

TRL LIMITED

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CAPACITIES, QUEUES, AND DELAYS AT 3 OR 4-ARM MAJOR/MINOR PRIORITY JUNCTIONS

PICADY 5.0 ANALYSIS PROGRAM  
RELEASE 3.0 (JUNE 2006)

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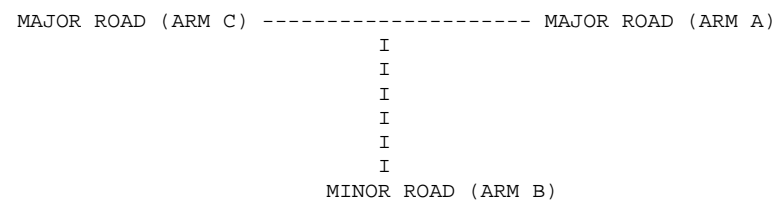
Run with file:-  
"T:\T12\Jobs\T12.172\_Herbert Road, Newport\Analysis\PICADY\Trostrey St\Am\Turner\_Trostrey Am.vpi"  
(drive-on-the-left ) at 10:31:17 on Thursday, 28 November 2013

RUN INFORMATION  
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RUN TITLE: Turner St\_Trostrey St  
LOCATION: Newport  
DATE: 28/11/13  
CLIENT: Greenhill Construction  
ENUMERATOR: Transport Planner  
JOB NUMBER: T12.172  
STATUS:  
DESCRIPTION:

.MAJOR/MINOR JUNCTION CAPACITY AND DELAY  
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INPUT DATA  
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ARM A IS Turner St (West)  
ARM B IS Trostrey St  
ARM C IS Turner St (East)

STREAM LABELLING CONVENTION  
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STREAM A-B CONTAINS TRAFFIC GOING FROM ARM A TO ARM B  
STREAM B-AC CONTAINS TRAFFIC GOING FROM ARM B TO ARM A AND TO ARM C  
ETC.

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 GEOMETRIC DATA  
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I	DATA ITEM	I	MINOR ROAD B	I
I	TOTAL MAJOR ROAD CARRIAGEWAY WIDTH	I ( W )	6.70 M.	I
I	CENTRAL RESERVE WIDTH	I (WCR )	0.00 M.	I
I		I		I
I	MAJOR ROAD RIGHT TURN - WIDTH	I (WC-B)	2.20 M.	I
I	- VISIBILITY	I (VC-B)	190.0 M.	I
I	- BLOCKS TRAFFIC	I	YES	I
I		I		I
I	MINOR ROAD - VISIBILITY TO LEFT	I (VB-C)	23.0 M.	I
I	- VISIBILITY TO RIGHT	I (VB-A)	13.0 M.	I
I	- LANE 1 WIDTH	I (WB-C)	3.40 M.	I
I	- LANE 2 WIDTH	I (WB-A)	0.00 M.	I

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 .SLOPES AND INTERCEPT  
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(NB:Streams may be combined, in which case capacity will be adjusted )

I	Intercept For Stream B-C	Slope For Opposing Stream A-C	Slope For Opposing Stream A-B	I
I	657.43	0.25	0.10	I

I	Intercept For Stream B-A	Slope For Opposing Stream A-C	Slope For Opposing Stream A-B	Slope For Opposing Stream C-A	Slope For Opposing Stream C-B	I
I	511.14	0.23	0.09	0.14	0.33	I

I	Intercept For Stream C-B	Slope For Opposing Stream A-C	Slope For Opposing Stream A-B	I
I	683.99	0.26	0.26	I

NB These values do not allow for any site specific corrections

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 TRAFFIC DEMAND DATA  
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I	TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)	I
I	08.00-08.15										I
I	B-AC	0.34	9.69	0.036		0.03	0.04	0.5		0.11	I
I	C-AB	0.12	11.03	0.011		0.01	0.01	0.2		0.09	I
I	A-B	0.00									I
I	A-C	1.42									I

I	TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)	I
I	08.15-08.30										I
I	B-AC	0.42	9.60	0.044		0.04	0.05	0.7		0.11	I
I	C-AB	0.15	10.95	0.013		0.01	0.01	0.2		0.09	I
I	A-B	0.00									I
I	A-C	1.74									I

I	TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)	I
I	08.30-08.45										I
I	B-AC	0.42	9.60	0.044		0.05	0.05	0.7		0.11	I
I	C-AB	0.15	10.95	0.013		0.01	0.01	0.2		0.09	I
I	A-B	0.00									I
I	A-C	1.74									I

I	TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)	I
I	08.45-09.00										I
I	B-AC	0.34	9.69	0.036		0.05	0.04	0.6		0.11	I
I	C-AB	0.12	11.03	0.011		0.01	0.01	0.2		0.09	I
I	A-B	0.00									I
I	A-C	1.42									I

I	TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)	I
I	09.00-09.15										I
I	B-AC	0.29	9.75	0.030		0.04	0.03	0.5		0.11	I
I	C-AB	0.10	11.09	0.009		0.01	0.01	0.1		0.09	I
I	A-B	0.00									I
I	A-C	1.19									I

QUEUE FOR STREAM B-AC

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE
08.00	0.0
08.15	0.0
08.30	0.0
08.45	0.0
09.00	0.0
09.15	0.0

QUEUE FOR STREAM C-AB

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE
08.00	0.0
08.15	0.0
08.30	0.0
08.45	0.0
09.00	0.0
09.15	0.0

QUEUEING DELAY INFORMATION OVER WHOLE PERIOD

I STREAM I	TOTAL DEMAND I	* QUEUEING * I	* INCLUSIVE QUEUEING * I
I I	I I	* DELAY * I	* DELAY * I
I I	(VEH) (VEH/H) I	(MIN) (MIN/VEH) I	(MIN) (MIN/VEH) I
I B-AC I	31.7 I 21.1 I	3.4 I 0.11 I	3.4 I 0.11 I
I C-AB I	11.0 I 7.3 I	1.0 I 0.09 I	1.0 I 0.09 I
I A-B I	0.0 I 0.0 I	I I	I I
I A-C I	130.8 I 87.2 I	I I	I I
I ALL I	214.7 I 143.1 I	4.4 I 0.02 I	4.4 I 0.02 I

\* DELAY IS THAT OCCURRING ONLY WITHIN THE TIME PERIOD .  
 \* INCLUSIVE DELAY INCLUDES DELAY SUFFERED BY VEHICLES WHICH ARE STILL QUEUEING AFTER THE END OF THE TIME PERIOD.  
 \* THESE WILL ONLY BE SIGNIFICANTLY DIFFERENT IF THERE IS A LARGE QUEUE REMAINING AT THE END OF THE TIME PERIOD.

END OF JOB

.SLOPES AND INTERCEPT

(NB:Streams may be combined, in which case capacity will be adjusted )

I Intercept For Stream B-C	Slope For Opposing Stream A-C	Slope For Opposing Stream A-B
I 657.43	0.25	0.10

I Intercept For Stream B-A	Slope For Opposing Stream A-C	Slope For Opposing Stream A-B	Slope For Opposing Stream C-A	Slope For Opposing Stream C-B
I 511.14	0.23	0.09	0.14	0.33

I Intercept For Stream C-B	Slope For Opposing Stream A-C	Slope For Opposing Stream A-B
I 683.99	0.26	0.26

NB These values do not allow for any site specific corrections

TRAFFIC DEMAND DATA



I	TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)	I
I	08.00-08.15										I
I	B-AC	0.34	9.67	0.036		0.03	0.04	0.5		0.11	I
I	C-AB	0.12	11.01	0.011		0.01	0.01	0.2		0.09	I
I	A-B	0.00									I
I	A-C	1.50									I

I	TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)	I
I	08.15-08.30										I
I	B-AC	0.42	9.58	0.044		0.04	0.05	0.7		0.11	I
I	C-AB	0.15	10.93	0.013		0.01	0.01	0.2		0.09	I
I	A-B	0.00									I
I	A-C	1.84									I

I	TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)	I
I	08.30-08.45										I
I	B-AC	0.42	9.58	0.044		0.05	0.05	0.7		0.11	I
I	C-AB	0.15	10.93	0.013		0.01	0.01	0.2		0.09	I
I	A-B	0.00									I
I	A-C	1.84									I

I	TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)	I
I	08.45-09.00										I
I	B-AC	0.34	9.67	0.036		0.05	0.04	0.6		0.11	I
I	C-AB	0.12	11.01	0.011		0.01	0.01	0.2		0.09	I
I	A-B	0.00									I
I	A-C	1.50									I

I	TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)	I
I	09.00-09.15										I
I	B-AC	0.29	9.74	0.030		0.04	0.03	0.5		0.11	I
I	C-AB	0.10	11.08	0.009		0.01	0.01	0.1		0.09	I
I	A-B	0.00									I
I	A-C	1.25									I

QUEUE FOR STREAM B-AC

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE
08.00	0.0
08.15	0.0
08.30	0.0
08.45	0.0
09.00	0.0
09.15	0.0

QUEUE FOR STREAM C-AB

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE
08.00	0.0
08.15	0.0
08.30	0.0
08.45	0.0
09.00	0.0
09.15	0.0

QUEUEING DELAY INFORMATION OVER WHOLE PERIOD

I STREAM I	TOTAL DEMAND I	* QUEUEING * I	* INCLUSIVE QUEUEING * I
I I	I I	* DELAY * I	* DELAY * I
I I	(VEH) (VEH/H) I	(MIN) (MIN/VEH) I	(MIN) (MIN/VEH) I
I B-AC I	31.7 I 21.1 I	3.4 I 0.11 I	3.4 I 0.11 I
I C-AB I	11.0 I 7.3 I	1.0 I 0.09 I	1.0 I 0.09 I
I A-B I	0.0 I 0.0 I	I I	I I
I A-C I	137.6 I 91.8 I	I I	I I
I ALL I	224.4 I 149.6 I	4.4 I 0.02 I	4.4 I 0.02 I

\* DELAY IS THAT OCCURRING ONLY WITHIN THE TIME PERIOD .  
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 \* THESE WILL ONLY BE SIGNIFICANTLY DIFFERENT IF THERE IS A LARGE QUEUE REMAINING AT THE END OF THE TIME PERIOD.

END OF JOB

.SLOPES AND INTERCEPT

(NB:Streams may be combined, in which case capacity will be adjusted )

I Intercept For Stream B-C	Slope For Opposing Stream A-C	Slope For Opposing Stream A-B
I 657.43	0.25	0.10

I Intercept For Stream B-A	Slope For Opposing Stream A-C	Slope For Opposing Stream A-B	Slope For Opposing Stream C-A	Slope For Opposing Stream C-B
I 511.14	0.23	0.09	0.14	0.33

I Intercept For Stream C-B	Slope For Opposing Stream A-C	Slope For Opposing Stream A-B
I 683.99	0.26	0.26

NB These values do not allow for any site specific corrections

TRAFFIC DEMAND DATA



I	TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)	I
I	08.00-08.15										I
I	B-AC	0.39	9.62	0.040		0.03	0.04	0.6		0.11	I
I	C-AB	0.13	10.98	0.012		0.01	0.01	0.2		0.09	I
I	A-B	0.00									I
I	A-C	1.63									I

I	TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)	I
I	08.15-08.30										I
I	B-AC	0.48	9.52	0.050		0.04	0.05	0.8		0.11	I
I	C-AB	0.17	10.89	0.015		0.01	0.02	0.2		0.09	I
I	A-B	0.00									I
I	A-C	2.00									I

I	TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)	I
I	08.30-08.45										I
I	B-AC	0.48	9.52	0.050		0.05	0.05	0.8		0.11	I
I	C-AB	0.17	10.89	0.015		0.02	0.02	0.2		0.09	I
I	A-B	0.00									I
I	A-C	2.00									I

I	TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)	I
I	08.45-09.00										I
I	B-AC	0.39	9.62	0.040		0.05	0.04	0.6		0.11	I
I	C-AB	0.13	10.98	0.012		0.02	0.01	0.2		0.09	I
I	A-B	0.00									I
I	A-C	1.63									I

I	TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)	I
I	09.00-09.15										I
I	B-AC	0.33	9.69	0.034		0.04	0.04	0.5		0.11	I
I	C-AB	0.11	11.05	0.010		0.01	0.01	0.2		0.09	I
I	A-B	0.00									I
I	A-C	1.37									I

QUEUE FOR STREAM B-AC

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE
08.00	0.0
08.15	0.0
08.30	0.1
08.45	0.1
09.00	0.0
09.15	0.0

QUEUE FOR STREAM C-AB

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE
08.00	0.0
08.15	0.0
08.30	0.0
08.45	0.0
09.00	0.0
09.15	0.0

QUEUEING DELAY INFORMATION OVER WHOLE PERIOD

I STREAM I	TOTAL DEMAND I	* QUEUEING * I	* INCLUSIVE QUEUEING * I
I I	I I	* DELAY * I	* DELAY * I
I I	(VEH) (VEH/H) I	(MIN) (MIN/VEH) I	(MIN) (MIN/VEH) I
I B-AC I	35.8 I 23.9 I	3.9 I 0.11 I	3.9 I 0.11 I
I C-AB I	12.4 I 8.3 I	1.1 I 0.09 I	1.1 I 0.09 I
I A-B I	0.0 I 0.0 I	I I	I I
I A-C I	150.0 I 100.0 I	I I	I I
I ALL I	246.4 I 164.3 I	5.0 I 0.02 I	5.0 I 0.02 I

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 \* THESE WILL ONLY BE SIGNIFICANTLY DIFFERENT IF THERE IS A LARGE QUEUE REMAINING AT THE END OF THE TIME PERIOD.

END OF JOB

.SLOPES AND INTERCEPT

(NB:Streams may be combined, in which case capacity will be adjusted )

I Intercept For Stream B-C	Slope For Opposing Stream A-C	Slope For Opposing Stream A-B
I 657.43	0.25	0.10

I Intercept For Stream B-A	Slope For Opposing Stream A-C	Slope For Opposing Stream A-B	Slope For Opposing Stream C-A	Slope For Opposing Stream C-B
I 511.14	0.23	0.09	0.14	0.33

I Intercept For Stream C-B	Slope For Opposing Stream A-C	Slope For Opposing Stream A-B
I 683.99	0.26	0.26

NB These values do not allow for any site specific corrections

TRAFFIC DEMAND DATA



I	TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)	I
I	08.00-08.15										I
I	B-AC	0.34	9.29	0.037		0.03	0.04	0.6		0.11	I
I	C-AB	0.12	10.65	0.011		0.01	0.01	0.2		0.09	I
I	A-B	0.00									I
I	A-C	2.91									I

I	TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)	I
I	08.15-08.30										I
I	B-AC	0.42	9.11	0.046		0.04	0.05	0.7		0.12	I
I	C-AB	0.15	10.49	0.014		0.01	0.01	0.2		0.10	I
I	A-B	0.00									I
I	A-C	3.56									I

I	TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)	I
I	08.30-08.45										I
I	B-AC	0.42	9.11	0.046		0.05	0.05	0.7		0.12	I
I	C-AB	0.15	10.49	0.014		0.01	0.01	0.2		0.10	I
I	A-B	0.00									I
I	A-C	3.56									I

I	TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)	I
I	08.45-09.00										I
I	B-AC	0.34	9.29	0.037		0.05	0.04	0.6		0.11	I
I	C-AB	0.12	10.65	0.011		0.01	0.01	0.2		0.09	I
I	A-B	0.00									I
I	A-C	2.91									I

I	TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)	I
I	09.00-09.15										I
I	B-AC	0.29	9.41	0.031		0.04	0.03	0.5		0.11	I
I	C-AB	0.10	10.77	0.009		0.01	0.01	0.1		0.09	I
I	A-B	0.00									I
I	A-C	2.43									I

QUEUE FOR STREAM B-AC

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE
08.00	0.0
08.15	0.0
08.30	0.0
08.45	0.0
09.00	0.0
09.15	0.0

QUEUE FOR STREAM C-AB

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE
08.00	0.0
08.15	0.0
08.30	0.0
08.45	0.0
09.00	0.0
09.15	0.0

QUEUEING DELAY INFORMATION OVER WHOLE PERIOD

I STREAM I	TOTAL DEMAND I	* QUEUEING * I	* INCLUSIVE QUEUEING * I
I I	I I	* DELAY * I	* DELAY * I
I I	(VEH) (VEH/H) I	(MIN) (MIN/VEH) I	(MIN) (MIN/VEH) I
I B-AC I	31.7 I 21.1 I	3.5 I 0.11 I	3.5 I 0.11 I
I C-AB I	11.0 I 7.3 I	1.0 I 0.10 I	1.0 I 0.10 I
I A-B I	0.0 I 0.0 I	I I	I I
I A-C I	267.0 I 178.0 I	I I	I I
I ALL I	412.9 I 275.3 I	4.6 I 0.01 I	4.6 I 0.01 I

\* DELAY IS THAT OCCURRING ONLY WITHIN THE TIME PERIOD .  
 \* INCLUSIVE DELAY INCLUDES DELAY SUFFERED BY VEHICLES WHICH ARE STILL QUEUEING AFTER THE END OF THE TIME PERIOD.  
 \* THESE WILL ONLY BE SIGNIFICANTLY DIFFERENT IF THERE IS A LARGE QUEUE REMAINING AT THE END OF THE TIME PERIOD.

END OF JOB

.SLOPES AND INTERCEPT

(NB:Streams may be combined, in which case capacity will be adjusted )

I Intercept For Stream B-C	Slope For Opposing Stream A-C	Slope For Opposing Stream A-B
I 657.43	0.25	0.10

I Intercept For Stream B-A	Slope For Opposing Stream A-C	Slope For Opposing Stream A-B	Slope For Opposing Stream C-A	Slope For Opposing Stream C-B
I 511.14	0.23	0.09	0.14	0.33

I Intercept For Stream C-B	Slope For Opposing Stream A-C	Slope For Opposing Stream A-B
I 683.99	0.26	0.26

NB These values do not allow for any site specific corrections

TRAFFIC DEMAND DATA

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-----
I ARM I FLOW SCALE(%) I
-----
I A I 100 I
I B I 100 I
I C I 100 I
-----

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Demand set: Turner St\_Trostre St 2022 Am with dev

TIME PERIOD BEGINS 07.45 AND ENDS 09.15

LENGTH OF TIME PERIOD - 90 MINUTES.  
 LENGTH OF TIME SEGMENT - 15 MINUTES.

DEMAND FLOW PROFILES ARE SYNTHESISED FROM TURNING COUNT DATA

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-----
I I NUMBER OF MINUTES FROM START WHEN I RATE OF FLOW (VEH/MIN) I
I ARM I FLOW STARTS I TOP OF PEAK I FLOW STOPS I BEFORE I AT TOP I AFTER I
I I TO RISE I IS REACHED I FALLING I PEAK I OF PEAK I PEAK I
-----
I ARM A I 15.00 I 45.00 I 75.00 I 2.54 I 3.81 I 2.54 I
I ARM B I 15.00 I 45.00 I 75.00 I 0.32 I 0.49 I 0.32 I
I ARM C I 15.00 I 45.00 I 75.00 I 1.08 I 1.61 I 1.08 I
-----

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-----
I I TURNING PROPORTIONS I
I I TURNING COUNTS (VEH/HR) I
I I (PERCENTAGE OF H.V.S) I
I I -----
I TIME I FROM/TO I ARM A I ARM B I ARM C I
I -----
I 07.45 - 09.15 I I I I I
I I ARM A I 0.000 I 0.000 I 1.000 I
I I I 0.0 I 0.0 I 203.0 I
I I I ( 0.0)I ( 0.0)I ( 0.0)I
I I I I I I
I I ARM B I 0.308 I 0.000 I 0.692 I
I I I 8.0 I 0.0 I 18.0 I
I I I ( 0.0)I ( 0.0)I ( 0.0)I
I I I I I I
I I ARM C I 0.895 I 0.105 I 0.000 I
I I I 77.0 I 9.0 I 0.0 I
I I I ( 0.0)I ( 0.0)I ( 0.0)I
I I I I I I
-----

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TURNING PROPORTIONS ARE CALCULATED FROM TURNING COUNT DATA

THE PERCENTAGE OF HEAVY VEHICLES VARIES OVER TURNING MOVEMENTS

QUEUE AND DELAY INFORMATION FOR EACH 15 MIN TIME SEGMENT

FOR DEMAND SET Turner St\_Trostre St 2022 Am with dev  
 AND FOR TIME PERIOD 1

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-----
I TIME DEMAND CAPACITY DEMAND/ PEDESTRIAN START END DELAY GEOMETRIC DELAY AVERAGE DELAY I
I (VEH/MIN) (VEH/MIN) CAPACITY FLOW QUEUE QUEUE (VEH.MIN/ (VEH.MIN/ PER ARRIVING I
I (RFC) (PESD/MIN) (VEHS) (VEHS) TIME SEGMENT) TIME SEGMENT) VEHICLE (MIN) I
I 07.45-08.00 I
I B-AC 0.33 9.37 0.035 0.00 0.04 0.5 0.11 I
I C-AB 0.11 10.75 0.011 0.00 0.01 0.2 0.09 I
I A-B 0.00 I
I A-C 2.55 I
I I
-----

```

I	TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)	I
I	08.00-08.15										I
I	B-AC	0.39	9.24	0.042		0.04	0.04	0.6		0.11	I
I	C-AB	0.13	10.62	0.013		0.01	0.01	0.2		0.10	I
I	A-B	0.00									I
I	A-C	3.04									I

I	TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)	I
I	08.15-08.30										I
I	B-AC	0.48	9.05	0.053		0.04	0.06	0.8		0.12	I
I	C-AB	0.17	10.44	0.016		0.01	0.02	0.2		0.10	I
I	A-B	0.00									I
I	A-C	3.73									I

I	TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)	I
I	08.30-08.45										I
I	B-AC	0.48	9.05	0.053		0.06	0.06	0.8		0.12	I
I	C-AB	0.17	10.44	0.016		0.02	0.02	0.2		0.10	I
I	A-B	0.00									I
I	A-C	3.73									I

I	TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)	I
I	08.45-09.00										I
I	B-AC	0.39	9.24	0.042		0.06	0.04	0.7		0.11	I
I	C-AB	0.13	10.62	0.013		0.02	0.01	0.2		0.10	I
I	A-B	0.00									I
I	A-C	3.04									I

I	TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)	I
I	09.00-09.15										I
I	B-AC	0.33	9.37	0.035		0.04	0.04	0.6		0.11	I
I	C-AB	0.11	10.75	0.011		0.01	0.01	0.2		0.09	I
I	A-B	0.00									I
I	A-C	2.55									I

QUEUE FOR STREAM B-AC

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE
08.00	0.0
08.15	0.0
08.30	0.1
08.45	0.1
09.00	0.0
09.15	0.0

QUEUE FOR STREAM C-AB

---

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE
08.00	0.0
08.15	0.0
08.30	0.0
08.45	0.0
09.00	0.0
09.15	0.0

QUEUEING DELAY INFORMATION OVER WHOLE PERIOD

---

I	STREAM	I	TOTAL DEMAND	I	* QUEUEING *	I	* INCLUSIVE QUEUEING *	I		
I	I	I	I	I	* DELAY *	I	* DELAY *	I		
I	I	I	(VEH)	(VEH/H)	(MIN)	(MIN/VEH)	(MIN)	(MIN/VEH)		
I	B-AC	I	35.8	I	23.9	I	4.0	I	0.11	I
I	C-AB	I	12.4	I	8.3	I	1.2	I	0.10	I
I	A-B	I	0.0	I	0.0	I		I		I
I	A-C	I	279.4	I	186.3	I		I		I
I	ALL	I	433.6	I	289.0	I	5.2	I	0.01	I

\* DELAY IS THAT OCCURRING ONLY WITHIN THE TIME PERIOD .  
 \* INCLUSIVE DELAY INCLUDES DELAY SUFFERED BY VEHICLES WHICH ARE STILL QUEUEING AFTER THE END OF THE TIME PERIOD.  
 \* THESE WILL ONLY BE SIGNIFICANTLY DIFFERENT IF THERE IS A LARGE QUEUE REMAINING AT THE END OF THE TIME PERIOD.

END OF JOB  
 ===== end of file =====

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CAPACITIES, QUEUES, AND DELAYS AT 3 OR 4-ARM MAJOR/MINOR PRIORITY JUNCTIONS

PICADY 5.0 ANALYSIS PROGRAM  
RELEASE 3.0 (JUNE 2006)

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Run with file:-  
"T:\T12\Jobs\T12.172\_Herbert Road, Newport\Analysis\PICADY\Trostrey St\Pm\Turner\_Trostrey Pm.vpi"  
(drive-on-the-left ) at 10:36:45 on Thursday, 28 November 2013

RUN INFORMATION  
\*\*\*\*\*

RUN TITLE: Turner St\_Trostrey St  
LOCATION: Newport  
DATE: 28/11/13  
CLIENT: Greenhill Construction  
ENUMERATOR: Transport Planner  
JOB NUMBER: T12.172  
STATUS:  
DESCRIPTION:

.MAJOR/MINOR JUNCTION CAPACITY AND DELAY  
\*\*\*\*\*

INPUT DATA  
-----

MAJOR ROAD (ARM C) ----- MAJOR ROAD (ARM A)

I  
I  
I  
I  
I  
I  
I

MINOR ROAD (ARM B)

ARM A IS Turner St (West)  
ARM B IS Trostrey St  
ARM C IS Turner St (East)

STREAM LABELLING CONVENTION  
-----

STREAM A-B CONTAINS TRAFFIC GOING FROM ARM A TO ARM B

STREAM B-AC CONTAINS TRAFFIC GOING FROM ARM B TO ARM A AND TO ARM C

ETC.

-----  
 GEOMETRIC DATA  
 -----

DATA ITEM	MINOR ROAD B
TOTAL MAJOR ROAD CARRIAGEWAY WIDTH	( W ) 6.70 M.
CENTRAL RESERVE WIDTH	( WCR ) 0.00 M.
MAJOR ROAD RIGHT TURN - WIDTH	( WC-B ) 2.20 M.
- VISIBILITY	( VC-B ) 190.0 M.
- BLOCKS TRAFFIC	YES
MINOR ROAD - VISIBILITY TO LEFT	( VB-C ) 23.0 M.
- VISIBILITY TO RIGHT	( VB-A ) 13.0 M.
- LANE 1 WIDTH	( WB-C ) 3.40 M.
- LANE 2 WIDTH	( WB-A ) 0.00 M.

.SLOPES AND INTERCEPT  
 -----

(NB:Streams may be combined, in which case capacity will be adjusted )

Intercept For Stream B-C	Slope For Opposing Stream A-C	Slope For Opposing Stream A-B
657.43	0.25	0.10

Intercept For Stream B-A	Slope For Opposing Stream A-C	Slope For Opposing Stream A-B	Slope For Opposing Stream C-A	Slope For Opposing Stream C-B
511.14	0.23	0.09	0.14	0.33

Intercept For Stream C-B	Slope For Opposing Stream A-C	Slope For Opposing Stream A-B
683.99	0.26	0.26

NB These values do not allow for any site specific corrections

TRAFFIC DEMAND DATA  
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I	TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)	I
I	17.00-17.15										I
I	B-AC	0.16	10.31	0.016		0.01	0.02	0.2		0.10	I
I	C-AB	0.06	11.05	0.005		0.00	0.01	0.1		0.09	I
I	A-B	0.00									I
I	A-C	1.38									I

I	TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)	I
I	17.15-17.30										I
I	B-AC	0.20	10.23	0.020		0.02	0.02	0.3		0.10	I
I	C-AB	0.07	10.97	0.007		0.01	0.01	0.1		0.09	I
I	A-B	0.00									I
I	A-C	1.69									I

I	TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)	I
I	17.30-17.45										I
I	B-AC	0.20	10.23	0.020		0.02	0.02	0.3		0.10	I
I	C-AB	0.07	10.97	0.007		0.01	0.01	0.1		0.09	I
I	A-B	0.00									I
I	A-C	1.69									I

I	TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)	I
I	17.45-18.00										I
I	B-AC	0.16	10.31	0.016		0.02	0.02	0.2		0.10	I
I	C-AB	0.06	11.05	0.005		0.01	0.01	0.1		0.09	I
I	A-B	0.00									I
I	A-C	1.38									I

I	TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)	I
I	18.00-18.15										I
I	B-AC	0.14	10.37	0.013		0.02	0.01	0.2		0.10	I
I	C-AB	0.05	11.10	0.005		0.01	0.00	0.1		0.09	I
I	A-B	0.00									I
I	A-C	1.15									I

QUEUE FOR STREAM B-AC

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE
17.00	0.0
17.15	0.0
17.30	0.0
17.45	0.0
18.00	0.0
18.15	0.0

QUEUE FOR STREAM C-AB

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE
17.00	0.0
17.15	0.0
17.30	0.0
17.45	0.0
18.00	0.0
18.15	0.0

QUEUEING DELAY INFORMATION OVER WHOLE PERIOD

I STREAM I	TOTAL DEMAND I	* QUEUEING * I	* INCLUSIVE QUEUEING * I
I I	I I	* DELAY * I	* DELAY * I
I I	(VEH) (VEH/H) I	(MIN) (MIN/VEH) I	(MIN) (MIN/VEH) I
I B-AC I	15.1 I 10.1 I	1.5 I 0.10 I	1.5 I 0.10 I
I C-AB I	5.5 I 3.7 I	0.5 I 0.09 I	0.5 I 0.09 I
I A-B I	0.0 I 0.0 I	I I	I I
I A-C I	126.6 I 84.4 I	I I	I I
I ALL I	271.2 I 180.8 I	2.0 I 0.01 I	2.0 I 0.01 I

\* DELAY IS THAT OCCURRING ONLY WITHIN THE TIME PERIOD .  
 \* INCLUSIVE DELAY INCLUDES DELAY SUFFERED BY VEHICLES WHICH ARE STILL QUEUEING AFTER THE END OF THE TIME PERIOD.  
 \* THESE WILL ONLY BE SIGNIFICANTLY DIFFERENT IF THERE IS A LARGE QUEUE REMAINING AT THE END OF THE TIME PERIOD.

END OF JOB

.SLOPES AND INTERCEPT

(NB:Streams may be combined, in which case capacity will be adjusted )

I Intercept For Stream B-C	Slope For Opposing Stream A-C	Slope For Opposing Stream A-B
I 657.43	0.25	0.10

I Intercept For Stream B-A	Slope For Opposing Stream A-C	Slope For Opposing Stream A-B	Slope For Opposing Stream C-A	Slope For Opposing Stream C-B
I 511.14	0.23	0.09	0.14	0.33

I Intercept For Stream C-B	Slope For Opposing Stream A-C	Slope For Opposing Stream A-B
I 683.99	0.26	0.26

NB These values do not allow for any site specific corrections

TRAFFIC DEMAND DATA



I	TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)	I
I	17.00-17.15										I
I	B-AC	0.18	10.31	0.017		0.01	0.02	0.3		0.10	I
I	C-AB	0.06	11.03	0.005		0.00	0.01	0.1		0.09	I
I	A-B	0.00									I
I	A-C	1.45									I

I	TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)	I
I	17.15-17.30										I
I	B-AC	0.22	10.23	0.022		0.02	0.02	0.3		0.10	I
I	C-AB	0.07	10.94	0.007		0.01	0.01	0.1		0.09	I
I	A-B	0.00									I
I	A-C	1.78									I

I	TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)	I
I	17.30-17.45										I
I	B-AC	0.22	10.23	0.022		0.02	0.02	0.3		0.10	I
I	C-AB	0.07	10.94	0.007		0.01	0.01	0.1		0.09	I
I	A-B	0.00									I
I	A-C	1.78									I

I	TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)	I
I	17.45-18.00										I
I	B-AC	0.18	10.31	0.017		0.02	0.02	0.3		0.10	I
I	C-AB	0.06	11.03	0.005		0.01	0.01	0.1		0.09	I
I	A-B	0.00									I
I	A-C	1.45									I

I	TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)	I
I	18.00-18.15										I
I	B-AC	0.15	10.38	0.015		0.02	0.01	0.2		0.10	I
I	C-AB	0.05	11.09	0.005		0.01	0.00	0.1		0.09	I
I	A-B	0.00									I
I	A-C	1.22									I

QUEUE FOR STREAM B-AC

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE
17.00	0.0
17.15	0.0
17.30	0.0
17.45	0.0
18.00	0.0
18.15	0.0

QUEUE FOR STREAM C-AB

---

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE
17.00	0.0
17.15	0.0
17.30	0.0
17.45	0.0
18.00	0.0
18.15	0.0

QUEUEING DELAY INFORMATION OVER WHOLE PERIOD

---

I	STREAM	I	TOTAL DEMAND	I	* QUEUEING * * DELAY *	I	* INCLUSIVE QUEUEING * * DELAY *	I		
I	I	I	(VEH)	I	(VEH/H)	I	(MIN)	I		
I	I	I	(VEH)	I	(VEH/H)	I	(MIN)	I		
I	I	I	(VEH)	I	(VEH/H)	I	(MIN)	I		
I	B-AC	I	16.5	I	11.0	I	1.6	I	0.10	I
I	C-AB	I	5.5	I	3.7	I	0.5	I	0.09	I
I	A-B	I	0.0	I	0.0	I		I		I
I	A-C	I	133.5	I	89.0	I		I		I
I	ALL	I	286.3	I	190.9	I	2.1	I	0.01	I

\* DELAY IS THAT OCCURRING ONLY WITHIN THE TIME PERIOD .  
 \* INCLUSIVE DELAY INCLUDES DELAY SUFFERED BY VEHICLES WHICH ARE STILL QUEUEING AFTER THE END OF THE TIME PERIOD.  
 \* THESE WILL ONLY BE SIGNIFICANTLY DIFFERENT IF THERE IS A LARGE QUEUE REMAINING AT THE END OF THE TIME PERIOD.

END OF JOB

.SLOPES AND INTERCEPT

---

(NB:Streams may be combined, in which case capacity will be adjusted )

I	Intercept For Stream B-C	Slope For Opposing Stream A-C	Slope For Opposing Stream A-B	I
I	657.43	0.25	0.10	I

I	Intercept For Stream B-A	Slope For Opposing Stream A-C	Slope For Opposing Stream A-B	Slope For Opposing Stream C-A	Slope For Opposing Stream C-B	I
I	511.14	0.23	0.09	0.14	0.33	I

I	Intercept For Stream C-B	Slope For Opposing Stream A-C	Slope For Opposing Stream A-B	I
I	683.99	0.26	0.26	I

NB These values do not allow for any site specific corrections

TRAFFIC DEMAND DATA

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I	TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)	I
I	17.00-17.15										I
I	B-AC	0.18	10.28	0.017		0.01	0.02	0.3		0.10	I
I	C-AB	0.07	11.00	0.007		0.01	0.01	0.1		0.09	I
I	A-B	0.00									I
I	A-C	1.57									I

I	TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)	I
I	17.15-17.30										I
I	B-AC	0.22	10.19	0.022		0.02	0.02	0.3		0.10	I
I	C-AB	0.09	10.90	0.008		0.01	0.01	0.1		0.09	I
I	A-B	0.00									I
I	A-C	1.93									I

I	TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)	I
I	17.30-17.45										I
I	B-AC	0.22	10.19	0.022		0.02	0.02	0.3		0.10	I
I	C-AB	0.09	10.90	0.008		0.01	0.01	0.1		0.09	I
I	A-B	0.00									I
I	A-C	1.93									I

I	TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)	I
I	17.45-18.00										I
I	B-AC	0.18	10.28	0.017		0.02	0.02	0.3		0.10	I
I	C-AB	0.07	11.00	0.007		0.01	0.01	0.1		0.09	I
I	A-B	0.00									I
I	A-C	1.57									I

I	TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)	I
I	18.00-18.15										I
I	B-AC	0.15	10.35	0.015		0.02	0.01	0.2		0.10	I
I	C-AB	0.06	11.06	0.006		0.01	0.01	0.1		0.09	I
I	A-B	0.00									I
I	A-C	1.32									I

QUEUE FOR STREAM B-AC

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE
17.00	0.0
17.15	0.0
17.30	0.0
17.45	0.0
18.00	0.0
18.15	0.0

QUEUE FOR STREAM C-AB

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE
17.00	0.0
17.15	0.0
17.30	0.0
17.45	0.0
18.00	0.0
18.15	0.0

QUEUEING DELAY INFORMATION OVER WHOLE PERIOD

I STREAM I	TOTAL DEMAND I	* QUEUEING * I	* INCLUSIVE QUEUEING * I
I	I	* DELAY * I	* DELAY * I
I	(VEH)	(MIN)	(MIN)
I	(VEH/H)	(MIN/VEH)	(MIN/VEH)
I B-AC I	16.5 I	11.0 I	1.6 I
I C-AB I	6.9 I	4.6 I	0.6 I
I A-B I	0.0 I	0.0 I	I
I A-C I	144.5 I	96.3 I	I
I ALL I	309.7 I	206.5 I	2.3 I

\* DELAY IS THAT OCCURRING ONLY WITHIN THE TIME PERIOD .  
 \* INCLUSIVE DELAY INCLUDES DELAY SUFFERED BY VEHICLES WHICH ARE STILL QUEUEING AFTER THE END OF THE TIME PERIOD.  
 \* THESE WILL ONLY BE SIGNIFICANTLY DIFFERENT IF THERE IS A LARGE QUEUE REMAINING AT THE END OF THE TIME PERIOD.

END OF JOB

.SLOPES AND INTERCEPT

(NB:Streams may be combined, in which case capacity will be adjusted )

I Intercept For Stream B-C	Slope For Opposing Stream A-C	Slope For Opposing Stream A-B
I 657.43	0.25	0.10

I Intercept For Stream B-A	Slope For Opposing Stream A-C	Slope For Opposing Stream A-B	Slope For Opposing Stream C-A	Slope For Opposing Stream C-B
I 511.14	0.23	0.09	0.14	0.33

I Intercept For Stream C-B	Slope For Opposing Stream A-C	Slope For Opposing Stream A-B
I 683.99	0.26	0.26

NB These values do not allow for any site specific corrections

TRAFFIC DEMAND DATA

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I ARM I FLOW SCALE(%) I
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I A I 100 I
I B I 100 I
I C I 100 I
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Demand set: Turner St\_Trostre St 2017 Pm with dev

TIME PERIOD BEGINS 16.45 AND ENDS 18.15

LENGTH OF TIME PERIOD - 90 MINUTES.  
 LENGTH OF TIME SEGMENT - 15 MINUTES.

DEMAND FLOW PROFILES ARE SYNTHESISED FROM TURNING COUNT DATA

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-----
I I NUMBER OF MINUTES FROM START WHEN I RATE OF FLOW (VEH/MIN) I
I ARM I FLOW STARTS I TOP OF PEAK I FLOW STOPS I BEFORE I AT TOP I AFTER I
I I TO RISE I IS REACHED I FALLING I PEAK I OF PEAK I PEAK I
-----
I ARM A I 15.00 I 45.00 I 75.00 I 1.92 I 2.89 I 1.92 I
I ARM B I 15.00 I 45.00 I 75.00 I 0.15 I 0.23 I 0.15 I
I ARM C I 15.00 I 45.00 I 75.00 I 2.33 I 3.49 I 2.33 I
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I I TURNING PROPORTIONS I
I I TURNING COUNTS (VEH/HR) I
I I (PERCENTAGE OF H.V.S) I
I I
I I
I TIME I FROM/TO I ARM A I ARM B I ARM C I
-----
I 16.45 - 18.15 I I I I
I I ARM A I 0.000 I 0.000 I 1.000 I
I I I 0.0 I 0.0 I 154.0 I
I I I ( 0.0)I ( 0.0)I ( 0.0)I
I I I I I I
I I ARM B I 0.083 I 0.000 I 0.917 I
I I I 1.0 I 0.0 I 11.0 I
I I I ( 0.0)I ( 0.0)I ( 0.0)I
I I I I I I
I I ARM C I 0.978 I 0.022 I 0.000 I
I I I 182.0 I 4.0 I 0.0 I
I I I ( 0.0)I ( 0.0)I ( 0.0)I
I I I I I I
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TURNING PROPORTIONS ARE CALCULATED FROM TURNING COUNT DATA

THE PERCENTAGE OF HEAVY VEHICLES VARIES OVER TURNING MOVEMENTS

QUEUE AND DELAY INFORMATION FOR EACH 15 MIN TIME SEGMENT

FOR DEMAND SET Turner St\_Trostre St 2017 Pm with dev  
 AND FOR TIME PERIOD 1

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I TIME DEMAND CAPACITY DEMAND/ PEDESTRIAN START END DELAY GEOMETRIC DELAY AVERAGE DELAY I
I (VEH/MIN) (VEH/MIN) CAPACITY FLOW QUEUE QUEUE (VEH.MIN/ (VEH.MIN/ PER ARRIVING I
I (RFC) (PEDS/MIN) (VEHS) (VEHS) TIME SEGMENT) TIME SEGMENT) VEHICLE (MIN) I
I 16.45-17.00 I
I B-AC 0.15 10.18 0.015 0.00 0.01 0.2 0.10 I
I C-AB 0.05 10.90 0.005 0.00 0.00 0.1 0.09 I
I A-B 0.00 I
I A-C 1.93 I
I I
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I	TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)	I
I	17.00-17.15										I
I	B-AC	0.18	10.08	0.018		0.01	0.02	0.3		0.10	I
I	C-AB	0.06	10.81	0.006		0.00	0.01	0.1		0.09	I
I	A-B	0.00									I
I	A-C	2.31									I

I	TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)	I
I	17.15-17.30										I
I	B-AC	0.22	9.93	0.022		0.02	0.02	0.3		0.10	I
I	C-AB	0.07	10.67	0.007		0.01	0.01	0.1		0.09	I
I	A-B	0.00									I
I	A-C	2.83									I

I	TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)	I
I	17.30-17.45										I
I	B-AC	0.22	9.93	0.022		0.02	0.02	0.3		0.10	I
I	C-AB	0.07	10.67	0.007		0.01	0.01	0.1		0.09	I
I	A-B	0.00									I
I	A-C	2.83									I

I	TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)	I
I	17.45-18.00										I
I	B-AC	0.18	10.08	0.018		0.02	0.02	0.3		0.10	I
I	C-AB	0.06	10.81	0.006		0.01	0.01	0.1		0.09	I
I	A-B	0.00									I
I	A-C	2.31									I

I	TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)	I
I	18.00-18.15										I
I	B-AC	0.15	10.18	0.015		0.02	0.02	0.2		0.10	I
I	C-AB	0.05	10.90	0.005		0.01	0.00	0.1		0.09	I
I	A-B	0.00									I
I	A-C	1.93									I

QUEUE FOR STREAM B-AC

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE
17.00	0.0
17.15	0.0
17.30	0.0
17.45	0.0
18.00	0.0
18.15	0.0

QUEUE FOR STREAM C-AB

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE
17.00	0.0
17.15	0.0
17.30	0.0
17.45	0.0
18.00	0.0
18.15	0.0

QUEUEING DELAY INFORMATION OVER WHOLE PERIOD

I STREAM I	TOTAL DEMAND I	* QUEUEING * I	* INCLUSIVE QUEUEING * I
I I	I I	* DELAY * I	* DELAY * I
I I	(VEH) (VEH/H) I	(MIN) (MIN/VEH) I	(MIN) (MIN/VEH) I
I B-AC I	16.5 I 11.0 I	1.7 I 0.10 I	1.7 I 0.10 I
I C-AB I	5.5 I 3.7 I	0.5 I 0.09 I	0.5 I 0.09 I
I A-B I	0.0 I 0.0 I	I I	I I
I A-C I	212.0 I 141.3 I	I I	I I
I ALL I	484.5 I 323.0 I	2.2 I 0.00 I	2.2 I 0.00 I

\* DELAY IS THAT OCCURRING ONLY WITHIN THE TIME PERIOD .  
 \* INCLUSIVE DELAY INCLUDES DELAY SUFFERED BY VEHICLES WHICH ARE STILL QUEUEING AFTER THE END OF THE TIME PERIOD.  
 \* THESE WILL ONLY BE SIGNIFICANTLY DIFFERENT IF THERE IS A LARGE QUEUE REMAINING AT THE END OF THE TIME PERIOD.

END OF JOB

.SLOPES AND INTERCEPT

(NB:Streams may be combined, in which case capacity will be adjusted )

I Intercept For Stream B-C	Slope For Opposing Stream A-C	Slope For Opposing Stream A-B
I 657.43	0.25	0.10 I

I Intercept For Stream B-A	Slope For Opposing Stream A-C	Slope For Opposing Stream A-B	Slope For Opposing Stream C-A	Slope For Opposing Stream C-B
I 511.14	0.23	0.09	0.14	0.33 I

I Intercept For Stream C-B	Slope For Opposing Stream A-C	Slope For Opposing Stream A-B
I 683.99	0.26	0.26 I

NB These values do not allow for any site specific corrections

TRAFFIC DEMAND DATA



I	TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)	I
I	17.00-17.15										I
I	B-AC	0.18	10.04	0.018		0.01	0.02	0.3		0.10	I
I	C-AB	0.07	10.77	0.007		0.01	0.01	0.1		0.09	I
I	A-B	0.00									I
I	A-C	2.44									I

I	TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)	I
I	17.15-17.30										I
I	B-AC	0.22	9.89	0.022		0.02	0.02	0.3		0.10	I
I	C-AB	0.09	10.63	0.009		0.01	0.01	0.1		0.09	I
I	A-B	0.00									I
I	A-C	2.99									I

I	TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)	I
I	17.30-17.45										I
I	B-AC	0.22	9.89	0.022		0.02	0.02	0.3		0.10	I
I	C-AB	0.09	10.63	0.009		0.01	0.01	0.1		0.09	I
I	A-B	0.00									I
I	A-C	2.99									I

I	TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)	I
I	17.45-18.00										I
I	B-AC	0.18	10.04	0.018		0.02	0.02	0.3		0.10	I
I	C-AB	0.07	10.77	0.007		0.01	0.01	0.1		0.09	I
I	A-B	0.00									I
I	A-C	2.44									I

I	TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)	I
I	18.00-18.15										I
I	B-AC	0.15	10.15	0.015		0.02	0.02	0.2		0.10	I
I	C-AB	0.06	10.87	0.006		0.01	0.01	0.1		0.09	I
I	A-B	0.00									I
I	A-C	2.05									I

QUEUE FOR STREAM B-AC

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE
17.00	0.0
17.15	0.0
17.30	0.0
17.45	0.0
18.00	0.0
18.15	0.0

QUEUE FOR STREAM C-AB

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE
17.00	0.0
17.15	0.0
17.30	0.0
17.45	0.0
18.00	0.0
18.15	0.0

QUEUEING DELAY INFORMATION OVER WHOLE PERIOD

I STREAM I	TOTAL DEMAND I	* QUEUEING * I	* INCLUSIVE QUEUEING * I
I I	I I	I * DELAY * I	I * DELAY * I
I I	I (VEH) (VEH/H) I	I (MIN) (MIN/VEH) I	I (MIN) (MIN/VEH) I
I B-AC I	16.5 I 11.0 I	1.7 I 0.10 I	1.7 I 0.10 I
I C-AB I	6.9 I 4.6 I	0.6 I 0.09 I	0.6 I 0.09 I
I A-B I	0.0 I 0.0 I	I I	I I
I A-C I	224.4 I 149.6 I	I I	I I
I ALL I	510.7 I 340.4 I	2.3 I 0.00 I	2.3 I 0.00 I

\* DELAY IS THAT OCCURRING ONLY WITHIN THE TIME PERIOD .  
 \* INCLUSIVE DELAY INCLUDES DELAY SUFFERED BY VEHICLES WHICH ARE STILL QUEUEING AFTER THE END OF THE TIME PERIOD.  
 \* THESE WILL ONLY BE SIGNIFICANTLY DIFFERENT IF THERE IS A LARGE QUEUE REMAINING AT THE END OF THE TIME PERIOD.

END OF JOB  
 ===== end of file =====