	Flow (veh/h)	HV (%)	Flow (veh/h)	HV (%)	Flow (pcu/h)	(veh /h)	Satn xp	Cap. (%)	(%)	x
South: PR 155- Sur										
1 LT	12	0.0	40	0.0	40	1536	0.80	****	100	0.008
North: PR 155 - Norte										
7 T	40	0.0	0			789	0.80	1478	100	0.051
9 R	56	0.0	0			1105	0.80	1479	100	0.051
West: Ramal 155										
10 L	164	0.0	68+	0.0	68	683	0.80	233	100	0.240*
12 R	44	0.0	68+	0.0	68	183	0.80	233	100	0.240*

+ Percentage of exiting flow included in total opposing flow

PR 155 y Ramal 155
2005, pm
Intersection ID: 03
Stop Sign Controlled Intersection

Table 5.4 - INTERSECTION PARAMETERS

Intersection Level of Service	=	NA
Worst movement Level of Service	=	B
Average intersection delay (s)	=	9.0
Largest average movement delay (s)	=	11.3
Largest cycle-average queue, mean (m)	=	0
Performance Index	=	5.26
Degree of saturation (highest)	=	0.240
Practical Spare Capacity (lowest)	=	233 %
Effective intersection capacity, (veh/h)	=	1314
Total vehicle flow (veh/h)	=	316
Total person flow (pers/h)	=	474
Total vehicle delay (veh-h/h)	=	0.75
Total person delay (pers-h/h)	=	1.19
Total effective vehicle stops (veh/h)	=	226
Total effective person stops (pers/h)	=	339
Total vehicle travel (veh-km/h)	=	195.4
Total cost ($/h)	=	123.69
Total fuel (l/h)	=	20.8
Total CO2 (kg/h)	=	52.00

NA Not Applicable - Intersection Level of Service is not calculated at two-way stop control or give-way/yield controlled intersections. See Table 5.13 or Movement Displays for individual movement LOS values.

PR 155 y Ramal 155
2005, pm
Intersection ID: 03
Stop Sign Controlled Intersection

Table 5.5 - MOVEMENT PERFORMANCE

Mov No.	Total Delay (veh-h/h)	Total Delay (pers-h/h)	Aver. Delay (sec)	Prop. Queued	Eff. Stop Rate	Longest Cycle (veh)	Queue Aver. (m)	Perf. Index	Aver. Speed (km/h)
South: PR 155- Sur									
1 LT	0.02	0.03	5.7	0.11	0.43	0.0	0	0.17	51.2
North: PR 155 - Norte									
7 T	0.00	0.00	0.2	0.00	0.00	0.0	0	0.40	60.0
9 R	0.13	0.19	8.2	0.03	0.67	0.0	0	0.80	49.0
West: Ramal 155									
10 L	0.61	0.76	11.1	0.24	0.88	0.0	0	2.99	46.2
12 R	0.14	0.21	11.3	0.24	0.87	0.0	0	0.80	46.2

PR 155 y Ramal 155
2005, pm
Intersection ID: 03
Stop Sign Controlled Intersection

Table 5.6 - INTERSECTION PERFORMANCE

Total Flow (veh/h)	Deg. Satn x	Total Delay (veh-h/h)	Total Delay (pers-h/h)	Aver. Delay (sec)	Prop. Queued	Eff. Stop Rate	Longest Queue (m)	Perf. Index	Aver. Speed (km/h)
South: PR 155- Sur									
12	0.008	0.02	0.03	5.7	0.11	0.43	0	0.17	51.2
North: PR 155 - Norte									
96	0.051	0.13	0.19	4.8	0.00	0.39	0	1.30	53.0
West: Ramal 155									
208	0.240	0.85	0.97	11.2	0.24	0.88	0	3.79	46.2
ALL VEHICLES:									
316	0.240	0.99	1.19	9.0	0.16	0.71	0	5.26	48.3
INTERSECTION (persons):									
474	0.240		1.19	9.0	0.16	0.71		5.26	48.3

Queue values in this table are mean cycle-average queue (metres).

PR 155 y Ramal 155
2005, pm
Intersection ID: 03
Stop Sign Controlled Intersection

Table 5.7 - LANE PERFORMANCE

Dem Q u e u e

Lane No.	Mov No.	Flow (veh /h)	Cap (veh /h)	Deg. Satn x	Aver. Delay (sec)	Eff. Stop Rate	Cycle (veh)	Aver. (m)	Short Lane (m)
South: PR 155- Sur									
1 LT	1	12	1536	0.008	5.7	0.43	0.0	0	
North: PR 155 - Norte									
1 TR	7, 9	96	1895	0.051	4.8	1.39	0.0	0	
West: Ramal 155									
1 LR	10, 12	208	866	0.240	11.2	0.89	0.0	0	

PR 155 y Ramal 155
2005, pm
Intersection ID: 03
Stop Sign Controlled Intersection

Table 5.9A - LANE FLOW AND CAPACITY INFORMATION

Lane No.	Mov No.	Dem Flow (veh/h) Lef	Thru	Rig	Tot	Min Cap (veh /h)	Tot Cap (veh /h)	Deg. Satn x	Lane Util %
South: PR 155- Sur									
1 LT	1	8	4	0	12	12	1536	0.008	100
North: PR 155 - Norte									
1 TR	7, 9	0	40	56	96	96	1895	0.051	100
West: Ramal 155									
1 LR	10, 12	164	0	44	208	123	866	0.240	100

The capacity value for priority and continuous movements is obtained by adjusting the basic saturation flow for heavy vehicle and turning vehicle effects. Saturation flow scale applies if specified.

PR 155 y Ramal 155
2005, pm
Intersection ID: 03
Stop Sign Controlled Intersection

Table 5.10 - MOVEMENT CAPACITY AND PERFORMANCE SUMMARY

Mov No.	Mov Typ	Dem Flow	Total Cap.	Lane Util	Deg. Satn	Aver. Delay	Eff. Stop	Cycle Average	Perf. Index

	(veh /h)	(veh /h)	(%)	x	(sec)	Rate	Queue (veh)	
South: PR 155- Sur								
1 LT	12	1536	100	0.008	5.7	0.43	0.0	0.17
North: PR 155 - Norte								
7 T	40	759	100	0.051	3.0	0.50	0.0	0.40
9 R	56	1105	100	0.051	8.2	0.67	0.0	0.90
West: Ramal 155								
10 L	164	683	100	0.240*	11.1	0.89	0.0	2.99
12 R	44	183	100	0.240*	11.3	0.87	0.0	0.80

* Maximum degree of saturation

PR 155 y Ramal 155
2005, pm
Intersection ID: 03
Stop Sign Controlled Intersection

Table 5.12A - FUEL CONSUMPTION, EMISSIONS AND COST - TOTAL

Mov No.	Fuel Total L/h	Cost Total $/h	HC Total kg/h	CO Total kg/h	NOX Total kg/h	CO2 Total kg/h
South: PR 155- Sur						
1 LT	0.7	4.41	0.003	0.13	0.004	1.8
	0.7	4.41	0.003	0.13	0.004	1.8
North: PR 155 - Norte						
7 T	1.7	12.15	0.006	0.12	0.008	4.3
9 R	3.7	21.83	0.016	0.36	0.023	9.3
	5.4	33.99	0.022	0.69	0.030	13.6
West: Ramal 155						
10 L	11.5	67.32	0.051	2.47	0.070	28.8
12 R	3.1	18.17	0.014	0.65	0.019	7.7
	14.6	85.49	0.064	3.13	0.089	36.6
INTERSECTION:	20.8	123.99	0.089	4.15	0.124	52.0

PARAMETERS USED IN COST CALCULATIONS

Pump price of fuel ($/L)	=	0.900
Fuel resource cost factor	=	0.50
Ratio of running cost to fuel cost	=	3.0

Average income ($/h)	=	27.00
Time value factor	=	0.60
Average occupancy (persons/veh)	=	1.5
Light vehicle mass (1000 kg)	=	1.4
Heavy vehicle mass (1000 kg)	=	11.0
Light vehicle idle fuel rate (L/h)	=	1.350
Heavy vehicle idle fuel rate (L/h)	=	2.000

The idle fuel and vehicle mass parameters given above are the default values (data given in RIDES may override some of these parameters).

PR 155 y Ramal 155
2005, pm
Intersection ID: 03
Stop Sign Controlled Intersection

Table 5.14 - SUMMARY OF INPUT AND OUTPUT DATA

Lane No.	Demand Flow (veh/h) L	T	R	Total	%HV	Adj. Basic Satf.	Eff Grn (secs) 1st	2nd	Deg Sat x	Aver. Delay (sec)	Longest Queue (m)	Shrt Lane (m)
South: PR 155- Sur												
1 LT	8	4		12	0				0.008	5.7	0	
	8	4	0	12	0				0.008	5.7	0	
North: PR 155 - Norte												
1 T		40	56	96	0				0.051	4.8	0	
	0	40	56	96	0				0.051	4.8		
West: Ramal 155												
1 LR	64		44	208	0				0.240	11.2	0	
	164	0	44	208	0				0.240	11.2	0	
ALL VEHICLES				Total Flow 316	% HV 0				Max X 0.240	Aver. Delay 9.0	Max Queue 0	

Total flow period = 60 minutes. Peak flow period = 15 minutes.

Queue values in this table are mean cycle-average queue (metres).

Note: Basic Saturation Flows are not adjusted at roundabouts or sign-controlled intersections and apply only to continuous lanes.

PR 155 y Ramal 155
2005, pm
Intersection ID: 03
Stop Sign Controlled Intersection

Table 5.15 - CAPACITY AND LEVEL OF SERVICE

Mov No.	Mov Typ	Total Flow (veh /h)	Total Cap. (veh /h)	Deg. of Satn (v/c)	Aver. Delay (sec)	LOS	Longest Cycle (vehs)	Queue Aver. (m)
South: PR 155- Sur								
1 LT		12	1536	0.008	5.7	A	0.0	0
		12		0.008	5.7	A	0.0	0
North: PR 155 - Norte								
1 T		40	789	0.051	0.0	A	0.0	0
9 R		56	1105	0.051	8.2	A	0.0	0
		96		0.051	4.8	A	0.0	0
West: Ramal 155								
10 L		164	683	0.240*	11.1	B	0.0	0
12 R		44	183	0.240*	11.3	B	0.0	0
		208		0.240	11.2	B	0.0	0
ALL VEHICLES:		316		0.240	9.0	NA	0.0	0

Level of Service calculations are based on average control delay including geometric delay (HCM criteria), independent of the current delay definition used. For the criteria, refer to the "Level of Service" topic in the aaSIDRA Output Guide or the Output section of the on-line help.

NA Not Applicable - Intersection Level of Service is not calculated at two-way stop control or give-way/yield controlled intersections.

* Maximum v/c ratio, or critical green periods

--- End of aaSIDRA Output ---

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PR 155 y Ramal 155
2010, am
Intersection ID: 03

RUN INFORMATION

* Basic Parameters:
  Intersection Type: Unsignalised Two-Way Stop Control
  Driving on the right-hand side of the road
  Input data specified in Metric units
  Default Values File No. 30
  Peak flow period (for performance): 15 minutes
  Unit time (for volumes): 60 minutes (Total Flow Period)
  Delay definition: Control delay
                    Geometric delay included
  aaSIDRA Standard Delay and Queue models used
  Level of Service based on: Delay (HCM Method)
  Queue definition: Cycle average queue, Average

PR 155 y Ramal 155
2010, am
Intersection ID: 03
Stop Sign Controlled Intersection

DEFAULT PARAMETERS

Default values for some of the important general parameters:
(Default Values File: DEF30.SDF)

1. Basic saturation flow: 1950 veh/h

   This value applies mainly to signalised intersections. For roundabouts and sign-controlled intersections, it is used for determining capacity of priority and continuous movements.

2. Through car equivalents for signalised intersections

	LEFT LV	LEFT HV	THROUGH LV	THROUGH HV	RIGHT LV	RIGHT HV
Normal	1.050	1.800	1.000	1.650	1.050	1.600
Restricted	1.250	2.250			1.250	2.250

3. Opposed turn parameters (Two-Way Stop Control)

	Crit. Gap	Follow Hdway	Min. Deps	% Exit Flow Opposing
Left turns :	7.0	4.0	2.0	50
Through :	6.5	3.5	2.0	50
Right turns:	5.0	3.0	2.0	50
Opposed turns from priority road:	4.5	2.5	2.0	0

4. Cruise speed= 60 km/h, Approach Distance= 500 m

5. Queue space per vehicle in metres
   Light vehicles: 7.0 Heavy vehicles: 13.0

A full list of input data defaults and ranges is given in the Input Guide part of aaSIDRA User Guide.

PR 155 y Ramal 155
2010, am
Intersection ID: 03
Stop Sign Controlled Intersection

Table 5.0 - TRAFFIC FLOW DATA

Mov No.	Left LV	Left HV	Through LV	Through HV	Right LV	Right HV	Flow Scale	Peak Flow Factor
VEHICLES Demand flows in veh/hour as used by the program								
South: PR 155- Sur								
1	13	0	24	0	0	0	1.00	1.00
North: PR 155 - Norte								
7	0	0	40	0	0	0	1.00	1.00
9	0	0	0	0	480	0	1.00	1.00
West: Ramal 155								
10	200	0	0	0	0	0	1.00	1.00
12	0	0	0	0	35	0	1.00	1.00

Based on unit time = 60 minutes.
Flow Scale and Peak Hour Factor effects included in flow values.

PR 155 y Ramal 155
2010, am
Intersection ID: 03
Stop Sign Controlled Intersection

Table 5.2 - MOVEMENT CAPACITY PARAMETERS

Mov No.	Demand	Opposing Movement	Adjust.	Total Cap.	Prac. Deg.	Prac. Spare	Lane Util	Deg. Satn

	Flow (veh/h)	P* (%)	Flow (veh/h)	HV (%)	Flow (pcu/h)	(veh /h)	Satn xp	Cap. (%)	(%)	x
South: PR 155- Sur										
1 LT	37	0.0	40	0.0	40	1707	0.80	3591	100	0.022
North: PR 155 - Norte										
7 T	40	0.0	0			143	0.80	186	100	0.280
9 R	480	0.0	0			1721	0.80	187	100	0.279
West: Ramal 155										
10 L	200	0.0	280+	0.0	280	518	0.80	107	100	0.386*
12 R	35	0.0	280+	0.0	280	91	0.80	108	100	0.385

* Percentage of exiting flow included in total opposing flow

PR 155 y Ramal 155
2010, am
Intersection ID: 03
Stop Sign Controlled Intersection

Table 5.3 - INTERSECTION PARAMETERS

Intersection Level of Service	=	NA
Worst movement Level of Service	=	C
Average intersection delay (s)	=	3.6
Largest average movement delay (s)	=	15.3
Largest cycle-average queue, mean (m)	=	2
Performance Index	=	13.50
Degree of saturation (highest)	=	0.386
Practical Spare Capacity (lowest)	=	107 %
Effective intersection capacity, (veh/h)	=	2051
Total vehicle flow (veh/h)	=	792
Total person flow (pers/h)	=	1188
Total vehicle delay (veh-h/h)	=	2.11
Total person delay (pers-h/h)	=	3.16
Total effective vehicle stops (veh/h)	=	562
Total effective person stops (pers/h)	=	844
Total vehicle travel (veh-km/h)	=	477.9
Total cost ($/h)	=	314.35
Total fuel (L/h)	=	52.5
Total CO2 (kg/h)	=	131.28

NA Not Applicable - Intersection Level of Service is not calculated at two-way stop control or give-way/yield controlled intersections. See Table 5.15 or Movement Displays for individual movement LOS values.

PR 155 y Ramal 155
2010, am
Intersection ID: 03
Stop Sign Controlled Intersection

Table 5.5 - MOVEMENT PERFORMANCE

Mov No.	Total Delay (veh-h/h)	Total Delay (pers-h/h)	Aver. Delay (sec)	Prop. Queued	Eff. Stop Rate	Longest Cycle (veh)	Queue Aver. (m)	Perf. Index	Aver. Speed (km/h)
South: PR 155- Sur									
1 LT	0.03	0.05	3.1	0.12	0.23	0.0	0	0.45	54.3
North: PR 155 - Norte									
7 T	0.00	0.00	0.0	0.00	0.00	0.0	0	0.40	60.0
9 R	1.09	1.64	8.2	0.00	0.67	0.0	0	7.71	49.0
West: Ramal 155									
10 L	0.84	1.26	15.1	0.56	1.00	0.3	2	4.21	43.1
12 R	0.15	0.22	15.3	0.56	0.96	0.3	2	0.73	43.2

PR 155 y Ramal 155
2010, am
Intersection ID: 03
Stop Sign Controlled Intersection

Table 5.6 - INTERSECTION PERFORMANCE

Total Flow (veh/h)	Deg. Satn x	Total Delay (veh-h/h)	Total Delay (pers-h/h)	Aver. Delay (sec)	Prop. Queued	Eff. Stop Rate	Longest Queue (m)	Perf. Index	Aver. Speed (km/h)
South: PR 155- Sur									
37	0.022	0.03	0.05	3.1	0.12	0.23	0	0.45	54.3
North: PR 155 - Norte									
520	0.280	1.09	1.64	7.8	0.00	0.62	0	8.11	49.7
West: Ramal 155									
235	0.386	0.99	1.48	15.1	0.56	0.99	2	4.94	43.2
ALL VEHICLES:									
792	0.386	2.11	3.16	9.6	0.19	0.71	2	13.50	47.7
INTERSECTION (persons):									
1188	0.386		3.16	9.6	0.19	0.71		13.50	47.7

Queue values in this table are mean cycle-average queue (metres).

PR 155 y Ramal 155
2010, am
Intersection ID: 03
Stop Sign Controlled Intersection

Table 5.7 - LANE PERFORMANCE

	Dem	Q u e u e

Lane No.	Mov No.	Flow (veh /h)	Cap (veh /h)	Deg. Satn x	Aver. Delay (sec)	Eff. Stop Rate	Cycle (vehs)	Aver. (m)	Short Lane (m)
South: PR 155- Sur									
1 LT	1	37	1707	0.022	3.1	0.23	0.0	0	
North: PR 155 - Norte									
1 TR	7, 9	520	1864	0.279	7.6	0.62	0.8	0	
West: Ramal 155									
1 LR	10, 12	236	608	0.386	15.1	0.99	0.3	2	

PR 155 y Ramal 155
2010, am
Intersection ID: 03
Stop Sign Controlled Intersection

Table S.9A LANE FLOW AND CAPACITY INFORMATION

Lane No.	Mov No.	Dem Flow (veh/h) Lef	Thru	Rig	Tot	Mov Cap (veh /h)	Tot Cap (veh /h)	Deg. Satn x	Lane Util %
South: PR 155- Sur									
1 LT	1	13	24	0	37	37	1707	0.022	100
North: PR 155 - Norte									
1 TR	7, 9	0	40	480	520	129	1864	0.279	100
West: Ramal 155									
1 LR	10, 12	200	0	35	236	120	608	0.386	100

The capacity value for priority and continuous movements is obtained by adjusting the basic saturation flow for heavy vehicle and turning vehicle effects. Saturation flow scale applies if specified.

PR 155 y Ramal 155
2010, am
Intersection ID: 03
Stop Sign Controlled Intersection

Table S.10 - MOVEMENT CAPACITY AND PERFORMANCE SUMMARY

Mov No.	Mov Typ	Dem Flow (veh /h)	Total Cap. (veh /h)	Lane Util (%)	Deg. Satn x	Aver. Delay (sec)	Eff. Stop Rate	Cycle Average (vehs)	Perf. Index (veh)
South: PR 155- Sur									
1 LT		37	1707	100	0.022	3.1	0.23	0.0	0.45
North: PR 155 - Norte									
7 T		40	143	100	0.280	0.0	0.00	0.0	0.40
9 R		480	1721	100	0.279	8.2	0.67	0.9	7.71
West: Ramal 155									
10 L		200	518	100	0.386*	15.1	1.00	0.3	4.21
12 R		35	91	100	0.386	15.3	0.96	0.3	0.73

* Maximum degree of saturation

PR 155 y Ramal 155
2010, am
Intersection ID: 03
Stop Sign Controlled Intersection

Table S.12A - FUEL CONSUMPTION, EMISSIONS AND COST - TOTAL

Mov No.	Fuel Total L/h	Cost Total $/h	HC Total kg/h	CO Total kg/h	NOX Total kg/h	CO2 Total kg/h
South: PR 155- Sur						
1 LT	2.0	12.69	0.008	0.29	0.011	5.0
	2.0	12.69	0.008	0.29	0.011	5.0
North: PR 155 - Norte						
7 T	1.7	12.15	0.006	0.12	0.008	4.3
9 R	31.9	187.08	0.138	6.55	0.193	79.8
	33.6	199.23	0.144	6.68	0.201	84.1
West: Ramal 155						
10 L	14.4	87.11	0.064	3.05	0.087	35.9
12 R	2.5	15.31	0.011	0.33	0.015	6.3
	16.9	102.43	0.075	3.38	0.102	42.2
INTERSECTION:	52.5	314.35	0.226	10.55	0.313	131.3

PARAMETERS USED IN COST CALCULATIONS

Pump price of fuel ($/l)	=	0.900
Fuel resource cost factor	=	0.50
Ratio of running cost to fuel cost	=	3.0

Average income ($/h)	=	27.00
Time value factor	=	0.60
Average occupancy (persons/veh)	=	1.5
Light vehicle mass (1000 kg)	=	1.4
Heavy vehicle mass (1000 kg)	=	11.0
Light vehicle idle fuel rate (L/h)	=	1.350
Heavy vehicle idle fuel rate (L/h)	=	2.000

The idle fuel and vehicle mass parameters given above are the default values (data given in RTBES may override some of these parameters)

PR 155 y Ramal 155
2010, am
Intersection ID: 03
Stop Sign Controlled Intersection

Table S.14 - SUMMARY OF INPUT AND OUTPUT DATA

Lane No.	Demand Flow (veh/h) L	T	R	Tot	%HV	Adj. Basic Satt.	Eff Grn (secs) 1st 2nd	Deg Sat x	Aver. Delay (sec)	Longest Queue (m)	Shrt Lane (m)
South: PR 155- Sur											
1 LT	13	24		37	0			0.022	3.1	0	
	13	24	0	37	0			0.022	3.1	0	
North: PR 155 - Norte											
1 TR		40	480	520	0			0.279	7.6	0	
	0	40	480	520	0			0.279	7.6		
West: Ramal 155											
1 LR	200		35	235	0			0.386	15.1	2	
	200	0	35	235	0			0.386	15.1	2	
ALL VEHICLES				Total Flow 792	% HV 0			Max X 0.386	Aver. Delay 9.6	Max Queue 2	

Total flow period = 60 minutes. Peak flow period = 15 minutes.

Queue values in this table are mean cycle-average queue (metres).

Note: Basic Saturation Flows are not adjusted at roundabouts or sign-controlled intersections and apply only to continuous lanes.

PR 155 y Ramal 155
2010, am
Intersection ID: 03
Stop Sign Controlled Intersection

Table S.15 - CAPACITY AND LEVEL OF SERVICE

Mov No.	Mov Typ	Total Flow (veh /h)	Total Cap. (veh /h)	Deg. of Satn (v/c)	Aver. Delay (sec)	LOS	Longest Queue Cycle (veh)	Aver. (m)
South: PR 155- Sur								
1 LT		37	1707	0.022	3.1	A	0.0	0
		37		0.022	3.1	A	0.0	0
North: PR 155 - Norte								
7 T		40	143	0.280	0.0	A	0.0	0
9 R		480	1721	0.279	8.2	A	0.0	0
		520		0.280	7.6	A	0.0	0
West: Ramal 155								
10 L		200	518	0.386*	15.1	C	0.3	2
12 R		35	91	0.385	15.3	C	0.3	2
		235		0.386	15.1	C	0.3	2
ALL VEHICLES:		792		0.386	9.6	NA	0.3	2

Level of Service calculations are based on average control delay including geometric delay (HCM criteria), independent of the current delay definition used. For the criteria, refer to the "Level of Service" topic in the aaSIDRA Output Guide or the Output section of the on-line help.

NA Not Applicable - Intersection Level of Service is not calculated at two-way stop control or give-way/yield controlled intersections.

* Maximum v/c ratio, or critical green periods

--- End of aaSIDRA Output ---

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Carlos M. Contreras User ID: mC276
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Filename: C:\Documents and Settings\All Users\Documents\Vega Baja-octubre-2005-Monte Arenas\pr 155 y ramal 155-2010-pm.CUT

PR 155 y Ramal 155
2010, pm
Intersection ID: 03

RUN INFORMATION

* Basic Parameters:
  Intersection type: Unsignalised - Two-Way Stop Control
  Driving on the right-hand side of the road
  Input data specified in Metric units
  Default Values File No. 30
  Peak flow period (for performance): 15 minutes
  Unit time (for volumes): 60 minutes (Total Flow Period)
  Delay definition: Control delay
  Geometric delay included
  aaSIDRA Standard Delay and Queue models used
  Level of Service based on: Delay (HCM method)
  Queue definition: Cycle average queue, Average

PR 155 y Ramal 155
2010, pm
Intersection ID: 03
Stop Sign Controlled Intersection

DEFAULT PARAMETERS

Default values for some of the important general parameters:
(Default Values File: DEF30.SDF)

1. Basic saturation flow: 1950 tcu/h

   This value applies mainly to signalised intersections. For roundabouts and sign-controlled intersections, it is used for determining capacity of priority and continuous movements.

2. Through car equivalents for signalised intersections

	LEFT		THROUGH		RIGHT	
	LV	HV	LV	HV	LV	HV
Normal	1.050	1.800	1.000	1.650	1.050	1.800
Restricted	1.250	2.250			1.250	2.250

3. Opposed turn parameters (Two-Way Stop Control)

	Crit. Gap	Fol.up Hdway	Min. Deps	% Exit Flow Opposing
Left turns :	7.0	4.0	2.0	50
Through :	6.5	3.5	2.0	50
Right turns:	5.0	3.0	2.0	50
Opposed turns from priority road:	4.5	2.5	2.0	0

4. Cruise speed= 60 km/h, Approach Distance= 500 m

5. Queue space per vehicle in metres
   Light vehicles: 7.0 Heavy vehicles: 13.0

A full list of input data defaults and ranges is given in the Input Guide part of aaSIDRA User Guide.

PR 155 y Ramal 155
2010, pm
Intersection ID: 03
Stop Sign Controlled Intersection

Table S.0 - TRAFFIC FLOW DATA

Mov No.	Left LV	Left HV	Through LV	Through HV	Right LV	Right HV	Flow Scale	Peak Flow Factor
VEHICLES Demand flows in veh/hour as used by the program								
South: PR 155- Sur								
1	3	0	21	0	0	0	1.00	1.00
North: PR 155 - Norte								
7	0	0	63	0	0	0	1.00	1.00
9	0	0	2	0	304	0	1.00	1.00
West: ramal 155								
10	594	0	0	0	0	0	1.00	1.00
12	0	0	0	0	49	0	1.00	1.00

Based on unit time = 60 minutes.
Flow Scale and Peak Hour Factor effects included in flow values.

PR 155 y Ramal 155
2010, pm
Intersection ID: 03
Stop Sign Controlled Intersection

Table S.2 - MOVEMENT CAPACITY PARAMETERS

Mov No.	Demand	Opposing Movement Adjust.	Total Cap.	Frac. Deg.	Frac. Spare	Lane Util	Deg. Satn

	Flow (veh/h)	HV (%)	Flow (veh/h)	HV (%)	Flow (pcu/h)	(veh /h)	Satn xp	Cap. (%)	(%)	x
South: PR 155- Sur										
1 LT	32	0.0	63	0.0	63	1725	0.80	4500	100	0.017
North: PR 155 - Norte										
7 T	63	0.0	0			321	0.80	308	100	0.196
9 R	384	0.0	0			1551	0.80	308	100	0.196
West: ramal 155										
10 L	594	0.0	215+	0.0	215	612	0.80	-18	100	0.971*
12 R	49	0.0	215+	0.0	215	21	0.80	-17	100	0.961

* Percentage of exiting flow included in total opposing flow

PR 155 y Ramal 155
2010, pm
Intersection ID: 03
Stop Sign Controlled Intersection

Table S.5 - INTERSECTION PARAMETERS

Intersection level of Service	=	NA
Worst movement level of Service	=	E
Average intersection delay (s)	=	26.8
Largest average movement delay (s)	=	39.5
Largest cycle-average queue, mean (m)	=	36
Performance Index	=	30.47
Degree of saturation (highest)	=	0.971
Practical Spare Capacity (lowest)	=	-19 %
Effective intersection capacity, (veh/h)	=	1072
Total vehicle flow (veh/h)	=	1040
Total person flow (pers/h)	=	1560
Total vehicle delay (veh-h/h)	=	7.74
Total person delay (pers-h/h)	=	11.61
Total effective vehicle stops (veh/h)	=	1284
Total effective person stops (pers/h)	=	1927
Total vehicle travel (veh-km/h)	=	626.3
Total cost ($/h)	=	546.99
Total fuel (L/h)	=	79.6
Total CO2 (kg/h)	=	193.05

NA Not Applicable - Intersection Level of Service is not calculated at two-way stop control or give-way/yield controlled intersections. See Table S.15 or Movement Displays for individual movement LOS values.

PR 155 y Ramal 155
2010, pm
Intersection ID: 03
Stop Sign Controlled Intersection

Table S.6 - MOVEMENT PERFORMANCE

Mov No.	Total Delay (veh-h/h)	Total Delay (pers-h/h)	Aver. Delay (sec)	Prop. Queued	Eff. Stop Rate	Longest Cycle (veh)	Queue Aver. (m)	Perf. Index	Aver. Speed (km/h)
South: PR 155- Sur									
1 LT	0.02	0.03	2.7	0.16	0.19	0.0	0	0.36	54.5
North: PR 155 - Norte									
7 T	0.00	0.00	0.0	0.00	0.00	0.0	0	0.64	60.0
9 R	0.69	1.04	6.2	0.00	0.67	0.0	0	4.98	49.0
West: ramal 155									
10 L	6.49	9.73	39.3	1.00	1.67	5.2	36	22.72	29.4
12 R	0.54	0.81	39.5	1.00	1.67	5.2	36	1.89	29.5

PR 155 y Ramal 155
2010, pm
Intersection ID: 03
Stop Sign Controlled Intersection

Table S.6 - INTERSECTION PERFORMANCE

Total Flow (veh/h)	Deg. Satn x	Total Delay (veh-h/h)	Total Delay (pers-h/h)	Aver. Delay (sec)	Prop. Queued	Eff. Stop Rate	Longest Queue (m)	Perf. Index	Aver. Speed (km/h)
South: PR 155- Sur									
30	0.017	0.02	0.03	2.7	0.16	0.19	0	0.36	54.5
North: PR 155 - Norte									
367	0.196	0.69	1.04	6.8	0.00	0.55	0	5.52	50.6
West: ramal 155									
643	0.971	7.03	10.54	39.3	1.00	1.67	36	24.60	29.4
ALL VEHICLES:									
1040	0.971	7.74	11.61	26.9	0.62	1.24	36	30.47	35.1
INTERSECTION (persons):									
1560	0.971		11.61	26.8	0.62	1.24		30.47	35.1

Queue values in this table are mean cycle-average queue (metres).

PR 155 y Ramal 155
2010, pm
Intersection ID: 03
Stop Sign Controlled Intersection

Table S.7 - LANE PERFORMANCE

Dem	Queue

Lane No.	Mov No.	Flow (veh /h)	Cap (veh /h)	Deg. Satn x	Aver. Delay (sec)	Eff. Stop Rate	Cycle (veh)	Aver. (m)	Short Lane (m)
South: PR 155- Sur									
1 LT	1	30	1725	0.017	2.7	0.19	0.0		0
North: PR 155 - Norte									
1 TR	7, 9	367	1872	0.196	6.6	0.55	0.0		0
West: ramal 155									
1 LR	10, 12	643	663	0.970	39.3	1.67	5.2		36

PR 155 y Ramal 155
2010, pm
Intersection ID: 03
Stop Sign Controlled Intersection

Table 5.8A - LANE FLOW AND CAPACITY INFORMATION

Lane No.	Mov No.	Dem Flow (veh/h) Lef	Thru	Rig	Tot	Min Cap (veh /h)	Tot Cap (veh /h)	Deg. Satn x	Lane Util %
South: PR 155- Sur									
1 LT	1	9	21	0	30	30	1725	0.017	100
North: PR 155 - Norte									
1 TR	7, 9	0	63	304	367	143	1872	0.196	100
West: ramal 155									
1 LR	10, 12	594	0	49	643	120	663	0.970	100

The capacity value for priority and continuous movements is obtained by adjusting the basic saturation flow for heavy vehicle and turning vehicle effects. Saturation flow scale applies if specified.

PR 155 y Ramal 155
2010, pm
Intersection ID: 03
Stop Sign Controlled Intersection

Table 5.10 - MOVEMENT CAPACITY AND PERFORMANCE SUMMARY

Mov No.	Mov Typ	Dem Flow	Total Cap.	Lane Util	Deg. Satn	Aver. Delay	Eff. Stop	Cycle Average	Perf. Index

	(veh /h)	(veh /h)	(%)	x	(sec)		Rate	Queue (veh)	
South: PR 155- Sur									
1 LT	30	1725	100	0.017	2.7	0.19		0.0	0.36
North: PR 155 - Norte									
7 T	63	321	100	0.196	3.0	0.00		0.0	0.64
9 R	304	1551	100	0.196	8.2	0.67		0.0	4.88
West: ramal 155									
10 L	594	612	100	0.971*	39.3	1.67		5.2	22.72
12 R	49	51	100	0.961	39.5	1.67		5.2	1.88

* Maximum degree of saturation

PR 155 y Ramal 155
2010, pm
Intersection ID: 03
Stop Sign Controlled Intersection

Table 5.12A - FUEL CONSUMPTION, EMISSIONS AND COST - TOTAL

Mov No.	Fuel Total L/h	Cost Total $/h	HC Total kg/h	CO Total kg/h	NOX Total kg/h	CO2 Total kg/h
South: PR 155- Sur						
1 LT	1.6	10.25	0.006	0.23	0.009	4.0
	1.6	10.25	0.006	0.23	0.009	4.0
North: PR 155 - Norte						
7 T	2.7	19.14	0.009	0.20	0.012	6.8
9 R	20.2	118.48	0.087	4.15	0.122	50.5
	22.9	137.62	0.097	4.35	0.135	57.3
West: ramal 155						
10 L	50.8	360.49	0.238	10.53	0.292	127.1
12 R	4.3	30.62	0.020	0.91	0.025	10.7
	55.1	399.12	0.257	11.60	0.317	137.3
INTERSECTION:	79.6	546.99	0.360	16.18	0.460	199.0

PARAMETERS USED IN COST CALCULATIONS

Pump price of fuel ($/L)	=	0.900
Fuel resource cost factor	=	0.50
Ratio of running cost to fuel cost	=	3.3

Average income ($/h)	=	27.00
Time value factor	=	0.60
Average occupancy (persons/veh)	=	1.5
Light vehicle mass (1000 kg)	=	1.4
Heavy vehicle mass (1000 kg)	=	11.0
Light vehicle idle fuel rate (L/h)	=	1.350
Heavy vehicle idle fuel rate (L/h)	=	2.000

The idle fuel and vehicle mass parameters given above are the default values (data given in RTDSS may override some of these parameters).

PR 155 y Ramal 155
2010, pm
Intersection ID: 03
Stop Sign Controlled Intersection

Table S.14 - SUMMARY OF INPUT AND OUTPUT DATA

Lane No.	Demand Flow (veh/h) L	T	R	Tot	%HV	Adj. Basic Satd.	Eff Grn (secs) 1st 2nd	Deg Sat x	Aver. Delay (sec)	Longest Queue (m)	Shrt Lane (m)
South: PR 155- Sur											
1 LT	9	21		30	0			0.017	2.7	0	
	9	21	0	30	0			0.017	2.7	0	
North: PR 155 - Norte											
1 TR		63	304	367	0			0.196	6.0	0	
	0	63	304	367	0			0.196	6.0		
West: ramal 155											
1 LR	594		49	643	0			0.970	39.3	36	
	594	0	49	643	0			0.970	39.3	36	
ALL VEHICLES				Total Flow 1040	% HV 0			Max X 0.971	Aver. Delay 26.8	Max Queue 36	

Total flow period - 60 minutes. Peak flow period = 15 minutes.

Queue values in this table are mean cycle-average queue (metres).

Note: Basic Saturation Flows are not adjusted at roundabouts or sign-controlled intersections and apply only to continuous lanes.

PR 155 y Ramal 155
2010, pm
Intersection ID: 03
Stop Sign Controlled Intersection

Table S.15 - CAPACITY AND LEVEL OF SERVICE

Mov No.	Mov Typ	Total Flow (veh /h)	Total Cap. (veh /h)	Deg. of Satn (v/c)	Aver. Delay (sec)	LOS	Longest Queue Cycle (veh)	Aver. (m)
South: PR 155- Sur								
1 LT		30	1725	0.017	2.7	A	0.0	0
		30		0.017	2.7	A	0.0	0
North: PR 155 - Norte								
7 T		63	321	0.196	0.0	A	0.0	0
9 R		304	1551	0.196	8.2	A	0.0	0
		367		0.196	6.9	A	0.0	0
West: ramal 155								
10 L		594	612	0.971*	39.3	E	5.2	36
12 R		49	51	0.961	39.5	E	5.2	36
		643		0.971	39.3	E	5.2	36
ALL VEHICLES:		1040		0.971	26.8	NA	5.2	36

Level of Service calculations are based on average control delay including geometric delay (ECM criteria), independent of the current delay definition used. For the criteria, refer to the "Level of Service" topic in the aaSIDRA Output Guide or the Output section of the on-line help.

NA Not Applicable - Intersection Level of Service is not calculated at two way stop control or give-way/yield controlled intersections.

* Maximum v/c ratio, or critical green periods

--- End of aaSIDRA Output ---

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Carlos M. Contreras User ID: mG278
Licence Type: Multi Computer

Time and Date of Analysis 3:55 PM, 15 Dec 2005

Filename: C:\Documents and Settings\Miguel Pellot\My Documents\Mis Proyectos\Vega Baja-octubre-2005-Monte Arenas\pr 645 con colectora norte-2010 am.OUT

PR 645 con colectora norte
2010, am
Intersection ID: 06

RUN INFORMATION

* Basic Parameters:
  Intersection Type: Unsignalised - Two-Way Stop Control
  Driving on the right-hand side of the road
  Input data specified in Metric units
  Default Values File No. 30
  Peak flow period (for performance): 15 minutes
  Unit time (for volumes): 60 minutes (Total Flow Period)
  Delay definition: Control delay
  Geometric delay included
  aaSIDRA Standard Delay and Queue models used
  Level of Service Based on: Delay (HCM method)
  Queue definition: Cycle average queue, Average

PR 645 con colectora norte
2010, am
Intersection ID: 06
Stop Sign Controlled Intersection

DEFAULT PARAMETERS

Default values for some of the important general parameters:
(Default Values file: DEF30.SDF)

1. Basic saturation flow: 1950 tcu/h

   This value applies mainly to signalised intersections. For roundabouts and sign-controlled intersections, it is used for determining capacity of priority and continuous movements.

2. Through car equivalents for signalised intersections

	LEFT		THROUGH		RIGHT	
	LV	HV	LV	HV	LV	HV
Normal	1.050	1.800	1.000	1.650	1.050	1.800

Restricted	1.250	2.250	1.250	2.250

3. Opposed turn parameters (Two-Way Stop Control):

	Crit. Gap	Follow Hdway	Min. Degs	% Exit Flow Opposing
Left turns :	7.0	4.0	2.0	50
Through :	6.5	3.5	2.0	50
Right turns:	5.0	3.0	2.0	50
Opposed turns from priority road:	4.5	2.5	2.0	0

4. Cruise speed= 60 km/h, Approach Distance= 500 m.

5. Queue space per vehicle in metres
   Light vehicles: 7.0 Heavy vehicles: 13.0

A full list of input data defaults and ranges is given in the Input Guide part of aaSIDRA User Guide.

PR 645 con colectora norte
2010, am
Intersection ID: 06
Stop Sign Controlled Intersection

Table 5.0 - TRAFFIC FLOW DATA

Mov No.	Left LV	Left HV	Through LV	Through HV	Right LV	Right HV	Flow Scale	Peak Flow Factor
VEHICLES Demand flows in veh/hour as used by the program								
South: PR-645 Sur								
1	5	0	199	0	0	0	1.00	1.00
3	0	0	0	0	5	0	1.00	1.00
East: Colectora Norte-Este								
4	5	0	70	0	0	0	1.00	1.00
6	0	0	0	0	13	0	1.00	1.00
North: PR 645-Norte								
7	4	0	38	0	0	0	1.00	1.00
9	0	0	0	0	6	0	1.00	1.00
West: Colectora Norte-Oeste								
10	18	0	24	0	0	0	1.00	1.00
12	0	0	0	0	5	0	1.00	1.00

Based on unit time = 60 minutes.
Flow Scale and Peak Hour Factor effects included in flow values.

PR 645 con colectora norte
2010, am
Intersection ID: 06
Stop Sign Controlled Intersection

Table 5.2 - MOVEMENT CAPACITY PARAMETERS

Mov No.	Demand Flow (veh/h)	HV (%)	Opposing Movement Flow (veh/h)	HV (%)	Adjust. Flow (pcu/h)	Total Cap. (veh /h)	Prac. Deg. Satn xp	Prac. Spare Cap. (%)	Lane Util (%)	Deg. Satn x
South: PR-645 Sur										
1 LT	194	1.0	46	0.0	44	1979	0.80	675	100	0.103
3 R	5	0.0	0			48	0.80	668	100	0.104
East: Colectora Norte-Este										
4 LT	75	0.0	DIFF			638	0.80	581	100	0.118*
6 R	13	0.0	192+	0.0	192	111	0.80	593	100	0.117
North: PR 645-Norte										
7 LT	42	0.0	194	0.0	194	1611	0.80	2969	100	0.026
9 R	6	0.0	0			230	0.80	2967	100	0.026
West: Colectora Norte-Oeste										
10 LT	41	0.0	DIFF			601	0.80	1073	100	0.068
12 R	5	0.0	41+	0.0	41	73	0.80	1069	100	0.069

DIFF Opposing flow was not printed as there was more than one opposed turn in this movement with differing opposing flows
\+ Percentage or exiting flow included in total opposing flow

PR 645 con colectora norte
2010, am
Intersection ID: 06
Stop Sign Controlled Intersection

Table 5.3 - INTERSECTION PARAMETERS

Intersection Level of Service	=	NA
Worst movement Level of Service	=	D
Average intersection delay (s)	=	5.0
Largest average movement delay (s)	=	13.1
Largest cycle-average queue, mean (m)	=	0
Performance Index	=	5.20
Degree of saturation (highest)	=	0.118
Practical Spare Capacity (lowest)	=	581 %
Effective intersection capacity, (veh/h)	=	3241
Total vehicle flow (veh/h)	=	381
Total person flow (pers/h)	=	572
Total vehicle delay (veh-h/h)	=	0.53
Total person delay (pers-h/h)	=	0.80
Total effective vehicle stops (veh/h)	=	130
Total effective person stops (pers/h)	=	196
Total vehicle travel (veh-km/h)	=	230.3
Total cost ($/h)	=	136.78
Total fuel (L/h)	=	21.7
Total CO2 (kg/h)	=	54.20

NA Not Applicable - Intersection Level of Service is not calculated at two-way stop control or give-way/yield controlled intersections. See Table 5.15 or Movement Displays for individual movement LOS values.

PR 645 con colectora norte
2010, am
Intersection ID: 06
Stop Sign Controlled Intersection

Table 5.5 - MOVEMENT PERFORMANCE

Mov No.	Total Delay (veh-h/h)	Total Delay (pers-h/h)	Aver. Delay (sec)	Prop. Queued	Eff. Stop Rate	Longest Cycle (vehs)	Queue Aver. (m)	Perf. Index	Aver. Speed (km/h)
South: PR-645 Sur									
1 LT	0.02	0.03	0.4	0.15	0.02	0.0	0	2.01	57.7
3 R	0.01	0.02	8.4	0.15	0.57	0.0	0	0.08	48.3
East: Colectora Norte-Este									
4 LT	0.26	0.39	12.4	0.42	0.89	0.1	0	1.42	45.5
6 R	0.05	0.07	12.8	0.42	0.85	0.1	0	0.25	45.2
North: PR 645-Norte									
7 LT	0.02	0.03	1.5	0.34	0.06	0.0	0	0.46	54.7
9 R	0.01	0.02	8.9	0.34	0.44	0.0	0	0.09	47.5
West: Colectora Norte-Oeste									
10 LT	0.15	0.22	12.8	0.32	0.32	0.0	0	0.79	44.6
12 R	0.02	0.03	13.1	0.32	0.78	0.0	0	0.09	44.7

PR 645 con colectora norte
2010, am
Intersection ID: 06
Stop Sign Controlled Intersection

Table 5.6 - INTERSECTION PERFORMANCE

Total Flow (veh/h)	Deg. Satn x	Total Delay (veh-h/h)	Total Delay (pers-h/h)	Aver. Delay (sec)	Prop. Queued	Eff. Stop Rate	Longest Queue (m)	Perf. Index	Aver. Speed (km/h)
South: PR-645 Sur									
199	0.104	0.03	0.05	0.6	0.15	0.03	0	2.03	57.4
East: Colectora Norte-Este									
88	0.118	0.30	0.46	12.4	0.42	0.89	0	1.67	45.4
North: PR 645-Norte									
49	0.026	0.03	0.05	2.5	0.34	0.11	0	0.56	53.1

```
West: Colectora Norte-Oeste
   45   0.068    0.16     0.25    12.8   0.32  0.90     0    0.89    44.9
-------------------------------------------------------------------------
ALL VEHICLES:
  381   0.118    0.53     0.85     5.0   0.25  0.34     0    5.20    52.0
-------------------------------------------------------------------------
INTERSECTION (personal):
  372   0.118             0.80     5.0   0.25  0.34          5.20    52.0
-------------------------------------------------------------------------
Queue values in this table are mean cycle-average queue (metres).
```

```
PR 645 con colectora norte
2010, am
Intersection ID:    06
            Stop Sign Controlled Intersection
```

Table 5.7 - LANE PERFORMANCE

Lane No.	Mov No.	Dem Flow (veh /h)	Cap (veh /h)	Deg. Satn x	Aver. Delay (sec)	Eff. Stop Rate	Queue Cycle (vehs)	Queue Aver. (m)	Short Lane (m)
South: PR-645 Sur									
1 LTR	1, 3	199	1928	0.103	0.6	0.03	0.0	0	
East: Colectora Norte-Este									
1 LTR	4, 6	58	748	0.118	12.4	0.88	0.1	3	
North: PR 645-Norte									
1 LTR	7, 9	49	1841	0.026	2.5	0.11	0.0	0	
West: Colectora Norte-Oeste									
1 LTR	10, 12	46	674	0.068	12.8	0.90	0.0	0	

```
PR 645 con colectora norte
2010, am
Intersection ID:    06
            Stop Sign Controlled Intersection
```

Table 5.8A - LANE FLOW AND CAPACITY INFORMATION

Lane No.	Mov No.	Dem Flow (veh/h) Lef	Thru	Rig	Tot	Min Cap (veh /h)	Tot Cap (veh /h)	Deg. Satn x	Lane Util %
South: PR-645 Sur									

1 LTR	1, 3	5	189	5	199	120	1928	0.103	100
East: Colectora Norte-Este									
1 LTR	4, 6	5	70	13	88	88	748	0.118	100
North: PR 645-Norte									
1 LTR	7, 9	4	38	6	46	48	1841	0.026	100
West: Colectora Norte-Oeste									
1 LTR	10, 12	18	23	5	46	46	674	0.068	100

The capacity value for priority and continuous movements is obtained by adjusting the basic saturation flow for heavy vehicle and turning vehicle effects. Saturation flow scale applies if specified.

```
PR 645 con colectora norte
2010, am
Intersection ID:    06
            Stop Sign Controlled Intersection
```

Table 5.10 - MOVEMENT CAPACITY AND PERFORMANCE SUMMARY

Mov No.	Mov Typ	Dem Flow (veh /h)	Total Cap. (veh /h)	Lane Util (%)	Deg. Satn x	Aver. Delay (sec)	Eff. Stop Rate	Cycle Average Queue (veh)	Perf. Index
South: PR-645 Sur									
1	LT	194	1879	100	0.103	0.4	0.02	0.0	2.01
3	R	5	48	100	0.104	8.4	0.57	0.0	0.08
East: Colectora Norte-Este									
4	LT	75	638	100	0.118*	12.4	0.83	0.1	1.42
6	R	13	111	100	0.117	12.8	0.85	0.1	0.25
North: PR 645-Norte									
7	LT	42	1611	100	0.026	1.5	0.06	0.0	0.46
9	R	6	230	100	0.026	8.9	0.44	0.0	0.09
West: Colectora Norte-Oeste									
10	LT	41	601	100	0.068	12.8	0.82	0.0	0.79
12	R	5	73	100	0.068	13.1	0.78	0.0	0.09

* Maximum degree of saturation

```
PR 645 con colectora norte
2010, am
Intersection ID:    06
```

Stop Sign Controlled Intersection

Table 5.12A - FUEL CONSUMPTION, EMISSIONS AND COST - TOTAL

Mov No.	Fuel Total L/h	Cost Total $/h	HC Total kg/h	CO Total kg/h	NOX Total kg/h	CO2 Total kg/h
South: PR 645 Sur						
1 LT	9.2	62.53	0.034	0.99	0.046	23.1
3 R	0.3	1.97	0.001	0.07	0.002	0.8
	9.5	64.00	0.035	1.06	0.049	23.9
East: Colectora Norte-Este						
4 LT	5.3	31.18	0.025	1.11	0.032	13.2
6 R	0.9	5.47	0.004	0.19	0.006	2.3
	6.2	36.65	0.027	1.31	0.038	15.5
North: PR 645-Norte						
7 LT	1.3	14.36	0.009	0.33	0.012	5.6
9 R	0.4	2.41	0.002	0.09	0.002	1.0
	1.7	16.76	0.011	0.41	0.015	6.7
West: Colectora Norte-Oeste						
10 LT	2.9	17.24	0.013	0.61	0.018	7.2
12 R	0.4	2.12	0.002	0.07	0.002	0.9
	3.3	19.37	0.014	0.69	0.020	8.1
INTERSECTION:	21.7	136.78	0.087	3.46	0.120	54.2

PARAMETERS USED IN COST CALCULATIONS

Pump price of fuel ($/L)	=	0.900
Fuel resource cost factor	=	0.50
Ratio of running cost to fuel cost	=	3.0
Average income ($/h)	=	27.00
Time value factor	=	0.60
Average occupancy (persons/veh)	=	1.5
Light vehicle mass (1000 kg)	=	1.4
Heavy vehicle mass (1000 kg)	=	11.0
Light vehicle idle fuel rate (L/h)	=	1.350
Heavy vehicle idle fuel rate (L/h)	=	2.000

The idle fuel and vehicle mass parameters given above are the default values (data given in RTIES may override some of these parameters).

PR 645 con colectora norte
2010, am

Intersection ID: 05
Stop Sign Controlled Intersection

Table 5.14 - SUMMARY OF INPUT AND OUTPUT DATA

Lane No.	Demand Flow (veh/h) L	T	R	Tot	%HV	Adj. Basic Satf.	Eff Grn (secs) 1st	2nd	Deg Sat x	Aver. Delay (sec)	Longest Queue (m)	Shrt Lane (m)
South: PR-645 Sur												
1 LTR	5	189	5	199	0				0.103	0.6	0	
	5	189	5	199	0				0.103	0.6	0	
East: Colectora Norte-Este												
1 LTR	5	70	13	88	0				0.118	12.4	0	
	5	70	13	88	0				0.118	12.4	0	
North: PR 645-Norte												
1 LTR	4	38	6	48	0				0.026	2.5	0	
	4	38	6	48	0				0.026	2.5	0	
West: Colectora Norte-Oeste												
1 LTR	18	23	5	46	0				0.069	12.8	0	
	18	23	5	46	0				0.069	12.8	0	
ALL VEHICLES				Total Flow 381	% HV 0				Max X 0.118	Aver. Delay 5.0	Max Queue 0	

Total flow period = 60 minutes. Peak flow period = 15 minutes.

Queue values in this table are mean cycle-average queue (metres).

Note: Basic Saturation Flows are not adjusted at roundabouts or sign-controlled intersections and apply only to continuous lanes.

PR 645 con colectora norte
2010, am
Intersection ID: 06
Stop Sign Controlled Intersection

Table 5.15 - CAPACITY AND LEVEL OF SERVICE

Mov No.	Mov Typ	Total Flow (veh /h)	Total Cap. (veh /h)	Deg. of Satn (v/c)	Aver. Delay (sec)	LOS	Longest Queue Cycle (veh)	Aver. (m)
South: PR-645 Sur								
1 LT		194	1879	0.103	0.4	A	0.0	0

3 R	5	43	0.104	8.4	A	0.0	0
	199		0.104	0.6	A	0.0	0
East: Colectora Norte-Este							
4 LT	85	638	0.116*	12.4	B	0.1	0
6 R	13	111	0.117	12.8	B	0.1	0
	98		0.116	12.4	B	0.1	0
North: PR 645-Norte							
7 LT	42	1611	0.026	1.5	A	0.0	0
9 R	6	230	0.026	8.3	A	0.0	0
	48		0.026	2.5	A	0.0	0
West: Colectora Norte-Oeste							
10 LT	41	801	0.069	12.8	B	0.0	0
12 R	5	73	0.069	13.1	B	0.0	0
	46		0.069	12.8	B	0.0	0
ALL VEHICLES:	381		0.118	5.0	NA	0.1	0

Level of Service calculations are based on
average control delay including geometric delay (HCM criteria),
independent of the current delay definition used.
For the criteria, refer to the "Level of Service" topic in the
aaSIDRA Output Guide or the Output section of the on-line help.

NA Not Applicable - Intersection Level of Service is not calculated at two-way stop control or give-way/yield controlled intersections.

* Maximum v/c ratio, or critical green periods

--- End of aaSIDRA Output ---

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PR 645 con colentora norte
2010, pm
Intersection ID: 07

RUN INFORMATION

* Basic Parameters:
Intersection Type: Unsignalised - Two-Way Stop Control
Driving on the right-hand side of the road
Input data specified in Metric Units
Default Values File No. 30
Peak flow period (for performance): 15 minutes
Unit time (for volumes): 60 minutes (Total Flow Period)
Delay definition: Control delay
Geometric delay included
aaSIDRA Standard Delay and Queue models used
Level of Service based on: Delay (HCM method)
Queue definition: Cycle average queue, Average

PR 645 con colectora norte
2010, pm
Intersection ID: 07
Stop Sign Controlled Intersection

DEFAULT PARAMETERS

Default values for some of the important general parameters:
(Default Values File: DEF30.SDF)

1. Basic saturation flow: 1950 tcu/h

This value applies mainly to signalised intersections. For roundabouts and sign-controlled intersections, it is used for determining capacity of priority and continuous movements.

2. Through car equivalents for signalised intersections

	L E F T		THROUGH		R I G H T	
	LV	HV	LV	HV	LV	HV
Normal	1.050	1.810	1.000	1.650	1.050	1.800

Restricted	1.250	2.250	1.250	2.250

3. Opposed turn parameters (Two-Way Stop Control)

	Crit. Gap	Follup Hdway	Min. Deps	% Exit Flow Opposing
Left turns :	5.0	4.0	2.0	50
Through :	4.5	3.5	2.0	50
Right turns:	5.0	3.0	2.0	50
Opposed turns from priority road:	4.5	2.5	2.0	0

4. Cruise speed= 80 km/h, Approach Distance= 500 m

5. Queue space per vehicle in metres
   Light vehicles: 7.0 Heavy vehicles: 13.0

A full list of input data defaults and ranges is given in the Input Guide part of aaSIDRA User Guide.

PR 645 con colectora norte
2010, pm
Intersection ID: 07
Stop Sign Controlled Intersection

Table 5.0 - TRAFFIC FLOW DATA

Mov No.	Left LV	Left HV	Through LV	Through HV	Right LV	Right HV	Flow Scale	Peak Flow Factor
VEHICLES Demand flows in veh/hour as used by the program								
South: PR-645 Sur								
1	5	0	131	0	0	0	1.00	1.00
3	0	0	0	0	5	0	1.00	1.00
East: Colectora Norte-Este								
4	0	0	46	0	0	0	1.00	1.00
6	0	0	0	0	8	0	1.00	1.00
North: PR 645-Norte								
7	14	0	141	0	0	0	1.00	1.00
9	0	0	0	0	19	0	1.00	1.00
West: Colectora Norte Oeste								
10	11	0	79	0	0	0	1.00	1.00
12	0	0	0	0	5	0	1.00	1.00

Based on unit time = 60 minutes.
Flow Scale and Peak Hour Factor effects included in flow values.

PR 645 con colectora norte
2010, pm
Intersection ID: 07
Stop Sign Controlled Intersection

Table 5.2 - MOVEMENT CAPACITY PARAMETERS

Mov No.	Demand Flow (veh/h)	HV (%)	Opposing Movement Flow (veh/h)	HV (%)	Adjust. Flow (pcu/h)	Total Cap. (veh /h)	Prac. Deg. Satn xp	Prac. Spare Cap. (%)	Lane Util (%)	Deg. Satn x
South: PR-645 Sur										
1 LT	136	0.0	160	0.0	160	1849	0.80	982	100	0.074
3 R	5	0.0	0			68	0.80	988	100	0.074
East: Colectora Norte-Este										
4 LT	51	0.0	DIFF			582	0.80	813	100	0.088
6 R	8	0.0	134+	0.0	134	91	0.80	810	100	0.088
North: PR 645-Norte										
7 LT	155	0.0	136	0.0	136	1656	0.80	755	100	0.094
9 R	19	0.0	0			203	0.80	755	100	0.094
West: Colectora Norte-Oeste										
10 LT	90	0.0	DIFF			622	0.80	453	100	0.145*
12 R	5	0.0	151+	0.0	151	35	0.80	460	100	0.143

DIFF Opposing flow was not printed as there was more than one opposed turn in this movement with differing opposing flows
\+ Percentage of exiting flow included in total opposing flow

PR 645 con colectora norte
2010, pm
Intersection ID: 07
Stop Sign Controlled Intersection

Table 5.3 - INTERSECTION PARAMETERS

Intersection level of Service	-	NA
Worst movement Level of Service	=	B
Average intersection delay (s)	=	5.5
Largest average movement delay (s)	=	13.7
Largest cycle-average queue, mean (m)	-	1
Performance Index	=	6.52
Degree of saturation (highest)	=	0.145
Practical Spare Capacity (lowest)	=	453 %
Effective intersection capacity, (veh/h)	-	3241
Total vehicle flow (veh/h)	=	469
Total person flow (pers/h)	-	704
Total vehicle delay (veh-h/h)	=	0.72
Total person delay (pers-h/h)	=	1.08
Total effective vehicle stops (veh/h)	=	162
Total effective person stops (pers/h)	=	244
Total vehicle travel (veh-km/h)	-	283.4
Total cost ($/h)	=	172.41
Total fuel (L/h)	=	23.7
Total CO2 (kg/h)	=	69.27

NA Not Applicable - Intersection Level of Service is not calculated at two-way stop control or give-way/yield controlled intersections. See Table S.15 or Movement Displays for individual movement LOS values.

PR 645 con colectora norte
2010, pm
Intersection ID: 07
Stop Sign Controlled Intersection

Table S.5 - MOVEMENT PERFORMANCE

Mov No.		Total Delay (veh-h/h)	Total Delay (pers-h/h)	Aver. Delay (sec)	Prop. Queued	Eff. Stop Rate	Longest Queue Cycle (veh)	Aver. (m)	Perf. Index	Aver. Speed (km/h)
South: PR-645 Sur										
1	LT	0.04	0.05	1.0	0.31	0.02	0.0	0	1.45	55.6
3	R	0.01	0.02	5.8	0.31	0.46	0.0	0	0.08	47.6
East: Colectora Norte-Este										
4	LT	0.18	0.28	13.0	0.43	0.91	0.0	0	0.99	44.9
6	R	0.03	0.04	13.4	0.43	0.90	0.0	0	0.15	44.6
North: PR 645-Norte										
7	LT	0.06	0.09	1.3	0.29	0.06	0.0	0	1.70	55.3
9	R	0.05	0.07	5.7	0.29	0.47	0.0	0	0.29	47.7
West: Colectora Norte-Oeste										
10	LT	0.33	0.50	13.3	0.48	0.91	0.1	1	1.77	44.7
12	R	0.02	0.03	13.7	0.48	0.81	0.1	1	0.10	44.4

PR 645 con colectora norte
2010, pm
Intersection ID: 07
Stop Sign Controlled Intersection

Table S.6 - INTERSECTION PERFORMANCE

Total Flow (veh/h)	Deg. Satn x	Total Delay (veh-h/h)	Total Delay (pers-h/h)	Aver. Delay (sec)	Prop. Queued	Eff. Stop Rate	Longest Queue (m)	Perf. Index	Aver. Speed (km/h)
South: PR-645 Sur									
141	0.074	0.05	0.07	1.2	0.31	0.04	0	1.53	55.2
East: Colectora Norte-Este									
59	0.036	0.21	0.32	13.1	0.43	0.89	0	1.14	44.8
North: PR 645-Norte									
174	0.094	0.10	0.15	2.1	0.29	0.10	0	1.39	54.3

West: Colectora Norte-Oeste									
95	0.145	0.35	0.53	13.3	0.46	0.91	1	1.86	44.7
ALL VEHICLES:									
469	0.145	0.72	1.08	5.5	0.35	0.35	1	6.52	51.0
INTERSECTION (persons):									
704	0.145		1.08	5.5	0.35	0.35		6.52	51.0

Queue values in this table are mean cycle-average queue (metres).

PR 645 con colectora norte
2010, pm
Intersection ID: 07
Stop Sign Controlled Intersection

Table S.7 - LANE PERFORMANCE

Lane No.	Mov No.	Dem Flow (veh/h)	Cap (veh/h)	Deg. Satn x	Aver. Delay (sec)	Eff. Stop Rate	Queue Cycle (veh)	Queue Aver. (m)	Short Lane (m)
South: PR-645 Sur									
1 LTR	1, 3	141	1907	0.074	1.2	0.04	0.0	0	
East: Colectora Norte-Este									
1 LTR	4, 6	59	674	0.089	13.1	0.89	0.0	0	
North: PR 645-Norte									
1 LTR	7, 9	174	1859	0.094	2.1	0.10	0.0	0	
West: Colectora Norte-Oeste									
1 LTR	10, 12	95	656	0.145	13.3	0.91	0.1	1	

PR 645 con colectora norte
2010, pm
Intersection ID: 07
Stop Sign Controlled Intersection

Table S.8A - LANE FLOW AND CAPACITY INFORMATION

Lane No.	Mov No.	Dem Flow (veh/h) Lef	Thru	Rig	Tot	Min Cap (veh/h)	Tot Cap (veh/h)	Deg. Satn x	Lane Util %
South: PR-645 Sur									

1 LTR	1, 3	5	131	5	141	120	1907	0.074	100
East: Colectora Norte-Este									
1 LTR	4, 6	5	46	8	59	59	674	0.088	100
North: PR 645-Norte									
1 LTR	7, 9	14	141	19	174	120	1859	0.094	100
West: Colectora Norte-Oeste									
1 LTR	10, 12	11	79	5	95	95	656	0.145	100

The capacity value for priority and continuous movements is obtained by adjusting the basic saturation flow for heavy vehicle and turning vehicle effects. Saturation flow scale applies if specified.

PR 645 con colectora norte
2010, pm
Intersection ID: 07
Stop Sign Controlled Intersection

Table 5.10 - MOVEMENT CAPACITY AND PERFORMANCE SUMMARY

Mov No.	Mov Typ	Dem Flow (veh /h)	Total Cap. (veh /h)	Lane Util (%)	Deg. Satn x	Aver. Delay (sec)	Eff. Stop Rate	Cycle Average Queue (veh)	Perf. Index
South: PR-645 Sur									
1	LT	136	1846	100	0.074	1.5	0.02	0.0	1.45
3	R	5	68	100	0.074	9.8	0.46	0.0	0.09
East: Colectora Norte-Este									
4	LT	51	582	100	0.088	13.0	0.91	0.0	0.99
6	R	8	91	100	0.088	13.4	0.80	0.0	0.15
North: PR 645-Norte									
7	LT	155	1656	100	0.094	1.3	0.06	0.0	1.70
9	R	19	203	100	0.094	6.7	0.43	0.0	0.29
West: Colectora Norte-Oeste									
10	LT	90	622	100	0.145*	13.3	0.91	0.1	1.77
12	R	5	35	100	0.143	13.7	0.85	0.1	0.10

* Maximum degree of saturation

PR 645 con colectora norte
2010, pm
Intersection ID: 07

Stop Sign Controlled Intersection

Table 5.12A - FUEL CONSUMPTION, EMISSIONS AND COST - TOTAL

Mov No.	Fuel Total L/h	Cost Total $/h	HC Total kg/h	CO Total kg/h	NOX Total kg/h	CO2 Total kg/h
South: PR-645 Sur						
1 LT	7.1	45.60	0.027	0.96	0.037	17.7
3 R	0.3	2.00	0.001	0.07	0.002	0.8
	7.4	47.60	0.028	1.03	0.039	18.5
East: Colectora Norte-Este						
4 LT	3.6	21.44	0.016	0.76	0.022	9.0
6 R	0.6	3.40	0.002	0.12	0.003	1.4
	4.2	24.84	0.018	0.88	0.025	10.4
North: PR 645-Norte						
7 LT	8.1	52.29	0.032	1.13	0.043	20.3
9 R	1.3	7.59	0.006	0.27	0.008	3.2
	9.4	59.87	0.037	1.39	0.051	23.5
West: Colectora Norte-Oeste						
10 LT	6.4	37.97	0.028	1.34	0.039	15.9
12 R	0.4	2.13	0.002	0.07	0.002	0.9
	6.7	40.10	0.029	1.41	0.041	16.8
INTERSECTION:	27.7	172.41	0.114	4.71	0.156	69.3

PARAMETERS USED IN COST CALCULATIONS

Pump price of fuel ($/L)	=	0.900
Fuel resource cost factor	=	0.50
Ratio of running cost to fuel cost	=	3.0
Average income ($/h)	=	23.00
Time value factor	=	0.60
Average occupancy (persons/veh)	=	1.5
Light vehicle mass (1000 kg)	=	1.4
Heavy vehicle mass (1000 kg)	=	11.0
Light vehicle idle fuel rate (L/h)	=	1.350
Heavy vehicle idle fuel rate (L/h)	=	2.000

The idle fuel and vehicle mass parameters given above are the default values (data given in RIDES may override some of these parameters).

PR 645 con colectora norte
2010, pm

Intersection ID: 07
Stop Sign Controlled Intersection

Table 5.14 - SUMMARY OF INPUT AND OUTPUT DATA

Lane No.	Demand Flow (veh/h) L	T	R	Tot	%HV	Adj. Basic Satf.	Eff Grn (secs) 1st 2nd	Deg Sat X	Aver. Delay (sec)	Longest Queue (m)	Shrt Lane (m)
South: PR-645 Sur											
1 LTR	5	131	5	141	0			0.074	1.2	0	
	5	131	5	141	0			0.074	1.2	0	
East: Colectora Norte-Este											
1 LTR	5	46	8	59	0			0.088	13.1	0	
	5	46	8	59	0			0.088	13.1	0	
North: PR 645-Norte											
1 LTR	14	141	19	174	0			0.094	2.1	0	
	14	141	19	174	0			0.094	2.1	0	
West: Colectora Norte-Oeste											
1 LTR	11	79	5	95	0			0.145	13.3	1	
	11	79	5	95	0			0.145	13.3	1	

ALL VEHICLES	Total Flow	% HV	Max X	Aver. Delay	Max Queue
	469	0	0.145	5.5	1

Total flow period = 60 minutes. Peak flow period = 15 minutes.

Queue values in this table are mean cycle-average queue (metres).

Note: Basic Saturation Flows are not adjusted at roundabouts or sign-controlled intersections and apply only to continuous lanes.

PR 645 con colectora norte
2010, pm
Intersection ID: 07
Stop Sign Controlled Intersection

Table 5.15 - CAPACITY AND LEVEL OF SERVICE

Mov No.	Mov Typ	Total Flow (veh /h)	Total Cap. (veh /h)	Deg. of Satn (v/c)	Aver. Delay (sec)	LOS	Longest Queue Cycle (vehs)	Aver. (m)
South: PR-645 Sur								
1	LT	138	1840	0.074	1.0	A	0.0	0

3	R	5	68	0.074	8.8	A	0.0	0
		141		0.074	1.2	A	0.0	0
East: Colectora Norte-Este								
4	LT	51	582	0.088	13.0	B	0.0	0
6	R	8	91	0.088	13.4	B	0.0	0
		59		0.088	13.1	B	0.0	0
North: PR 645-Norte								
7	LT	155	1656	0.094	1.3	A	0.0	0
9	R	19	203	0.094	8.7	A	0.0	0
		174		0.094	2.1	A	0.0	0
West: Colectora Norte-Oeste								
10	LT	90	622	0.145*	13.3	B	0.1	1
12	R	5	35	0.143	13.7	B	0.1	1
		95		0.145	13.3	B	0.1	1
ALL VEHICLES:		469		0.145	5.5	NA	0.1	1

Level of Service calculations are based on
average control delay including geometric delay (HCM criteria),
independent of the current delay definition used.
For the criteria, refer to the "Level of Service" topic in the
aaSIDRA Output Guide or the Output section of the on-line help.

NA Not Applicable - Intersection Level of Service is not calculated at two-way stop control or give-way/yield controlled intersections.

* Maximum v/c ratio, or critical green periods

--- End of aaSIDRA Output ---

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PR 645 con colectora sur
2010, am
Intersection ID: 06

RUN INFORMATION

* Basic Parameters:
  Intersection Type: Unsignalised - Two-Way Stop Control
  Driving on the right-hand side of the road
  Input data specified in Metric units
  Default Values File No. 30
  Peak flow period (for performance): 15 minutes
  Unit time (for volumes): 60 minutes (Total Flow Period)
  Delay definition: Control delay
  Geometric delay included
  aaSIDRA Standard Delay and Queue models used
  Level of Service based on: Delay (HCM method)
  Queue definition: Cycle average queue, Average

PR 645 con colectora sur
2010, am
Intersection ID: 06
Stop Sign Controlled Intersection

DEFAULT PARAMETERS

Default values for some of the important general parameters:
(Default Values File: DEF30.SDF)

1. Basic saturation flow: 1950 pcu/h

   This value applies mainly to signalised intersections. For roundabouts and sign-controlled intersections, it is used for determining capacity of priority and continuous movements.

2. Through car equivalents for signalised intersections

	LEFT		THROUGH		RIGHT	
	LV	HV	LV	HV	LV	HV
Normal	1.050	1.800	1.000	1.650	1.050	1.800

Restricted	1.250	2.250	1.250	2.250

3. Opposed turn parameters (Two-Way Stop Control)

	Crit. Gap	Follow Rdway	Min. Deps	% Exit Flow Opposing
Left turns :	7.0	4.0	2.0	50
Through :	6.5	3.5	2.0	50
Right turns:	5.0	3.0	2.0	50
Opposed turns from priority road:	4.5	2.5	2.0	0

4. Cruise speed= 60 km/h, Approach Distance= 500 m

5. Queue space per vehicle in metres
   Light vehicles: 7.0 Heavy vehicles: 13.0

A full list of input data defaults and ranges is given in the Input Guide part of aaSIDRA User Guide.

PR 645 con colectora sur
2010, am
Intersection ID: 06
Stop Sign Controlled Intersection

Table 5.0 - TRAFFIC FLOW DATA

Mov No.	Left LV	Left HV	Through LV	Through HV	Right LV	Right HV	Flow Scale	Peak Flow Factor
VEHICLES Demand flows in veh/hour as used by the program								
South: PR-645 Sur								
1	5	0	152	0	0	0	1.00	1.00
3	0	0	0	0	5	0	1.00	1.00
East: Colectora Sur-Este								
4	5	0	108	0	0	0	1.00	1.00
6	0	0	0	0	19	0	1.00	1.00
North: PR 645-Norte								
7	6	0	26	0	0	0	1.00	1.00
9	0	0	0	0	6	0	1.00	1.00
West: Colectora Sur-Oeste								
10	18	0	36	0	0	0	1.00	1.00
12	0	0	0	0	5	0	1.00	1.00

Based on unit time = 60 minutes.
Flow Scale and Peak Hour Factor effects included in flow values.

PR 645 con colectora sur
2010, am
Intersection ID: 06
Stop Sign Controlled Intersection

Table S.2 - MOVEMENT CAPACITY PARAMETERS

Mov No.	Demand Flow (veh/h)	HV (%)	Opposing Movement Flow (veh/h)	EV (%)	Adjust. Flow (pcu/h)	Total Cap. (veh /h)	Frac. Deg. Satn xp	Frac. Spare Cap. (%)	Lane Util (%)	Deg. Satn x
South: PR-645 Sur										
1 LT	157	0.0	32	0.0	32	1864	0.80	850	100	0.084
3 R	5	0.0	0			59	0.80	844	100	0.085
East: Colectora Sur-Este										
4 LT	113	0.0	DIFF			686	0.80	336	100	0.165*
6 R	19	0.0	155+	0.0	155	115	0.80	384	100	0.165*
North: PR 645-Norte										
7 LT	32	0.0	157	0.0	157	1495	0.80	3638	100	0.021
9 R	6	0.0	0			760	0.80	3633	100	0.021
West: Colectora Sur-Oeste										
10 LT	54	0.0	DIFF			653	0.80	870	100	0.082
12 R	5	0.0	23+	0.0	29	61	0.80	676	100	0.082

DIFF Opposing flow was not printed as there was more than one opposed turn in this movement with differing opposing flows
\+ Percentage of exiting flow included in total opposing flow

PR 645 con colectora sur
2010, am
Intersection ID: 06
Stop Sign Controlled Intersection

Table S.3 - INTERSECTION PARAMETERS

Intersection Level of Service	=	NA
Worst movement Level of Service	=	B
Average intersection delay (s)	=	6.5
Largest average movement delay (s)	=	12.8
Largest cycle-average queue, mean (m)	=	0
Performance Index	=	5.76
Degree of saturation (highest)	=	0.165
Practical Spare Capacity (lowest)	=	384 %
Effective intersection capacity, (veh/h)	=	2367
Total vehicle flow (veh/h)	=	391
Total person flow (pers/h)	=	597
Total vehicle delay (veh-h/h)	=	0.71
Total person delay (pers-h/h)	=	1.06
Total effective vehicle stops (veh/h)	=	182
Total effective person stops (pers/h)	=	273
Total vehicle travel (veh-km/h)	=	236.0
Total cost ($/h)	=	144.63
Total fuel (L/h)	=	23.3
Total CO2 (kg/h)	=	56.23

NA Not Applicable - Intersection Level of Service is not calculated at two-way stop control or give-way/yield controlled intersections. See Table S.15 or Movement Displays for individual movement LOS values.

PR 645 con colectora sur
2010, am
Intersection ID: 06
Stop Sign Controlled Intersection

Table S.5 - MOVEMENT PERFORMANCE

Mov No.	Total Delay (veh-h/h)	Total Delay (pers-h/h)	Aver. Delay (sec)	Prop. Queued	Eff. Stop Rate	Longest Cycle (veh)	Queue Aver. (m)	Perf. Index	Aver. Speed (km/h)
South: PR-645 Sur									
1 LT	0.02	0.03	0.4	0.12	0.02	0.0	0	1.63	58.0
3 R	0.01	0.02	8.3	0.12	0.33	0.0	0	0.08	48.6
East: Colectora Sur-Este									
4 LT	0.39	0.56	12.8	0.39	0.89	0.1	0	2.12	45.8
6 R	0.07	0.10	12.4	0.39	0.85	0.1	0	0.36	45.5
North: PR 645-Norte									
7 LT	0.02	0.03	2.2	0.30	0.12	0.0	0	0.37	54.3
9 R	0.01	0.02	8.8	0.30	0.47	0.0	0	0.09	47.7
West: Colectora Sur-Oeste									
10 LT	0.19	0.28	12.4	0.29	0.91	0.0	0	1.03	45.2
12 R	0.02	0.03	12.8	0.29	0.79	0.0	0	0.09	46.9

PR 645 con colectora sur
2010, am
Intersection ID: 06
Stop Sign Controlled Intersection

Table S.6 - INTERSECTION PERFORMANCE

Total Flow (veh/h)	Deg. Satn x	Total Delay (veh-h/h)	Total Delay (pers-h/h)	Aver. Delay (sec)	Prop. Queued	Eff. Stop Rate	Longest Queue (m)	Perf. Index	Aver. Speed (km/h)
South: PR-645 Sur									
162	0.085	0.03	0.04	0.6	0.12	0.04	0	1.70	57.6
East: Colectora Sur-Este									
132	0.165	0.44	0.66	12.0	0.39	1.88	0	2.47	45.7
North: PR 645-Norte									
38	0.021	0.03	0.05	3.2	0.30	0.17	0	0.46	53.1

West: Colectora Sur-Oeste										
	59	0.082	0.20	0.31	12.4	0.29	0.90	0	1.13	45.1
ALL VEHICLES:										
	391	0.165	0.71	1.06	6.5	0.25	0.47	0	5.76	50.7
INTERSECTION (persons):										
	587	0.165		1.06	6.5	0.25	0.47		5.76	50.7

Queue values in this table are mean cycle-average queue (metres).

PR 645 con colectora sur
2010, am
Intersection ID: 06
Stop Sign Controlled Intersection

Table S.7 - LANE PERFORMANCE

Lane No.	Mov No.	Dem Flow (veh /h)	Cap (veh /h)	Deg. Satn x	Aver. Delay (sec)	Eff. Stop Rate	Queue Cycle (vehs)	Queue Aver. (m)	Short Lane (m)
South: PR-645 Sur									
1 LTR	1, 3	162	1924	0.084	0.6	0.04	0.0	0	
East: Colectora Sur-Este									
1 LTR	4, 6	132	802	0.165	12.0	0.88	0.1	0	
North: PR 645-Norte									
1 LTR	7, 9	38	1775	0.021	3.2	0.17	0.0	0	
West: Colectora Sur-Oeste									
1 LTR	10, 12	59	715	0.082	12.4	0.90	0.0	0	

PR 645 con colectora sur
2010, am
Intersection ID: 06
Stop Sign Controlled Intersection

Table S.8A - LANE FLOW AND CAPACITY INFORMATION

Lane No.	Mov No.	Dem Flow (veh/h) Lef	Thru	Rig	Tot	Min Cap (veh /h)	Tot Cap (veh /h)	Deg. Satn x	Lane Util %
South: PR-645 Sur									

1 LTR	1, 3	5	152	5	162	120	1924	0.084	100
East: Colectora Sur-Este									
1 LTR	4, 6	5	108	19	132	120	802	0.165	100
North: PR 645-Norte									
1 LTR	7, 9	6	26	6	38	38	1775	0.021	100
West: Colectora Sur-Oeste									
1 LTR	10, 12	18	36	5	59	59	715	0.082	100

The capacity value for priority and continuous movements is obtained by adjusting the basic saturation flow for heavy vehicle and turning vehicle effects. Saturation flow scale applies if specified.

PR 645 con colectora sur
2010, am
Intersection ID: 06
Stop Sign Controlled Intersection

Table S.10 - MOVEMENT CAPACITY AND PERFORMANCE SUMMARY

Mov No.	Mov Typ	Dem Flow (veh /h)	Total Cap. (veh /h)	Lane Util (%)	Deg. Satn x	Aver. Delay (sec)	Eff. Stop Rate	Cycle Average Queue (veh)	Perf. Index
South: PR-645 Sur									
1	LT	157	1864	100	0.084	0.4	0.02	0.0	1.63
3	R	5	59	100	0.085	8.3	0.59	0.0	0.09
East: Colectora Sur-Este									
4	LT	113	686	100	0.165*	12.0	0.88	0.1	2.12
6	R	19	115	100	0.165*	12.4	0.85	0.1	0.36
North: PR 645-Norte									
7	LT	32	1495	100	0.021	2.2	0.12	0.0	0.37
9	R	6	280	100	0.021	8.8	0.47	0.0	0.09
West: Colectora Sur-Oeste									
10	LT	54	655	100	0.082	12.4	0.91	0.0	1.03
12	R	5	61	100	0.082	12.9	0.79	0.0	0.09

* Maximum degree of saturation

PR 645 con colectora sur
2010, am
Intersection ID: 06

Stop Sign Controlled Intersection

Table S.13A FUEL CONSUMPTION, EMISSIONS AND COST - TOTAL

Mov No.	Fuel Total L/h	Cost Total $/h	HC Total kg/h	CO Total kg/h	NOX Total kg/h	CO2 Total kg/h
South: PR-645 Sur						
1 LT	7.4	49.97	0.027	0.76	0.036	18.5
3 R	0.3	1.97	0.001	0.07	0.002	0.8
	[illegible]	51.84	0.028	0.83	0.038	19.3
East: Colectora Sur-Este						
4 LT	[illegible]	46.72	0.035	1.67	0.046	19.8
6 R	1.5	7.95	0.006	0.28	0.008	3.4
	9.3	54.67	0.041	1.96	0.056	23.2
North: PR 645-Norte						
7 LT	[illegible]	11.02	0.007	0.26	0.009	4.3
9 R	[illegible]	2.40	0.002	0.08	0.002	1.0
	2.1	13.42	0.009	0.34	0.012	5.4
West: Colectora Sur-Oeste						
10 LT	3.8	22.59	0.017	0.80	0.023	9.5
12 R	0.4	2.11	0.002	0.07	0.002	0.9
	4.2	24.70	0.018	0.88	0.025	10.4
INTERSECTION:	25.3	144.63	0.096	4.01	0.132	58.2

PARAMETERS USED IN COST CALCULATIONS

Pump price of fuel ($/L)	=	0.900
Fuel resource cost factor	=	0.50
Ratio of running cost to fuel cost	=	3.0
Average income ($/h)	=	27.00
Time value factor	=	0.60
Average occupancy (persons/veh)	=	1.5
Light vehicle mass (1000 kg)	=	1.4
Heavy vehicle mass (1000 kg)	=	11.0
Light vehicle idle fuel rate (L/h)	=	1.330
Heavy vehicle idle fuel rate (L/h)	=	2.000

The idle fuel and vehicle mass parameters given above are the default values (data given in RIDES may override some of these parameters).

PR 645 con colectora sur
2010, am

Intersection ID: 06
Stop Sign Controlled Intersection

Table S.14 - SUMMARY OF INPUT AND OUTPUT DATA

Lane No.	Demand Flow (veh/h) L	T	R	Tot	%HV	Adj. Basic Satf.	Eff Grn (secs) 1st	2nd	Deg Sat x	Aver. Delay (sec)	Longest Queue (m)	Shrt Lane (m)
South: PR-645 Sur												
1 LTR	5	152	5	162	0				0.084	0.6	0	
	5	152	5	162	0				0.084	0.6	0	
East: Colectora Sur-Este												
1 LTR	5	109	19	132	0				0.165	12.0	0	
	5	109	19	132	0				0.165	12.0	0	
North: PR 645-Norte												
1 LTR	6	26	6	38	0				0.021	3.2	0	
	6	26	6	38	0				0.021	3.2	0	
West: Colectora Sur-Oeste												
1 LTR	18	36	5	59	0				0.082	12.4	0	
	18	36	5	59	0				0.082	12.4	0	
ALL VEHICLES				Total Flow 391	% HV 0				Max X 0.165	Aver. Delay 6.5	Max Queue 0	

Total flow period = 60 minutes. Peak flow period = 15 minutes.

Queue values in this table are mean cycle-average queue (metres).

Note: Basic Saturation Flows are not adjusted at roundabouts or sign-controlled intersections and apply only to continuous lanes.

PR 645 con colectora sur
2010, am
Intersection ID: 06
Stop Sign Controlled Intersection

Table S.15 - CAPACITY AND LEVEL OF SERVICE

Mov No.	Mov Typ	Total Flow (veh /h)	Total Cap. (veh /h)	Deg. of Satn (v/c)	Aver. Delay (sec)	LOS	Longest Queue Cycle Aver. (vehs)	(m)
South: PR-645 Sur								
1 LT		15[illegible]	1864	0.084	0.4	A	0.0	0

3 R	5	59	0.085	8.3	A	0.0	0
	162		0.085	0.6	A	0.0	0
East: Colectora Sur-Este							
4 LT	113	686	0.165*	12.0	B	0.1	0
6 R	19	115	0.165*	12.4	B	0.1	0
	132		0.165	12.0	B	0.1	0
North: PR 645-Norte							
7 LT	32	1495	0.021	2.2	A	0.0	0
9 R	6	280	0.021	8.8	A	0.0	0
	38		0.021	3.2	A	0.0	0
West: Colectora Sur-Oeste							
10 LT	54	655	0.082	12.4	B	0.0	0
12 R	5	61	0.082	12.8	B	0.0	0
	59		0.082	12.4	B	0.0	0
ALL VEH.. FS:	391		0.165	6.5	NA	0.1	0

Level of Service calculations are based on
average control delay including geometric delay (HCM criteria),
independent of the current delay definition used.
For the criteria, refer to the "Level of Service" topic in the
aaSIDRA Output Guide or the Output section of the on-line help.

NA Not Applicable - Intersection Level of Service is not calculated at two-way stop control or give-way/yield controlled intersections.

* Maximum v/c ratio, or critical green periods

--- End of aaSIDRA Output ---

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PR 645 con colectora sur
2010, pm
Intersection ID: 08

RUN INFORMATION

* Basic Parameters:
Intersection Type: Unsignalised - Two-Way Stop Control
Driving on the right-hand side of the road
Input data specified in Metric units
Default Values File No. 30
Peak flow period (for performance): 15 minutes
Unit time (for volumes): 60 minutes (Total Flow Period)
Delay definition: Control delay
Geometric delay included
aaSIDRA Standard Delay and Queue models used
Level of Service based on: Delay (HCM method)
Queue definition: Cycle average queue, Average

PR 645 con colectora sur
2010, pm
Intersection ID: 08
Stop Sign Controlled Intersection

DEFAULT PARAMETERS

Default values for some of the important general parameters:
(Default Values File: DEF30.SDF)

1. Basic saturation flow: 1950 tcu/h

   This value applies mainly to signalised intersections. For roundabouts and sign-controlled intersections, it is used for determining capacity of priority and continuous movements.

2. Through car equivalents for signalised intersections

	LEFT		THROUGH		RIGHT	
	LV	HV	LV	HV	LV	HV
Normal	1.050	1.800	1.000	1.650	1.050	1.800

Restricted 1.250 2.250 1.250 2.250

3. Opposed turn parameters (Two-Way Stop Control)

	Crit. Gap	Follow Hdway	Max. Deps	% Exit Flow Opposing
Left turns :	7.5	4.0	2.0	50
Through :	6.5	3.5	2.0	50
Right turns:	5.0	3.0	2.0	50
Opposed turns from priority road:	4.5	2.5	2.0	0

4. Cruise speed= 60 km/h, Approach Distance= 500 m

5. Queue space per vehicle in metres
Light vehicles: 7.0 Heavy vehicles: 13.0

A full list of input data defaults and ranges is given in the Input Guide part of aaSIDRA User Guide.

PR 645 con colectora sur
2010, pm
Intersection ID: 08
Stop Sign Controlled Intersection

Table S.0 - TRAFFIC FLOW DATA

Mov No.	Left LV	Left HV	Through LV	Through HV	Right LV	Right HV	Flow Scale	Peak Flow Factor
VEHICLES Demand flows in veh/hour as used by the program								
South: PR-645 Sur								
1	5	0	108	0	0	0	1.00	1.00
3	0	0	0	0	5	0	1.00	1.00
East: Colectora Sur-Este								
4	5	0	71	0	0	0	1.00	1.00
6	0	0	0	0	12	0	1.00	1.00
North: PR 645-Norte								
7	21	0	101	0	0	0	1.00	1.00
9	0	0	0	0	19	0	1.00	1.00
West: Colectora Sur-Oeste								
10	11	0	120	0	0	0	1.00	1.00
12	0	0	0	0	5	0	1.00	1.00

Based on unit time = 60 minutes.
Flow Scale and Peak Hour Factor effects included in flow values.

PR 645 con colectora sur
2010, pm
Intersection ID: 08
Stop Sign Controlled Intersection

Table S.2 - MOVEMENT CAPACITY PARAMETERS

Mov No.	Demand Flow (veh/h)	HV (%)	Opposing Movement Flow (veh/h)	HV (%)	Adjust. Flow (pcu/h)	Total Cap. (veh/h)	Prac. Deg. Satn xp	Prac. Spare Cap. (%)	Lane Util (%)	Deg. Satn x
South: PR-645 Sur										
1 LT	113	0.0	120	0.0	120	1824	0.80	1191	100	0.062
3 R	5	0.0	0			81	0.80	1196	100	0.062
East: Colectora Sur-Este										
4 LT	76	0.0	DIFF			633	0.80	566	100	0.120
6 R	12	0.0	111+	0.0	111	100	0.80	561	100	0.120
North: PR 645-Norte										
7 LT	122	0.0	113	0.0	113	1559	0.80	922	100	0.078
9 R	19	0.0	0			243	0.80	923	100	0.078
West: Colectora Sur-Oeste										
10 LT	131	0.0	DIFF			683	0.80	320	100	0.191
12 R	5	0.0	111+	0.0	111	76	0.80	316	100	0.192*

DIFF Opposing flow was not printed as there was more than one opposed form in this movement with differing opposing flows
\+ Percentage of exiting flow included in total opposing flow

PR 645 con colectora sur
2010, pm
Intersection ID: 08
Stop Sign Controlled Intersection

Table S.3 - INTERSECTION PARAMETERS

Intersection Level of Service	=	NA
Worst movement level of Service	=	B
Average intersection delay (s)	=	3.0
Largest average movement delay (s)	=	13.2
Largest cycle-average queue, mean (m)	=	1
Performance Index	=	7.25
Degree of saturation (highest)	=	0.192
Practical Spare Capacity (lowest)	=	316 %
Effective intersection capacity, (veh/h)	=	2512
Total vehicle flow (veh/h)	=	493
Total person flow (pers/h)	=	725
Total vehicle delay (veh-h/h)	=	0.94
Total person delay (pers-h/h)	=	1.41
Total effective vehicle stops (veh/h)	=	223
Total effective person stops (pers/h)	=	343
Total vehicle travel (veh-km/h)	=	291.5
Total cost ($/h)	=	182.16
Total fuel (L/h)	=	29.6
Total CO2 (kg/h)	=	74.06

NA Not Applicable - Intersection Level of Service is not calculated at two-way stop control or give-way/yield controlled intersections. See Table 5.15 or Movement Displays for individual movement LOS values.

PR 645 con colectora sur
2010, pm
Intersection ID: 08
Stop Sign Controlled Intersection

Table 5.5 - MOVEMENT PERFORMANCE

Mov No.		Total Delay (veh-h/h)	Total Delay (pers-h/h)	Aver. Delay (sec)	Prop. Queued	Eff. Stop Rate	Longest Queue Cycle (vehs)	Longest Queue Aver. (m)	Perf. Index	Aver. Speed (km/h)
South: PR-645 Sur										
1	LT	0.03	0.04	0.8	0.26	0.03	0.0	0	1.20	56.1
3	R	0.01	0.02	8.6	0.26	0.49	0.0	0	0.08	47.8
East: Colectora Sur Este										
4	LT	0.25	0.40	12.5	0.40	0.90	0.1	0	1.45	45.3
6	R	0.04	0.06	12.9	0.40	0.81	0.1	0	0.23	45.0
North: PR 645-Norte										
7	LT	0.06	0.10	1.9	0.26	0.11	0.0	0	1.39	54.8
9	R	0.05	0.07	8.6	0.26	0.50	0.0	0	0.29	47.8
West: Colectora Sur-Oeste										
10	LT	0.47	0.70	12.8	0.45	0.90	0.1	1	2.53	45.1
12	R	0.02	0.03	13.2	0.45	0.79	0.1	1	0.09	44.8

PR 645 con colectora sur
2010, pm
Intersection ID: 08
Stop Sign Controlled Intersection

Table 5.6 - INTERSECTION PERFORMANCE

Total Flow (veh/h)	Deg. Satn x	Total Delay (veh-h/h)	Total Delay (pers-h/h)	Aver. Delay (sec)	Prop. Queued	Eff. Stop Rate	Longest Queue (m)	Perf. Index	Aver. Speed (km/h)
South: PR-645 Sur									
118	0.062	0.04	0.06	1.2	0.26	0.05	0	1.28	55.7
East: Colectora Sur-Este									
98	0.120	0.31	0.46	12.5	0.40	0.89	0	1.68	45.3
North: PR 645-Norte									
141	0.078	0.11	0.16	2.3	0.26	0.16	0	1.68	53.3

West: Colectora Sur-Oeste									
136	0.192	0.48	0.73	12.8	0.45	0.90	1	2.62	45.1
ALL VEHICLES:									
483	0.192	0.94	1.41	7.0	0.34	0.47	1	7.25	49.8
INTERSECTION (persons):									
725	0.192		1.41	7.0	0.34	0.47		7.25	49.8

Queue values in this table are mean cycle-average queue (metres).

PR 645 con colectora sur
2010, pm
Intersection ID: 08
Stop Sign Controlled Intersection

Table 5.7 - LANE PERFORMANCE

Lane No.	Mov No.	Dem Flow (veh /h)	Cap (veh /h)	Deg. Satn x	Aver. Delay (sec)	Eff. Stop Rate	Queue Cycle (vehs)	Queue Aver. (m)	Short Lane (m)
South: PR 645 Sur									
1 LTR	1, 3	118	1934	0.062	1.2	0.05	0.0	0	
East: Colectora Sur-Este									
1 LTR	4, 6	98	733	0.120	12.6	0.89	0.1	0	
North: PR 645-Norte									
1 LTR	7, 9	141	1802	0.078	2.6	0.16	0.0	0	
West: Colectora Sur-Oeste									
1 LTR	10, 12	136	714	0.191	12.8	0.90	0.1	1	

PR 645 con colectora sur
2010, pm
Intersection ID: 08
Stop Sign Controlled Intersection

Table 5.8A - LANE FLOW AND CAPACITY INFORMATION

Lane No.	Mov No.	Dem Flow (veh/h) Lef	Thru	Rig	Tot	Min Cap (veh /h)	Tot Cap (veh /h)	Deg. Satn x	Lane Util %
South: PR-645 Sur									

1 LTR	1, 3	5	109	5	119	118	1904	0.062	100

East: Colectora Sur-Este

1 LTR	4, 6	5	71	12	88	88	733	0.120	100

North: PR 645-Norte

1 LTR	7, 9	21	101	19	141	120	1802	0.078	100

West: Colectora Sur-Oeste

1 LTR	10, 12	11	120	5	136	120	714	0.191	100

The capacity value for priority and continuous movements is obtained by adjusting the basic saturation flow for heavy vehicle and turning vehicle effects. Saturation flow scale applies if specified.

PR 645 con colectora sur
2010, pm
Intersection ID: 08
Stop Sign Controlled Intersection

Table 5.10 - MOVEMENT CAPACITY AND PERFORMANCE SUMMARY

Mov No.	Mov Typ	Dem Flow veh /h	Total Cap. veh /h	Lane Util (%)	Deg. Satn x	Aver. Delay (sec)	Eff. Stop Rate	Cycle Average Queue (veh)	Perf. Index
South: PR-645 Sur									
1	LT	113	1824	100	0.062	0.8	0.03	0.0	1.20
3	R	5	81	100	0.062	9.6	0.49	0.0	0.08
East: Colectora Sur-Este									
4	LT	76	633	100	0.120	12.5	0.90	0.1	1.45
6	R	12	100	100	0.120	12.9	0.91	0.1	0.23
North: PR 645-Norte									
7	LT	122	1559	100	0.078	1.9	0.11	0.0	1.39
9	R	19	243	100	0.078	9.6	0.50	0.0	0.29
West: Colectora Sur-Oeste									
10	LT	131	687	100	0.191	12.8	0.90	0.1	2.53
12	R	5	26	100	0.192*	13.2	0.79	0.1	0.09

* Maximum degree of saturation

PR 645 con colectora sur
2010, pm
Intersection ID: 08

Stop Sign Controlled Intersection

Table 5.12A - FUEL CONSUMPTION, EMISSIONS AND COST - TOTAL

Mov No.	Fuel Total l/h	Cost Total $/h	HC Total kg/h	CO Total kg/h	NOX Total kg/h	CO2 Total kg/h
South: PR-645 Sur						
1 LT	5.7	37.43	0.022	0.74	0.035	14.4
3 R	0.3	1.99	0.001	0.07	0.002	0.8
	6.1	39.42	0.023	0.81	0.132	15.2
East: Colectora Sur-Este						
4 LT	5.3	31.70	0.023	1.13	0.032	13.4
6 R	0.8	5.06	0.004	0.18	0.005	2.1
	6.2	36.76	0.027	1.31	0.039	15.5
North: PR 645-Norte						
7 LT	6.5	41.48	0.025	0.92	0.035	16.2
9 R	1.3	7.56	0.006	0.27	0.008	3.2
	7.8	49.05	0.031	1.19	0.042	19.4
West: Colectora Sur-Oeste						
10 LT	9.2	54.82	0.040	1.94	0.056	23.1
12 R	0.4	2.12	0.002	0.07	0.002	0.9
	9.6	56.93	0.042	2.02	0.058	24.0
INTERSECTION:	29.6	182.16	0.123	5.32	0.170	74.1

PARAMETERS USED IN COST CALCULATIONS

Pump price of fuel ($/l)	=	0.900
Fuel resource cost factor	=	0.50
Ratio of running cost to fuel cost	=	3.0
Average income ($/h)	=	27.00
Time value factor	=	0.60
Average occupancy (persons/veh)	=	1.5
Light vehicle mass (1000 kg)	=	1.4
Heavy vehicle mass (1000 kg)	=	11.0
Light vehicle idle fuel rate (l/h)	=	1.350
Heavy vehicle idle fuel rate (l/h)	=	2.000

The idle fuel and vehicle mass parameters given above are the default values (data given in RTDES may override some of these parameters.)

PR 645 con colectora sur
2010, pm

Intersection ID: 08
Stop Sign Controlled Intersection

Table 5.14 - SUMMARY OF INPUT AND OUTPUT DATA

Lane No.	Demand Flow (veh/h) L	T	R	Tot	%HV	Adj. Basic Satf.	Eff Grn (secs) 1st 2nd	Deg Sat x	Aver. Delay (sec)	Longest Queue (m)	Shrt Lane (m)
South: PR 645 Sur											
1 LTR	5	108	5	118	0			0.062	1.2	0	
	5	108	5	118	0			0.062	1.2	0	
East: Colectora Sur-Este											
1 LTR	[illegible]	71	12	89	0			0.120	12.6	0	
	5	71	12	88	0			0.120	12.6	0	
North: PR 645-Norte											
1 LTR	21	101	19	141	0			0.078	2.8	0	
	21	101	19	141	0			0.078	2.8	0	
West: Colectora Sur-Oeste											
1 LTR	11	120	5	136	0			0.191	12.8	1	
	11	120	5	136	0			0.191	12.8	1	
ALL VEHICLES				Total Flow 483	% HV 0			Max X 0.192	Aver. Delay 7.0	Max Queue 1	

Total flow period = 60 minutes. Peak flow period = 15 minutes.

Queue values in this table are mean cycle-average queue (metres).

Note. Basic Saturation flows are not adjusted at roundabouts or sign-controlled intersections and apply only to continuous lanes.

PR 645 con colectora sur
2010, pm
Intersection ID: 08
Stop Sign Controlled Intersection

Table 5.15 - CAPACITY AND LEVEL OF SERVICE

Mov No.	Mov Typ	Total Flow (veh /h)	Total Cap. /veh /h)	Deg. of Satn (v/c)	Aver. Delay (sec)	LOS	Longest Queue Cycle Aver. (vehs)	(m)
South: PR-645 Sur								
1 LT		113	1924	0.062	0.3	A	0.0	0

3 R	5	91	0.062	8.6	A	0.0	0
	118		0.062	1.2	A	0.0	0
East: Colectora Sur-Este							
4 LT	76	633	0.120	12.5	B	0.1	0
6 R	12	100	0.120	12.9	B	0.1	0
	88		0.120	12.6	B	0.1	0
North: PR 645-Norte							
7 LT	122	1559	0.078	1.9	A	0.0	0
9 R	19	243	0.078	8.6	A	0.0	0
	141		0.0.9	2.8	A	0.0	0
West: Colectora Sur-Oeste							
10 LT	131	687	0.191	12.8	B	0.1	1
12 R	5	26	0.192*	13.2	B	0.1	1
	136		0.192	12.8	B	0.1	1
ALL VEHICLES:	483		0.192	1.0	NA	0.1	1

Level of Service calculations are based on average control delay including geometric delay (RCM criteria), independent of the current delay definition used. For the criteria, refer to the "Level of Service" topic in the aaSIDRA Output Guide or the Output section of the on-line help.

NA Not Applicable - Intersection Level of Service is not calculated at two-way stop control or give-way/yield controlled intersections.

* Maximum v/c ratio, or critical green periods

--- End of aaSIDRA Output ---

C:\Documents and Settings\Miguel Pellot\My Documents\Mis Proyectos\Vega Baja-octubre-2005-Monte Arenas\pr 645 con colectora sur 2010-pm.OUT
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Filename: C:\Documents and Settings\All Users\Documents\Vega Baja-octubre-2005-Monir Azenas\pr137con 670-2005-am.OUT

PR-137 con PR-670
2005, AM
Intersection ID: 04

RUN INFORMATION

- Basic Parameters:
  Intersection Type: Signalised - Fixed Time
  Driving on the right-hand side of the road
  Input data specified in Metric units
  Default Values File No. 30
  Peak flow period (for performance): 15 minutes
  Unit time (for volumes): 60 minutes (Hourly Rate)
  Delay definition: Control delay
  Geometric delay included
  aaSIDRA Standard Delay and Queue models used
  Level of Service based on: Delay (HCM method)
  Queue definition: Cycle average queue, Average

- No. of Main (Timing-Capacity) Iterations = 1
  Comparison of last two iterations:
  Difference in intersection degree of sat. = 0.0 %
  Largest difference in eff. green times = 0 secs
  (max. value for stopping = 0 secs)

PR-137 con PR-670
2005, AM
Intersection ID: 04
Fixed-Time Signals, Cycle Time = 95

DEFAULT PARAMETERS

Default values for some of the important general parameters:
(Default Values File: DSF30.SDF)

1. Basic saturation flow: 1950 tou/h

   This value applies mainly to signalised intersections. For roundabouts and sign-controlled intersections, it is used for determining capacity of priority and continuous movements.

2. Through car equivalents for signalised intersections

	LEFT LV	LEFT HV	THROUGH LV	THROUGH HV	RIGHT LV	RIGHT HV
Normal	1.050	1.800	1.000	1.650	1.050	1.800
Restricted	1.250	2.250			1.250	2.250

3. Opposed turn parameters (Signalised intersection)

	Crit. Gap	Fol.up Rdway	Deps at End	% Exit Flow Opposing
Left turns :	4.5	2.6	2.2	0
Right turns:	4.0	2.4	2.5	0

4. Cruise speed= 60 km/h, Approach Distance= 500 m

5. Queue space per vehicle in metres
   Light vehicles: 7.0 Heavy vehicles: 13.0

A full list of input data defaults and ranges is given in the Input Guide part of aaSIDRA User Guide.

PR-137 con PR-670
2005, AM
Intersection ID: 04
Fixed-Time Signals, Cycle Time = 95

Table S.0 - TRAFFIC FLOW DATA

Mov No.	Left LV	Left HV	Through LV	Through HV	Right LV	Right HV	Flow Scale	Peak Flow Factor
VEHICLES Demand flows in veh/hour as used by the program								
South: PR-137 Sur								
1	200	0	0	0	0	0	1.00	1.00
2	0	0	336	0	0	0	1.00	1.00
3	0	0	0	0	24	0	1.00	1.00
East: PR-670 Este								
4	60	0	0	0	0	0	1.00	1.00
5	0	0	108	0	0	0	1.00	1.00
6	0	0	0	0	200	0	1.00	1.00
North: PR-137 Norte								
7	92	0	0	0	0	0	1.00	1.00
8	0	0	240	0	0	0	1.00	1.00
9	0	0	0	0	52	0	1.00	1.00
West: PR-670 Oeste								
10	56	0	0	0	0	0	1.00	1.00
11	0	0	104	0	0	0	1.00	1.00
12	0	0	0	0	112	0	1.00	1.00

Based on unit time = 60 minutes.
Flow Scale and Peak Hour Factor effects included in flow values.

PR-137 con PR-670
2005, AM
Intersection ID: 04
Fixed-Time Signals, Cycle Time = 95

Table S.1 - MOVEMENT PHASE AND TIMING PARAMETERS

Mov No.	Mov Typ	P H A S E First Green Fr	To	Op	Pr	M A C R I X Second Green Fr	To	Op	Pr	Lost Tim 1st Grn	2nd Grn	Req.Mov.Time 1st Grn	2nd Grn	Eff. Grn 1st Grn	2nd Grn
South: PR-137 Sur															
1 L		*G	H							4		15.4		11	
2 T		*H	F							4		13.1		25	
3 R	(Und)	H	F			F	H	R		4	4	10.0Min	32.0Min	25	62
East: PR-670 Este															
4 L		*D	G							4		11.5		14	
5 T		J	G							4		21.1		32	
6 R	(Und)	G	J	R		J	G			4	6	30.0Min	14.4	55	32
North: PR-137 Norte															
7 L		G	H							4		10.0Min		11	
8 T		H	F							4		18.5		25	
9 R	(Und)	H	F			F	H	R		4	4	10.0Min	32.0Min	25	62
West: PR-670 Oeste															
10 L		F	J							4		10.7		11	
11 T		*F	D							4		21.7		29	
12 R	(Und)	F	D			D	F	R		4	6	10.0Min	30.0Min	29	56

Current Phase Sequence No.: 8
Input phase sequence: G H F J D
Output phase sequence: G H F J D

* Critical Movement/Green Period

Movement Types:
- Ped Pedestrian
- Dum Dummy
- Und Undetected in both green periods
- Un1 Undetected in 1st green period
- Un2 Undetected in 2nd green period

Under heading 'Op':
- L "Left" turns are opposed
- R "Right" turns are opposed
- LR "Left and Right" opposed
- C "Constant" saturation flow

PR-137 con PR-670
2005, PM
Intersection ID: 04
Fixed-Time Signals, Cycle Time = 95

Table S.2 - MOVEMENT CAPACITY PARAMETERS

Mov No.	Dem Flow (veh /h)	HV (%)	Satn Flow 1st Grn	2nd Grn	Flow Ratio 1st Grn	2nd Grn	Total Cap. (veh /h)	Prac. Deg. Satn xp	Prac. Spare Cap. (%)	Lane Util (%)	Deg. Satn x
South: PR-137 Sur											
1 L	200	0.0	1857		0.108		215	0.90	-3	100	0.930*
2 T	336	0.0	3800		0.086		1026	0.90	175	100	0.327
3 R	24	0.0	1712<	1671<	0.014	0.000	1476	0.90	5434	100	0.016
East: PR-670 Este											
4 L	60	0.0	847		0.071		125	0.90	87	100	0.481
5 T	108	0.0	667		0.162		225	0.90	87	100	0.481
6 R	200	0.0	598<	667<	0.000	0.300	556	0.90	150	100	0.360
North: PR-137 Norte											
7 L	92	0.0	1857		0.050		215	0.90	110	100	0.428
8 T	240	0.0	3900		0.062		1026	0.90	285	100	0.234
9 R	52	0.0	1643<	1508<	0.032	0.000	1417	0.90	2352	100	0.037
West: PR-670 Oeste											
10 L	56	0.0	880		0.064		102	0.90	64	100	0.550
11 T	104	0.0	620		0.168		188	0.90	64	100	0.549
12 R	112	0.0	643<	625<	0.174	0.000	565	0.90	354	100	0.198

< Reduced saturation flow due to a short lane effect

PR-137 con PR-670
2005, AM
Intersection ID: 04
Fixed-Time Signals, Cycle Time = 95

Table S.3 - INTERSECTION PARAMETERS

Crit Mov No.	App. & Turn	Green Period	Phases Fr	To	Adjusted Lost Time	Adjusted Flow Ratio	Required Grn Time Ratio	Required Movement Time
1	S_L		G	H	4	0.108	0.120	15.4
2	S_T		H	F	4	0.086	0.096	13.1
11	N_T		F	H	4	0.168	0.196	21.7
4	E_L		D	G	4	0.071	0.079	11.5
				Total:	16	0.432	0.480	61.6

Cycle Time:

Minimum	Maximum	Practical	Chosen
42	150	92	95

(Cycle time specified by the user)

Intersection Level of Service = C
Worst movement Level of Service = E
Average intersection delay (s) = 33.4
Largest average movement delay (s) = 68.7

Largest cycle-average queue, mean (m)	=	24
Performance Index	=	50.26
Degree of saturation (highest)	=	0.930
Practical Spare Capacity (lowest)	=	-3 %
Effective intersection capacity, (veh/h)	=	1703
Total vehicle flow (veh/h)	=	1584
Total person flow (pers/h)	=	2376
Total vehicle delay (veh-h/h)	=	14.70
Total person delay (pers-h/h)	=	22.05
Total effective vehicle stops (veh/h)	=	1176
Total effective person stops (pers/h)	=	1764
Total vehicle travel (veh-km/h)	=	963.9
Total cost ($/h)	=	912.92
Total fuel (L/h)	=	121.3
Total CO2 (kg/h)	=	383.30

PR-137 con PR-670
2005, AM
Intersection ID: 04
Fixed-Time Signals, Cycle Time = 95

Table 5.4 - PHASE INFORMATION

Phase No.	Change Time	Green Start	Displayed Green	Grn+Intgrn Secs	Prop.
G	0	4	11	15	0.158
H	15	19	26	29	0.305
F	44	49	11	15	0.158
J	59	63	14	18	0.189
D	77	81	14	18	0.189

(Phase times specified by the user)
Current Phase Sequence No.: 6
Input phase sequence: G H F J D
Output phase sequence: G H F J D

PR-137 con PR-670
2005, AM
Intersection ID: 04
Fixed-Time Signals, Cycle Time = 95

Table 5.5 - MOVEMENT PERFORMANCE

Mov No.	Total Delay (veh-h/h)	Total Delay (pers-h/h)	Aver. Delay (sec)	Prop. Queued	Eff. Stop Rate	Longest Cycle Aver. (vehs)	Queue (m)	Perf. Index	Aver. Speed (km/h)
South: PR-137 Sur									
1 L	3.91	5.77	68.7	1.00	1.04	3.4	24	10.35	20.8
2 T	2.86	4.29	33.6	0.85	0.90	1.4	10	10.41	32.6
3 R	0.05	0.08	7.8	0.03	0.61	0.0	0	0.38	49.3

Mov No.	Total Delay (veh-h/h)	Total Delay (pers-h/h)	Aver. Delay (sec)	Prop. Queued	Eff. Stop Rate	Longest Cycle Aver. (vehs)	Queue (m)	Perf. Index	Aver. Speed (km/h)
East: PR-670 Este									
4 L	0.76	1.15	45.8	0.94	0.80	1.8	12	2.27	26.6
5 T	1.14	1.70	37.9	0.94	0.77	1.8	12	3.62	29.4
6 R	0.45	0.68	8.2	0.23	0.65	0.0	0	3.26	48.5
North: PR-137 Norte									
7 L	1.33	2.00	52.0	0.97	0.77	1.1	8	3.78	24.7
8 T	1.98	2.97	39.7	0.83	0.66	1.0	7	7.27	33.0
9 R	0.11	0.17	7.8	0.09	0.62	0.0	0	0.83	49.3
West: PR-670 Oeste									
10 L	0.76	1.14	49.0	0.97	0.80	1.8	13	2.22	25.6
11 T	1.19	1.78	41.1	0.97	0.79	1.8	13	3.88	28.2
12 R	0.25	0.37	7.8	0.12	0.63	0.0	0	1.79	49.1

PR-137 con PR-670
2005, AM
Intersection ID: 04
Fixed-Time Signals, Cycle Time = 95

Table 5.6 - INTERSECTION PERFORMANCE

Total Flow (veh/h)	Deg. Satn x	Total Delay (veh-h/h)	Total Delay (pers-h/h)	Aver. Delay (sec)	Prop. Queued	Eff. Stop Rate	Longest Queue (m)	Perf. Index	Aver. Speed (km/h)
South: PR-137 Sur									
560	0.930	6.72	10.08	43.2	0.87	0.82	24	21.24	27.4
East: PR-670 Este									
368	0.481	2.36	3.53	23.0	0.55	0.71	12	9.35	36.7
North: PR-137 Norte									
384	0.428	3.42	5.14	32.1	0.76	0.68	8	11.68	31.9
West: PR-670 Oeste									
272	0.550	2.19	3.29	29.0	0.62	0.72	13	7.89	33.4
ALL VEHICLES:									
1584	0.930	14.70	22.05	33.4	0.73	0.74	24	50.26	31.3
INTERSECTION (persons):									
2376	0.930		22.05	33.4	0.73	0.74		50.26	31.3

Queue values in this table are mean cycle-average queue (metres).

PR-137 con PR-670
2005, AM
Intersection ID: 04
Fixed-Time Signals, Cycle Time = 95

Table 5.7 - LANE PERFORMANCE

Lane No.	Mov No.	Effective Green Times (sec) R1	Y	R2	G2	Dem Flow (veh/h)	Cap (veh/h)	Deg. Satn x	Aver. Delay (sec)	Eff. Stop Rate	Queue Cycle (veh)	Queue Aver. (m)	Shrt Lane (m)
South: PR-137 Sur													
1 L	1	84	11	0	0	200	215	0.930	68.7	1.04	3.4	24	60
2 T	2	70	9	0	0	168	513	0.327	30.6	0.70	1.4	10	
3 T	2	70	9	0	0	168	513	0.327	30.6	0.70	1.4	10	
4 R	3	4	5	4	62	24	1476	0.016	7.8	0.61	0.0	0	60
East: PR 670 Este													
1 LT	4, 5	77	14	0	0	168	350	0.481	43.7	0.78	1.8	12	
2 R	6	4	51	6	50	200	556	0.360	8.2	0.65	0.0	0	10
North: PR 137 Norte													
1 L	7	84	11	0	0	92	215	0.428	32.0	0.77	1.1	8	54
2 T	8	70	24	0	0	120	513	0.234	29.7	0.66	1.0	7	
3 T	8	70	24	0	0	120	513	0.234	29.7	0.66	1.0	7	
4 R	9	4	5	4	62	52	1416	0.037	7.8	0.62	0.0	0	30
West: PR-670 Oeste													
1 LT	10, 11	59	13	0	0	160	291	0.549	43.8	0.79	1.8	13	
2 R	12	4	29	6	56	112	565	0.198	7.9	0.63	0.0	0	10

PR-137 con PR-670
2005, AM
Intersection ID: 04
Fixed-Time Signals, Cycle Time = 95

Table 5.8A - LANE FLOW AND CAPACITY INFORMATION

Lane No.	Mov No.	Dem Flow (veh/h) Lef	Thru	Rig	Tot	Lane Width (m)	Saturation Flow Adj. Basic (tbu)	Aver 1st (veh)	Aver 2nd (veh)	End Cap (veh/h)	Tot Cap (veh/h)	Deg. Satn x	Lane Util %
South: PR-137 Sur													
1 L	1	200	0	0	200	3.30	1950	1857	0	0	215	0.930	100
2 T	2	0	168	0	168	3.30	1950	1950	0	0	513	0.327	100
3 T	2	0	168	0	168	3.30	1950	1950	0	0	513	0.327	100
4 R	3	0	0	24	24	3.30	1950	1712<	1571<	0	1476	0.016	100
East: PR-670 Este													
1 LT	4, 5	60	108	0	168	3.30	1950	1845	0	0	350	0.481	100
2 R	6	0	0	200	200	3.30	1950	596<	667<	0	556	0.360	100
North: PR-137 Norte													
1 L	7	92	0	0	92	3.30	1950	1857	0	0	215	0.428	100
2 T	8	0	120	0	120	3.30	1950	1950	0	0	513	0.234	100
3 T	9	0	120	0	120	3.30	1950	1950	0	0	513	0.234	100
4 R	9	0	0	52	52	3.30	1950	1643<	1303<	0	1416	0.037	100
West: PR-670 Oeste													
1 LT	10, 11	56	104	0	160	3.30	1950	1844	0	0	291	0.549	100
2 R	12	0	0	112	112	3.30	1950	643<	629<	0	565	0.198	100

< Reduced saturation flow due to a short lane effect

Basic Saturation Flow in this table is adjusted for lane width, approach grade, parking manoeuvres and number of buses stopping. Saturation flow scale applies if specified.

PR-137 con PR-670
2005, AM
Intersection ID: 04
Fixed-Time Signals, Cycle Time = 95

Table 5.8B - SCATS MF PARAMETER

Lane No.	Mov No.	Stopline Flow (veh/h)	Capacity (veh/h)	SCATS Satn Flow	SCATS MF	Deg. Satn x	Lane Util. %
South: PR-137 Sur							
1 L	1	200	215	1857	1362	0.930	100
2 T	2	168	513	1950	1681	0.327	100
3 T	2	168	513	1950	1681	0.327	100
4 R	3	24	1476	1857	NA	0.016	100
East: PR 670 Este							
1 LT	4, 5	168	350	1916	NA	0.481	100
2 R	6	200	556	1857	NA	0.360	100
North: PR-137 Norte							
1 L	7	92	215	1857	1362	0.428	100
2 T	8	120	513	1950	1681	0.234	100
3 T	8	120	513	1950	1681	0.234	100
4 R	9	52	1416	1857	NA	0.037	100
West: PR-670 Oeste							
1 LT	10, 11	160	291	1916	NA	0.549	100
2 R	12	112	565	1857	NA	0.198	100

NA Not Applicable - SCATS MF was not calculated for this lane due to one of the following reasons:
- the lane is not controlled by signals (slip or continuous lane)
- two movements share this lane and do not run in the same phases

STOPLINE FLOW: Departure flow rate in veh/h as measured at the stop line. This cannot exceed capacity.

SCATS SATURATION FLOW: This allows for lane width, approach grade and turning vehicles. Saturation flow scale applies if specified. The effects of heavy vehicles, parking manoeuvres, number of buses stopping and conflicting pedestrian volume are not included.

SCATS MF: This emulates the MF (Maximum Flow) parameter used in the SCATS control system. It is calculated from the SCATS SATURATION FLOW parameter.

DEG. SATN: The Demand (Arrival) Flow Rate may exceed the Stopline Flow Rate, therefore x > 1 is possible.

PR-137 con PR-670
2005, AM
Intersection ID: 04
Fixed-Time Signals, Cycle Time = 95

Table S.10 - MOVEMENT CAPACITY AND PERFORMANCE SUMMARY

Mov No.	Mov Typ	Dem. Flow (veh /h)	Total Cap. (veh /h)	Lane Util (%)	Deg. Satn x	Eff. Grn 1st Grn	Eff. Grn 2nd Grn	Aver. Delay (sec)	Eff. Stop Rate	Cycle Average Queue (veh)	Perf. Index
South: PR-137 Sur											
1	L	200	215	100	0.930*	11*		68.7	1.04	3.4	10.35
2	T	336	1076	100	0.321	25*		30.6	0.70	1.4	10.41
3	R (Unq)	24	1476<	100	0.016	25	62	7.9	0.61	0.0	0.38
East: PR-670 Este											
4	L	60	125	100	0.481	14*		45.8	0.90	1.8	2.27
5	T	108	225	100	0.481	32		37.9	0.77	1.8	3.82
6	R (Und)	200	556<	100	0.360	55	30	8.2	0.65	0.0	3.26
North: PR-137 Norte											
7	L	92	215	100	0.428	11		52.0	0.77	1.1	3.79
8	T	240	1026	100	0.234	25		29.7	0.66	1.0	7.27
9	R (Und)	52	1413<	100	0.037	25	52	7.6	0.62	0.0	0.83
West: PR-670 Oeste											
10	L	56	102	100	0.550	11		49.0	0.85	1.0	2.22
11	T	104	189	100	0.549	29*		41.1	0.79	1.8	3.68
12	R (Und)	112	565<	100	0.198	25	56	7.9	0.65	0.0	1.79

< Reduced capacity due to a short lane effect
* Maximum degree of saturation, or critical green periods

PR-137 con PR-670
2005, AM
Intersection ID: 04
Fixed-Time Signals, Cycle Time = 95

Table S.12A - FUEL CONSUMPTION, EMISSIONS AND COST - TOTAL

Mov No.	Fuel Total L/h	Cost Total $/h	HC Total kg/h	CO Total kg/h	NOX Total kg/h	CO2 Total kg/h
South: PR-137 Sur						
1 L	19.7	167.46	0.089	3.29	0.095	46.7
2 T	25.1	185.82	0.112	4.53	0.137	62.7
3 R	1.6	9.38	0.007	0.30	0.009	3.9
	46.3	362.66	0.208	8.13	0.241	113.2
East: PR-670 Este						
4 L	5.0	90.04	0.023	0.90	0.027	12.4
5 T	8.6	65.73	0.039	1.59	0.047	21.4
6 R	13.1	79.34	0.056	2.57	0.078	32.9
	26.7	185.11	0.118	5.06	0.151	66.7
North: PR-137 Norte						
7 L	7.8	65.48	0.037	1.41	0.041	19.6
8 T	17.7	131.00	0.079	3.16	0.096	44.2
9 R	3.4	20.32	0.014	0.65	0.020	8.4
	28.9	216.79	0.130	5.23	0.159	72.2
West: PR-670 Oeste						
10 L	4.7	38.67	0.022	0.85	0.025	11.8
11 T	8.5	65.78	0.039	1.56	0.046	21.1
12 R	7.3	43.92	0.031	1.42	0.043	19.2
	20.4	148.37	0.091	3.83	0.114	51.1
INTERSECTION:	121.3	912.92	0.546	22.23	0.665	303.3

PARAMETERS USED IN COST CALCULATIONS

Pump price of fuel ($/L	=	0.800
Fuel resource cost factor	=	0.50
Ratio of running cost to fuel cost	=	3.0
Average income ($/h)	=	27.00
Time value factor	=	0.60
Average occupancy (persons/veh)	=	1.5
Light vehicle mass (1000 kg)	=	1.4
Heavy vehicle mass (1000 kg)	=	11.0
Light vehicle idle fuel rate (L/h)	=	1.350
Heavy vehicle idle fuel rate (L/h)	=	2.000

The idle fuel and vehicle mass parameters given above are the default values (data given in RIDES may override some of those parameters).

PR-137 con PR-670
2005, AM
Intersection ID: 04

Fixed-Time Signals, Cycle Time = 95

Table 5.14 - SUMMARY OF INPUT AND OUTPUT DATA

Lane No.	Demand Flow (veh/h) L	T	R	Tot	%HV	Adj. Basic Satf.	Eff Grn (secs) 1st	2nd	Deg Sat x	Aver. Delay (sec)	Longest Queue (m)	Shrt Lane (m)
South: PR-137 Sur												
1 L	200			200	0	1949	11		0.930	69.7	24	60
2 T		168		168	0	1949	25		0.327	30.6	10	
3 T		168		168	0	1949	25		0.327	30.6	10	
4 R			24	24	0	1949	25	62	0.016	7.8	0	60
	200	336	24	560	0				0.930	43.2	24	
East: PR-670 Este												
1 LT	60	108		168	0	1950	18		0.481	40.7	12	
2 R			200	200	0	1949	55	30	0.360	9.2	0	10
	60	108	200	368	0				0.481	23.0	12	
North: PR-137 Norte												
1 L	92			92	0	1949	11		0.428	52.0	8	54
2 T		120		120	0	1949	25		0.234	29.7	7	
3 T		120		120	0	1949	25		0.234	29.7	7	
4 R			52	52	0	1949	25	62	0.037	7.8	0	50
	92	240	52	384	0				0.428	32.1	8	
West: PR-670 Oeste												
1 LT	56	104		160	0	1950	15		0.549	43.8	13	
2 R			112	112	0	1949	29	56	0.198	7.9	0	10
	56	104	112	272	0				0.549	29.0	13	

ALL VEHICLES	Total Flow	% HV	Cycle Time	Max X	Aver. Delay	Max Queue
	1584	0	95	0.930	33.4	24

Total flow period = 60 minutes. Peak flow period = 15 minutes.

Queue values in this table are mean cycle-average queue (metres).

Note: Basic Saturation Flows (in through car units) have been adjusted for grade, lane widths, parking manoeuvres and bus stops.

PR-137 con PR-670
2005, AM
Intersection ID: 14
Fixed-Time Signals, Cycle Time = 95

Table 5.15 - CAPACITY AND LEVEL OF SERVICE

Mov No.	Mov Typ	Green Ratio (g/C) 1st grn	2nd grn	Total Flow veh /h	Total Cap. (veh /h)	Deg. of Satn (v/c)	Aver. Delay (sec)	LOS	Longest Queue Cycle Aver. (vehs)	(m)
South: PR-137 Sur										
1 L		0.116*		200	215	0.930*	68.7	E	3.4	24
2 T		0.263*		336	1026	0.327	30.6	C	1.4	10
3 R	(Und)	0.263	0.653	24	1476<	0.016	7.8	A	0.0	0
				560		0.930	43.2	D	3.4	24
East: PR-670 Este										
4 L		0.147*		60	125	0.481	45.6	D	1.9	12
5 T		0.337		108	225	0.481	37.9	D	1.9	12
6 R	(Und)	0.579	0.316	200	556<	0.360	8.2	A	0.0	0
				368		0.481	23.0	C	1.6	12
North: PR-137 Norte										
7 L		0.116		92	215	0.428	52.0	D	1.1	8
8 T		0.263		240	1026	0.234	29.7	C	1.0	7
9 R	(Und)	0.263	0.653	52	1417<	0.037	7.8	A	0.0	0
				384		0.428	32.1	C	1.1	8
West: PR-670 Oeste										
10 L		0.116		56	102	0.550	49.0	D	1.8	13
11 T		0.305*		104	189	0.549	41.1	D	1.8	13
12 R	(Und)	0.305	0.569	112	565<	0.198	7.9	A	0.0	0
				272		0.550	29.0	C	1.8	13
ALL VEHICLES:				1584		0.930	33.4	C	3.4	24
INTERSECTION (persons):				2376			33.4		3.4	24

Level of Service calculations are based on average control delay including geometric delay (HCM criteria), independent of the current delay definition used. For the criteria, refer to the "Level of Service" topic in the aaSIDRA Output Guide or the Output section of the on-line help.
< Reduced capacity due to a short lane effect
* Maximum v/c ratio, or critical green periods

--- End of aaSIDRA Output ---

C:\Documents and Settings\All Users\Documents\Vega Baja-octubre-2005-Monte Arenas\pr137con 670-2005-am.CUT
Produced by aaSIDRA 2.1.3.356
Copyright 2000-2004
Akcelik & Associates Pty Ltd

Generated 1:16 PM, 15 Dec 2005

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Akcelik & Associates Pty Ltd - aaSIDRA 2.1.3.356
-------------------------------------------------
Traffic Consulting Group
Carlos M. Contreras                    User ID: m0276
Licence Type: Multi Computer

Time and Date of Analysis    1:18 PM, 15 Dec 2005

Filename: C:\Documents and Settings\All Users\Documents\Vega Baja-octubre-2005-
Monte Arenas\pr137con 670-2005-pm.OUT

PR-137 con PR-670
2005, PM
Intersection ID:    04


RUN INFORMATION
---------------
* Basic Parameters:
  Intersection Type: Signalised - Fixed Time
  Driving on the right-hand side of the road
  Input data specified in Metric units
  Default Values File No. 30
  Peak flow period (for performance): 15 minutes
  Unit time (for volumes): 60 minutes (Hourly Rate)
  Delay definition: Control delay
                    Geometric delay included
  aaSIDRA Standard Delay and Queue models used
  Level of Service based on: Delay (ECM method)
  Queue definition: Cycle average queue, Average

* No. of Main (Timing-Capacity) Iterations =  1
  Comparison of last two iterations:
    Difference in intersection degree of sath =  0.0 %
    Largest difference in eff. green times =  0 secs
    (max. value for stopping = 0 secs)
```

```
PR-137 con PR-670
2005, PM
Intersection ID:    04
          Fixed-Time Signals, Cycle Time =  95


DEFAULT PARAMETERS
----------------

Default values for some of the important general parameters:
(Default Values File: DEF30.SDF)

  1. Basic saturation flow: 1950 tcu/h

     This value applies mainly to signalised intersections. For roundabouts
     and sign-controlled intersections, it is used for determining capacity
     of priority and continuous movements.
```



```
  2. Through car equivalents for signalised intersections
                    L E F T        THROUGH       R I G H T
                   LV     HV      LV     HV      LV     HV
       Normal     1.050  1.800   1.000  1.650   1.050  1.800
       Restricted 1.250  2.250                 1.250  2.250

  3. Opposed turn parameters (Signalised intersection)
                    Crit.   Fol.up   Deps   % Exit Flow
                     Gap    Edway   at End   Opposing
       Left turns :   4.5     2.6      2.2        0
       Right turns:   4.0     2.4      2.5        0

  4. Cruise speed= 60 km/h,  Approach Distance=  500 m

  5. Queue space per vehicle in metres
       Light vehicles:  7.0    Heavy vehicles: 13.0

  A full list of input data defaults and ranges is given in the
  Input Guide part of aaSIDRA User Guide.
```

```
PR-137 con PR-670
2005, PM
Intersection ID:    04
          Fixed-Time Signals, Cycle Time =  95
```

Table S.0 - TRAFFIC FLOW DATA

Mov No.	Left LV	Left HV	Through LV	Through HV	Right LV	Right HV	Flow Scale	Peak Flow Factor
VEHICLES	Demand flows in veh/hour as used by the program							
South: PR-137 Sur								
1	148	0	0	0	0	0	1.00	1.00
2	0	0	244	0	0	0	1.00	1.00
3	0	0	0	0	28	0	1.00	1.00
East: PR-670 Este								
4	60	0	0	0	0	0	1.00	1.00
5	0	0	152	0	0	0	1.00	1.00
6	0	0	0	0	200	0	1.00	1.00
North: PR-137 Norte								
7	144	0	0	0	0	0	1.00	1.00
8	0	0	1020	0	0	0	1.00	1.00
9	0	0	0	0	100	0	1.00	1.00
West: PR 670 Oeste								
10	16	0	0	0	0	0	1.00	1.00
11	0	0	104	0	0	0	1.00	1.00
12	0	0	0	0	96	0	1.00	1.00

Based on unit time = 60 minutes.
Flow Scale and Peak Hour Factor effects included in flow values.

PR-137 con PR-670
2005, PM
Intersection ID: 04
Fixed-Time Signals, Cycle Time = 95

Table S.1 - MOVEMENT PHASE AND TIMING PARAMETERS

Mov No.	Mov Typ	First Green Fr	To	Op	Pr	Second Green Fr	To	Op	Pr	Last Tim 1st Grn	2nd Grn	Req.Mov.Time 1st Grn	2nd Grn	Eff. Grn 1st Grn	2nd Grn
South: PR-137 Sur															
1 L		*G	H							4		12.4		11	
2 T		H	F							4		10.6		25	
3 R	(Und)	H	F			F	H	R		4	4	10.0Min	32.0Min	25	62
East: PR-670 Este															
4 L		D	G							4		12.8		14	
5 T		*J	G							4		24.1		32	
6 R	(Und)	G	J	R		J	G			4	6	30.0Min	14.4	55	30
North: PR-137 Norte															
7 L		G	H							4		12.2		11	
8 T		*H	F							4		31.6		29	
9 R	(Und)	H	F			F	H	R		4	4	10.0Min	32.0Min	25	62
West: PR-670 Oeste															
10 L		*F	J							4		10.0Min		11	
11 T		F	D							4		13.4		29	
12 R	(Und)	F	D			D	F	R		4	6	10.0Min	30.0Min	29	56

Current Phase Sequence No.: 8
Input phase sequence: G H F J D
Output phase sequence: G H F J D

* Critical Movement/Green Period

Movement Types:
- Ped Pedestrian
- Dum Dummy
- Und Undetected in both green periods
- Und1 Undetected in 1st green period
- Und2 Undetected in 2nd green period

Under heading 'Op':
- L "Left" turns are opposed
- R "Right" turns are opposed
- LR "Left and Right" opposed
- C "Constant" saturation flow

PR-137 con PR-670
2005, PM
Intersection ID: 04
Fixed-Time Signals, Cycle Time = 95

Table S.2 - MOVEMENT CAPACITY PARAMETERS

Mov No.	Dem Flow (veh /h)	PV (%)	Satn Flow 1st Grn	Satn Flow 2nd Grn	Flow Ratio 1st Grn	Flow Ratio 2nd Grn	Total Cap. (veh /h)	Frac. Deg. Satn xp	Frac. Spare Cap. (%)	Lane Util (%)	Deg. Satn x
South: PR-137 Sur											
1 L	148	0.0	1857		0.080		215	0.90	31	100	0.688
2 T	244	0.0	3900		0.063		1026	0.90	279	100	0.238
3 R	28	0.0	1712<	1571<	0.016	0.000	1476	0.90	4644	100	0.019
East: PR-670 Este											
4 L	60	0.0	721		0.083		106	0.90	59	100	0.565
5 T	152	0.0	800		0.190		269	0.90	60	100	0.564
6 R	200	0.0	596<	667<	0.000	0.300	556	0.90	150	100	0.360
North: PR-137 Norte											
7 L	144	0.0	1857		0.078		215	0.90	34	100	0.670
8 T	1020	0.0	3900		0.262		1026	0.90	-9	100	0.994*
9 R	100	0.0	1641<	1506<	0.061	0.000	1415	0.90	1173	100	0.071
West: PR-670 Oeste											
10 L	16	0.0	472		0.034		55	0.90	207	100	0.293
11 T	104	0.0	1163		0.089		355	0.90	207	100	0.293
12 R	98	0.0	643<	626<	0.149	0.000	565	0.90	435	100	0.170

< Reduced saturation flow due to a short lane effect

PR-137 con PR-670
2005, PM
Intersection ID: 04
Fixed-Time Signals, Cycle Time = 95

Table S.3 - INTERSECTION PARAMETERS

Crit Mov No.	App. & Turn	Green Period	Phases Fr	Phases To	Adjusted Lost Time	Adjusted Flow Ratio	Required Grn Time Ratio	Required Movement Time
1	S_L		G	H	4	0.080	0.089	12.4
8	N_T		H	F	4	0.262	0.291	31.6
10	W_L		F	J	10	-	-	10.0Min
5	E_T		J	G	4	0.190	0.211	24.1
				Total:	22	0.531	0.590	78.1

\- Flow ratio not used for cycle time calculations and the adjusted lost time equals the required movement time (=Min or Max as shown in Table S.1)

Cycle Time:

Minimum	Maximum	Practical	Chosen
42	150	54	95

(Cycle time specified by the user)

Intersection Level of Service = D

Worst movement Level of Service	=	E
Average intersection delay (s)	=	47.4
Largest average movement delay (s)	=	68.9
Largest cycle-average queue, mean (m)	=	68
Performance Index	=	94.59
Degree of saturation (highest)	=	0.994
Practical Spare Capacity (lowest)	=	-9 %
Effective intersection capacity, (veh/h)	=	2326
Total vehicle flow (veh/h)	=	2312
Total person flow (pers/h)	=	3468
Total vehicle delay (veh-h/h)	=	30.43
Total person delay (pers-h/h)	=	45.65
Total effective vehicle stops (veh/h)	=	2163
Total effective person stops (pers/h)	=	3243
Total vehicle travel (veh-km/h)	=	1403.6
Total cost ($/h)	=	1580.03
Total fuel (L/h)	=	196.2
Total CO2 (kg/h)	=	490.44

PR-137 con PR-670
2005, PM
Intersection ID: 03
Fixed Time Signals, Cycle Time = 95

Table 5.4 - PHASE INFORMATION

Phase No.	Change Time	Green Start	Displayed Green	Grn-Intgrn Secs	Prop.
G	0	4	11	15	0.158
H	15	19	25	29	0.305
I	44	48	11	15	0.158
J	58	63	14	18	0.189
D	77	81	14	18	0.189

(Phase times specified by the user)
Current Phase Sequence No.: 8
Input phase sequence: G H I J D
Output phase sequence: G H I J D

PR-137 con PR 670
2005, PM
Intersection ID: 04
Fixed-Time Signals, Cycle Time = 95

Table 5.5 - MOVEMENT PERFORMANCE

Mov No.	Total Delay (veh-h/h)	Total Delay (pers-h/h)	Aver. Delay (sec)	Prop. Queued	Eff. Stop Rate	Longest Queue Cycle Aver. (veh)	(m)	Perf. Index	Aver. Speed (km/h)
South: PR-137 Sur									
1 L	2.25	3.38	54.6	1.00	0.85	1.9	13	6.38	23.9

2 T	2.02	3.03	29.8	0.83	0.66	1.0	7	7.40	33.0
3 R	0.06	0.09	7.9	0.03	0.62	0.0	0	0.44	49.3
East: PR-670 Este									
4 L	0.76	1.14	45.7	0.95	0.82	2.2	16	2.27	26.6
5 T	1.59	2.39	37.8	0.95	0.73	2.2	16	5.39	29.4
6 R	0.45	0.68	8.2	0.23	0.65	0.0	0	3.76	49.5
North: PR-137 Norte									
7 L	2.18	3.27	54.4	1.00	0.94	1.9	13	6.15	24.0
8 T	19.53	29.30	63.9	1.05	1.21	9.8	68	56.22	20.7
9 R	0.22	0.32	7.8	0.09	0.62	0.0	0	1.59	49.3
West: PR-670 Oeste									
10 L	0.19	0.28	41.6	0.86	0.78	1.1	8	0.57	28.0
11 T	0.97	1.46	33.7	0.88	0.72	1.1	8	3.40	31.2
12 R	0.21	0.32	7.8	0.12	0.62	0.0	0	1.54	49.1

PR-137 con PR-670
2005, PM
Intersection ID: 04
Fixed-Time Signals, Cycle Time = 95

Table 5.6 - INTERSECTION PERFORMANCE

Total Flow (veh/h)	Deg. Satn x	Total Delay (veh-h/h)	Total Delay (pers-h/h)	Aver. Delay (sec)	Prop. Queued	Eff. Stop Rate	Longest Queue (m)	Perf. Index	Aver. Speed (km/h)
South: PR-137 Sur									
420	0.698	4.33	6.50	37.1	0.84	0.73	12	14.21	29.7
East: PR-670 Este									
412	0.865	2.81	4.22	24.6	0.60	0.72	16	10.92	35.8
North: PR-137 Norte									
1264	0.994	21.92	32.88	62.4	0.53	1.12	68	83.96	22.1
West: PR-670 Oeste									
216	0.293	1.37	2.05	22.9	0.54	0.67	8	5.50	36.9
ALL VEHICLES:									
2312	0.994	30.43	45.65	47.4	0.82	0.94	68	94.59	26.1
INTERSECTION (persons):									
3468	0.994		45.65	47.4	0.82	0.94		94.59	26.1

Queue values in this table are mean cycle-average queue (metres).

PR-137 con PR-670
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Table 5.7 - LANE PERFORMANCE

Lane No.	Mov No.	Effective Green Times (sec) R1	G1	R2	G2	Dem Flow (veh/h)	Cap (veh/h)	Deg. Satn x	Aver. Delay (sec)	Eff. Stop Rate	Queue Cycle (vehs)	Queue Aver. (m)	Shrt Lane (m)
South: PR-137 Sur													
1 L	1	94	[illegible]	0	0	148	215	0.688	54.8	0.85	1.9	13	60
2 T	2	70	25	0	0	122	513	0.238	29.8	0.66	1.0	7	
3 T	2	70	25	0	0	122	513	0.238	29.8	0.66	1.0	7	
4 R	3	4	25	4	62	28	1476	0.019	7.8	0.62	0.0	0	60
East: PR-670 Este													
1 LT	4, 5	76	19	0	0	212	376	0.564	40.0	0.80	2.2	16	
2 R	6	[illegible]	15	6	30	200	556	0.360	8.2	0.65	0.0	0	10
North: PR 137 Norte													
1 L	7	94	21	0	0	144	215	0.670	54.4	0.84	1.9	13	54
2 T	8	[illegible]	[illegible]	0	0	510	513	0.994	68.9	1.21	9.8	66	
3 T	8	[illegible]	[illegible]	0	0	510	513	0.994	68.9	1.21	9.8	66	
4 R	9	4	23	4	62	100	1415	0.071	7.8	0.62	0.0	0	50
West: PR-670 Oeste													
1 LT	10, 11	74	21	0	0	120	410	0.293	34.7	0.71	1.1	9	
2 R	12	4	23	6	56	96	565	0.170	7.9	0.62	0.0	0	10

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Table 5.8A - LANE FLOW AND CAPACITY INFORMATION

Lane No.	Mov No.	Dem Flow (veh/h) Lef	Thru	Rig	Tot	Lane Width (m)	Saturation Flow Adj. Basic (veh/h)	Aver 1st (veh/h)	Aver 2nd (veh/h)	End Cap (veh/h)	Tot Cap (veh/h)	Deg. Satn x	Lane Util %
South: PR 137 Sur													
1 L	1	148	0	0	148	3.30	1950	1857	0	0	215	0.688	100
2 T	2	0	122	0	122	3.30	1950	1950	0	0	513	0.238	100
3 T	2	0	122	0	122	3.30	1950	1950	0	0	513	0.238	100
4 R	3	0	0	28	28	3.30	1950	1712<	1371<	0	1476	0.019	100
East: PR-670 Este													
1 LT	4, 5	60	152	0	212	3.30	1950	1978	0	0	376	0.564	100
2 R	6	0	0	200	200	3.30	1950	596<	667<	0	556	0.360	100

Lane No.	Mov No.	Dem Flow (veh/h) Lef	Thru	Rig	Tot	Lane Width (m)	Saturation Flow Adj. Basic (veh/h)	Aver 1st (veh/h)	Aver 2nd (veh/h)	End Cap (veh/h)	Tot Cap (veh/h)	Deg. Satn x	Lane Util %
North: PR-137 Norte													
1 L	7	144	0	0	144	3.30	1950	1857	0	0	215	0.670	100
2 T	8	0	510	0	510	3.30	1950	1950	0	0	513	0.994	100
3 T	8	0	510	0	510	3.30	1950	1950	0	0	513	0.994	100
4 R	9	0	0	100	100	3.30	1950	1641<	1506<	0	1415	0.071	100
West: PR-670 Oeste													
1 LT	10, 11	16	104	0	120	3.30	1950	1853	0	0	410	0.293	100
2 R	12	0	0	96	96	3.30	1950	643<	626<	0	565	0.170	100

< Reduced saturation flow due to a short lane effect

Basic Saturation Flow in this table is adjusted for lane width, approach grade, parking manoeuvres and number of buses stopping. Saturation flow scale applies if specified.

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Table 5.8B - SCATS MF PARAMETER

Lane No.	Mov No.	Stopline Flow (veh/h)	Capacity (veh/h)	SCATS Satn Flow	SCATS MF	Deg. Satn x	Lane Util. %
South: PR-137 Sur							
1 L	1	148	215	1857	1362	0.688	100
2 T	2	122	513	1950	1681	0.238	100
3 T	2	122	513	1950	1681	0.238	100
4 R	3	28	1476	1857	NA	0.019	100
East: PR 670 Este							
1 LT	4, 5	212	376	1923	NA	0.564	100
2 R	6	200	556	1857	NA	0.360	100
North: PR-137 Norte							
1 L	7	144	215	1857	1362	0.670	100
2 T	8	510	513	1950	1681	0.994	100
3 T	8	510	513	1950	1681	0.994	100
4 R	9	100	1415	1857	NA	0.071	100
West: PR-670 Oeste							
1 LT	10, 11	120	410	1939	NA	0.293	100
2 R	12	96	565	1857	NA	0.170	100

NA Not Applicable SCATS MF was not calculated for this lane due to one of the following reasons:
- the lane is not controlled by signals (slip or continuous lane)
- two movements share this lane and do not run in the same phases

STOPLINE FLOW: Departure flow rate in veh/h as measured at the stop line. This cannot exceed capacity.

SCATS SATURATION FLOW: This allows for lane width, approach grade and turning vehicles. Saturation flow scale applies if specified. The effects of heavy vehicles, parking manoeuvres, number of buses stopping and conflicting pedestrian volume are not included.

SCATS MF: This emulates the MF (Maximum Flow) parameter used in the SCATS control system. It is calculated from the SCATS SATURATION FLOW parameter.

DMD. SATN: The Demand (Arrival) Flow Rate may exceed the Stopline Flow Rate, therefore x > 1 is possible.

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Table 5.10 - MOVEMENT CAPACITY AND PERFORMANCE SUMMARY

Mov No.	Mov Typ	Dem Flow (veh /h)	Total Cap. (veh /h)	Lane Util (%)	Deg. Satn x	Eff. Grn 1st Grn	Eff. Grn 2nd Grn	Aver. Delay (sec)	Eff. Stop Rate	Cycle Average Queue (veh)	Perf. Index
South: PR-137 Sur											
1 L		148	215	100	0.688	11*		54.8	0.85	1.9	6.36
2 T		244	1026	100	0.238	25		29.8	0.66	1.0	3.40
3 R	(Und)	28	1476<	100	0.019	25	62	7.8	0.62	0.0	0.44
East: PR-670 Este											
4 L		60	106	100	0.565	14		45.7	0.82	2.2	2.27
5 T		152	269	100	0.564	32*		37.9	0.79	2.2	5.39
6 R	(Und)	200	956<	100	0.360	55	30	8.2	0.65	0.0	3.26
North: PR-137 Norte											
7 L		144	215	100	0.670	11		59.4	0.84	1.9	6.15
8 T		1020	1026	100	0.994*	25*		83.9	1.21	9.8	56.22
9 R	(Und)	100	1415<	100	0.071	25	62	7.8	0.62	0.0	1.59
West: PR-670 Oeste											
10 L		16	55	100	0.293	11*		41.6	0.78	1.1	0.57
11 T		104	355	100	0.293	29		33.7	0.70	1.1	3.40
12 R	(Und)	96	565<	100	0.170	29	36	7.9	0.62	0.0	1.54

< Reduced capacity due to a short lane effect
* Maximum degree of saturation, or critical green periods

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Fixed-Time Signals, Cycle Time = 95

Table 5.12A - FUEL CONSUMPTION, EMISSIONS AND COST - TOTAL

Mov No.	Fuel Total L/h	Cost Total $/h	HC Total kg/h	CO Total kg/h	NOX Total kg/h	CO2 Total kg/h
South: PR-137 Sur						
1 L	12.8	108.42	0.060	2.30	0.067	32.1
2 T	18.0	133.26	0.080	3.22	0.096	45.0
3 R	1.8	10.84	0.008	0.35	0.011	4.5
	32.6	252.62	0.148	5.88	0.176	81.6
East: PR-670 Este						
4 L	5.0	39.99	0.023	0.90	0.027	12.4
5 T	12.1	92.43	0.055	2.25	0.066	30.3
6 R	13.1	79.34	0.056	2.57	0.078	32.8
	30.2	211.77	0.134	5.72	0.171	75.5
North: PR-137 Norte						
7 L	12.5	105.10	0.058	2.24	0.065	31.1
8 T	98.8	663.74	0.475	18.35	0.515	247.3
9 R	6.5	39.09	0.027	1.26	0.038	16.2
	117.8	1007.93	0.560	21.85	0.619	294.6
West: PR-670 Oeste						
10 L	1.3	10.18	0.006	0.24	0.007	3.2
11 T	7.9	59.90	0.036	1.44	0.043	19.8
12 R	6.2	37.62	0.026	1.21	0.037	15.6
	15.5	107.70	0.068	2.89	0.087	38.7
INTERSECTION:	196.2	1580.03	0.910	36.33	1.053	490.4

PARAMETERS USED IN COST CALCULATIONS

Pump price of fuel ($/L)	=	0.900
Fuel resource cost factor	=	0.50
Ratio of running cost to fuel cost	=	3.0
Average income ($/h)	=	22.00
Time value factor	=	0.60
Average occupancy (persons/veh)	=	1.5
Light vehicle mass (1000 kg)	=	1.4
Heavy vehicle mass (1000 kg)	=	11.0
Light vehicle idle fuel rate (L/h)	=	1.500
Heavy vehicle idle fuel rate (L/h)	=	2.000

The idle fuel and vehicle mass parameters given above are the default values (data given in RIDES may override some of these parameters).