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).

---

04 Int PR-957 y Acceso 3
Pico PM Futuro
Intersection ID: 4
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-957 S												
1 L	1			1	0				0.002	15.3	0	30
2 T		518		518	0				0.266	0.0	0	
	1	518	0	519	0				0.266	0.0	0	
North: PR-957 N												
1 T		927		927	0				0.475	0.0	0	
2 R			96	96	0				0.052	8.2	0	30
	0	927	96	1023	0				0.475	0.8		
West: Acceso 3 W												
1 LR	47		1	48	0				0.191	25.5	1	
	47	0	1	48	0				0.191	25.5	1	

ALL VEHICLES	Total Flow	% HV	Max X	Aver. Delay	Max Queue
	1590	0	0.475	1.3	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.

---

04 Int PR-957 y Acceso 3
Pico PM Futuro
Intersection ID: 4
Stop Sign Controlled Intersection

Table S.15 - CAPACITY AND LEVEL OF SERVICE

Mov No.	Mov Typ	Total Flow	Total Cap.	Deg. of	Aver. Delay	LOS	Longest Queue Cycle	Aver.

	(veh /h)	(veh /h)	Satn (v/c)	(sec)		(vehs)	(m)
South: PR-957 S							
1 L	1	428	0.002	15.3	C	0.0	0
2 T	518	1950	0.266	0.0	A	0.0	0
	519		0.266	0.0	A	0.0	0
North: PR-957 N							
8 T	927	1950	0.475*	0.0	A	0.0	0
9 R	96	1857	0.052	8.2	A	0.0	0
	1023		0.475	0.8	A	0.0	0
West: Acceso 3 W							
10 L	47	246	0.191	25.5	D	0.2	1
12 R	1	5	0.200	25.6	D	0.2	1
	48		0.200	25.5	D	0.2	1
ALL VEHICLES:	1590		0.475	1.3	NA	0.2	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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Projects\CampoRicoNewCastle\04_PR-957 y Acceso 3_FP.OUT
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05 Int PR-957 y Accesos 4 y 5
Pico AM Futuro
Intersection ID: 5

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 (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

---

05 Int PR-957 y Accesos 4 y 5
Pico AM Futuro
Intersection ID: 5
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: Camino a Acceso 5 S								
1	1	0	133	0	0	0	1.00	1.00
3	0	0	0	0	1	0	1.00	1.00
SouthEast: PR-957 SE								
21	1	0	1	0	0	0	1.00	1.00
23	0	0	0	0	291	0	1.00	1.00
North: PR-957 N								

7	127	0	39	0	0	0	1.00	1.00
9	0	0	0	0	22	0	1.00	1.00
West: Acceso 4 W								
10	106	0	1	0	0	0	1.00	1.00
12	0	0	0	0	1	0	1.00	1.00

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

05 Int PR-957 y Accesos 4 y 5
Pico AM Futuro
Intersection ID: 5
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: Camino a Acceso 5 S										
1 LT	134	0.0	DIFF			942	0.80	462	100	0.142
3 R	1	0.0	127	0.0	127	7	0.80	460	100	0.143
SouthEast: PR-957 SE										
21 LT	2	0.0	DIFF			13	0.80	420	100	0.154
23 R	291	0.0	0			1838	0.80	405	100	0.158*
North: PR-957 N										
7 LT	166	0.0	0			1656	0.80	698	100	0.100
9 R	22	0.0	0			219	0.80	696	100	0.100
West: Acceso 4 W										
10 LT	107	0.0	DIFF			783	0.80	485	100	0.137
12 R	1	0.0	50+	0.0	50	7	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

05 Int PR-957 y Accesos 4 y 5
Pico AM Futuro
Intersection ID: 5
Stop Sign Controlled Intersection

Table S.3 - INTERSECTION PARAMETERS

Intersection Level of Service	=	NA
Worst movement Level of Service	=	B
Average intersection delay (s)	=	9.2
Largest average movement delay (s)	=	13.7

Largest cycle-average queue, mean (m)	=	1
Performance Index	=	11.80
Degree of saturation (highest)	=	0.158
Practical Spare Capacity (lowest)	=	405 %
Effective intersection capacity, (veh/h)	=	4573
Total vehicle flow (veh/h)	=	724
Total person flow (pers/h)	=	1086
Total vehicle delay (veh-h/h)	=	1.85
Total person delay (pers-h/h)	=	2.77
Total effective vehicle stops (veh/h)	=	442
Total effective person stops (pers/h)	=	664
Total vehicle travel (veh-km/h)	=	435.6
Total cost ($/h)	=	286.00
Total fuel (L/h)	=	48.1
Total CO2 (kg/h)	=	120.31

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.

---

05 Int PR-957 y Accesos 4 y 5
Pico AM Futuro
Intersection ID: 5
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 (vehs)	Longest Queue Aver. (m)	Perf. Index	Aver. Speed (km/h)
South: Camino a Acceso 5 S									
1 LT	0.46	0.68	12.2	0.45	0.91	0.1	1	2.55	45.7
3 R	0.00	0.01	13.6	0.45	0.78	0.1	1	0.02	44.6
SouthEast: PR-957 SE									
21 LT	0.01	0.01	9.3	0.34	0.66	0.1	0	0.03	47.3
23 R	0.68	1.02	8.4	0.34	0.42	0.1	0	4.34	48.0
North: PR-957 N									
7 LT	0.25	0.38	5.5	0.00	0.47	0.0	0	2.35	52.1
9 R	0.05	0.08	8.2	0.00	0.67	0.0	0	0.35	49.0
West: Acceso 4 W									
10 LT	0.40	0.60	13.5	0.52	0.95	0.1	1	2.13	44.5
12 R	0.00	0.01	13.7	0.52	0.66	0.1	1	0.02	44.5

---

05 Int PR-957 y Accesos 4 y 5
Pico AM Futuro
Intersection ID: 5
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: Camino a Acceso 5 S									
135	0.143	0.46	0.69	12.2	0.45	0.91	1	2.57	45.7
SouthEast: PR-957 SE									
293	0.158	0.68	1.02	8.4	0.34	0.43	0	4.38	48.0
North: PR-957 N									
188	0.100	0.30	0.45	5.8	0.00	0.49	0	2.70	51.7
West: Acceso 4 W									
108	0.143	0.40	0.61	13.5	0.52	0.95	1	2.15	44.5
ALL VEHICLES:									
724	0.158	1.85	2.77	9.2	0.30	0.61	1	11.80	47.9
INTERSECTION (persons):									
1086	0.158		2.77	9.2	0.30	0.61		11.80	47.9

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

05 Int PR-957 y Accesos 4 y 5
Pico AM Futuro
Intersection ID: 5
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: Camino a Acceso 5 S									
1 LTR	1, 3	135	949	0.142	12.2	0.91	0.1	1	
SouthEast: PR-957 SE									
1 LTR	21, 23	293	1850	0.158	8.4	0.43	0.1	0	
North: PR-957 N									
1 LTR	7, 9	188	1876	0.100	5.8	0.49	0.0	0	
West: Acceso 4 W									
1 LTR	10, 12	108	790	0.137	13.5	0.95	0.1	1	

05 Int PR-957 y Accesos 4 y 5
Pico AM Futuro
Intersection ID: 5
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: Camino a Acceso 5 S									
1 LTR	1, 3	1	133	1	135	120	949	0.142	100
SouthEast: PR-957 SE									
1 LTR	21, 23	1	1	291	293	120	1850	0.158	100
North: PR-957 N									
1 LTR	7, 9	127	39	22	188	120	1876	0.100	100
West: Acceso 4 W									
1 LTR	10, 12	106	1	1	108	108	790	0.137	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.

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05 Int PR-957 y Accesos 4 y 5
Pico AM Futuro
Intersection ID: 5
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: Camino a Acceso 5 S						
1 LT	9.4	55.52	0.041	1.98	0.057	23.5
3 R	0.1	0.43	0.000	0.01	0.000	0.2
	9.5	55.95	0.041	2.00	0.058	23.7
SouthEast: PR-957 SE						
21 LT	0.1	0.80	0.001	0.03	0.001	0.3
23 R	19.5	114.88	0.084	4.03	0.118	48.8

	19.6	115.68	0.085	4.05	0.119	49.1
North: PR-957 N						
7 LT	9.9	60.03	0.041	1.75	0.057	24.7
9 R	1.5	8.57	0.006	0.30	0.009	3.7
	11.3	68.60	0.047	2.05	0.066	28.3
West: Acceso 4 W						
10 LT	7.6	45.34	0.034	1.61	0.046	19.0
12 R	0.1	0.43	0.000	0.01	0.000	0.2
	7.7	45.77	0.034	1.63	0.046	19.2
INTERSECTION:	48.1	286.00	0.207	9.74	0.289	120.3

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 RIDES may override some of these parameters).

---

05 Int PR-957 y Accesos 4 y 5
Pico AM Futuro
Intersection ID: 5
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: Camino a Acceso 5 S												
1 LTR	1	133	1	135	0				0.142	12.2	1	
	1	133	1	135	0				0.142	12.2	1	
SouthEast: PR-957 SE												
1 LTR	1	1	291	293	0				0.158	8.4	0	

	1	1	291	293	0	0.158	8.4	0
North: PR-957 N								
1 LTR	127	39	22	188	0	0.100	5.8	0
	127	39	22	188	0	0.100	5.8	
West: Acceso 4 W								
1 LTR	106	1	1	108	0	0.137	13.5	1
	106	1	1	108	0	0.137	13.5	1

ALL VEHICLES	Total Flow	% HV	Max X	Aver. Delay	Max Queue
	724	0	0.158	9.2	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.

---

05 Int PR-957 y Accesos 4 y 5
Pico AM Futuro
Intersection ID: 5
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 (vehs)	Aver. (m)
South: Camino a Acceso 5 S								
1	LT	134	942	0.142	12.2	B	0.1	1
3	R	1	7	0.143	13.6	B	0.1	1
		135		0.143	12.2	B	0.1	1
SouthEast: PR-957 SE								
21	LT	2	13	0.154	9.3	A	0.1	0
23	R	291	1838	0.158*	8.4	A	0.1	0
		293		0.158	8.4	A	0.1	0
North: PR-957 N								
7	LT	166	1656	0.100	5.5	A	0.0	0
9	R	22	219	0.100	8.2	A	0.0	0
		188		0.100	5.8	A	0.0	0
West: Acceso 4 W								
10	LT	107	783	0.137	13.5	B	0.1	1

12 R	1	7	0.143	13.7	B	0.1	1
	108		0.143	13.5	B	0.1	1
ALL VEHICLES:	724		0.158	9.2	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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Projects\CampoRicoNewCastle\05_PR-957 y Accesos 4 y 5_FA.OUT
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05 Int PR-957 y Accesos 4 y 5
Pico PM Futuro
Intersection ID: 5

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 (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

---

05 Int PR-957 y Accesos 4 y 5
Pico PM Futuro
Intersection ID: 5
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: Camino a Acceso 5 S								
1	1	0	79	0	0	0	1.00	1.00
3	0	0	0	0	1	0	1.00	1.00
SouthEast: PR-957 SE								
21	1	0	1	0	0	0	1.00	1.00
23	0	0	0	0	310	0	1.00	1.00
North: PR-957 N								

7	462	0	141	0	0	0	1.00	1.00
9	0	0	0	0	102	0	1.00	1.00
West: Acceso 4 W								
10	50	0	1	0	0	0	1.00	1.00
12	0	0	0	0	1	0	1.00	1.00

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

O5 Int PR-957 y Accesos 4 y 5
Pico PM Futuro
Intersection ID: 5
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: Camino a Acceso 5 S										
1 LT	80	0.0	DIFF			611	0.80	511	100	0.131
3 R	1	0.0	462	0.0	462	8	0.80	540	100	0.125
SouthEast: PR-957 SE										
21 LT	2	0.0	DIFF			12	0.80	380	100	0.167
23 R	310	0.0	0			1825	0.80	371	100	0.170
North: PR-957 N										
7 LT	603	0.0	0			1604	0.80	113	100	0.376*
9 R	102	0.0	0			271	0.80	113	100	0.376*
West: Acceso 4 W										
10 LT	51	0.0	DIFF			460	0.80	622	100	0.111
12 R	1	0.0	192+	0.0	192	9	0.80	620	100	0.111

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

---

O5 Int PR-957 y Accesos 4 y 5
Pico PM Futuro
Intersection ID: 5
Stop Sign Controlled Intersection

Table S.3 - INTERSECTION PARAMETERS

Intersection Level of Service	=	NA
Worst movement Level of Service	=	C
Average intersection delay (s)	=	8.7
Largest average movement delay (s)	=	17.5

Largest cycle-average queue, mean (m)	=	3
Performance Index	=	17.94
Degree of saturation (highest)	=	0.376
Practical Spare Capacity (lowest)	=	113 %
Effective intersection capacity, (veh/h)	=	3055
Total vehicle flow (veh/h)	=	1150
Total person flow (pers/h)	=	1725
Total vehicle delay (veh-h/h)	=	2.78
Total person delay (pers-h/h)	=	4.17
Total effective vehicle stops (veh/h)	=	544
Total effective person stops (pers/h)	=	816
Total vehicle travel (veh-km/h)	=	693.0
Total cost ($/h)	=	446.67
Total fuel (L/h)	=	73.7
Total CO2 (kg/h)	=	184.35

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.

---

05 Int PR-957 y Accesos 4 y 5
Pico PM Futuro
Intersection ID: 5
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 (vehs)	Longest Queue Aver. (m)	Perf. Index	Aver. Speed (km/h)
South: Camino a Acceso 5 S									
1 LT	0.33	0.49	14.8	0.59	1.00	0.1	1	1.68	43.5
3 R	0.00	0.01	16.2	0.59	0.92	0.1	1	0.02	42.6
SouthEast: PR-957 SE									
21 LT	0.01	0.01	13.0	0.69	0.90	0.4	3	0.04	44.1
23 R	1.04	1.56	12.1	0.69	0.20	0.4	3	4.87	45.0
North: PR-957 N									
7 LT	0.92	1.38	5.5	0.00	0.47	0.0	0	8.54	52.1
9 R	0.23	0.35	8.2	0.00	0.67	0.0	0	1.64	49.0
West: Acceso 4 W									
10 LT	0.24	0.37	17.2	0.69	1.00	0.1	1	1.13	41.6
12 R	0.00	0.01	17.5	0.69	0.72	0.1	1	0.02	41.6

---

05 Int PR-957 y Accesos 4 y 5
Pico PM Futuro
Intersection ID: 5
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: Camino a Acceso 5 S									
81	0.131	0.33	0.50	14.9	0.59	1.00	1	1.70	43.5
SouthEast: PR-957 SE									
312	0.170	1.05	1.57	12.1	0.69	0.20	3	4.91	45.0
North: PR-957 N									
705	0.376	1.15	1.73	5.9	0.00	0.49	0	10.18	51.6
West: Acceso 4 W									
52	0.111	0.25	0.37	17.3	0.69	0.99	1	1.16	41.6
ALL VEHICLES:									
1150	0.376	2.78	4.17	8.7	0.26	0.47	3	17.94	48.5
INTERSECTION (persons):									
1725	0.376		4.17	8.7	0.26	0.47		17.94	48.5

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

05 Int PR-957 y Accesos 4 y 5
Pico PM Futuro
Intersection ID: 5
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: Camino a Acceso 5 S									
1 LTR	1, 3	81	619	0.131	14.9	1.00	0.1	1	
SouthEast: PR-957 SE									
1 LTR	21, 23	312	1837	0.170	12.1	0.20	0.4	3	
North: PR-957 N									
1 LTR	7, 9	705	1875	0.376	5.9	0.49	0.0	0	
West: Acceso 4 W									
1 LTR	10, 12	52	469	0.111	17.3	0.99	0.1	1	

05 Int PR-957 y Accesos 4 y 5
Pico PM Futuro
Intersection ID: 5
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: Camino a Acceso 5 S									
1 LTR	1, 3	1	79	1	81	81	619	0.131	100
SouthEast: PR-957 SE									
1 LTR	21, 23	1	1	310	312	120	1837	0.170	100
North: PR-957 N									
1 LTR	7, 9	462	141	102	705	120	1875	0.376	100
West: Acceso 4 W									
1 LTR	10, 12	50	1	1	52	52	469	0.111	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.

---

05 Int PR-957 y Accesos 4 y 5
Pico PM Futuro
Intersection ID: 5
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: Camino a Acceso 5 S						
1 LT	5.7	34.49	0.025	1.19	0.034	14.2
3 R	0.1	0.45	0.000	0.01	0.000	0.2
	5.8	34.94	0.025	1.20	0.035	14.4
SouthEast: PR-957 SE						
21 LT	0.1	0.85	0.001	0.03	0.001	0.4
23 R	21.4	129.68	0.094	4.44	0.130	53.6

	21.6	130.53	0.094	4.47	0.130	53.9
North: PR-957 N						
7 LT	35.9	218.11	0.147	6.38	0.207	89.7
9 R	6.8	39.75	0.029	1.39	0.041	17.0
	42.6	257.86	0.177	7.77	0.248	106.6
West: Acceso 4 W						
10 LT	3.7	22.89	0.016	0.77	0.022	9.2
12 R	0.1	0.45	0.000	0.01	0.000	0.2
	3.8	23.34	0.017	0.79	0.022	9.4
INTERSECTION:	73.7	446.67	0.313	14.23	0.435	184.4

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)	=	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).

---

05 Int PR-957 y Accesos 4 y 5
Pico PM Futuro
Intersection ID: 5
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: Camino a Acceso 5 S												
1 LTR	1	79	1	81	0				0.131	14.9	1	
	1	79	1	81	0				0.131	14.9	1	
SouthEast: PR-957 SE												
1 LTR	1	1	310	312	0				0.170	12.1	3	

	1	1	310	312	0	0.170	12.1	3
North: PR-957 N								
1 LTR	462	141	102	705	0	0.376	5.9	0
	462	141	102	705	0	0.376	5.9	
West: Acceso 4 W								
1 LTR	50	1	1	52	0	0.111	17.3	1
	50	1	1	52	0	0.111	17.3	1

ALL VEHICLES	Total Flow	% HV	Max X	Aver. Delay	Max Queue
	1150	0	0.376	8.7	3

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.

---

05 Int PR-957 y Accesos 4 y 5
Pico PM Futuro
Intersection ID: 5
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: Camino a Acceso 5 S								
1	LT	80	611	0.131	14.8	B	0.1	1
3	R	1	8	0.125	16.2	C	0.1	1
		81		0.131	14.9	B	0.1	1
SouthEast: PR-957 SE								
21	LT	2	12	0.167	13.0	B	0.4	3
23	R	310	1825	0.170	12.1	B	0.4	3
		312		0.170	12.1	B	0.4	3
North: PR-957 N								
7	LT	603	1604	0.376*	5.5	A	0.0	0
9	R	102	271	0.376*	8.2	A	0.0	0
		705		0.376	5.9	A	0.0	0
West: Acceso 4 W								
10	LT	51	460	0.111	17.2	C	0.1	1

12 R	1	9	0.111	17.5	C	0.1	1
	52		0.111	17.3	C	0.1	1
ALL VEHICLES:	1150		0.376	8.7	NA	0.4	3

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 ---

C:\Documents and Settings\Carlos M Contreras\My Documents\aaTraffic\aaSIDRA
Projects\CampoRicoNewCastle\05_PR-957 y Accesos 4 y 5_FP.OUT
Produced by aaSIDRA 2.1.3.356
Copyright 2000-2004
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Generated 10:53 AM, 17 Jan 2006

```
*****************************************************************************
*                                                                           *
* Release 10.3                    (TRANSYT-7F)                  January 2006 *
*                                                                           *
*                    TRAFFIC SIGNAL SYSTEM OPTIMIZATION                     *
*                                                                           *
*                                PROGRAM                                    *
*                                                                           *
*                                                              Developed by: *
* Sponsored by:                                                             *
*                                                   University of Florida   *
* U.S. Department of Transportation                 Transportation Research Center *
* Federal Highway Administration                                            *
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*          Software Maintenance and User Support Furnished by:              *
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*          Transportation Research Center, University of Florida            *
*                Box 116585, Gainesville, FL 32611-6585 USA                 *
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*****************************************************************************

Date of Run:  1/20/ 6  Start Time of Run:   13:42:47  Data File: PR-185~1.TIN

Pico AM Futuro

 ---  7 --- NOTE -
+                 A stop penalty of '-1' will result in automatic
                  calculation of the PI to minimize fuel consumption.
                  Link specific delay or stop weights on record
                  types 37 & 38 will still be applied, however.

 --- 15 --- NOTE -
+                 Input units were specified as follows:

                     * ENGLISH/METRIC UNITS IN METRIC

 --- 72 --- NOTE -
+                 A record type -52 causes run to be optimized using the
                  default normal optimization step sizes.
                  If record type 4 was coded, it is ignored.
                  The simulation used is the single-cycle
                  step-wise simulation.

 --- 74 --- NOTE -
+                 There are a total of   2 nodes and   8 links,
                  including bottlenecks, if any, in this run.

<PERFORMANCE WITH OPTIMAL SETTINGS>

Movement/  Deg/  Total  Travel Time      Delay        Total   Max Back  Fuel
Node No.   Sat  Travel  Total  Avg.   Total  Avg/LOS  Stops   of Queue  Cons.
            %    v-km   v-hr  sec/v   v-hr   sec/v   No. (%)  Est.Cap.   lit
```

NB THRU :	52	864.50	13.04	27.1	1.03	2.1A	340(20)	9	130	87.7
SB THRU :	10	129.85	1.83	20.3	0.02	0.2A	13(5)	1	106	11.1
EB LEFT :	28	21.31	1.02	69.6	0.73	49.5D	55(106)	1	106	6.1
RGHT :	33	239.99	3.42	20.6	0.08	0.5A	8(2)	0	53	19.6
NODE 1:	52	1255.65	19.30		1.86	2.5A	417(15)			124.5
NB THRU :	6	17.10	0.24	3.8	0.00	0.0A	0(1)	0	20	1.4
LEFT :	47	97.13	2.96	8.2	1.61	4.5A	423(33)	9	19	31.5
SB THRU :	47	129.85	12.10	134.9	3.44	38.4D	291(91)	8	105	29.0
RGHT :	8	54.67	3.65	96.6	0.00	0.1A	1(1)	0	53	8.0
NODE 2:	47	298.74	18.95		5.06	9.2A	717(36)			69.8

All MOEs are in units per hour.

SYSTEM-WIDE PERFORMANCE: ALL NODES

Performance Measures	Units	System Totals
Total Travel	veh-km/hr	1554
Total Travel Time	veh-hr/hr	38
Total Uniform Delay	veh-hr/hr	6
Total Random Delay	veh-hr/hr	1
Total Delay	veh-hr/hr	7
Average Delay	sec/veh	5.3
Passenger Delay	pax-hr/hr	8
Uniform Stops:	veh/hr	1073
	%	23
Random Stops:	veh/hr	62
	%	1
Total Stops:	veh/hr	1135
	%	24
Degree of Sat > 1	# of links	0
Queue Spillback	# of links	0
Time Jammed	%	0
Period Length	sec	900
System Speed	km/hr	40.6
Fuel Consumption	lit/hr	194
Operating Cost	$/hr	420
Performance Index	DI	15.59

Performance Index (PI): Disutility Index (DI):
Disutility Index Excess Fuel Consumption

No. of Simulations = 37, Links = 296, Elapsed Time = 0.1 sec.

TRANSYT-7F TRAFFIC SIGNAL TIMING TABLES

NETWORK-WIDE SIGNAL TIMING PARAMETERS

System Cycle Length = 100 Seconds

Master offset reference location = intersection no. 1 Start of interval 1.

Key to Interval Types:
F : Fixed green.
V : Variable green.
Y : Yellow.
R : All-red.

An 'M' by an interval length means this is the minimum time available.

INTERSECTION CONTROLLER SETTINGS

Intersection 1 Pretimed - Splits Optimized

Interval Number :	1	2	3	4	5	6
Intvl Length(sec):	5.0	3.0	1.0	87.0	3.0	1.0
Intvl Length (%):	5	3	1	87	3	1
Pin Settings (%):	100/0	5	8	9	96	99
Phase Start (No.):	1			2		
Interval Type :	V	Y	R	V	Y	R
Splits (sec):	9			91		
Splits (%):	9			91		
Links Moving :	107			102		
	112			106		
				112		

Offset = 0.0 sec 0 %.

This is the master controller.

Intersection 2 Pretimed - Splits Optimized

Interval Number :	1	2	3	4	5	6
Intvl Length(sec):	73.0	3.0	1.0	19.0	3.0	1.0
Intvl Length (%):	73	3	1	19	3	1
Pin Settings (%):	100/0	73	76	77	96	99
Phase Start (No.):	1			2		
Interval Type :	V	Y	R	V	Y	R
Splits (sec):	77			23		
Splits (%):	77			23		
Links Moving :	205			202		
	202			206		
	210			210		

Offset = 13.0 sec 13 %.

--- 92 --- NOTE -

+ End of job!

```
*****************************************************************************
*                                                                           *
* Release 10.3                    (TRANSYT-7F)                  January 2006 *
*                                                                           *
*                     TRAFFIC SIGNAL SYSTEM OPTIMIZATION                    *
*                                                                           *
*                                PROGRAM                                    *
*                                                                           *
*                                                            Developed by: *
* Sponsored by:                                                             *
*                                                                           *
* U.S. Department of Transportation                     University of Florida *
* Federal Highway Administration                Transportation Research Center *
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*                                                                           *
*****************************************************************************

Date of Run:  1/20/ 6  Start Time of Run:   13:22:23  Data File: PR-185~1.TIN

Pico PM Futuro

>>> 108 +++ WARNING +
+                     A stop penalty of zero (0) is not recommended.
                      Some consideration should be given to stops.

--- 15 --- NOTE -
+                   Input units were specified as follows:

                      * ENGLISH/METRIC UNITS IN METRIC

--- 72 --- NOTE -
+                   A record type -52 causes run to be optimized using the
                    default normal optimization step sizes.
                    If record type 4 was coded, it is ignored.
                    The simulation used is the single-cycle
                    step-wise simulation.

--- 74 --- NOTE -
+                   There are a total of   2 nodes and   8 links,
                    including bottlenecks, if any, in this run.

--- 77 --- NOTE -
+                   There were a total of   1 warning messages issued
                    in the above report.

<PERFORMANCE WITH OPTIMAL SETTINGS>

Movement/  Deg/  Total  Travel Time      Delay        Total   Max Back  Fuel
```

Node No.	Sat %	Travel v-km	Total v-hr	Avg. sec/v	Total v-hr	Avg/LOS sec/v	Stops No. (%)	of Queue Est.	Cap.	Cons. lit
NB THRU :	47	719.50	11.49	28.8	1.50	3.8A	411(29)	10	130	80.7
SB THRU :	23	79.68	1.67	9.1	0.57	3.1A	154(24)	4	31	15.0
EB LEFT :	45	97.50	3.76	69.3	2.40	44.3D	188(97)	5	130	22.7
RGHT :	106*	856.00	40.48	85.1	28.59	60.1E	2224(130)	11	44	224.7
NODE 1:	106*	1752.68	57.40		33.05	29.7C	2979(74)			343.1
NB THRU :	12	52.68	0.74	6.0	0.01	0.1A	1(1)	0	31	4.3
LEFT :	51	126.72	5.20	17.7	3.44	11.7B	412(40)	9	30	38.3
SB THRU :	50	332.00	26.87	145.7	4.74	25.7C	505(77)	13	130	62.4
RGHT :	8	72.00	4.80	120.1	0.00	0.1A	1(1)	0	66	10.5
NODE 2:	51	583.40	37.61		8.19	12.8B	921(40)			115.4

All MOEs are in units per hour.

SYSTEM-WIDE PERFORMANCE: ALL NODES

Performance Measures	Units	System Totals
Total Travel	veh-km/hr	2336
Total Travel Time	veh-hr/hr	95
Total Uniform Delay	veh-hr/hr	21
Total Random Delay	veh-hr/hr	20
Total Delay	veh-hr/hr	41
Average Delay	sec/veh	23.5
Passenger Delay	pax-hr/hr	49
Uniform Stops:	veh/hr	3250
	%	51
Random Stops:	veh/hr	651
	%	10
Total Stops:	veh/hr	3901
	%	62
Degree of Sat > 1	# of links	1
Queue Spillback	# of links	0
Time Jammed	%	0
Period Length	sec	900
System Speed	km/hr	24.6
Fuel Consumption	lit/hr	459
Operating Cost	$/hr	938
Performance Index	DI	41.24

Performance Index (PI): Disutility Index (DI):
Disutility Index Delay + Stops

No. of Simulations = 38, Links = 304, Elapsed Time = 0.1 sec.

TRANSYT-7F TRAFFIC SIGNAL TIMING TABLES

NETWORK-WIDE SIGNAL TIMING PARAMETERS

System Cycle Length = 100 Seconds

Master offset reference location = intersection no. 1 Start of interval 1.

Key to Interval Types:
F : Fixed green.
V : Variable green.
Y : Yellow.
R : All-red.

An 'M' by an interval length means this is the minimum time available.

INTERSECTION CONTROLLER SETTINGS

Intersection 1 Pretimed - Splits Optimized

Interval Number :	1	2	3	4	5	6
Intvl Length(sec):	12.0	3.0	1.0	80.0	3.0	1.0
Intvl Length (%):	12	3	1	80	3	1
Pin Settings (%):	100/0	12	15	16	96	99
Phase Start (No.):	1			2		
Interval Type :	V	Y	R	V	Y	R
Splits (sec):	16			84		
Splits (%):	16			84		
Links Moving :	107			102		
	112			106		
				112		

Offset = 0.0 sec 0 %.

This is the master controller.

```
-----------------------------------------------
Intersection     2  Pretimed - Splits Optimized
-----------------------------------------------

Interval Number  :      1     2     3     4     5     6

Intvl Length(sec):   55.0   3.0   1.0  37.0   3.0   1.0
Intvl Length   (%):     55     3     1    37     3     1

Pin Settings   (%):  100/0    55    58    59    96    99

Phase Start (No.):      1                 2

Interval Type    :      V     Y     R     V     Y     R

Splits       (sec):     59                41
Splits         (%):     59                41
Links Moving     :    205               202
                      202               206
                      210               210

Offset =  15.0 sec  15 %.

--- 92 --- NOTE -
+                 End of job!
```