4.8		4.8	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (k/h)	25			15	25	15
Sign Control		Free	Free		Stop	

#### Intersection Summary

Area Type: Other

Control Type: Unsignalized

Intersection Capacity Utilization 66.1% ICU Level of Service C

Analysis Period (min) 15

Intersection: 100: Av. Anchieta

Movement	EB	WB	NE
Directions Served	T	TR	L
Maximum Queue (m)	27.4	6.9	13.3
Average Queue (m)	12.3	1.4	6.8
95th Queue (m)	28.9	5.9	13.7
Link Distance (m)	37.3	118.9	24.4
Upstream Blk Time (%)			
Queuing Penalty (veh)			
Storage Bay Dist (m)			
Storage Blk Time (%)			
Queuing Penalty (veh)			

Intersection: 101: Av. Anchieta

Movement	EB	WB
Directions Served	TR	T
Maximum Queue (m)	131.4	8.0
Average Queue (m)	67.5	1.6
95th Queue (m)	133.1	6.9
Link Distance (m)	113.2	37.3
Upstream Blk Time (%)	3	
Queuing Penalty (veh)	31	
Storage Bay Dist (m)		
Storage Blk Time (%)		
Queuing Penalty (veh)		

Intersection: 102:

Movement
Directions Served
Maximum Queue (m)
Average Queue (m)
95th Queue (m)
Link Distance (m)
Upstream Blk Time (%)
Queuing Penalty (veh)
Storage Bay Dist (m)
Storage Blk Time (%)
Queuing Penalty (veh)

Intersection: 103: Av. Salvador Pecanha

Movement	SB
Directions Served	R
Maximum Queue (m)	6.6
Average Queue (m)	1.3
95th Queue (m)	5.7
Link Distance (m)	114.4
Upstream Blk Time (%)	
Queuing Penalty (veh)	
Storage Bay Dist (m)	
Storage Blk Time (%)	
Queuing Penalty (veh)	

Intersection: 104:

Movement
Directions Served
Maximum Queue (m)
Average Queue (m)
95th Queue (m)
Link Distance (m)
Upstream Blk Time (%)
Queuing Penalty (veh)
Storage Bay Dist (m)
Storage Blk Time (%)
Queuing Penalty (veh)

Intersection: 200: Rod. Paulo Borges

Movement	SE	SE
Directions Served	L	R
Maximum Queue (m)	65.6	14.8
Average Queue (m)	23.7	11.6
95th Queue (m)	58.5	17.8
Link Distance (m)	204.8	204.8
Upstream Blk Time (%)		
Queuing Penalty (veh)		
Storage Bay Dist (m)		
Storage Blk Time (%)		
Queuing Penalty (veh)		



Intersection: 300: Av. Vina del Mar/Alameda La Plata & Av. Meaípe

Movement

Directions Served  
Maximum Queue (m)  
Average Queue (m)  
95th Queue (m)  
Link Distance (m)  
Upstream Blk Time (%)  
Queuing Penalty (veh)  
Storage Bay Dist (m)  
Storage Blk Time (%)  
Queuing Penalty (veh)

Intersection: 400: Alameda LAs Palmas & Av. Meaípe

Movement	EB	WB	WB	B17	SB
Directions Served	TR	UL	TR	T	LTR
Maximum Queue (m)	13.2	175.1	186.0	44.1	8.4
Average Queue (m)	4.2	35.0	114.9	11.9	2.6
95th Queue (m)	12.4	150.6	222.7	40.3	8.1
Link Distance (m)	76.2	164.5	164.5	28.3	12.2
Upstream Blk Time (%)		3	17	6	0
Queuing Penalty (veh)		14	88	32	0
Storage Bay Dist (m)					
Storage Blk Time (%)					
Queuing Penalty (veh)					

Intersection: 500: Rod. Paulo Borges

Movement	SB	SB
Directions Served	L	R
Maximum Queue (m)	63.2	74.5
Average Queue (m)	48.1	55.8
95th Queue (m)	79.8	88.7
Link Distance (m)	58.6	58.6
Upstream Blk Time (%)	13	31
Queuing Penalty (veh)	0	0
Storage Bay Dist (m)		
Storage Blk Time (%)		
Queuing Penalty (veh)		

Zone Summary

Zone wide Queuing Penalty: 166