APPENDIX E

TRAVEL DEMAND AND OPERATIONAL ANALYSIS

TTC-TWRC Waterfront Transit EAs
Demand Forecasting Report

July 2006

Prepared by: Demand Forecasting Technical Sub-group

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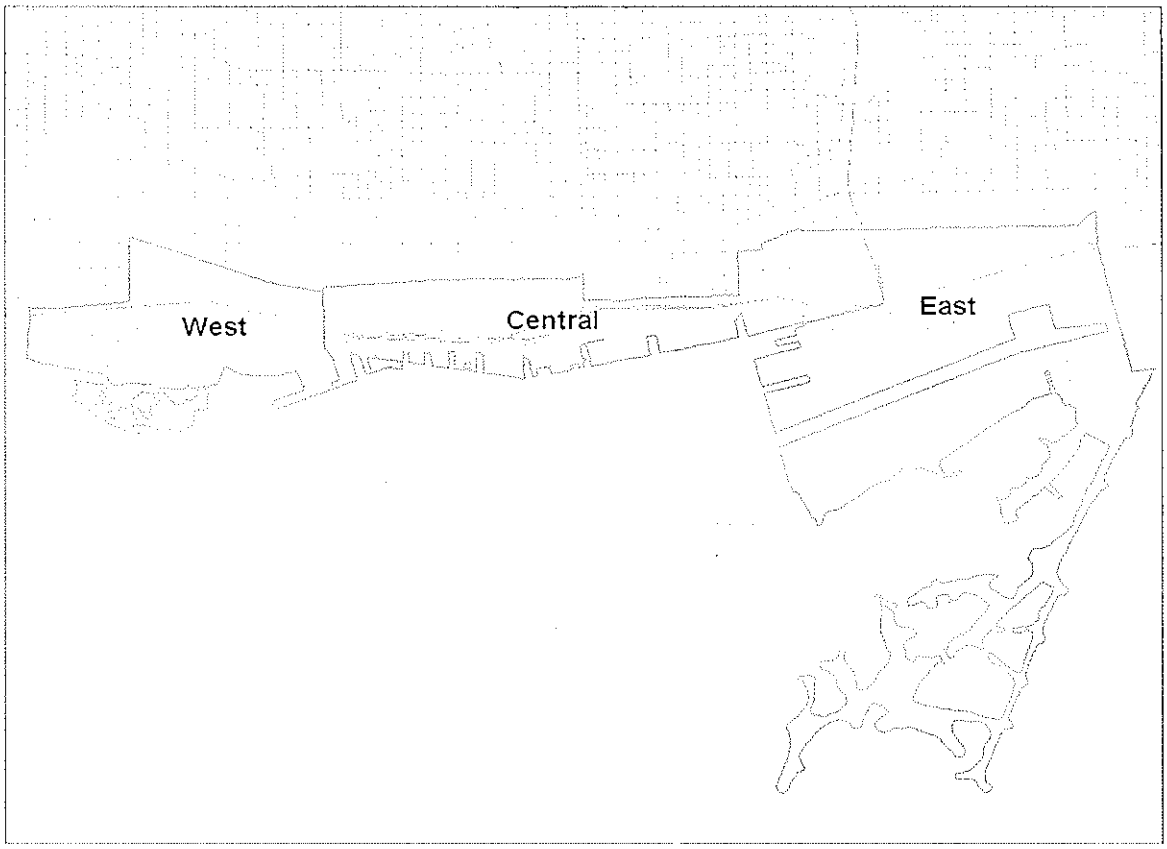
1 INTRODUCTION

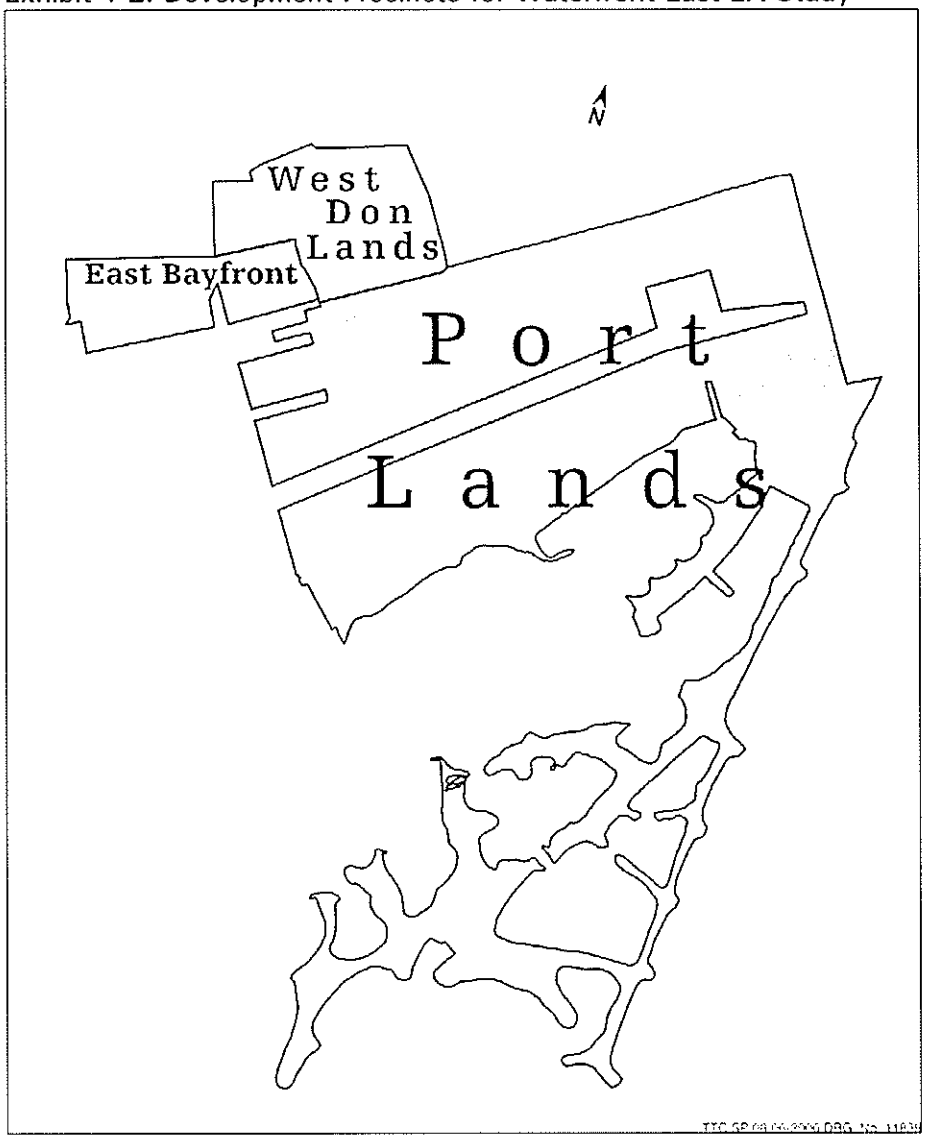
This report presents the analysis prepared by the Demand Forecasting Sub-Group of the Waterfront East EA study. This report contains the travel demand forecasts for future Waterfront East road and transit base networks under the future land use for the Waterfront study area (Exhibit 1-1). This report then looks in more detail at the Waterfront area that contains the eastern precincts of East Bayfront, West Don Lands, and the Port Lands. The locations and boundaries of these precincts are shown in Exhibit 1-2.

Exhibit 1-1: Waterfront East EA Study Area



Note: Boundaries are based on model traffic zone definitions that closely reflect Waterfront planning precincts.

Exhibit 1-2: Development Precincts for Waterfront East EA Study



Note: Boundaries are based on model traffic zone definitions that closely reflect Waterfront planning precincts.

2 APPROACH

The City of Toronto's GTA Model[1] has been used to generate the travel forecasts for 2021. It is an EMME/2-based model. The GTA Model contains GTA-wide road and transit networks, and is calibrated on the 2001 and 1996 Transportation Tomorrow Survey[2] data. The Model has been used extensively by the City in many transportation planning,

[1] GTA Model is a customized modeling framework that the City of Toronto uses for travel demand forecasting. The modeling framework uses EMME/2 travel demand forecasting software as a platform for completing calculations and performing various tasks to complete a four-stage travel demand forecasting procedure.
[2] The Transportation Tomorrow Survey (TTS) is a comprehensive GTA-wide telephone interview survey conducted every 5 years, in parallel with the Census, which collects detailed information on travel habits and behaviours for weekday travel.

assignments, transportation environmental assessments and in the preparation of the approved Official Plan[3].

Before generating the 2021 auto and transit forecasts, the GTA model is validated by comparing recent observed field data to the model forecasts for the current or recent year. Upon confirming that the model is adequate for this forecasting exercise, the future land use and transportation networks are assembled and then 2021 forecasts are generated.

The 2021 screenline forecasts from the GTA model have been compared to those contained in a April 2006 IBI Group report entitled "Toronto Waterfront – Travel Demand Forecasting Study." The comparison provides further credibility that the GTA model is producing reasonable forecast figures. The forecast analysis goes one step further in studying and presenting the degree of use of the road and transit networks for each of the individual precincts. For the transit analysis, a refined approach is used to assign future transit trips to the proposed transit network for the study area. This approach involved assigning these transit trips on a disaggregated basis.

The results of this forecasting work provide input to the City towards the sizing of transportation facilities and the development of transportation policies.

3 MODEL VALIDATION

The purpose of a model validation exercise is to ensure that the results generated by the GTA Model are within reasonable limits of estimating automobile and transit person trips. The validation exercise compares the base year (2001) GTA Model simulation results to survey data from the 2001 Transportation Tomorrow Survey (TTS).

The validation area used in this exercise is the City of Toronto's Central Area Cordon. The boundaries of the cordon are shown in Exhibit 3-1.

[3] The City of Toronto Official Plan was approved by City Council in December 2002 and by the Ontario Municipal Board in July, 2006.

Exhibit 3-1: Central Area Cordon

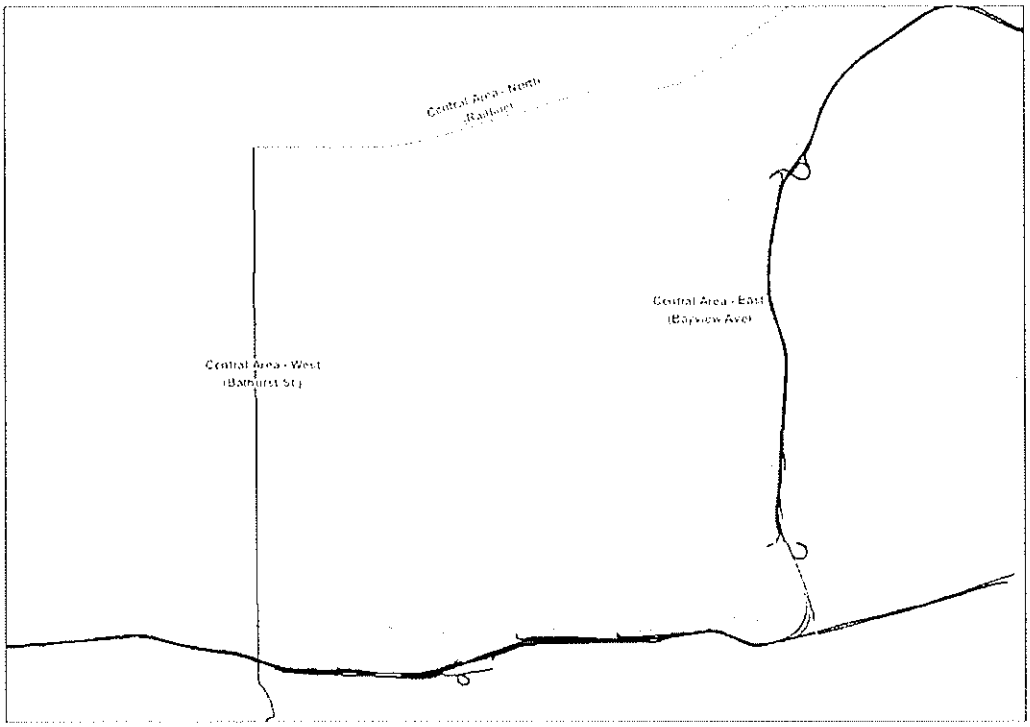


Table 3-1 compares A.M. peak hour auto driver flows to the 2001 TTS.

There is a reasonable fit comparing the auto driver assignments of 2001 simulated and 2001 TTS. The inbound direction is under-simulated by approximately -2% while the smaller volumes forecast for the outbound direction are over-predicted by approximately +18%. This larger difference in the outbound direction is expected since TTS under reports non-work trips travelling in the off-peak direction. An over-simulation of 31% is noted in the outbound direction for the East and North screenlines. Given that this over representation is in the non-peak direction, and is well below capacity, this percent difference will not affect the analysis of peak direction travel. The IBI figures are listed in the table for information.

Table 3-1 Central Area Cordon Observed, TTS and GTA Model Auto Volumes – 2001 AM Peak Hour

Inbound Direction					
Auto	2001 Cordon Count	2001 TTS	GTA Model	GTA Model vs TTS	IBI 2001
East Central Area Screenline	14,000	19,100	19,200	1%	16,600
North Central Area Screenline	6,900	6,500	6,100	-6%	6,500
West Central Area Screenline	14,000	18,600	17,900	-4%	16,600
Total Central Area Cordon	34,900	44,300	43,300	-2%	39,700

Outbound Direction					
Auto	2001 Cordon Count	2001 TTS	GTA Model	GTA Model vs TTS	IBI 2001
East Central Area Screenline	6,500	6,400	8,400	31%	6,900
North Central Area Screenline	3,400	2,600	3,400	31%	3,200
West Central Area Screenline	7,700	7,200	7,300	1%	6,800
Total Central Area Cordon	17,600	16,200	19,100	18%	16,900

Table 3-2 compares A.M peak period transit person trips to the 2001 TTS. These flows were analysed by looking at the local transit and commuter rail (GO Rail) sub modes separately.

The comparison of simulated transit trips and 2001 TTS transit trips shows a good fit. The local transit modes are over-simulated in the inbound and outbound direction by +11% and +23% respectively. GO Rail in the inbound direction is under-simulated by -20%. Under representing GO Rail in the peak direction has been an ongoing tendency of the GTA model which should be recognized given the importance of this direction of travel.

Combining all transit modes for the overall cordon, the transit simulations show a reasonable fit of +4% for the inbound direction and +23% for the outbound (off peak) direction when compared to the 2001 TTS transit trips. Again, the IBI figures are listed in the table for information.

The results of this validation work indicate that, on an aggregate basis, the accuracy of the GTA model results are well within accepted limits for a regional modelling exercise.

Table 3-2: Central Area Cordon Observed, TTS and Simulated Transit Volumes – 2001 AM Peak Period

Inbound Direction					
Local Transit incl GOBus	2001 Cordon Count	2001 TTS	GTA Model	GTA Model vs TTS	IBI 2001
East Central Area Screenline	55,000	41,500	53,000	28%	39,000
North Central Area Screenline	56,700	71,900	71,300	-1%	57,700
West Central Area Screenline	45,300	43,500	50,200	15%	44,000
Local Transit TOTAL	157,000	156,900	174,600	11%	140,700
GO Rail					
East Central Area Screenline	21,500	20,500	13,000	-37%	21,700
North Central Area Screenline	-	-	-	-	-
West Central Area Screenline	33,600	29,500	27,100	-8%	28,200
GO Rail TOTAL	55,100	50,100	40,100	-20%	49,900
Local Transit & GO RAIL TOTAL					
East Central Area Screenline	76,500	62,100	66,000	6%	60,800
North Central Area Screenline	56,700	71,900	71,300	-1%	57,700
West Central Area Screenline	79,000	73,000	77,300	6%	72,200
Total Central Area Cordon	212,200	207,000	214,700	4%	190,600

Outbound Direction					
Local Transit incl GOBus	2001 Cordon Count	2001 TTS	GTA Model	GTA Model vs TTS	IBI 2001
East Central Area Screenline	12,800	8,700	12,400	43%	7,600
North Central Area Screenline	27,100	21,200	23,000	9%	17,400
West Central Area Screenline	15,500	10,400	14,300	38%	9,600
Local Transit TOTAL	55,500	40,300	49,600	23%	34,600
GO Rail					
East Central Area Screenline	200	100	200	100%	200
North Central Area Screenline	-	-	-	-	-
West Central Area Screenline	400	300	300	0%	600
GO Rail TOTAL	600	400	500	25%	800
Local Transit & GO RAIL TOTAL					
East Central Area Screenline	13,000	8,800	12,500	42%	7,800
North Central Area Screenline	27,100	21,200	23,000	9%	17,400
West Central Area Screenline	15,900	10,700	14,600	36%	10,300
Total Central Area Cordon	56,100	40,700	50,100	23%	35,400

4 LAND USE

Table 4-1 contains the regional 2021 population and employment control totals used in the GTA model. Each region provided this information at a regional and traffic zone level.

Table 4-1 - Regional Land Use Assumptions

Region	Source	2001 POP	2001 EMP	2021 POP	2021 EMP
Toronto	Official Plan	2,450,700	1,453,600	2,845,100	1,766,300
Durham	Development Charges study	527,000	166,300	849,800	311,000
York	York Region Official Plan (September 2004 update)	772,000	386,000	1,272,000	721,200
Peel	Peel Region Official Plan (August 2003 update)	981,600	517,800	1,394,900	761,400
Halton	Halton Region Official Plan (June 2003 update)	389,300	169,000	592,300	308,000
Hamilton	1999-2001 TMP	498,100	192,400	566,800	229,600
TOTAL		5,618,700	2,885,100	7,520,900	4,097,500

Note: See Appendix C for more detailed explanation on Toronto's future land use forecasts and the Waterfront's land use forecasts.

Table 4-2 summarizes the existing (2001), future interim and ultimate population and employment in the East, Central and West sections of the study area.

Table 4-2: Land Use – Existing (2001), Interim and Ultimate Population and Employment

	Population			Employment		
Area	2001	2021 Interim	2021 Ultimate	2001	2021 Interim	2021 Ultimate
East	800	12,300	33,700	6,800	13,100	28,000
Central	7,500	57,300	57,300	25,300	47,300	47,300
West	1,300	13,600	13,600	4,300	17,700	17,700
Total	**9,600**	**83,200**	**104,600**	**36,400**	**78,100**	**93,000**

Table 4-3 summarizes the existing (2001), future interim and ultimate population and employment in the East Bayfront, West Don Lands, and Port Lands precincts.

Table 4-3: Land Use – Existing (2001), Interim and Ultimate Population and Employment for Precincts

	Population			Employment		
Precinct	2001	2021 Interim	2021 Ultimate	2001	2021 Interim	2021 Ultimate
East Bayfront	-	14,400	14,400	1,100	3,800	3,800
West Don Lands	1,300	10,200	10,200	2,800	4,100	4,100
Port Lands	-	11,400	32,900	3,500	9,800	24,700
Total	**1,300**	**36,000**	**57,500**	**7,400**	**17,700**	**32,600**

5 FUTURE BASE NETWORKS

The assumptions for the 2021 road network and base transit network are listed below. All planned road and transit network changes for 2021 are included in the GTA Model networks.

Base Road Network

The 2021 future base road network includes potential road improvements planned by each Region in the GTA. Road improvements expected to have the most impact within the Waterfront East study area are listed in Table 5-1.

Table 5-1: Description of Road Network Changes in Study Area

Road	Description
Bremner Blvd.	Extension from Spadina Ave. to Lake Shore Blvd., west of Bathurst St.
Simcoe St.	Extension from Bremner Blvd. to Lake Shore Blvd.
Queens Quay East	Extension from west of Parliament St to Cherry St. and Lake Shore Blvd.
Basin St.	Extension from Basin St. to Cherry St.
Don Roadway	Extension between Commissioners St. and Unwin Ave.
Front St./ Bayview Ave.	Minor realignment
River St.	Extension from Queen St. to realignment of Bayview Ave.
Front St.	Extension from Bathurst St. to Dufferin St. Gardiner Expressway ramps east of Dufferin St.
Liberty St.	Dufferin St. to Stachan Ave.
Dufferin St.	Extension to LakeShore Blvd.

Note: Gardiner Expressway is assumed to remain unchanged from 2001

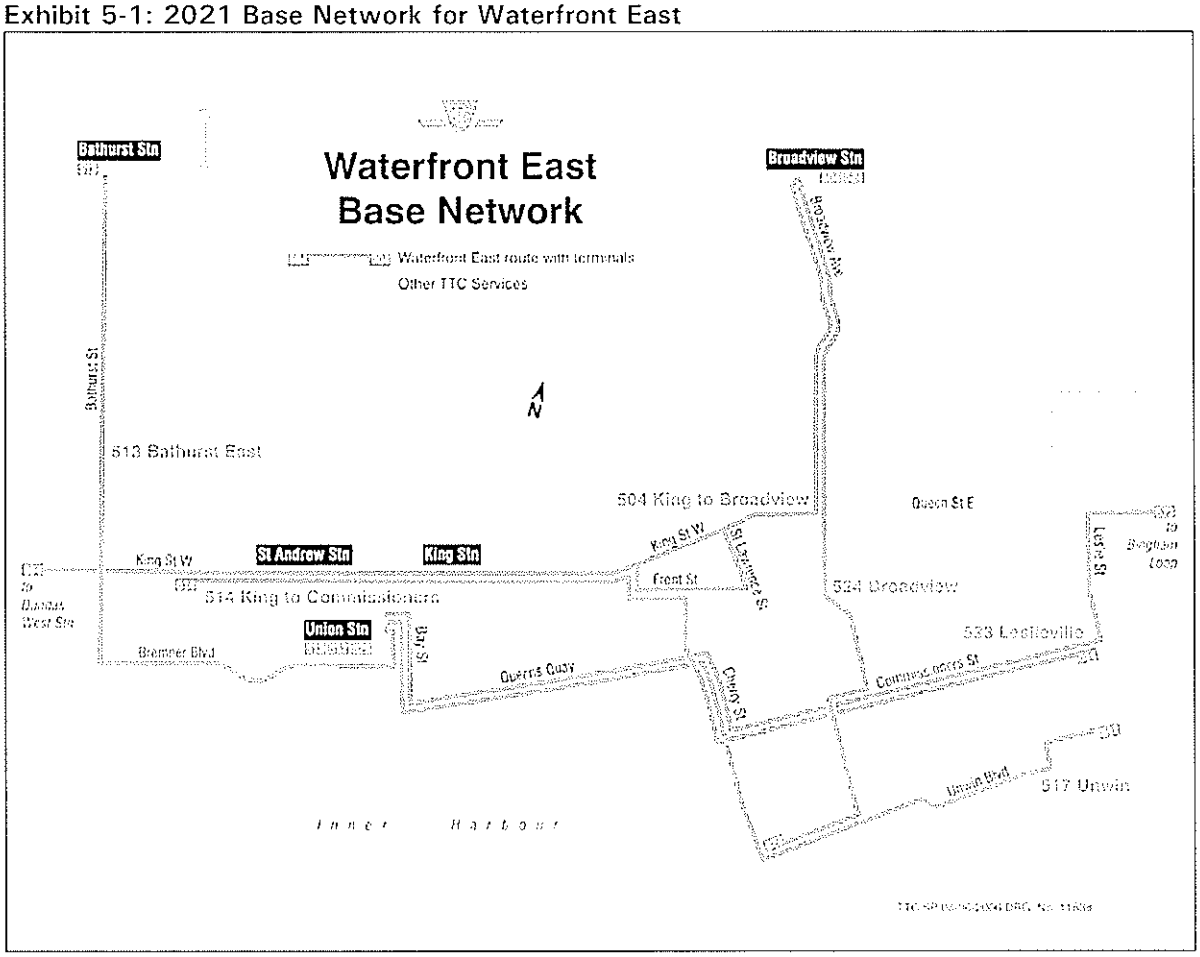
Base Transit Network

Table 5-2 lists the current and proposed streetcar services that will serve the study area. It also lists proposed bus route extensions that will better serve the area. Exhibit 5-1 contains a map that shows these transit services. The services reflect the base network in the GTA Model and will likely be refined further as environmental assessments for each of the precincts proceed.

Table 5-2: Description of AM Peak Base Transit Network in Study Area

Existing and Modified Streetcar Services	Description
504 King speed 13.2kph headway 4 min	Operating between Dundas West Station and Broadview Station via King St. As reflected in the approved secondary plan, a branch of the 504 will operate on roads in the West Don Lands.
509 Harbourfront speed 17.0kph headway 10 min	Operating between Union Station and Exhibition Grounds but extended to Dufferin loop
510 Spadina speed 17kph on QQ headway 4min	Operating between Spadina Station and Union Station via Spadina and Queen's Quay.
511 Bathurst speed 17kph thru Exhibition headway 5min	Operating between Bathurst Station and Exhibition Grounds via Bathurst and Exhibition loop
New Streetcar Services	**Description**
507 Long Branch speed 17kph Dufferin to Union headway 10min	Operating between Long Branch and Union Station via Lake Shore, Queensway, King W., Dufferin, Exhibition Grounds, and Queens Quay West
513 Bathurst East speed 17kph along Bremner headway 7.5min	Operating between Bathurst Station and Union Station via Bremner
514 King to Commissioners speed 17kph on Commissioners speed 8.0 to 12.4kph Cherry to Spadina headway 4min	Operating along King St. between Spadina and Commissioners serving the West Don Lands precinct
517 Unwin speed 17kph headway 7.5min	Operating between Union Station and Unwin Ave. via Queens Quay East
523 Leslieville speed 17kph Union to Eastern speed 15kph Eastern to Bingham headway 7.5min	Operating between Union Station and Queen St. East via Queens Quay East, Commissioners St., and Leslie St.
524 Broadview speed 17kph Lakeshore to Cherry headway 10min	Operating between Broadview Station and Unwin Ave. via Broadview Ave.
Existing and Modified Bus Services	**Description**
83 Jones	Extend route south to Unwin Ave. via Leslie St.
65 Parliament	Extend route south to Queens Quay East
63 Ossington	Extend route into Exhibition grounds
29 Dufferin	Extend route south to Lake Shore Blvd.
72A Pape	Remove service between Union Station and Carlaw Ave.
172 Cherry, 75 Sherbourne, 6 Bay	No changes to these existing routes

Exhibit 5-1: 2021 Base Network for Waterfront East



6 RIDERSHIP FORECAST RESULTS

This section presents the auto and transit forecasts for the future scenario of the 2021 ultimate land use on the 2021 road and transit network as described earlier.

The forecasts are presented at different levels of geography. Auto and transit volumes are shown at the Central Area screenline and Waterfront area levels. The GTA model forecasts are compared to IBI Group's forecasts. The intent of the comparison is not to validate IBI Group's model.

Forecasts are also presented at the precinct level. The forecasts show what roads and transit lines are used to accommodate the trips that are generated from and attracted to each precinct. This analysis is in response to questions by the community on what corridors trip-makers are using to get to/from their precinct.

Central Area Screenline Forecasts

Tables 6-1 and 6-2 provide screenline volumes for the Central Area and for specific screenlines in the study area. These volumes are for the year 2021 and assume the ultimate land use scenario.

Table 6-1: 2021 Auto Peak Hour Screenline Volumes for the Central Area Cordon

	GTA Model		IBI Model	
	Inbound	Outbound	Inbound	Outbound
Auto				
East Central Area Screenline	20,600	11,000	19,900	NA
North Central Area Screenline	6,600	4,600	7,000	NA
West Central Area Screenline	19,300	9,900	19,500	NA
Total Central Area Cordon	**46,500**	**25,500**	**46,400**	NA

Table 6-2: 2021 Transit AM Peak Period Screenline Volumes for Central Area Cordon

	GTA Model		IBI Model	
	Inbound	Outbound	Inbound	Outbound
Local Transit incl GOBus				
East Central Area Screenline	67,200	19,800	49,100	NA
North Central Area Screenline	93,100	35,100	75,000	NA
West Central Area Screenline	54,200	23,200	55,600	NA
Local Transit TOTAL	**214,600**	**78,100**	**179,700**	NA
GO Rail				
East Central Area Screenline	31,500	200	34,100	NA
North Central Area Screenline	-	-	-	NA
West Central Area Screenline	53,500	300	52,600	NA
GO Rail TOTAL	**84,900**	**500**	**86,700**	NA
Local Transit & GO Rail TOTAL	**299,500**	**78,700**	**266,400**	NA

The future auto volumes crossing the Central Area screenlines are very similar in both the GTA and IBI models. The GTA model, however, forecasts about 33,000 more AM peak period transit trips crossing the Central Area cordon when compared to the IBI model. This difference represents approximately 11% of the GTA model forecast which is not that significant especially with the difference spread along the screenlines.

The GTA model shows the AM peak hour automobile trips into the Central Area growing from 43,300 in 2001 to 46,500 in 2021. The AM peak period transit trips into the Central Area grow from about 215,000 in 2001 to 300,000 in 2021.

The next two sections look at these auto and transit trips at a finer level of geography. The transit trip volumes will be presented in AM peak hour so that they can be compared to the peak hour automobile trips. Based on recent riding counts on several TTC services in the study area, a peak hour factor of 0.55 will be applied to the AM peak period volumes.

Waterfront Area Forecasts

Table 6-3 shows the 2021 AM peak hour auto traffic volumes on selected east-west roads along the length of the Waterfront from the Exhibition Grounds. Peak direction auto traffic volumes show only modest growth over current traffic volumes due to limits on the practical capacity of the road network. Appendix A contains plots (Exhibits A-1 and A-2) showing the AM peak hour auto volumes and Volume/Capacity (v/c) ratios on all major roads in the Waterfront area.

Appendix A also contains plots (Exhibit A-3a and A-3b) of the 2021 AM peak hour transit volumes on the transit lines in the vicinity of the Waterfront area. Exhibit A-3a shows the link volumes with the King streetcars operating at a speed of 12.4kph between Cherry St. and Yonge St. Exhibit A-3b shows the link volumes with the King streetcars operating at a slower speed of 8kph between Cherry St. and Yonge St. The most noticeable effect of the slower speed is the diversion of transit trips from the King East corridor to the Queens Quay East corridor with a westbound peak hour volume of about 4,000.

Table 6-3: AM Peak Hour Auto Traffic Volumes at Selected Screenlines

			GTA Model 2021 Ultimate Land Use		
Area	**Screenline**	**Facility**	**Volume**	**Capacity**	**V/C**
West	East of Dufferin (EB)	FGG	6,900	5,400	1.28
		Lake Shore Blvd	3,200	3,000	1.06
		Saskatchewan	400	500	0.82
		Front St	800	1,600	0.53
Total West			11,400	10,500	1.08
Central WB	East of York (WB)	FGG	5,100	5,400	0.94
		Lake Shore Blvd	2,100	2,400	0.89
		Front St	700	1,000	0.67
		Queens Quay	300	1,000	0.33
Total Central WB			8,200	9,800	0.84
Central EB	East of York (EB)	FGG	4,500	5,400	0.83
		Lake Shore Blvd	2,000	2,400	0.85
		Front St	300	1,000	0.27
		Queens Quay	400	1,000	0.42
Total Central EB			7,200	9,800	0.74
East	West of DVP (WB)	FGG	6,500	7,200	0.90
		Lake Shore Blvd	1,100	2,400	0.46
Total East - West of DVP			7,600	9,600	0.79
East	East of DVP (WB)	Lake Shore Blvd	200	2,400	0.07
		FGG WB Ramp	3,000	2,800	1.08
		Eastern Ave	1,200	1,400	0.87
Total East - East of DVP			4,400	6,600	0.67

Precinct Level Forecasts

City staff, TTC staff, and community groups were interested in obtaining trip information for each of the precincts, namely, East Bayfront, West Don Lands, and the Port Lands. In particular, there was interest in knowing what road and transit links are used by people who make trips to and from each of the precincts. Appendix B contains plots for each of the precincts showing AM peak hour automobile and transit link volumes. Two plots are shown for the AM peak hour transit link volumes to reflect the two transit speed assumptions (8.0kph and 12.4kph) on King Street East. For the Port Lands precinct, an extra plot is included that shows the AM peak hour auto link volumes on the roads in the precinct but only for those automobile trips that do not originate or are destined to this precinct. The purpose of this plot is to show the magnitude of automobile traffic that travels through the Port Lands.

Caution must be used in interpreting these results at the individual link volume level. The regional-level GTA model is designed to provide accurate travel forecasts at a screen-line level but the road system and auto movement characteristics are not included in the model at a fine-enough level of detail to provide consistently-accurate auto link volumes on individual roads. A more detailed analysis of auto traffic volumes on individual road links and at intersections will be required as part of the development of design alternatives.

East Bayfront

Exhibit B-1 shows the AM peak hour link volumes for automobile trips originating from or destined to the East Bayfront precinct. The plot shows that the major roads used by these trips are the Gardiner Expressway and Lakeshore Boulevard.

Exhibit B-2a shows the AM peak hour link volumes for transit trips originating from or destined to the East Bayfront precinct. The majority of trips originating from this area are travelling westbound on the streetcar route on Queens Quay East. The volume grows to a maximum of about 1,000 in the AM peak hour.

Exhibit B-2b also shows the AM peak hour link volumes for transit trips originating from or destined to the East Bayfront precinct, but with the King streetcar operating at a slower speed of 8kph through the downtown. This results in westbound peak hour volume of about 1,200 on Queens Quay East.

West Don Lands

Exhibit B-3 shows the AM peak hour link volumes for automobile trips originating from or destined to the West Don Lands precinct. The plot shows that the major roads used by these trips are Lakeshore Boulevard, Richmond Street, and Adelaide Street.

Exhibit B-4a shows the AM peak hour link volumes for transit trips originating from or destined to the West Don Lands precinct. As expected, the majority of the trips are travelling westbound on the 504/514 King streetcar but boarding on the section of the

route that operates on Front Street. The number of westbound boardings on this section is approximately 630 in the AM peak hour.

Exhibit B-4b also shows the AM peak hour link volumes for transit trips originating from or destined to the West Don Lands precinct, but with the King streetcar operating at a slower speed of 8kph through the downtown. The slower speed operation results in the King streetcar westbound figure dropping from 630 to 580 in the AM peak hour. The difference is diverted to Queens Quay East.

Port Lands

Exhibit B-5 shows the AM peak hour auto link volumes for the roads in the Port Lands and vicinity. These volumes correspond only to those auto trips that either originate from or are destined to the Port Lands. These trips going into and out of the Port Lands are distributed well across the north-south roads connecting Commissioners Road and Lake Shore Boulevard East.

Exhibit B-6 shows the AM peak hour auto link volumes for the roads in the Port Lands and vicinity for auto trips that are NOT originating from or destined to the Port Lands. The purpose of this is exhibit is to show the automobile traffic that is forecast to travel through the Port Lands area. This has been raised as a concern by Waterfront community groups. This exhibit shows that approximately 500 AM peak hour auto trips are travelling through the Port Lands area.

Exhibit B-7a shows the AM peak hour transit link volumes for transit trips originating from or destined to the Port Lands precinct. In 2021, this area is expected to have about 33,000 in population and 25,000 in employment. The majority of the AM peak period trips originating in the Port Lands take the streetcar routes that operate on Cherry Street. This figure is approximately 2,600 of the total 3,600 transit trips leaving the Port Lands area in the AM peak hour. The 1,000 difference are leaving the Port Lands via the proposed 524 Broadview streetcar, 72 Pape, 83 Jones, or the 523/517 streetcar that operates on Leslie Street.

For those AM peak hour transit customers leaving the Port Lands via the streetcar services on Cherry Street, approximately 1,350 take the 514 Commissioners that operates via the West Don Lands to King Street. Approximately 1,250 take the streetcar services that operate on Queens Quay East.

The majority (approximately 1,750) of the AM peak hour transit trips destined to the Port Lands are entering the area via Cherry Street. Approximately 800 AM peak hour transit trips are entering the Port Lands area via 524 Broadview, 72 Pape, 83 Jones, or the 523/517 streetcar that operates on Leslie.

By comparing Exhibits A-3a and B-7a, one can estimate the number of TTC customer trips that are forecast to travel through the Port Lands. These exhibits indicate that there will be at least 300 AM peak hour TTC customers travelling through the Port Lands precinct.

This figure comes from the difference between the link volumes in each direction on the north-south roads.

Exhibit B-7b shows the AM peak hour transit link volumes for transit trips originating from or destined to the Port Lands, but with the King streetcar operating at a slower speed of 8kph through the downtown. This exhibit shows clearly the effects of a slower speed on King St. Westbound trips from the Port Lands are mostly using the Queens Quay corridor as opposed to the King corridor to get to the downtown. This westbound volume increases from 1,200 to 2,300 on Queens Quay East.

Tables 6-4a and 6-4b lists transit volumes for selected local roads in the three precincts. The link volumes are listed for the those trips that have a trip end in each of the precincts. The 'Background Trips' column is the link volume for those trips that do not have a trip end in any of the three precincts. Exhibits B-8, B-9a, and B-9b show peak hour link volume plots for these 'Background Trips.'

Table 6-4a: Transit Link Volumes at Selected Locations – 12.4kph on King St. E.

		2021 Transit AM Peak Hour Volume				
Location	Dir'n	Trips to/from East Bayfront	Trips to/from West Don	Trips to/from Port Lands	Background Trips	All Trips
Queens Quay East						
west of Jarvis	WB	1000	140	1200	230	2600
west of Jarvis	EB	400	80	1150	300	1900
west of Cherry	WB	140	10	1250	600	2000
west of Cherry	EB	40	20	1200	300	1500
King St. East						
west of Parliament	WB	300	450	1200	1000	2950
west of Parliament	EB	30	300	530	500	1350
Cherry St.						
north of CN tracks	NB	320	10	1350	0	1700
north of CN tracks	SB	0	10	570	0	600
crossing channel	NB	30	20	2600	200	2800
crossing channel	SB	30	10	1750	160	1900
Commissioners						
east of Cherry	WB	30	10	1120	200	1350
east of Cherry	EB	30	10	1400	160	1550
Unwin Ave.						
east of Cherry	WB	0	0	220	0	220
east of Cherry	EB	0	0	300	0	300
Broadview Ave.						
south of Lakeshore	NB	0	0	580	0	580
south of Lakeshore	SB	0	0	350	0	350
Leslie St.						
south of Lakeshore	NB	20	0	400	70	480
south of Lakeshore	SB	30	0	400	190	600

Table 6-4b: Transit Link Volumes at Selected Locations – 8kph on King St. E.

		2021 Transit AM Peak Hour Volume				
Location	Dir'n	Trips to/from East Bayfront	Trips to/from West Don	Trips to/from Port Lands	Background Trips	All Trips
Queens Quay East						
west of Jarvis	WB	1200	200	2300	370	4100
west of Jarvis	EB	400	100	17000	300	2500
west of Cherry	WB	420	20	2300	750	3500
west of Cherry	EB	70	20	1700	300	2100
King St. East						
west of Parliament	WB	20	400	70	940	1900
west of Parliament	EB	0	300	0	500	1800
Cherry St.						
north of CN tracks	NB	40	10	150	0	190
north of CN tracks	SB	0	30	30	0	50
crossing channel	NB	30	20	2500	340	2800
crossing channel	SB	60	10	1800	180	2000
Commissioners						
east of Cherry	WB	30	10	1100	340	1450
east of Cherry	EB	60	10	1750	180	1700
Unwin Ave.						
east of Cherry	WB	0	0	220	0	220
east of Cherry	EB	0	0	300	0	300
Broadview Ave.						
south of Lakeshore	NB	20	0	640	0	660
south of Lakeshore	SB	0	0	330	0	340
Leslie St.						
south of Lakeshore	NB	20	0	420	80	530
south of Lakeshore	SB	30	0	400	330	770

Tables 6-5 and 6-6 list mode splits for AM peak trips originating from and destined to each of the precincts and the remainder of the GTA. Exhibit 6-1 shows the geographic boundaries for the areas defined in these tables.

Table 6-5: Mode Split Summary of AM Peak Period Person-Trips to and from Precincts

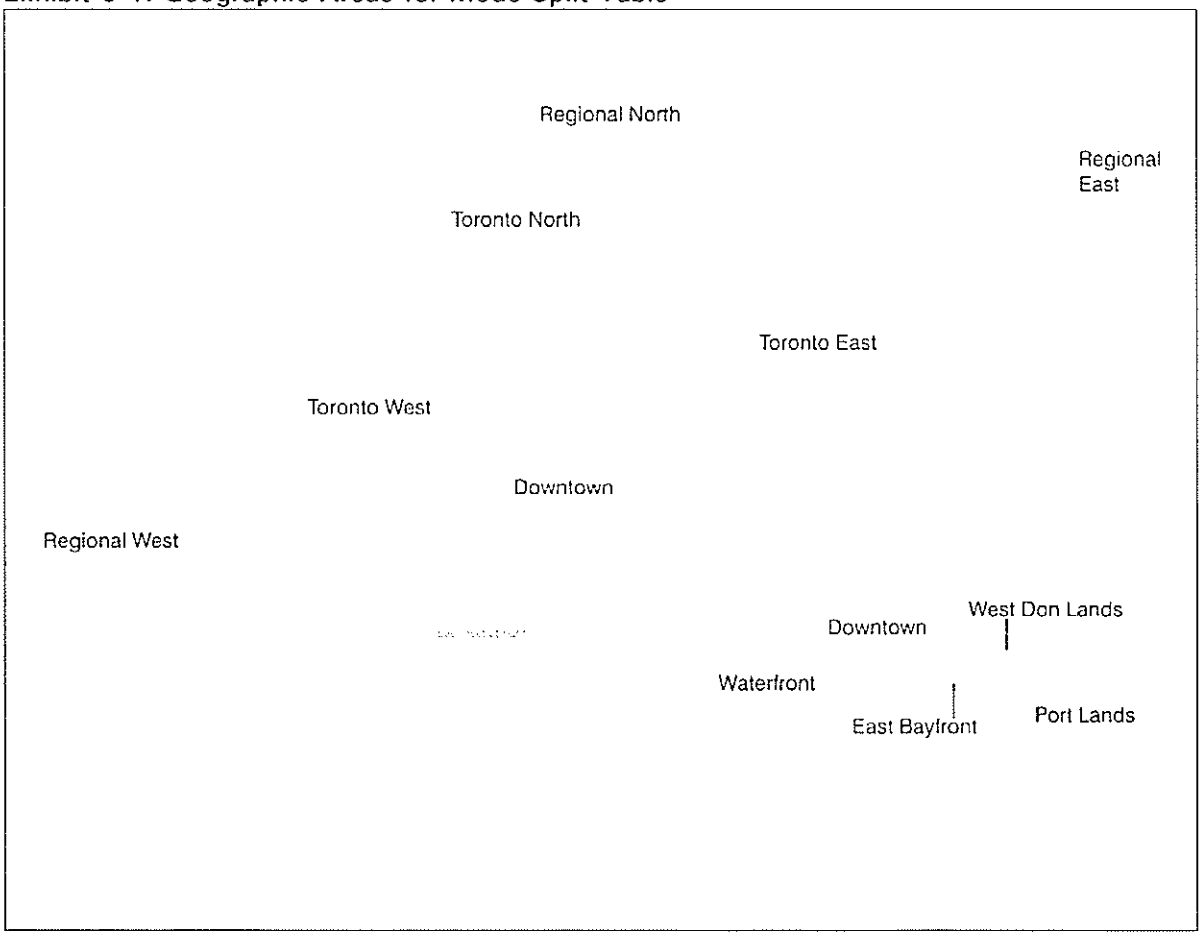
	# AM Peak Trips Destined to Precincts			# AM Peak Trips Originating from Precincts		
	East Bayfront	West Don Lands	Port Lands	East Bayfront	West Don Lands	Port Lands
Auto	1520	1680	11070	2740	2020	7750
Transit	1080	1280	5260	2850	2040	6970
Walk/Cycle/ Other	460	450	1110	1390	960	1580
Total	3060	3410	17440	6980	5020	16300
Modal Split						
Auto	50%	49%	64%	39%	40%	47%
Transit	35%	38%	30%	41%	41%	43%
Walk/Cycle/ Other	15%	13%	6%	20%	19%	10%
Total	100%	100%	100%	100%	100%	100%

Table 6-6: AM Peak Transit Mode Split for Person-Trips to/from Precincts

Trip Origin [A]	Transit Mode Split for Trips to Precincts		Trip Destination [A]	Transit Mode Split for Trips from Precincts
Downtown	[B]27%		Downtown	[C]47%
Toronto West	34%		Toronto West	40%
Toronto North	38%		Toronto North	53%
Toronto East	31%		Toronto East	48%
Regional West	39%		Regional West	18%
Regional North	31%		Regional North	27%
Regional East	34%		Regional East	8%
Waterfront	40%		Waterfront	43%
Total	32%		Total	42%

[A] See Exhibit 6-1 for geographic boundaries of areas
[B] ie 27% of all person trips travelling from the Downtown to the Precincts use transit
[C] ie 47% of all person trips travelling from the Precincts to the Downtown use transit

Exhibit 6-1: Geographic Areas for Mode Split Table



7 CONCLUSIONS

This report has documented the process and data used in the forecasting of automobile and transit usage on the future base road and transit networks in the Waterfront East. It also provided more detailed information for the individual precincts of East Bayfront, West Don Lands, and Port Lands. The results of this forecasting work provide input to the City and TTC towards the sizing of transportation facilities and developing transportation policies for the Waterfront East area.

Appendix A - 2021 Ultimate Demand Automobile and Transit Link Volume Forecasts

Exhibit A-1: AM Peak Hour Automobile Volumes on Roads

Exhibit A-2: AM Peak Hour Automobile Volume/Capacity (v/c) Ratios

Exhibit A-3a: AM Peak Hour Transit Volumes on Transit Routes – King Streetcar at 12.4kph downtown

Exhibit A-3b: AM Peak Hour Transit Volumes on Transit Routes – King Streetcar at 8.0kph downtown

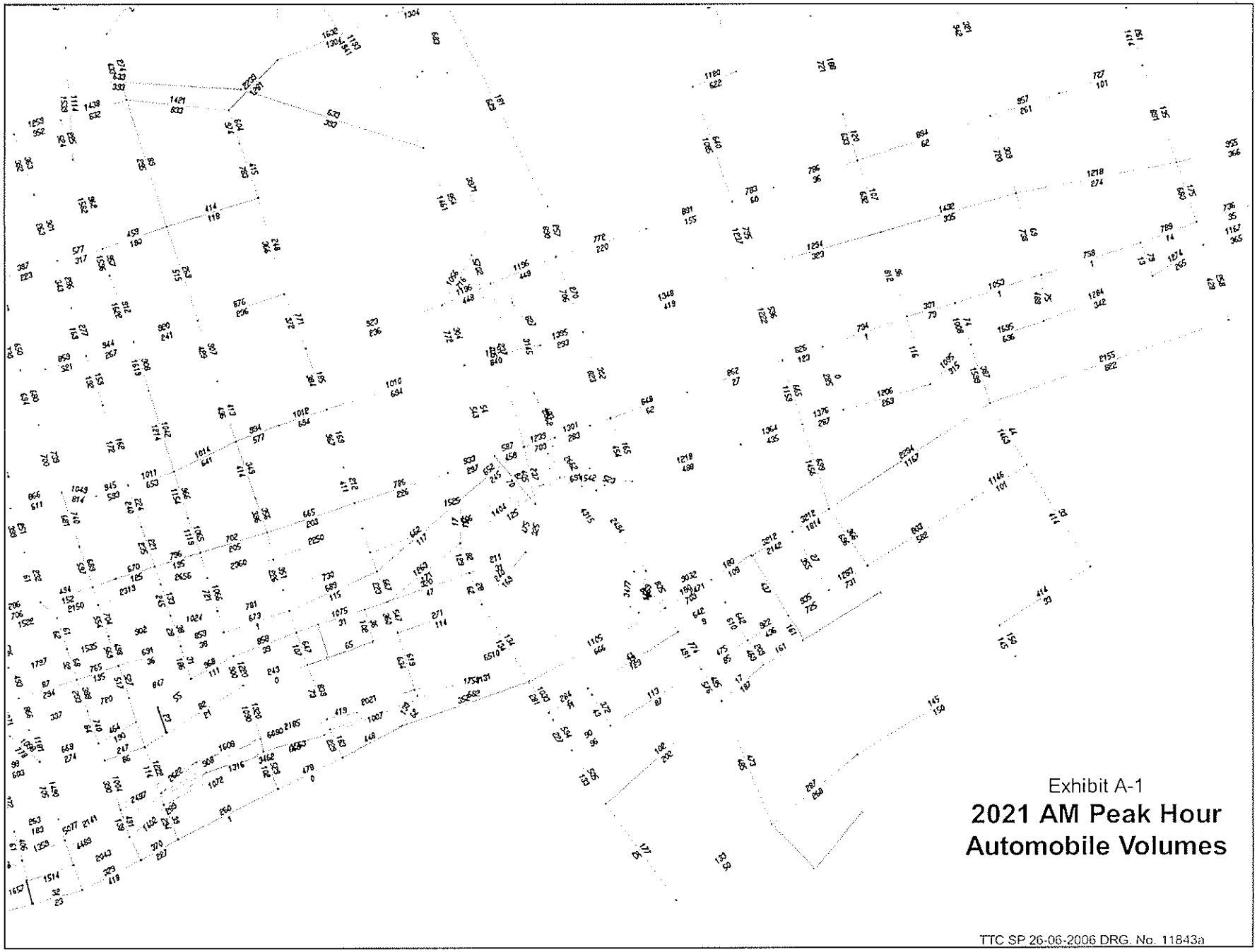


Exhibit A-1

2021 AM Peak Hour Automobile Volumes

TTC SP 26-06-2006 DRG. No. 11843a

Exhibit A-2

2021 AM Peak Hour Automobile Volume/Capacity Ratios

TTC SP 26-06-2006 DRG. No. 11843b

Exhibit A-3a
AM Peak Hour Transit Link Volumes
2021 Waterfront Network with 2021 Ultimate Demand
12.4kph streetcar speed on King St. E.

0 0.5 1
kilometres

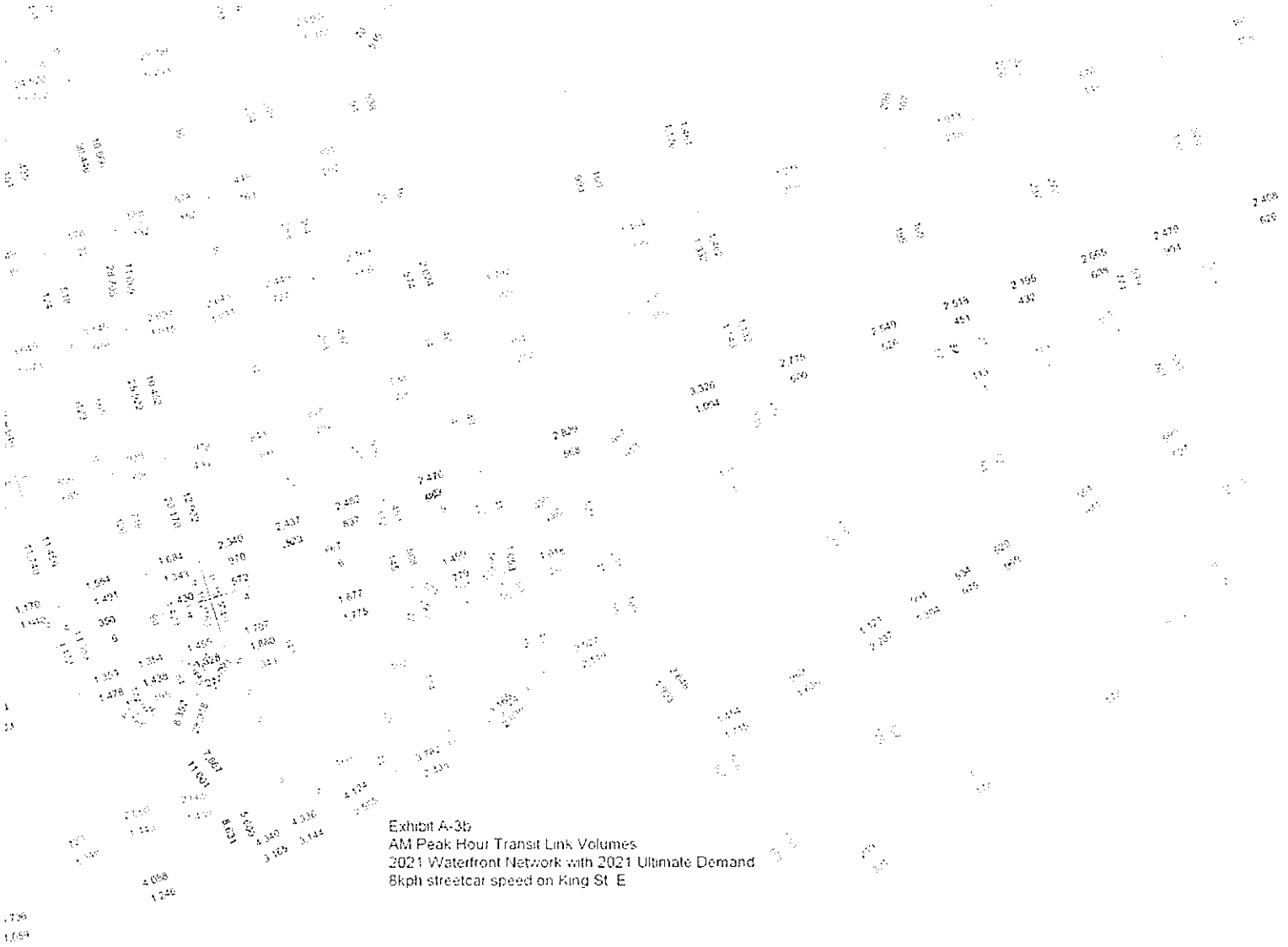


Exhibit A-3b
AM Peak Hour Transit Link Volumes
2021 Waterfront Network with 2021 Ultimate Demand
8kph streetcar speed on King St E

Appendix B – 2021 Ultimate Demand Automobile and Transit Link Volumes at Precinct Level


Exhibit B-1
East Bayfront
2021 AM Peak Hour
Automobile Volumes
TTC SP 26-06-2006 DRG. No. 11843c

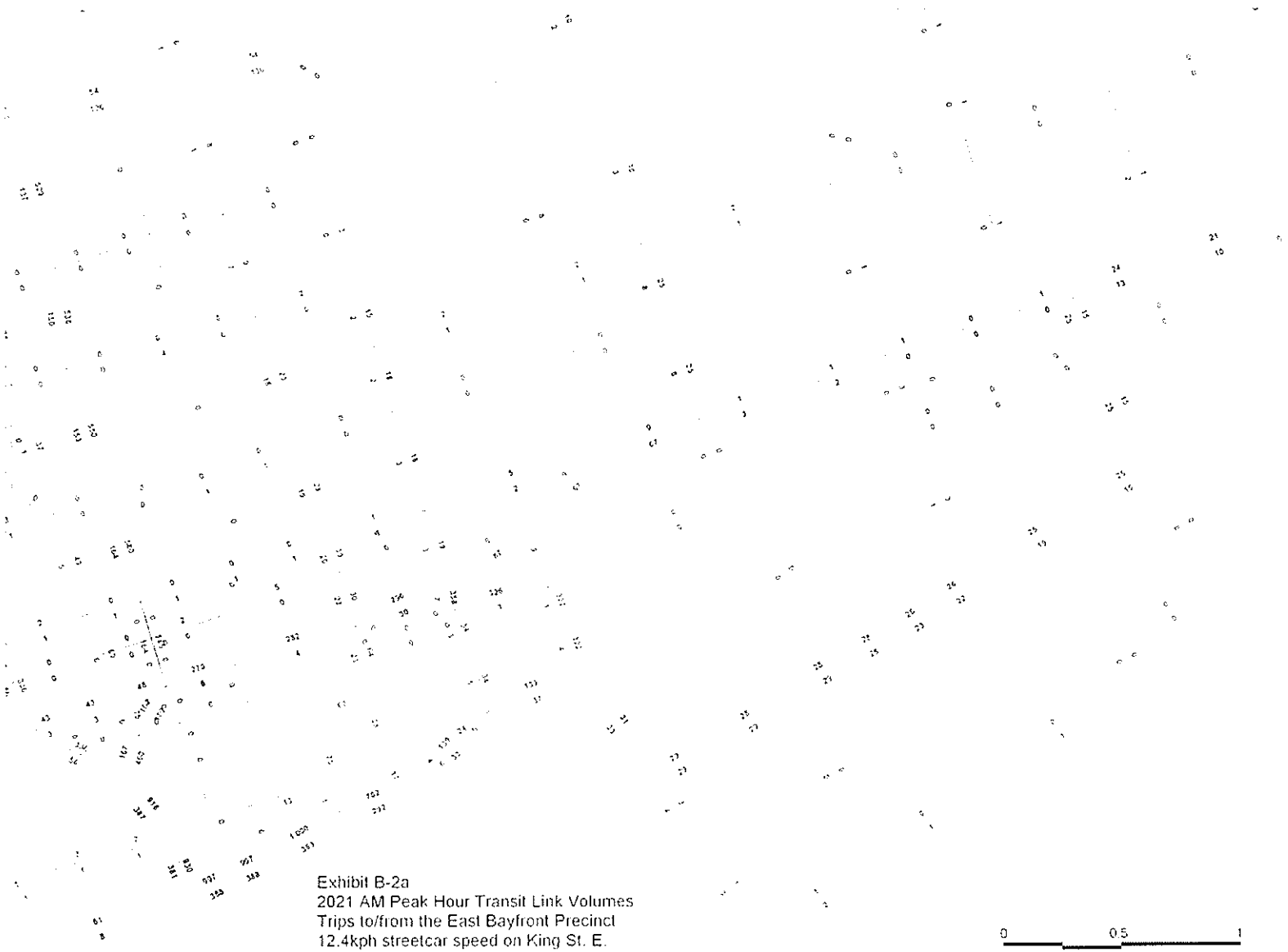


Exhibit B-2a
2021 AM Peak Hour Transit Link Volumes
Trips to/from the East Bayfront Precinct
12.4kph streetcar speed on King St. E.

0 0.5 1
kilometres

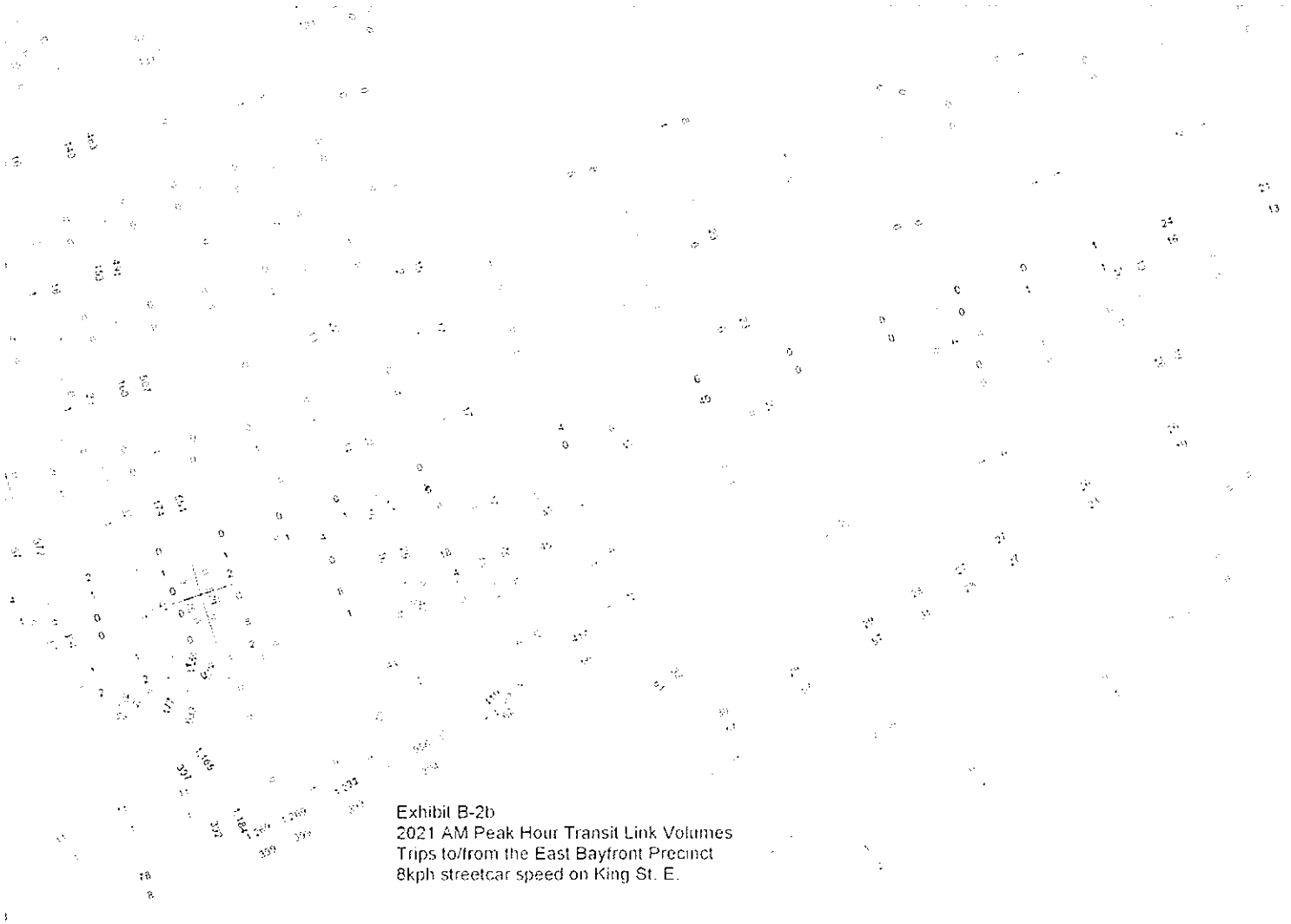


Exhibit B-2b
2021 AM Peak Hour Transit Link Volumes
Trips to/from the East Bayfront Precinct
8kph streetcar speed on King St. E.

Exhibit B-3

West Don Lands
2021 AM Peak Hour
Automobile Volumes

TTC SP 26-06-2006 DRG. No. 11843d

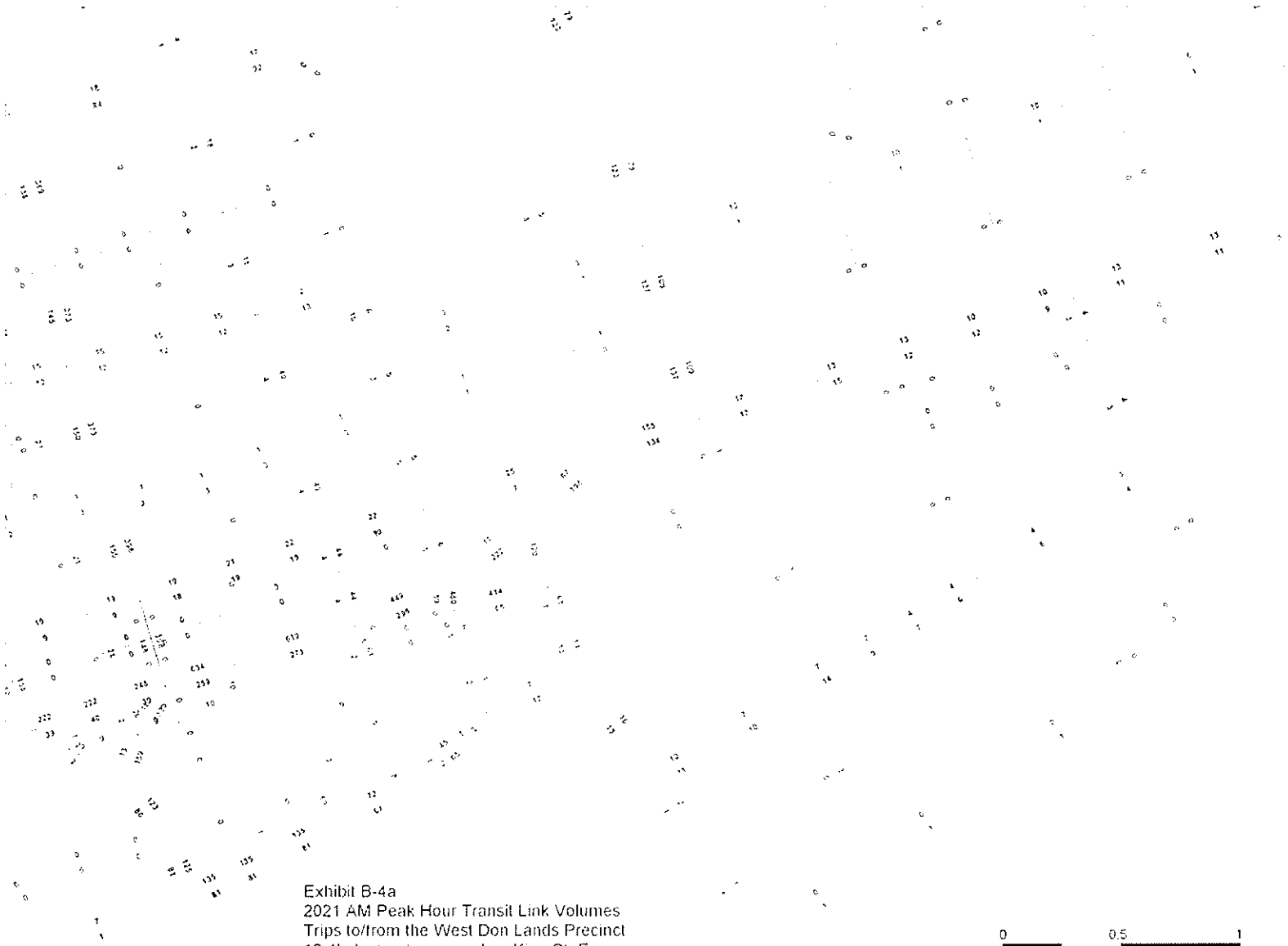


Exhibit B-4a
2021 AM Peak Hour Transit Link Volumes
Trips to/from the West Don Lands Precinct
12.4kph streetcar speed on King St. E.

0 0.5 1
kilometres

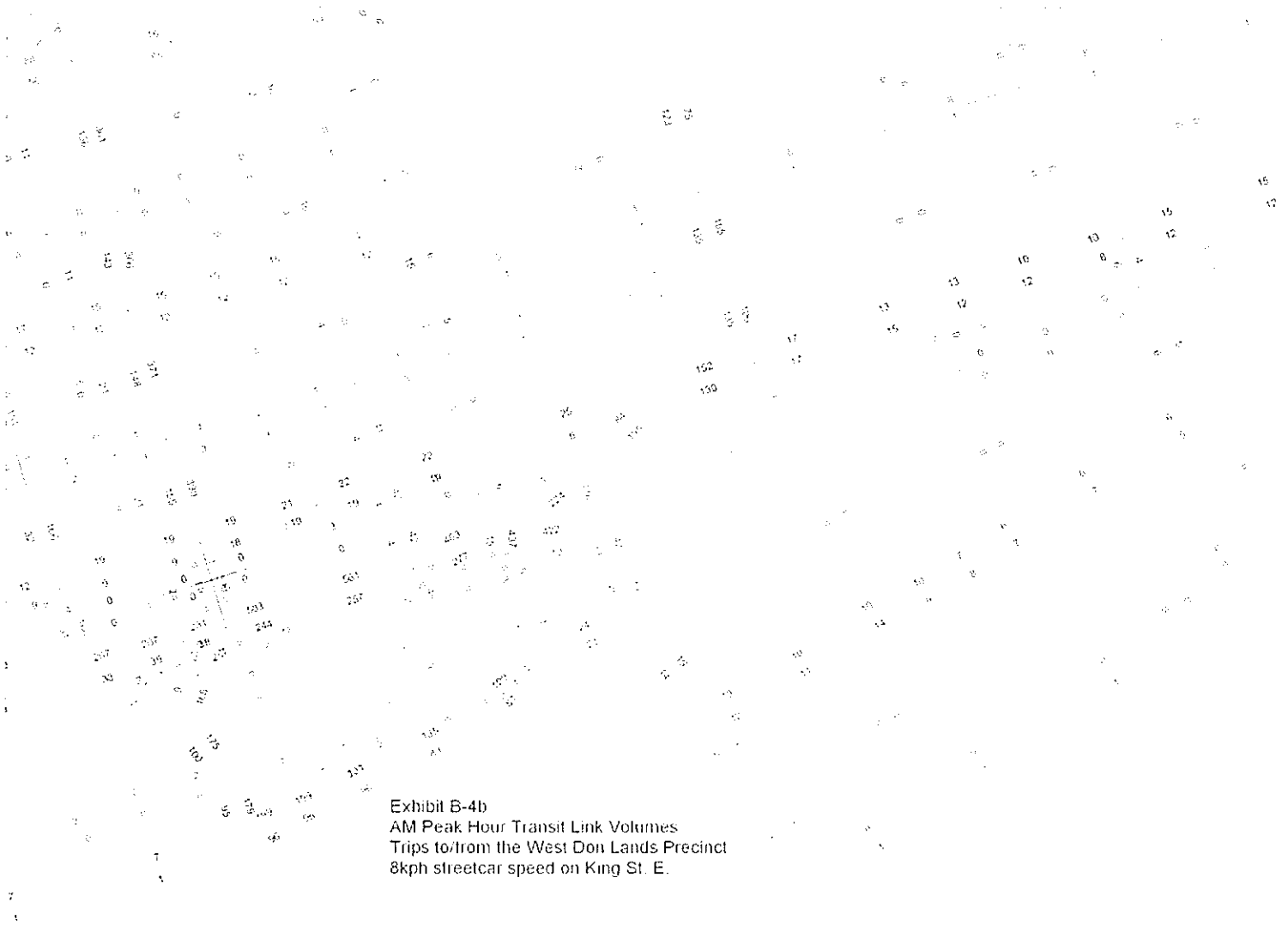


Exhibit B-4b
AM Peak Hour Transit Link Volumes
Trips to/from the West Don Lands Precinct
8kph streetcar speed on King St. E.

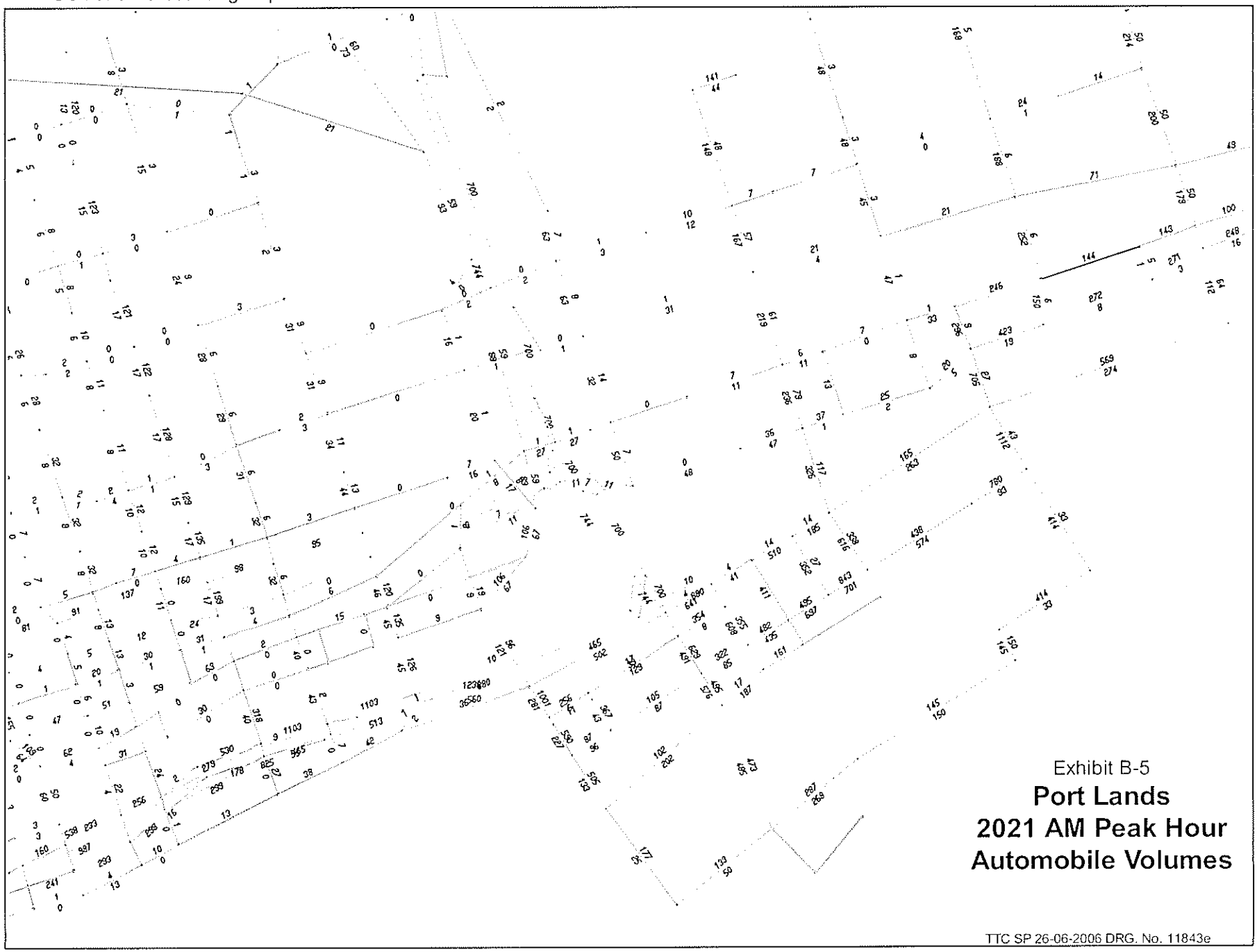


Exhibit B-5

Port Lands
2021 AM Peak Hour
Automobile Volumes

TTC SP 26-06-2006 DRG. No. 11843e

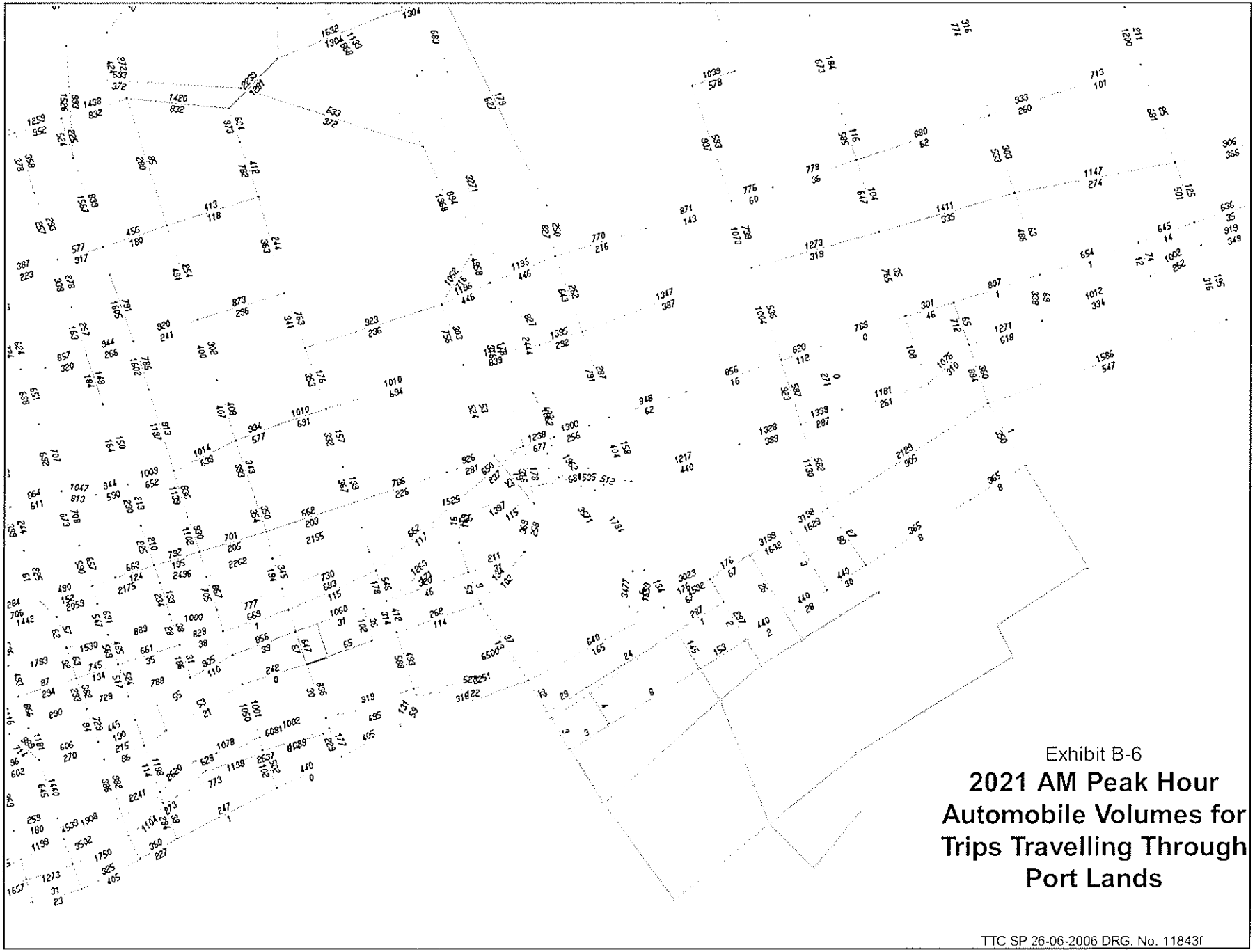


Exhibit B-6

2021 AM Peak Hour Automobile Volumes for Trips Travelling Through Port Lands

TTC SP 26-06-2006 DRG. No. 11843f

Exhibit B-7a
2021 AM Peak Hour Transit Link Volumes
Trips to/from the Port Lands Precinct
12.4kph streetcar speed on King St. E.

0 0.5 1
kilometres

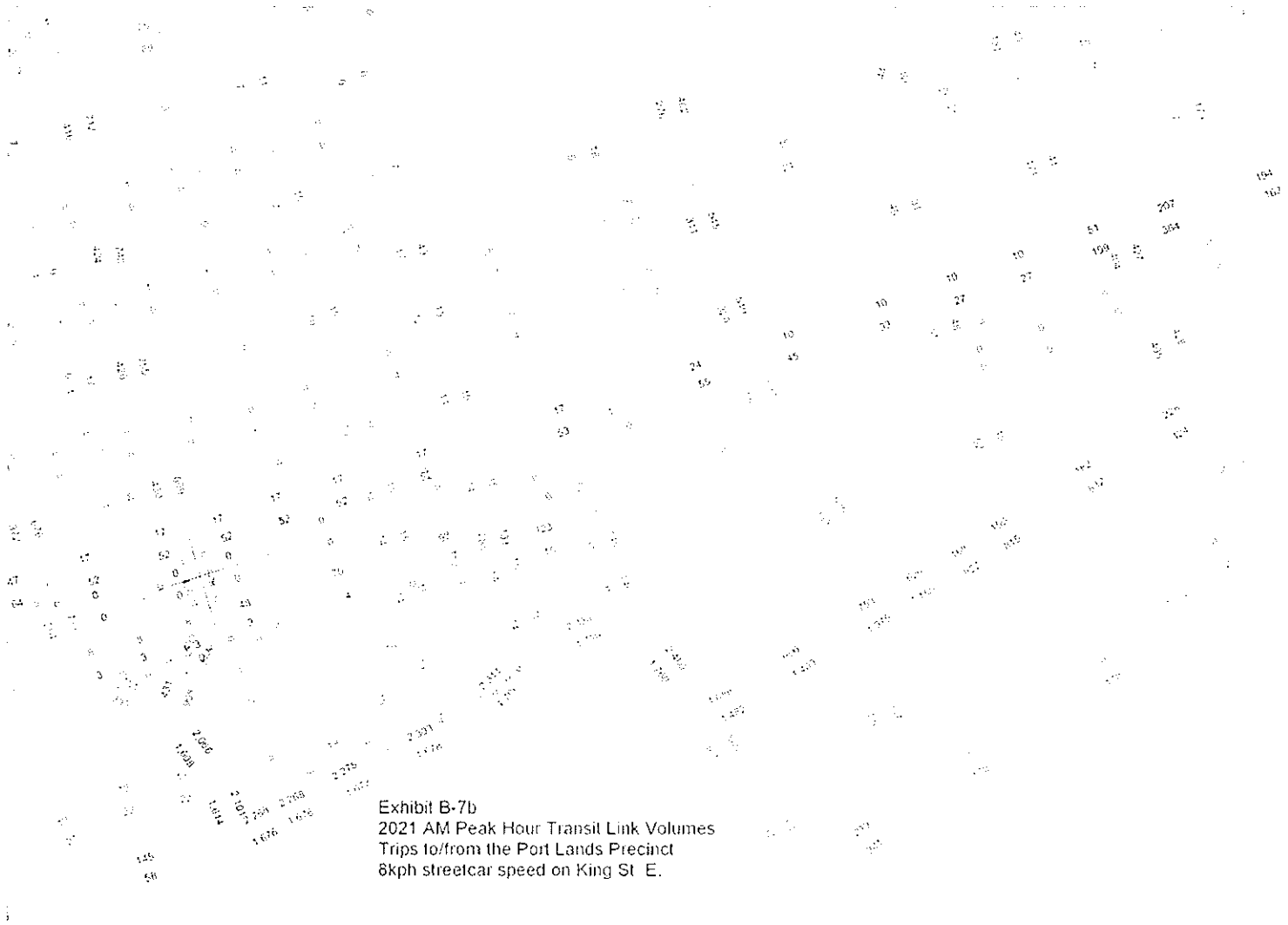


Exhibit B-7b
2021 AM Peak Hour Transit Link Volumes
Trips to/from the Port Lands Precinct
8kph streetcar speed on King St E.

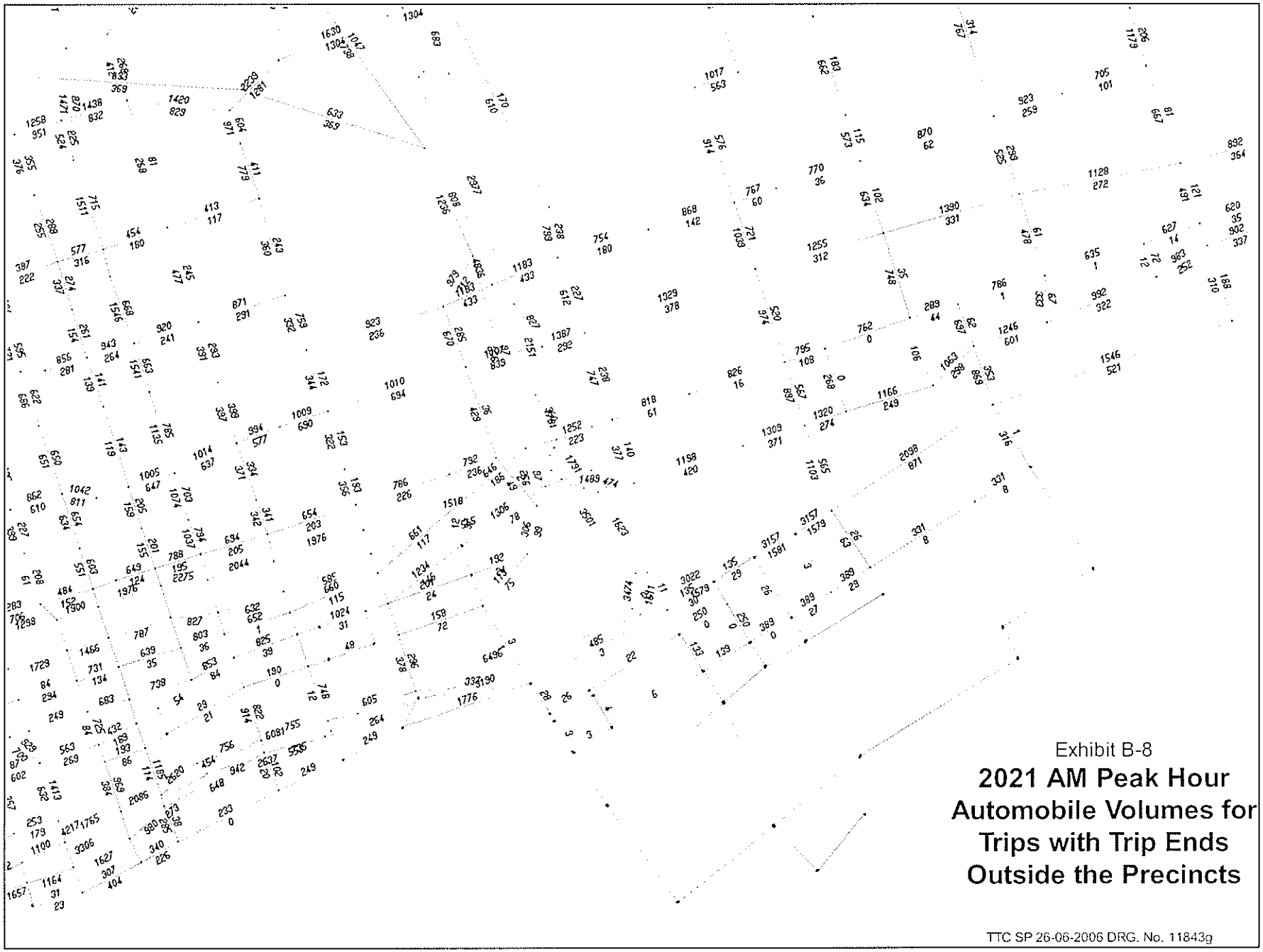


Exhibit B-8

2021 AM Peak Hour Automobile Volumes for Trips with Trip Ends Outside the Precincts

TTC SP 26-06-2006 DRG. No. 11843g

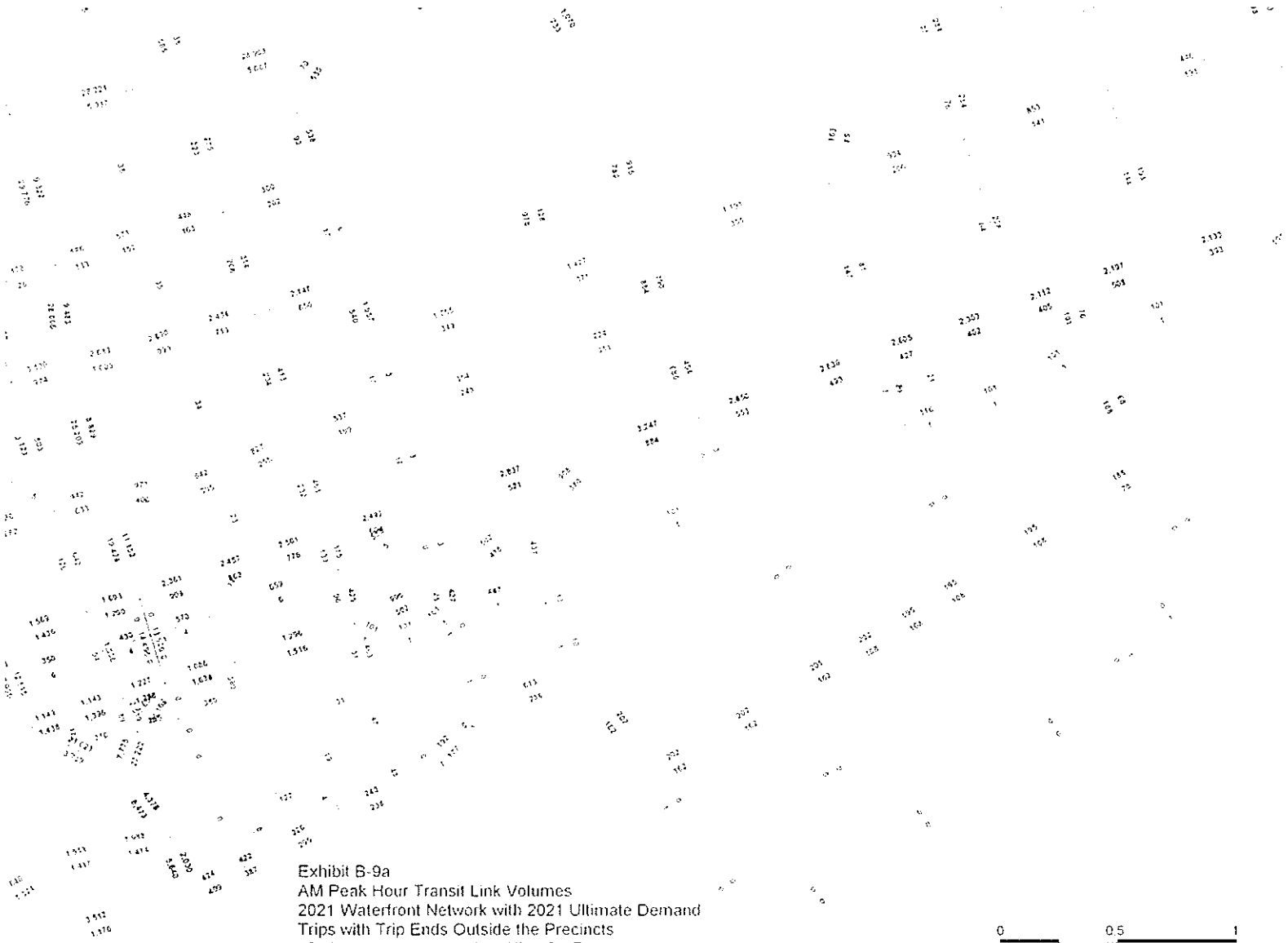


Exhibit B-9a
AM Peak Hour Transit Link Volumes
2021 Waterfront Network with 2021 Ultimate Demand
Trips with Trip Ends Outside the Precincts
12.4kph streetcar speed on King St. E.

0 0.5 1
kilometres

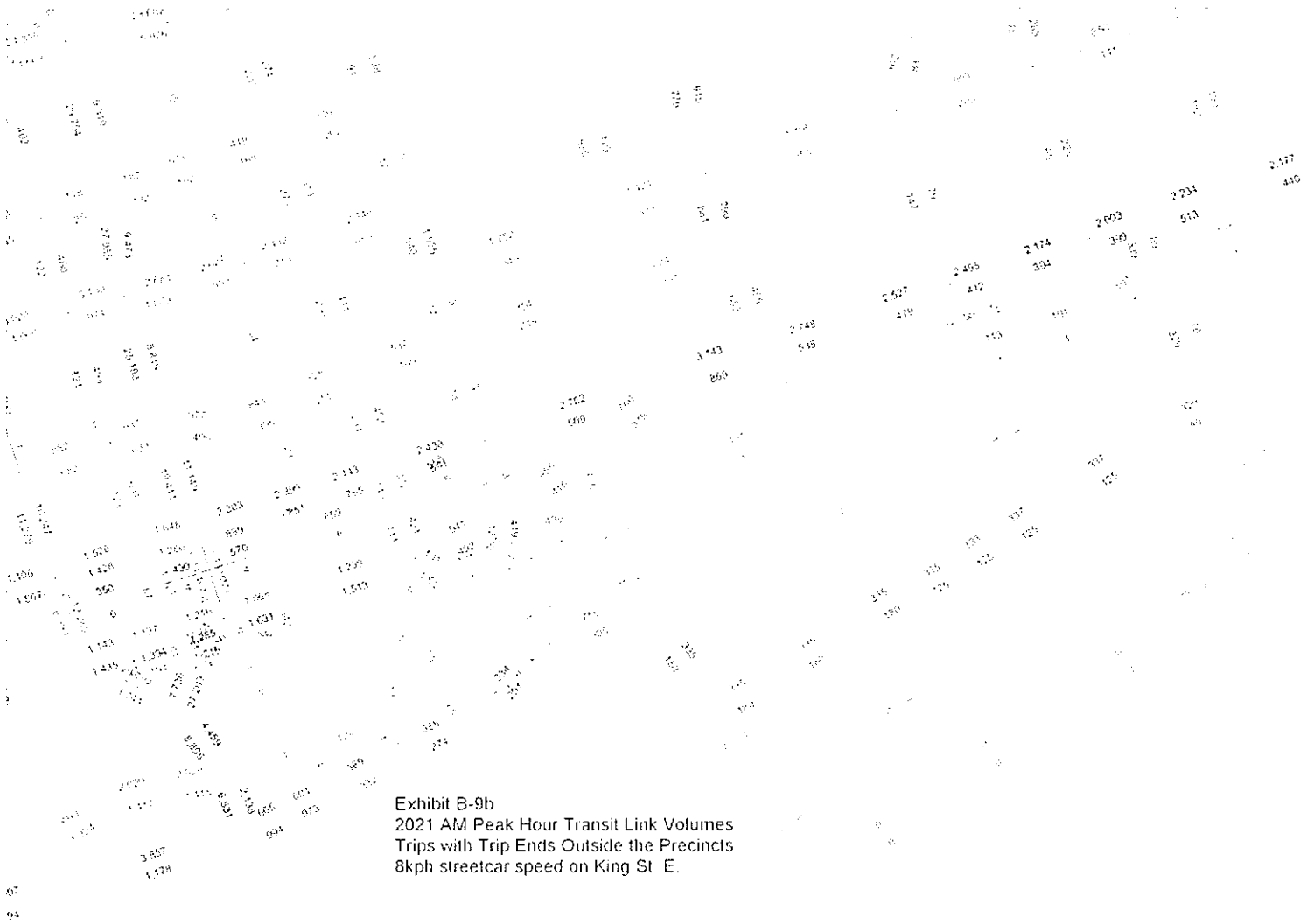


Exhibit B-9b
2021 AM Peak Hour Transit Link Volumes
Trips with Trip Ends Outside the Precincts
8kph streetcar speed on King St E.

Appendix C – Notes on Assumptions on Toronto's Future Land Use

Small-area population projections were constructed to estimate the anticipated number of households and their dwellings within 1996 Traffic Zones. The projections are background information to the City's Official Plan. The projections were based on a GTA regional forecast, the Census and occupancy rates of households by structural type of dwelling and tenure. The GTA regional forecast was prepared by the former Provincial Office of the GTA, the City of Toronto and the Regions of the GTA and published in March 2000. Toronto City Planning constructed population projections by age, sex within the envelope of the regional forecasts. The citywide projections take into account trends in births and deaths and in migration and mobility. These were converted into households using Census household occupancy rates.

The projected households were allocated to Traffic Zones in order to assess the impact of the central policies of the Official Plan. A conservative estimate of housing supply was assembled from a variety of sources in order to accurately estimate the short, medium and long-term potential housing yield in order to accommodate the projected population. These sources include residential development applications within the approvals process, opportunities for redevelopment of significant pieces of land, intensification along the Avenues well-served by public transit, and vacant and underutilized sites within the Downtown. It was determined that only approximately one-third of the available potential was required to house the anticipated population growth. The overall trajectory of the population projections to date corresponds to the pace of housing starts and completions over the past five years and has been shown to be generally on track versus the 2001 Census. Please see "Flashforward: Projecting Population and Employment to 2031 in a Mature Urban Area", available at http://www.toronto.ca/torontoplan/flashforward.htm.

With respect to the Central Waterfront, the estimates of housing supply include the residential development applications filed as of year-end 2001 and the population projections developed (by Toronto City Planning - Transportation, South District) for the Central Waterfront Part II Plan and its 37 sub-areas, scheduled into the short, medium and long terms. For the short term, the estimated implementation of the residential development proposals on hand were slotted into the three five-year periods between 1996 and 2011 based on their date of application, size and progress through the approvals process. For the medium and long term, the sub-area projections were divided between the subsequent decades, 2011-21 and 2021-31.

The Minister of Municipal Affairs and Housing inserted a population target into the Official Plan which reflects the forecasted population in 2031 based on the 2000 forecast. As part of the development of the Growth Plan for the Greater Golden Horseshoe (GGH), the regional population forecasts were updated. The forecasted population for Toronto in 2031 is slightly higher under the new 2005 forecast (3,080,000) than the 2000 forecast (3,000,000). Thus, Toronto's citywide population projections and small-area allocations predate the adoption of the Growth Plan but are consistent with it.

TTC-TWRC Waterfront Transit EAs
Demand Forecasting Report
- Addendum

March 2007

Prepared by: Demand Forecasting Technical Sub-group

Table of Contents

List of Exhibits

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List of Appendices

1 INTRODUCTION AND PURPOSE

This addendum to the Waterfront East EA Demand Forecasting Report documents the analysis undertaken to address the planning alternatives developed through the community consultation process as part of the development of terms of Reference for the TTC-TWRC Waterfront Transit EA studies.

The alternatives assessed were the following:

- Investigate enhancing transit through the Waterfront. These services include :
  - Through streetcar service along the Waterfront;
  - Waterfront East streetcar operating between West Don and Union Station via Queens Quay East;
  - Express bus service operating locally in the Beach and Portlands areas, and expressing to Union station via Lake Shore Boulevard; and
  - Parliament service between Castle Frank Station and Union Station via Queens Quay East.

- Investigate the effect of a People Mover operating between Queens Quay and Union Station.

- Investigate the option of expanding the downtown core looping of the Lake Shore Express bus service.

2 ENHANCED TRANSIT SERVICE IN STUDY AREA

The following table summarises the additional transit services that were included in the transit network used in the demand forecasting model.

Table 2-1: Description of Additional AM Peak Transit Services in Study Area

Additional Transit Services	Description
515 Waterfront streetcar speed 17.2kph headway 10 min	Operating between Dufferin loop and Queen E. / Leslie. The purpose of this is to provide service to customers who want to travel along the waterfront without having to transfer at Union Station.
567 West Don streetcar speed 17.0kph headway 4 min	Operating between West Don area and Union Station via Cherry and Queens Quay. The transit network in the original forecasting work did not have a direct service from the West Don to Union station.
566 Lake Shore Express bus speed 20kph on Lake Shore, Cherry and Commissioners speed 16kph on Queen E. headway 4min	Operating between Neville loop and Union Station via Queen E., Leslie, Commissioners, Cherry, Lake Shore E. to on-street loop to serve Union Station. Local and limited stop service on Queen E. and on Commissioners. The purpose of this service to provide quicker service for Beach and Portlands customers who were originally forecast to take a Queens Quay E. streetcar to get to Union Station.

565 Parliament bus speed 17kph on Queens Quay speed 12kph on Parliament headway 7 min	Operating between Castle Frank station and Union station via Parliament, Queens Quay E. to Union Station. The purpose of this is to provide service to Union Station for customers along Parliament.
514 King speed 17kph on Commissioners speed 12.4kph Cherry to Spadina headway 4 min	Operating along King St. between Spadina and Commissioners serving the West Don Lands precinct. The new routing now uses Cherry St. to connect King St. E with Commissioners.
504 King speed 12.4kph headway 4 min	The original diversion into the West Don area has been removed and all 504 King service is operating as per today's routing.

The transit services listed in Table 2-1 were added to the original base 2021 network as described in the Demand Forecasting report. The resulting network is shown in Exhibit 2-1. It is referred to as the Enhanced 2021 network.

Exhibit 2-1: Enhanced 2021 Transit Network

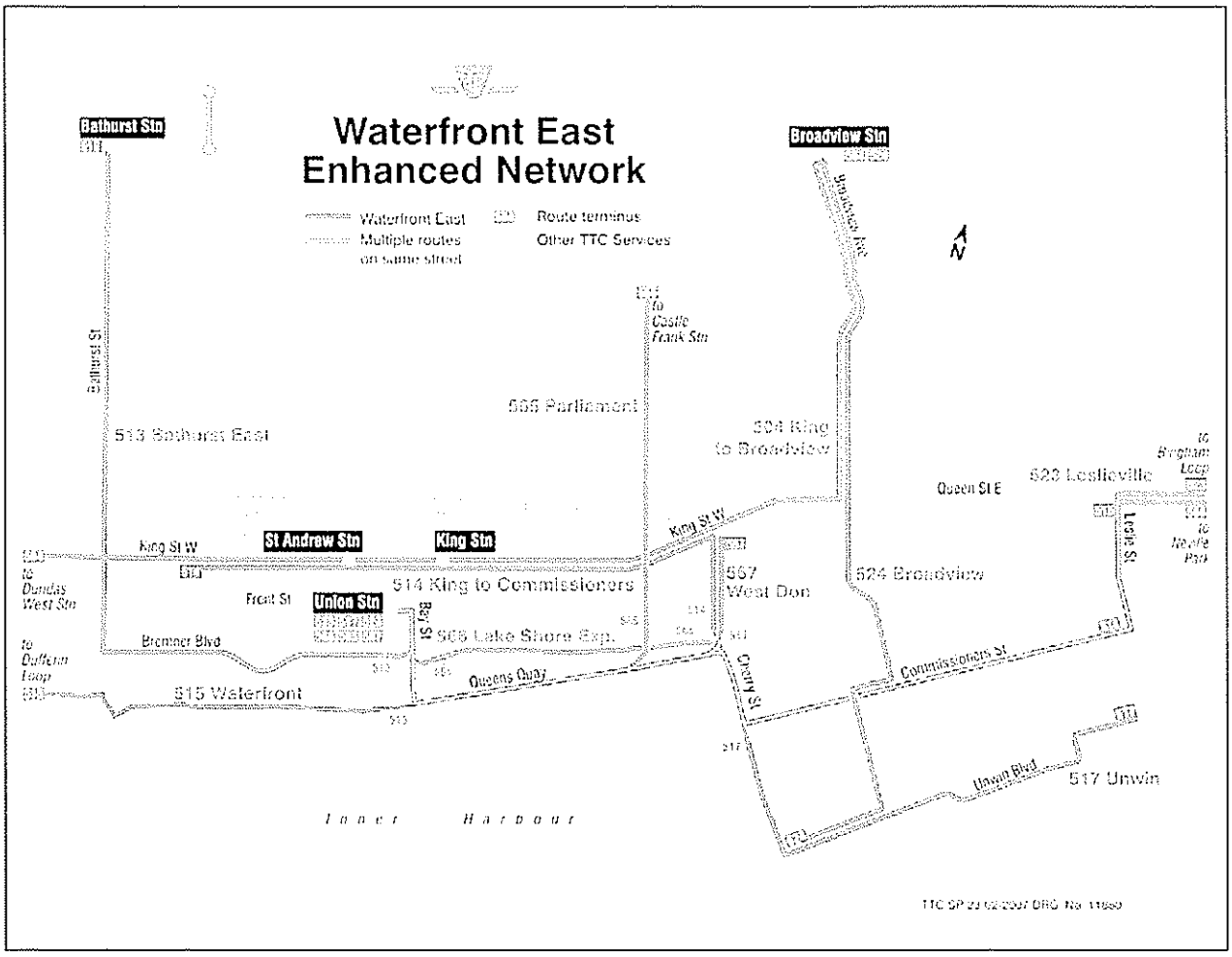


Table 2-2 lists the AM peak hour transit volumes on specific roads in the Waterfront East. These volumes and those for the rest of the Waterfront are shown in Exhibit A-1 in Appendix A.

Table 2-2: Transit Link Volumes at Selected Locations

Location	Direction	2021 Transit AM Peak Hr Volume
Queens Quay East		
west of Jarvis	WB	2200
west of Jarvis	EB	1400
west of Cherry	WB	3500
west of Cherry	EB	2200
King St. East		
west of Parliament	WB	1800
west of Parliament	EB	700
Cherry St.		
north of CN tracks	NB	900
north of CN tracks	SB	350
crossing channel	NB	3200
crossing channel	SB	2000
Lake Shore Blvd. E. (566 Lake Shore Express)		
west of Parliament	WB	1600
west of Parliament	EB	1200
Parliament St.		
north of King	NB	500
north of King	SB	350
south of Wellesley	NB	550
south of Wellesley	SB	500
Queens Quay and Yonge (515 Waterfront streetcar)		
through riders westbound	WB	140
through riders eastbound	EB	80

Table 2-3 shows the new modal split figures for the Enhanced 2021 network. This table is comparable to Table 6.5 of the July 2006 report showing the mode split forecast for the 2021 "Base Network" analysis.

Table 2-3: Modal Split Tables
Mode Split Table derived from GTA Model for Waterfront East Enhanced 2021 network
Mode Split Summary of AM Peak Period Person-Trips to and from Precincts

	# AM Peak Trips Destined to Precincts			# AM Peak Trips Originating from Precincts		
	East Bayfront	West Don Lands	Port Lands	East Bayfront	West Don Lands	Port Lands
Auto	1480	1650	10960	2730	2010	7690
Transit	1120	1310	5370	2850	2040	7030
Walk/Cycle/ Other	460	450	1100	1390	960	1570
Total	3060	3410	17430	6970	5010	16290
Modal Split						
Auto	48%	48%	63%	39%	40%	47%
Transit	37%	39%	31%	41%	41%	43%
Walk/Cycle/ Other	15%	13%	6%	20%	19%	10%
Total	100%	100%	100%	100%	100%	100%

The table, in comparison with Table 6-5 of the previous report, shows that, as expected, transit mode split is 1% to 2% higher with the higher quality and quantity of transit service in the Waterfront Area provided by the "enhanced" network.

3 PEOPLE MOVER TO UNION STATION

This section contains the results from investigating the effects of having a People Mover operating between Union station and Queens Quay. The purpose of the People Mover is to provide a short but frequent service to transfer customers between Union Station and Queens Quay, thus allowing continuous streetcar service on Queens Quay between the east and west.

A travel time elasticity approach was used to estimate the loss of customers due to the inconvenience of having an additional transfer. The resulting mode split figures are shown in Table 3-1. When compared to Table 2-3, one can see that the transit mode split for AM peak trips originating from the precincts decrease to about 34% from 42%.

Table 3-1: Adjusted Mode Split Table – Enhanced 2021 Network with People Mover

	# AM Peak Trips Destined to Precincts			# AM Peak Trips Originating from Precincts		
	East Bayfront	West Don Lands	Port Lands	East Bayfront	West Don Lands	Port Lands
Auto	1704	1912	12034	3300	2418	9096
Transit	896	1048	4296	2280	1632	5624
Walk/Cycle/ Other	460	450	1100	1390	960	1570
Total	3060	3410	17430	6970	5010	16290
Modal Split						
Auto	56%	56%	69%	47%	48%	56%
Transit	29%	31%	25%	33%	33%	35%
Walk/Cycle/ Other	15%	13%	6%	20%	19%	10%
Total	100%	100%	100%	100%	100%	100%

4 EXPANDED BUS LOOP IN DOWNTOWN CORE

There was a request to investigate expanding the downtown operation of the Lake Shore Express bus route from the Queens Quay-York-Front-Bay on-street bus loop to a loop further north to Adelaide Street. The forecasting results from the Enhanced 2021 network scenario were used to analyse this loop expansion.

TTC staff looked at the AM peak transit trips originating from the precincts and destined to the zones in the downtown area via transit services on Queens Quay or Lake Shore Boulevard (see Exhibit B-1 in Appendix B). The analysis indicated that the smaller southern loop will accommodate approximately 10% of the transit trips while the expanded loop to Adelaide Street will accommodate approximately 14% of the transit trips. The additional 4% corresponds to approximately 200 trips.

5 SUMMARY

This addendum report documented the analysis undertaken to address the planning alternatives developed through the community consultation process.

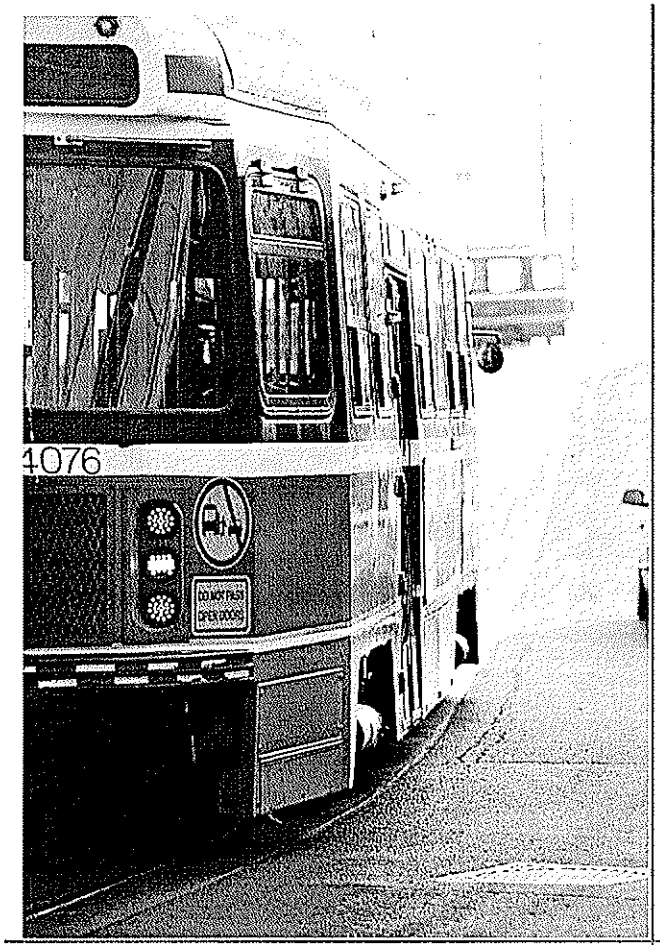
Appendix A - 2021 Enhanced Network – AM Peak Hour Link Volume Forecasts

Exhibit A-1
2021 Enhanced Network
AM Peak Hour Link Volumes

Appendix B – Plot of Precinct Transit Trips Destined to Downtown

Exhibit B-1: Plot of Precinct Transit Trips Destined to Downtown

There approximately 5300 AM peak period transit trips that originate from the precincts and are travelling along the Waterfront corridor ie Queens Quay E. / Lake Shore E. to Union station. Approximately 500 or 10% of the trips are destined to the area south of Queen St. between Spadina Ave. and Church St. This area is assumed to be the catchment area for the on-street loop of Queens Quay-York-Front-Bay. The catchment area is assumed to be extended to Dundas St. if the on-street loop were to be further north to Adelaide St. The area adds another 200 trips or 4%.



Waterfront Transit Environmental Assessments

- West Don Lands City of Toronto

Cherry Street - Design Alternatives

Traffic Volume Forecasts and Traffic Operations Analysis

TTC-WATERFRONToronto

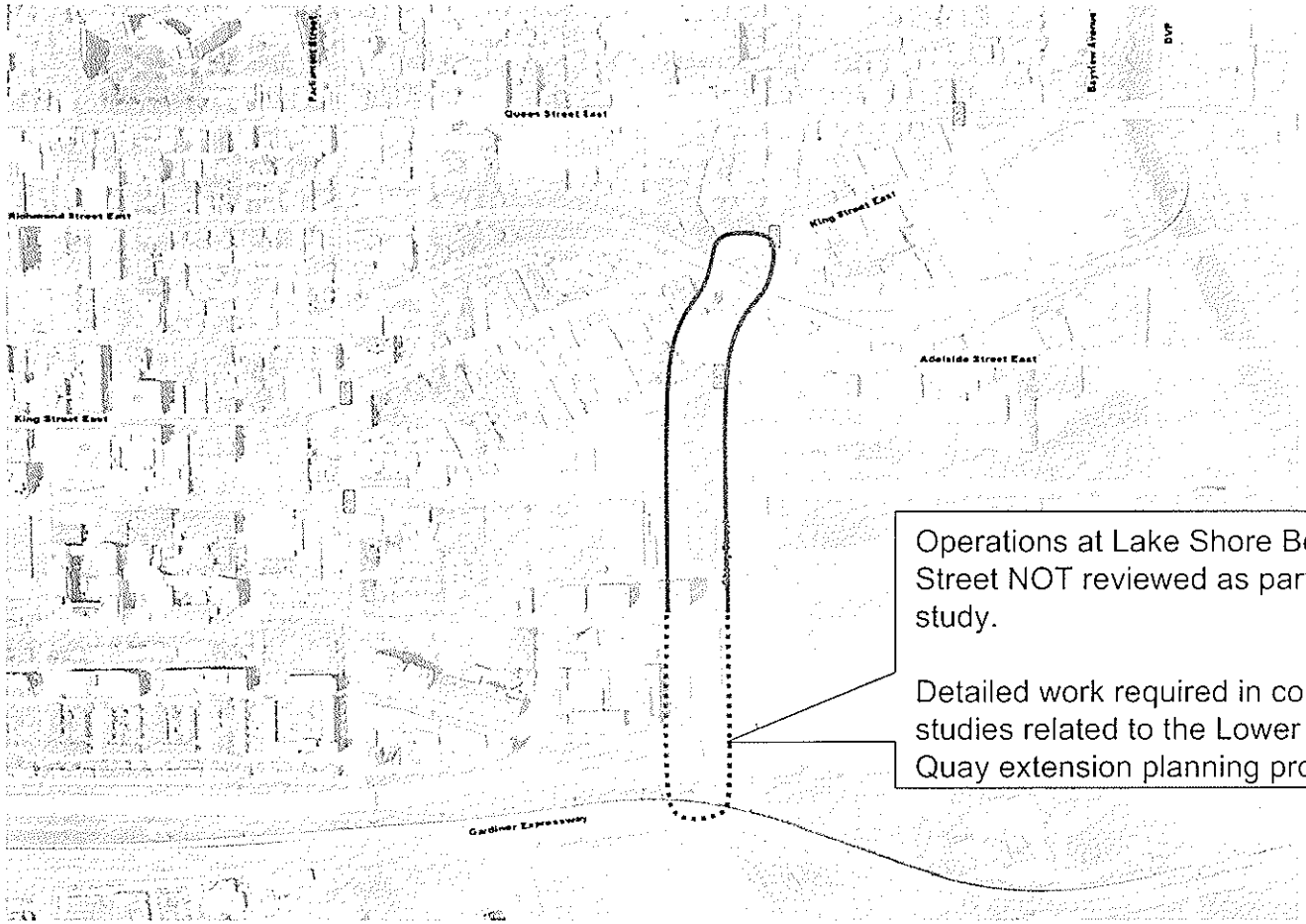
BA GROUP
Transportation Consultants

June 2007

Scope of Review

- Review and refine 'base' future traffic forecasts prepared as part of West Don Lands Precinct planning and related studies incorporating:
  - reassignment of existing traffic to reflect River Street – Bayview Avenue connection closure
  - traffic forecasts for new development in West Don Lands, East Bayfront and Port Lands Precincts
  - allowances for Distillery District development application
- Develop traffic forecasts for each design alternative under consideration
  - using base future traffic forecasts
  - re-assign volumes for options as required
- Outline analysis assumptions including:
  - signal phasing parameters
  - turn prohibitions / restrictions if required
  - lane configurations
- Review traffic operations at intersections on Cherry Street – King to Mill
- Review traffic volumes on area streets

Study Area Considered



Operations at Lake Shore Boulevard / Cherry Street NOT reviewed as part of this preliminary study.

Detailed work required in conjunction with studies related to the Lower Don and Queens Quay extension planning processes.

'Base' Traffic Volume Forecasts - Basic Methodology

- 5 step process:

- Establish existing area traffic volumes
  - morning and afternoon peak hours
- Reassign existing traffic:
  - closure of Bayview – River connection
  - planned road network (West Don Lands)
- Include new Precinct traffic:
  - West Don Lands
  - East Bayfront
  - Port Lands
- Incorporate specific allowances for development in Distillery District

'Base' Traffic Volume Forecasts - References and Data Sources

• Existing traffic	-	West Don Lands Transportation Precinct Planning *- LEA Consulting, June 2004*
	-	River Street Extension & Bayview/River Unnamed Road Connection, West Don Lands EA Addendum *- MMM, May 2006*
	-	WDL Traffic and Functional Design Analysis Summary Letter *- MMM, November 2006*
	-	Traffic Assessment Reports- East Bay Front Precinct *– BA Group, March 2004 / January 2006*
• West Don Lands Precinct traffic	-	*based upon* West Don Lands Transportation Precinct Planning Study *- LEA Consulting, June 2004*
• East Bayfront Precinct traffic	-	East Bayfront Precinct, Transportation Assessments *- BA Group, March 2004 / January 2006*
	-	East Bayfront Plan of Sub-Division Application, Transportation Analysis *- BA Group, May 2007*
• Port Lands Precinct traffic	-	Waterfront East Environmental Assessment Demand Forecasting Report, July 2006 *- Demand Forecasting Technical Sub-group (City of Toronto / TTC)*
• Planned cross-street lane configurations at Cherry (i.e. Mill Street, Front Street)	-	West Don Lands, Class Environmental Assessment Master Plan *- LEA Consulting, December 2004*

'Base' Traffic Volume Forecasts – Existing Traffic

- Based upon existing volumes referenced in LEA, BA Group and MMM studies

  - information collected in 2004 / 2005 by LEA / MMM / BA /City

- Heavy commuter use of linkages (Front / Eastern / Mill) to / from Bayview Avenue:

  - Bayview (south of River) - +/- 610 to 975 two-way vehicles AM and PM peak hours
  - Front (at Cherry) - +/- 635 to 665 two-way vehicles AM and PM peak hours
  - Mill (at Cherry) - +/- 100 to 160 two-way vehicles AM and PM peak hours
  - Eastern (at Bayview) - +/- 60 to 65 two-way vehicles AM and PM peak hours

- Existing traffic on Bayview generally reflects 'through' (commuter) traffic use of road system within West Don Lands Precinct:

  - +/-7,000 to 8,000 vehicles / day

- River – Bayview (to be closed) connection carries significant volume today

  - +/- 845 to 665 two-way vehicles AM and PM peak hours

'Base' Traffic Volume Forecasts – General Growth Allowances

- No general growth allowances are applied to existing volumes due to:

  - comprehensive and significant series of specific allowances for local area traffic
  - future changes in travel mode choice from automobile to other modes
  - provide sufficient infrastructure without encouraging incremental 'through' auto travel
  - policy considerations with respect to accommodating future travel demand growth

- Prior studies included 10 percent general allowance for 'growth'

'Base' Traffic Volume Forecasts – West Don Lands Traffic

- Forecasts based upon:

  - assignments in West Don Lands Transportation Assessment, Figure 3.1, LEA Consulting ,June 2004

- Refined based upon:

  - current block development permissions
  - current planned road network connections
  - previous trip generation parameters
  - previous 'macro' trip distribution parameters
  - assumed Lake Shore Boulevard / Cherry (North) intersection configured as per Secondary Plan

'Base' Traffic Volume Forecasts – East Bayfront Traffic

- Forecasts based upon:

  Jarvis to Parliament:
  - *East Bayfront Plan of Sub-Division Application, Transportation Analysis, May 2007*

  East of Parliament:
  - *Development block density potential (original Precinct Plan)*
  - *Trip generation parameters adopted for Jarvis to Parliament (BA Group studies)*
  - *Macro travel patterns adopted for Jarvis to Parliament (BA Group studies)*

- Assignments reflect:

  - *Extension of Queens Quay East to Cherry Street (South)*
  - *Presume Lake Shore Boulevard / Cherry (North) intersection reconfigured as per Secondary Plan*

'Base' Traffic Volume Forecasts – Distillery District Development

- Proposed development:
  - *+/- 1,250 new residential condominium units*
  - *additional 120 new commercial/retail public parking spaces*

- Access proposed to Parliament, Cherry & Mill
  - *assumed right turns only on Cherry*
  - *400 proposed units will have access only on Mill Street*
  - *850 units & commercial / retail uses have access on Parliament & Cherry*

- Trip generation assumptions:
  - *residential: 0.18 two-way trips / unit*
  - *net new parking: based upon parking discharge factor (0.25 and 0.40 trips / space)*
    assumed 'net new' supply = 120 spaces

- Network assignment based upon:
  - *TIS Report prepared by BA Group for Gooderham & Worts Distillery Site Redevelopment Project*

'Base' Traffic Volume Forecasts – Port Lands Traffic

- Allowances based upon Waterfront East EA Demand Forecasting Report, July 2006

  - Port Lands auto traffic forecasts (AM)
  - PM peak traffic link volumes are complementary to AM peak traffic link volumes

- Nominal balancing of demands between Parliament and Cherry corridors:

  - Cherry volume increased to reflect average of Parliament and Cherry forecast combined
  - Forecast modelled Parliament volume maintained

FIGURES

Figure 1

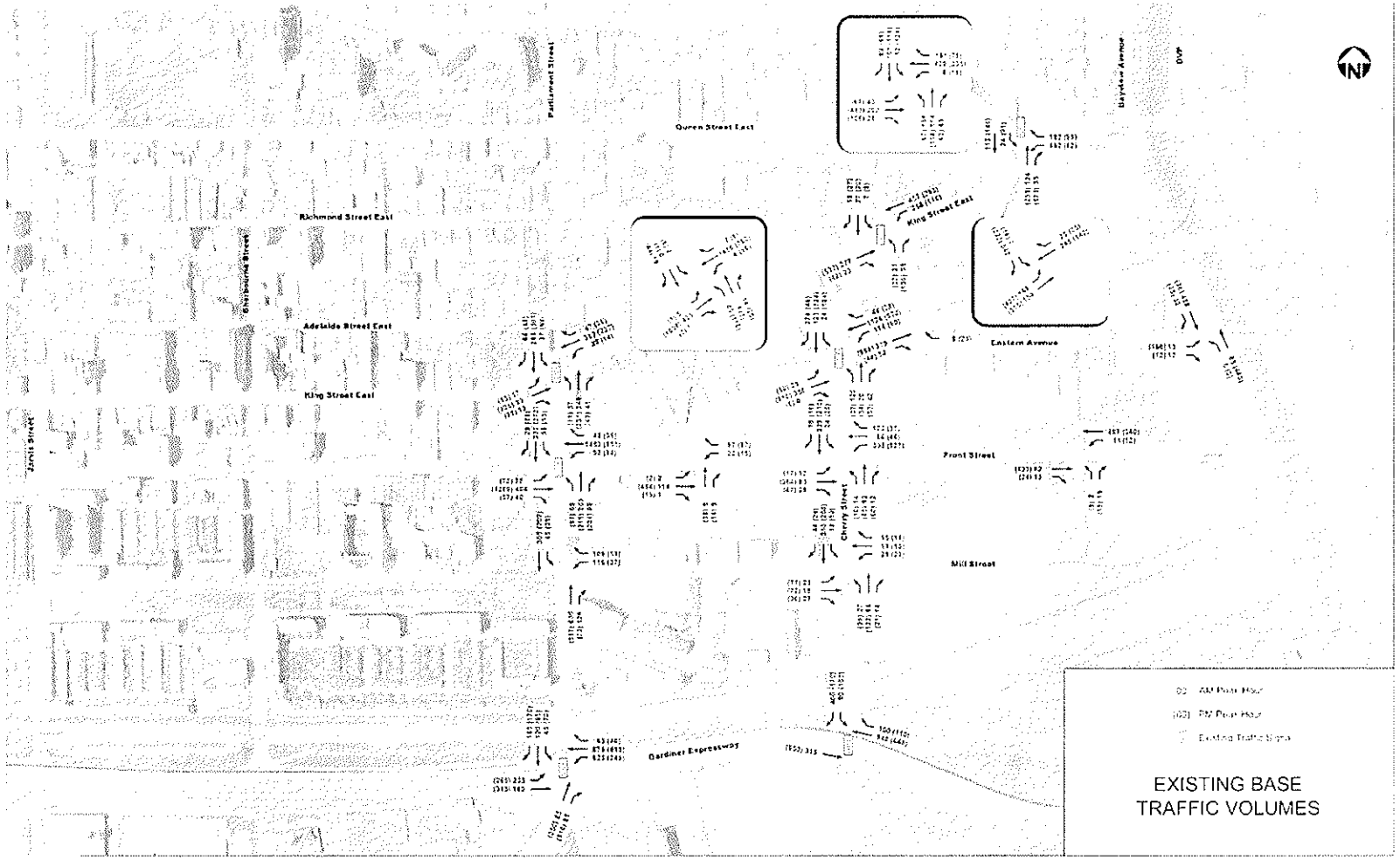

Richmond Street East
Adelaide Street East
King Street East
Queen Street East
King Street East
Eastern Avenue
Front Street
Cherry Street
Mill Street
Gardiner Expressway
EXISTING BASE
TRAFFIC VOLUMES

Figure 2

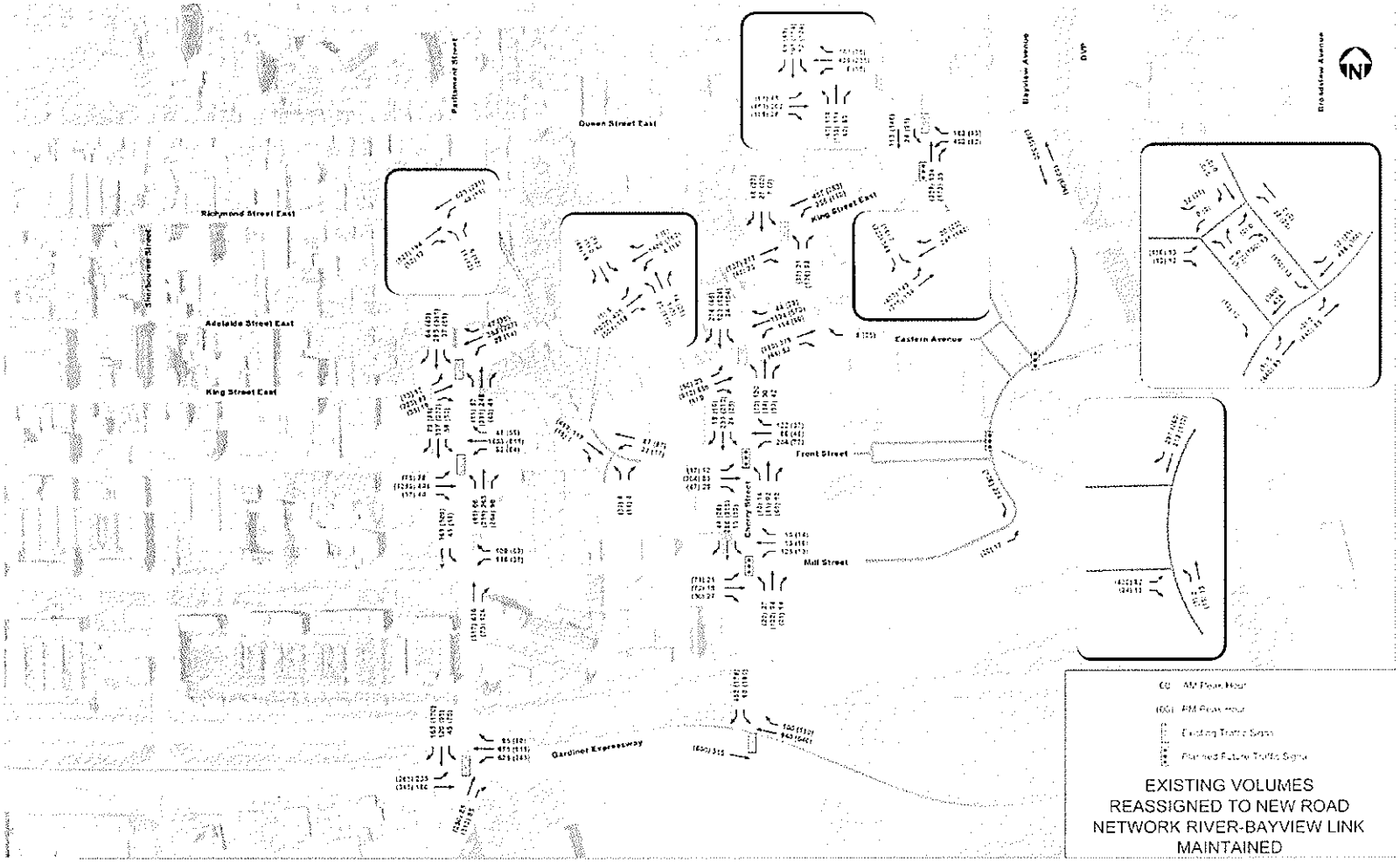

Parliament Street
Queen Street East
Richmond Street East
Adelaide Street East
King Street East
Sherbourne Street
King Street East
Eastern Avenue
Bayview Avenue
DVP
Broadview Avenue
Front Street
Cherry Street
Mill Street
Gardiner Expressway
EXISTING VOLUMES
REASSIGNED TO NEW ROAD
NETWORK RIVER-BAYVIEW LINK
MAINTAINED

Figure 3i

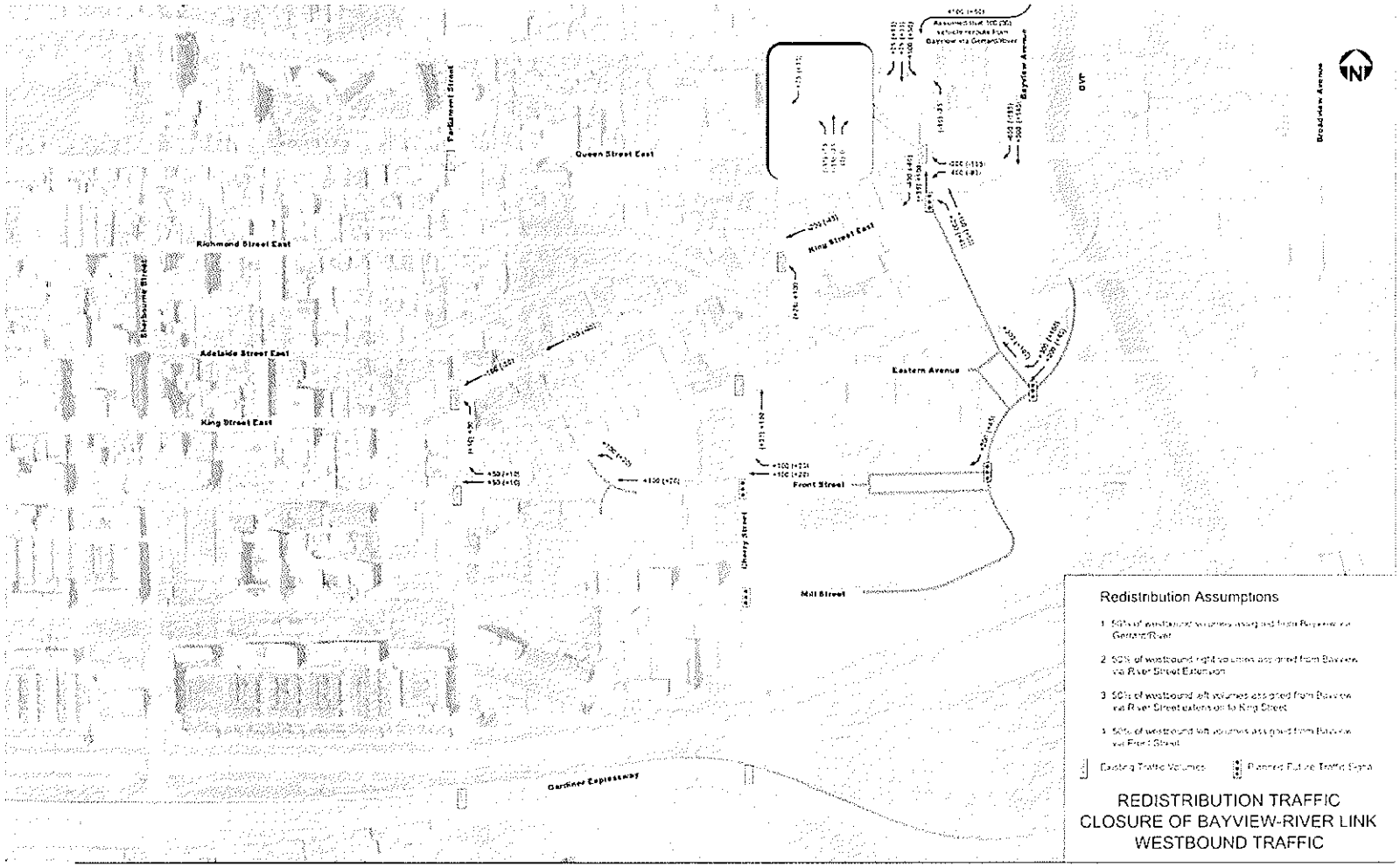

Queen Street East
Richmond Street East
Adelaide Street East
King Street East
Parliament Street
Sherbourne Street
King Street East
Eastern Avenue
Front Street
Cherry Street
Mill Street
Bayview Avenue
Broadview Avenue
DVP
Gardiner Expressway
Redistribution Assumptions
REDISTRIBUTION TRAFFIC
CLOSURE OF BAYVIEW-RIVER LINK
WESTBOUND TRAFFIC

Figure 3ii

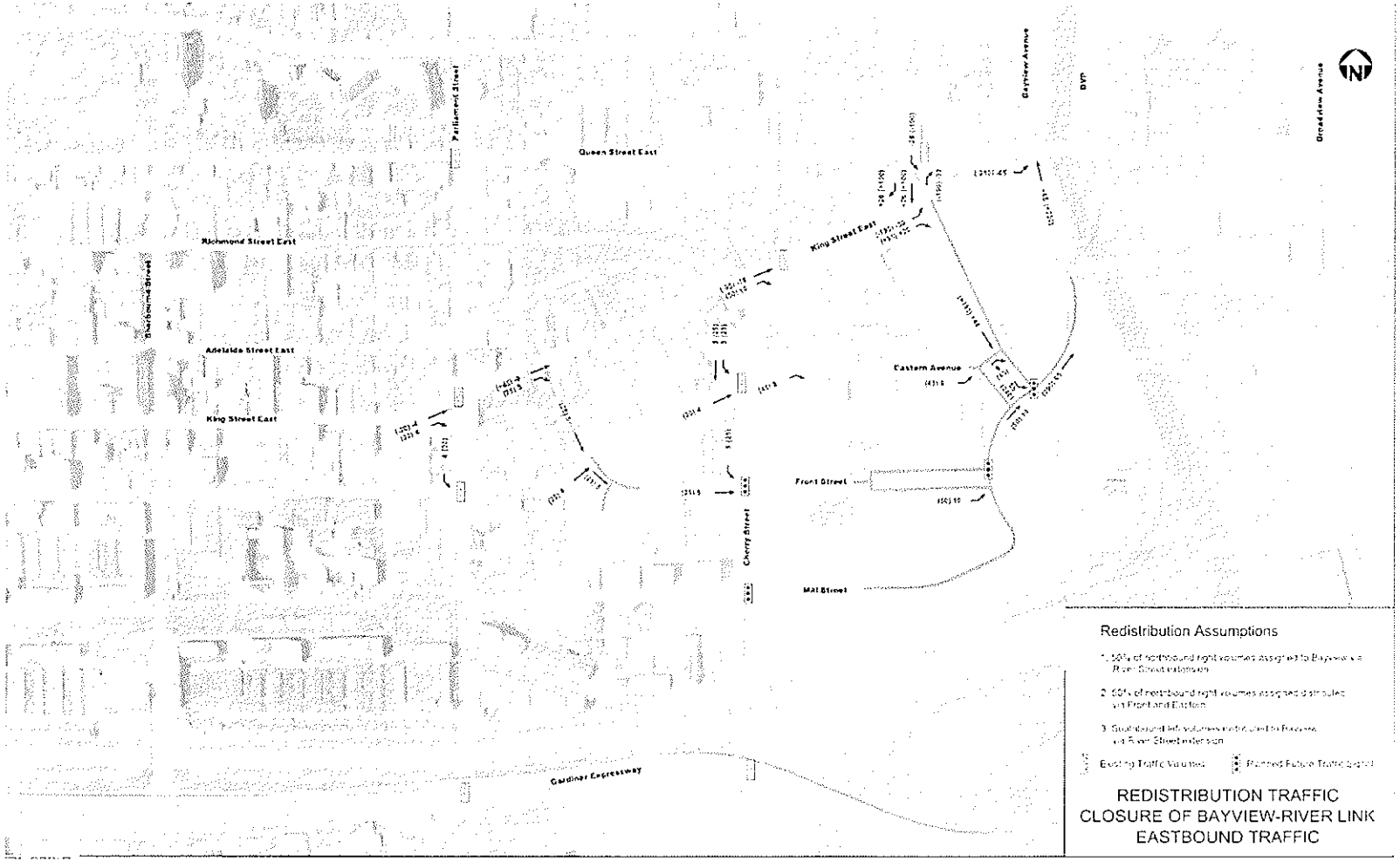

Queen Street East
Richmond Street East
Adelaide Street East
King Street East
Parliament Street
Sherbourne Street
Bayview Avenue
DVP
Broadview Avenue
Eastern Avenue
Front Street
Cherry Street
Mill Street
Gardiner Expressway
Redistribution Assumptions
REDISTRIBUTION TRAFFIC
CLOSURE OF BAYVIEW-RIVER LINK
EASTBOUND TRAFFIC

Figure 4

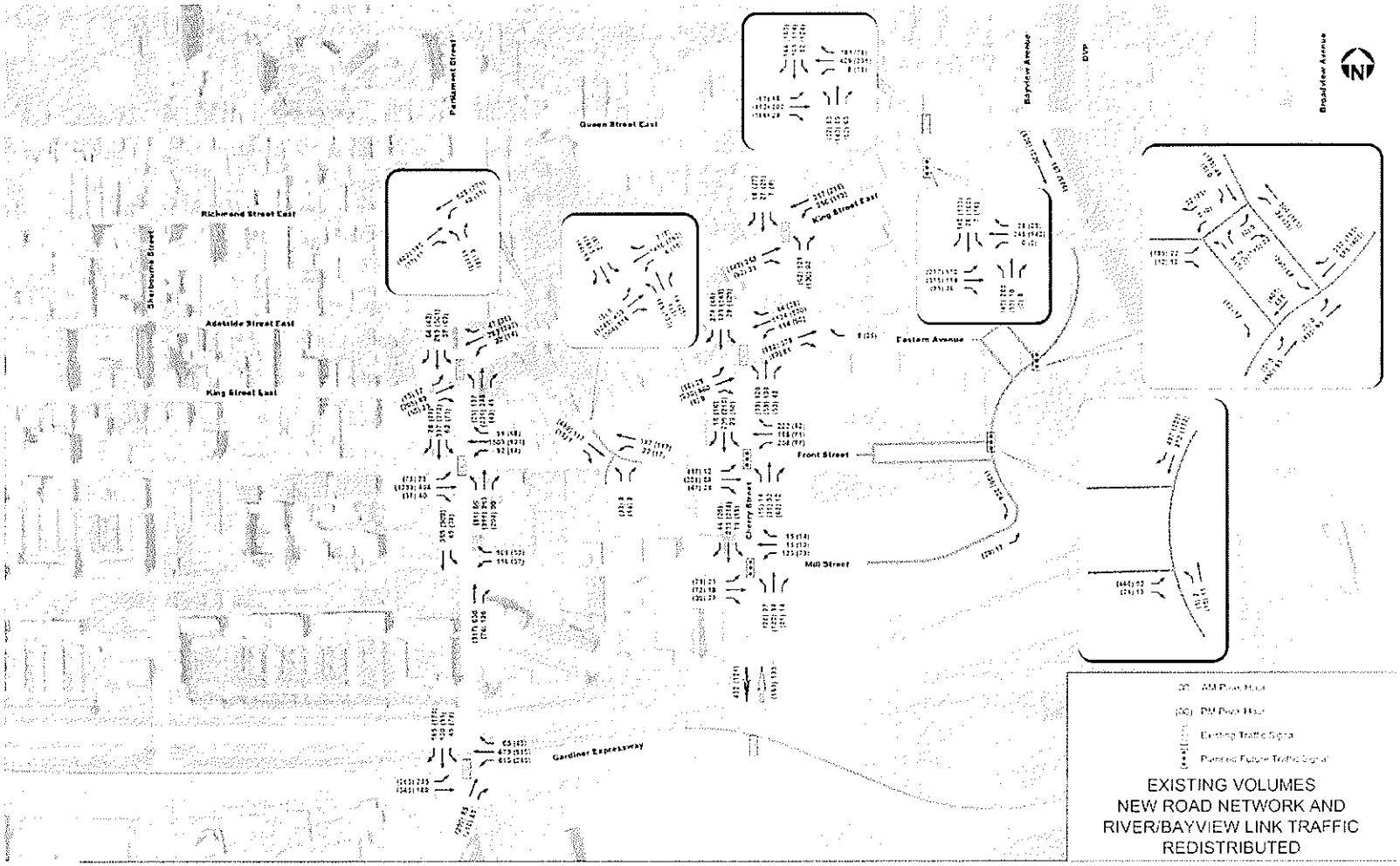

Queen Street East
Richmond Street East
Adelaide Street East
King Street East
Sherbourne Street
Parliament Street
Bayview Avenue
DVP
Broadview Avenue
Eastern Avenue
Front Street
Cherry Street
Mill Street
Gardiner Expressway
EXISTING VOLUMES
NEW ROAD NETWORK AND
RIVER/BAYVIEW LINK TRAFFIC
REDISTRIBUTED

Figure 5

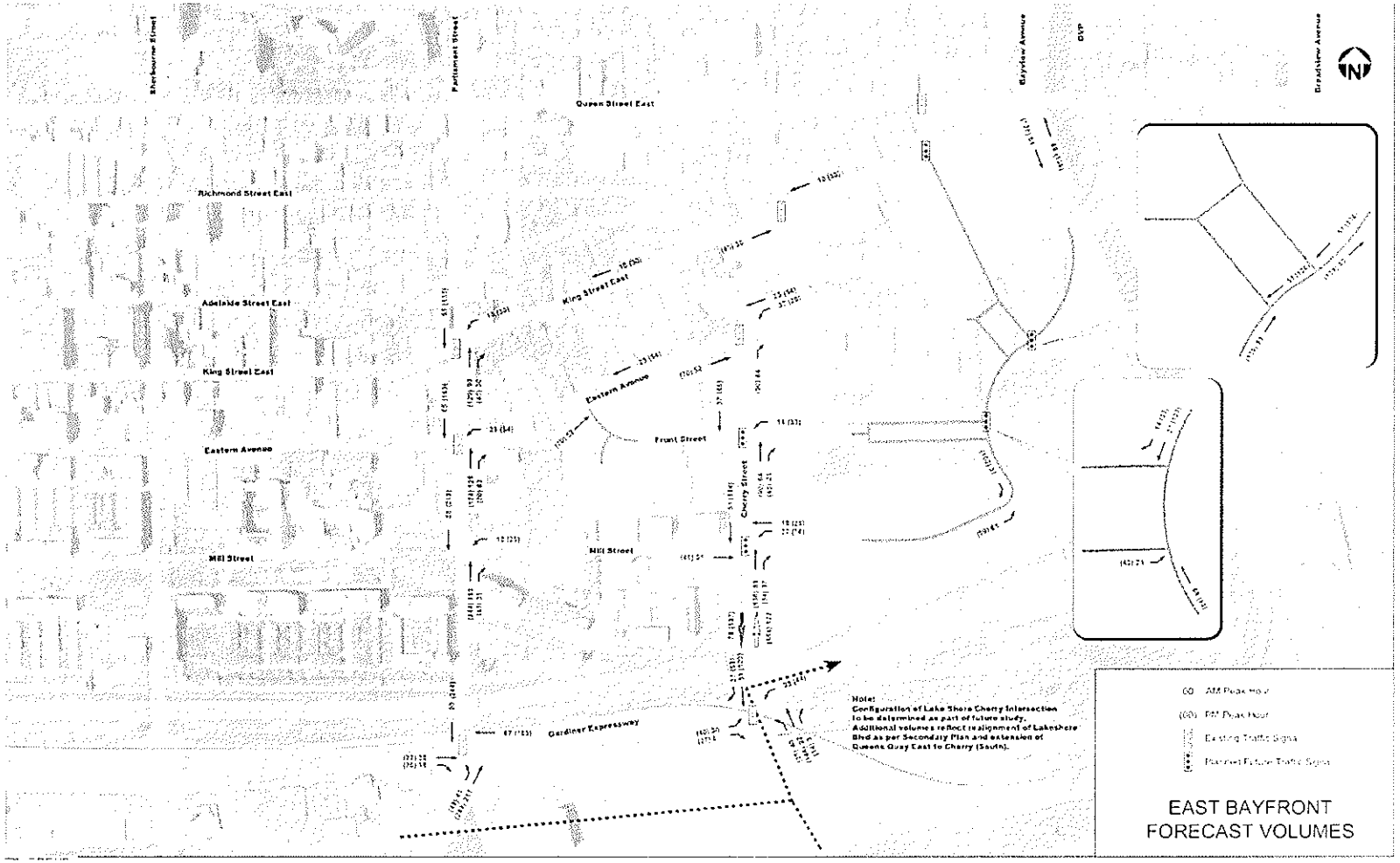

Sherbourne Street
Parliament Street
Queen Street East
Richmond Street East
Adelaide Street East
King Street East
Eastern Avenue
Mill Street
Front Street
Cherry Street
Bayview Avenue
DVP
Broadview Avenue
Gardiner Expressway
Note:
Configuration of Lake Shore Cherry Intersection to be determined as part of future study.
Additional volumes reflect realignment of Lakeshore Blvd as per Secondary Plan and extension of Queens Quay East to Cherry (South).
AM Peak Hour
PM Peak Hour
Existing Traffic Signal
Planned Future Traffic Signal
EAST BAYFRONT
FORECAST VOLUMES

Figure 6A

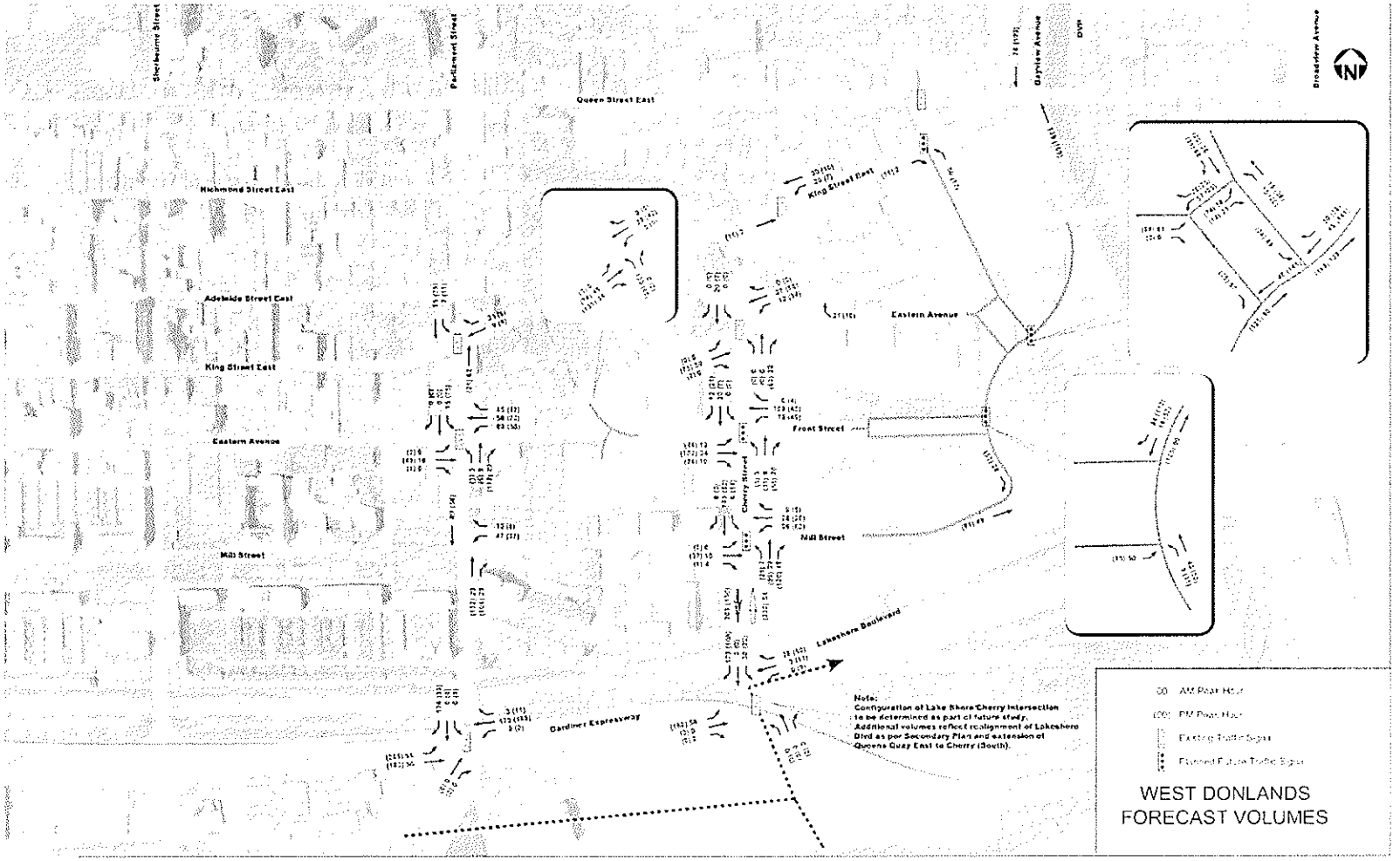

Sherbourne Street
Parliament Street
Queen Street East
Richmond Street East
Adelaide Street East
King Street East
Eastern Avenue
Mill Street
Gardiner Expressway
Lakeshore Boulevard
Cherry Street
Front Street
Gayview Avenue
Broadview Avenue
Note:
Configuration of Lake Shore/Cherry intersection to be determined as part of future study.
Additional volumes reflect realignment of Lakeshore Blvd as per Secondary Plan and extension of Queens Quay East to Cherry (South).
AM Peak Hour
PM Peak Hour
Existing Traffic Signal
Planned Future Traffic Signal
WEST DONLANDS
FORECAST VOLUMES

Figure 6B

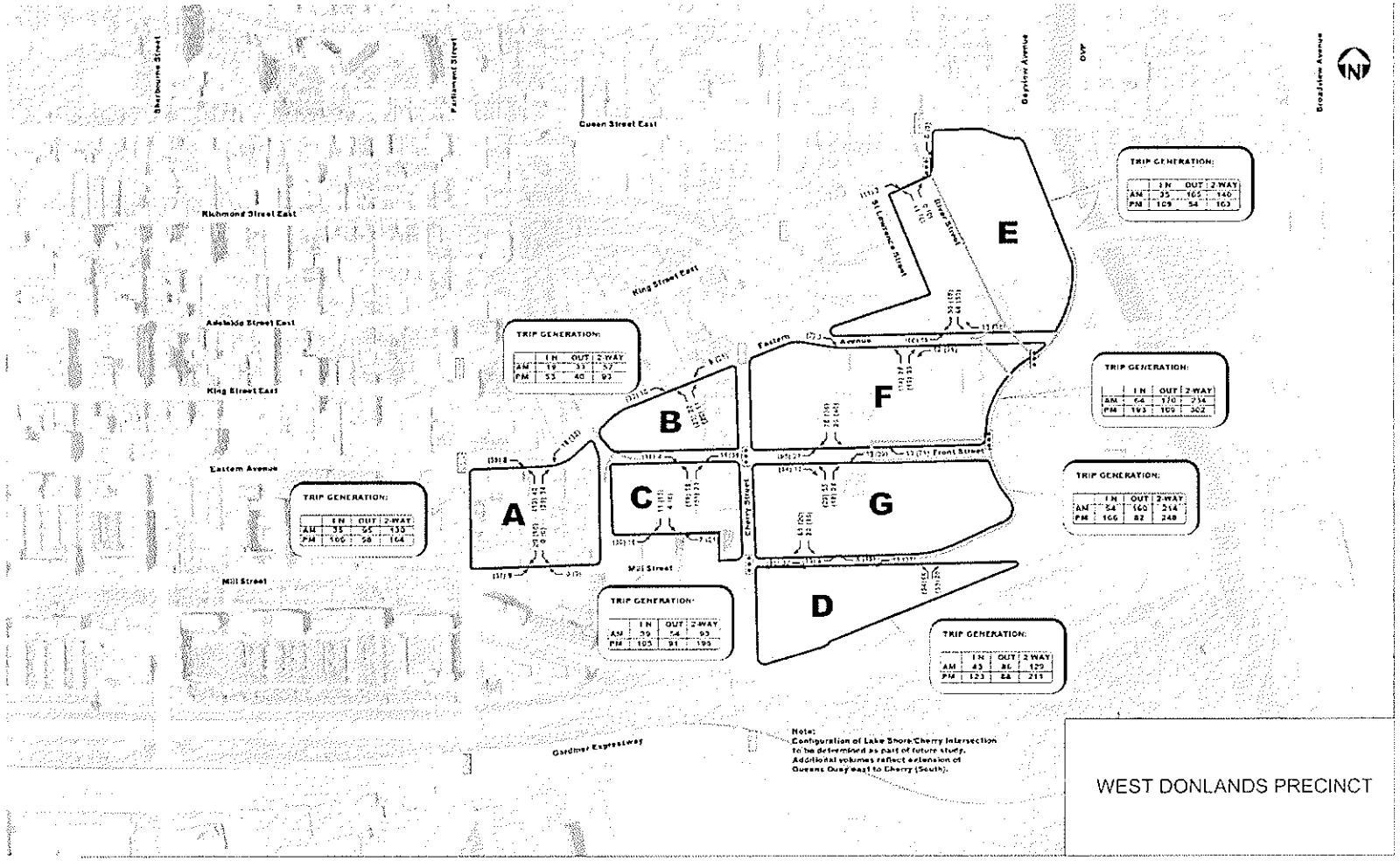

Sherbourne Street
Parliament Street
Queen Street East
Richmond Street East
King Street East
Adelaide Street East
King Street East
Eastern Avenue
Mill Street
Gardiner Expressway
Gaylord Avenue
DVP
Broadview Avenue
St Lawrence Street
Power Street
Eastern Avenue
Front Street
Cherry Street
Mill Street
A
B
C
D
E
F
G
TRIP GENERATION:
IN OUT 2-WAY
AM 35 65 100
PM 100 58 158
TRIP GENERATION:
IN OUT 2-WAY
AM 19 33 52
PM 53 40 93
TRIP GENERATION:
IN OUT 2-WAY
AM 39 54 93
PM 105 91 196
TRIP GENERATION:
IN OUT 2-WAY
AM 43 86 129
PM 123 88 211
TRIP GENERATION:
IN OUT 2-WAY
AM 64 170 234
PM 193 109 302
TRIP GENERATION:
IN OUT 2-WAY
AM 54 160 214
PM 166 82 248
TRIP GENERATION:
IN OUT 2-WAY
AM 25 165 140
PM 109 54 163
Note:
Configuration of Lake Shore/Cherry Intersection
to be determined as part of future study.
Additional volumes reflect extension of
Queens Quay east to Cherry (South).
WEST DONLANDS PRECINCT

Figure 7

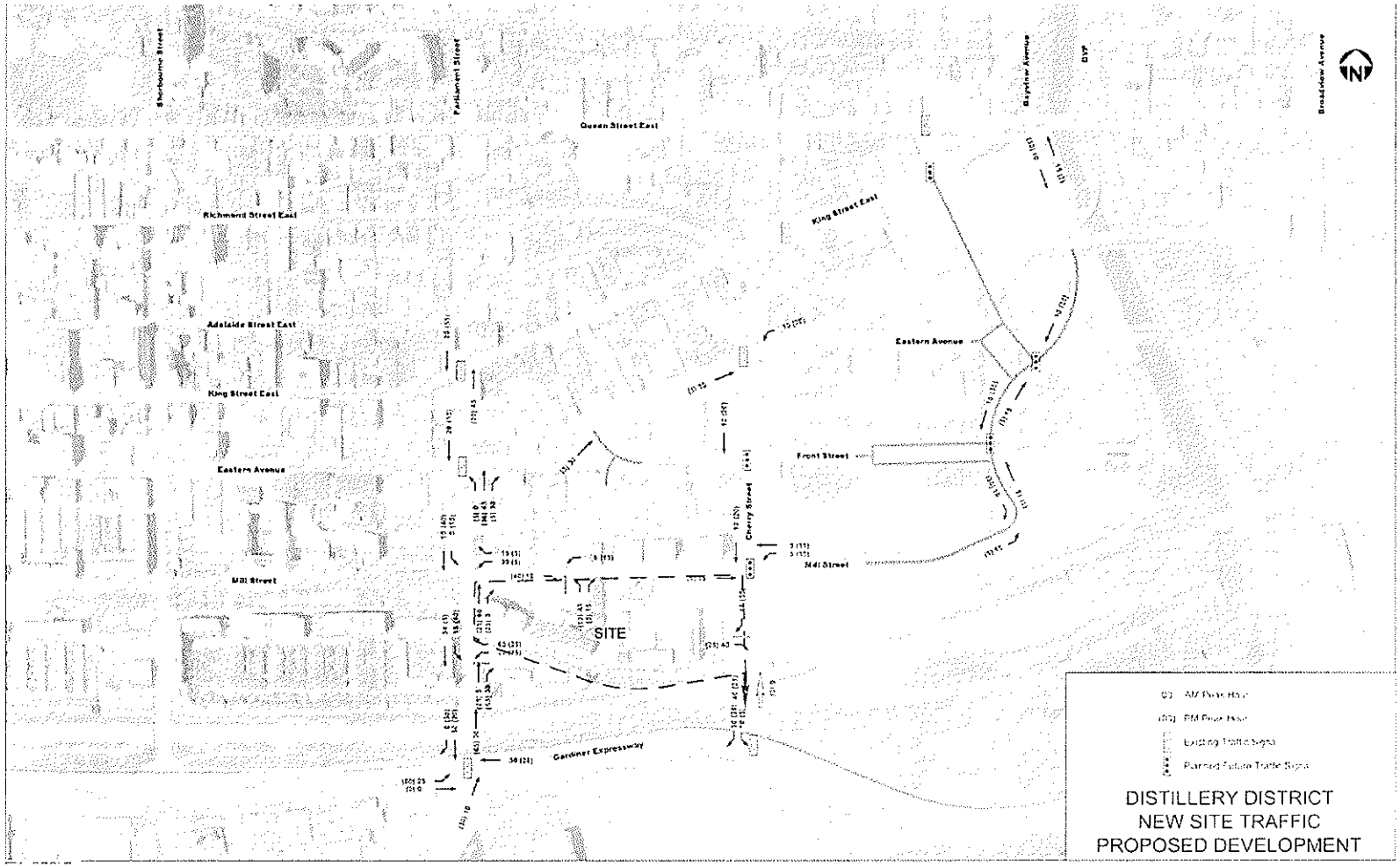
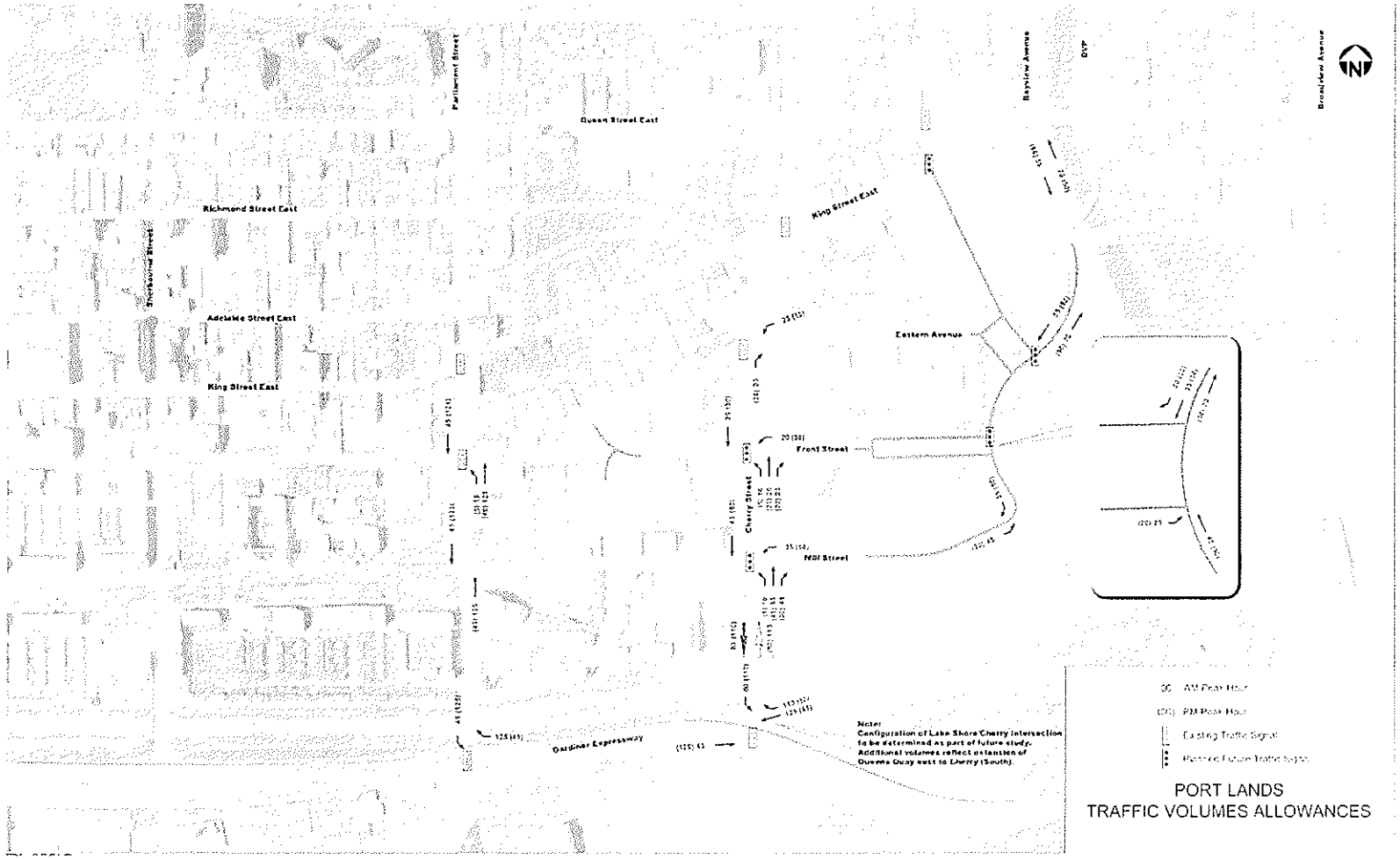

Queen Street East
Richmond Street East
Adelaide Street East
King Street East
Eastern Avenue
Mill Street
Parliament Street
Sherbourne Street
Cherry Street
Front Street
Gardiner Expressway
Broadview Avenue
SITE
DISTILLERY DISTRICT
NEW SITE TRAFFIC
PROPOSED DEVELOPMENT

Figure 8


Parliament Street
Queen Street East
Richmond Street East
Sherbourne Street
Adelaide Street East
King Street East
Bayview Avenue
DVP
Broadview Avenue
Eastern Avenue
Front Street
Cherry Street
Mill Street
Gardiner Expressway
Note:
Configuration of Lake Shore/Cherry intersection to be determined as part of future study.
Additional volumes reflect extension of Queens Quay east to Cherry (South).
AM Peak Hour
PM Peak Hour
Existing Traffic Signal
Planned Future Traffic Signal
PORT LANDS
TRAFFIC VOLUMES ALLOWANCES

'Base' Traffic Volume Forecasts – Total Volumes

- Reflect 'Build-Out' of Eastern Waterfront

- Cherry Street volumes:

  - *South of Mill:* *+/- 1,250 to 1,450 two-way vehicles (peak hours)*
  - *North of Front:* *+/- 800 to 850 two-way vehicles (peak hours)*
  - *North of Eastern:* *+/- 450 to 650 two-way vehicles (peak hours)*
  - *Estimated daily:* *+/- 5,500 to 13,500 two-way vehicles (10% avg. peak hour to daily factor)*

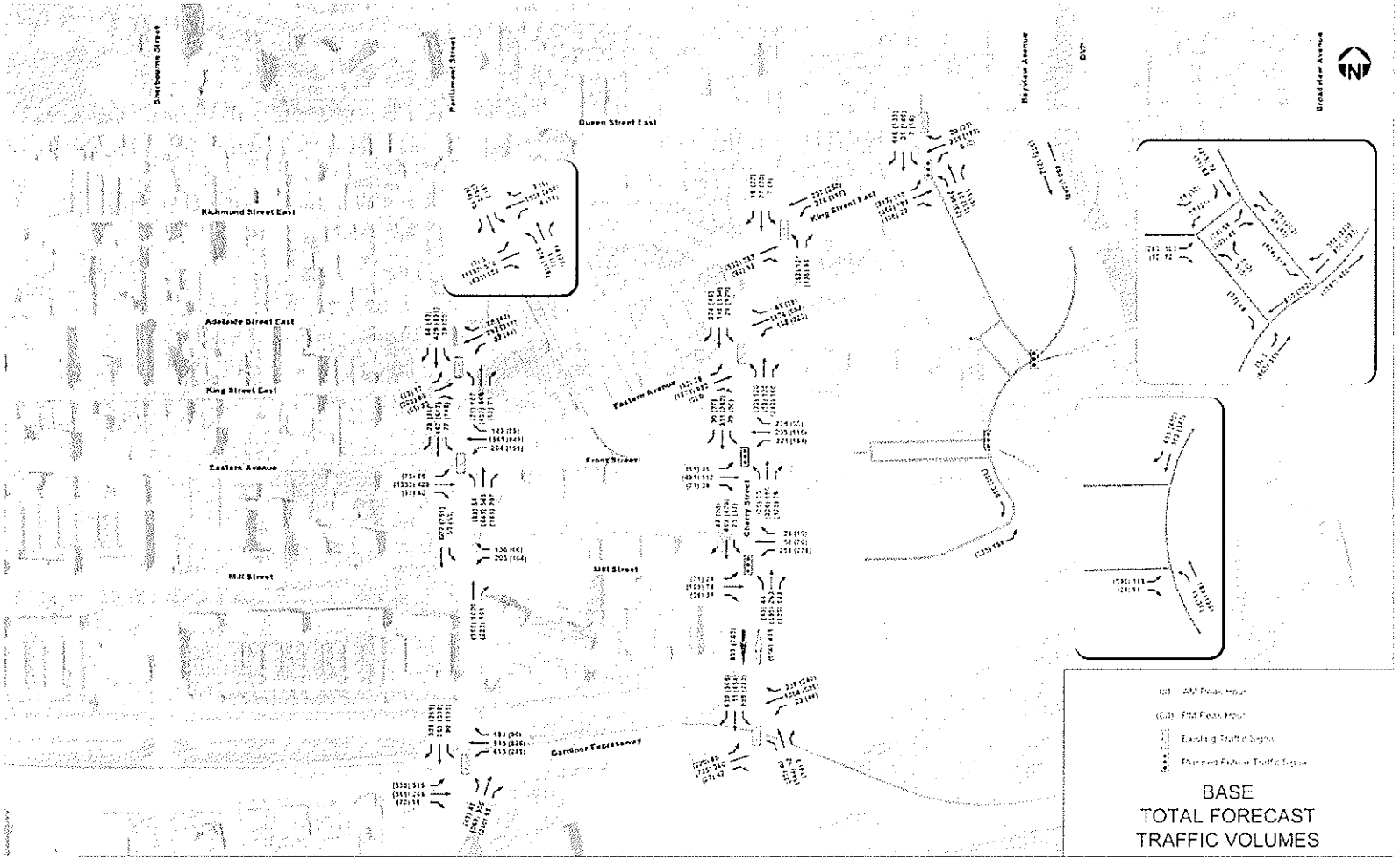
- Front Street volumes:

  - *At Cherry:* *+/- 1,000 two-way vehicles (peak hours)*
  - *Estimated daily:* *+/- 10,000 two-way vehicles (10% avg. peak hour to daily factor)*
  - *Estimated two-thirds is 'through / commuter' traffic (based upon maintaining existing commuter traffic)*

- Mill Street volumes:

  - *At Cherry:* *+/- 600 to 785 two-way vehicles (peak hours)*
  - *Estimated daily:* *+/- 7,000 two-way vehicles (10% avg. peak hour to daily factor)*
  - *Estimated one-third is 'through / commuter' traffic (based upon maintaining existing commuter traffic)*

Figure 9


Sherbourne Street
Parliament Street
Queen Street East
Richmond Street East
Adelaide Street East
King Street East
Eastern Avenue
Mill Street
Gardiner Expressway
Leslie Street
Broadview Avenue
BASE
TOTAL FORECAST
TRAFFIC VOLUMES

Traffic Operations Analysis – Common Assumptions

- Cross-street lane configurations:
  - *based upon West Don Lands Class EA Master Plan, December 2004 (figure 1.1)*

- Cherry 'base' lane configurations:
  - *lane configurations based on the design alternative (as indicated for each option)*
  - *assumed minimum cross-section:*
    - *1 through lane each direction PLUS 1 turn lane (left or right)*
    - *Only Option 7 (Precinct Plan) provides 2 northbound and southbound through lanes*

- Analysis undertaken using Canadian Capacity Guide methodology:
  - *1650 pcu/hr base saturation flow (through movements)*
  - *assumed intersection cycle length – 100 seconds*
  - *200 pedestrians assumed – all legs*
  - *pedestrian minimum crossing times are met or exceeded in all cases*

- Transit
  - *TTC stops at Front Street, King Street East and in Mill Street loop*
  - *transit saturation flow adjustments (where appropriate) for stops*
  - *assumed 15 streetcars / peak hour each direction (peak direction demand = +/- 1,000 passengers)*
  - *passenger on/off assumed at Front: 800/200 AM peak and 200/800 PM Peak*

Option 1: Transit in Mixed Traffic

Option 1: Transit in Mixed Traffic

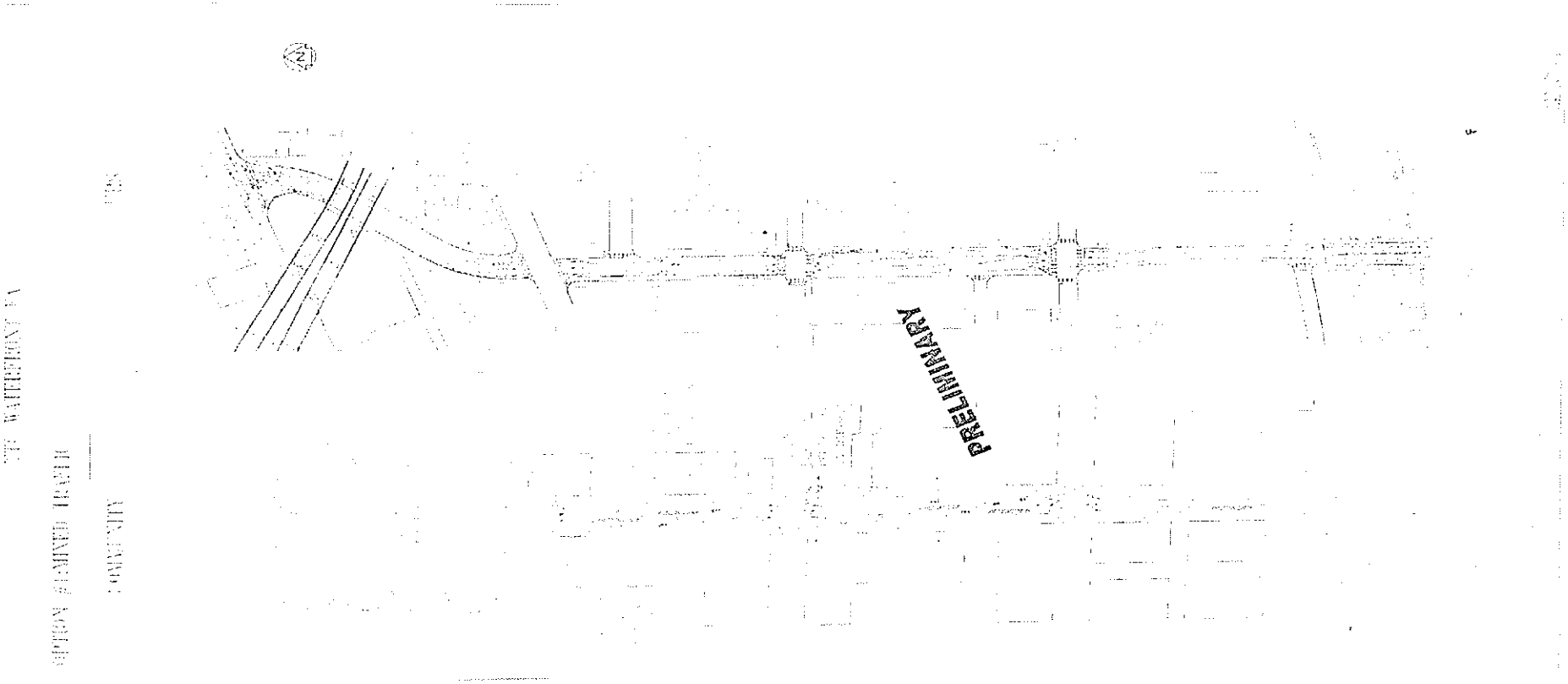
Key Assumptions

- Three lane basic cross-section
  - NB left and SB left turn lanes

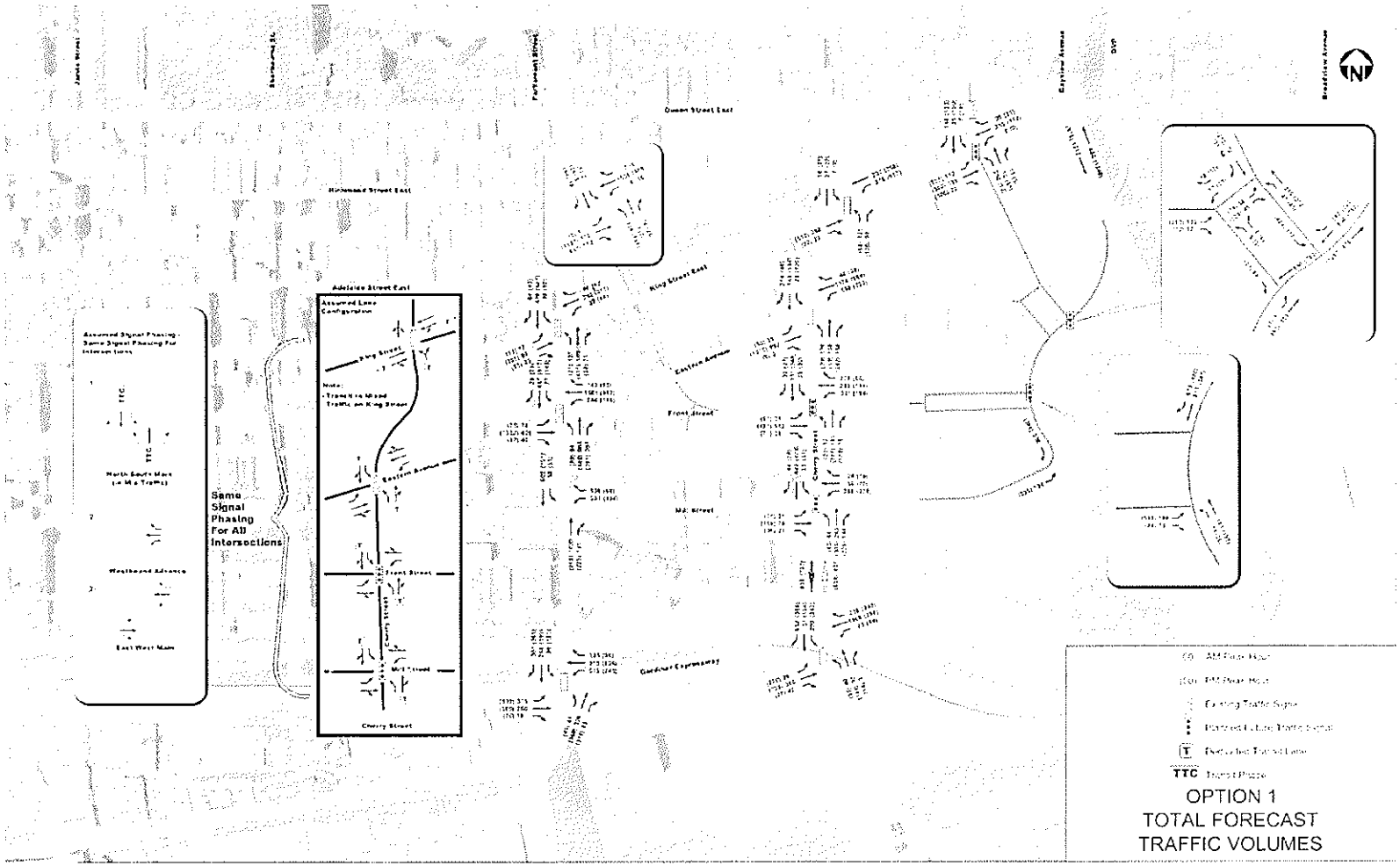
- Transit in mixed traffic
  - shares curb lane with through and right turning traffic

- Transit moves with north-south main traffic signal phase

Option 1 - Plan



Option 1 - Volumes, Lane Configuration and Signal Phasing



Option 1 - Analysis Results / Link Volumes

Traffic Operations Results Summary

Intersection	Overall V/C Index	
	AM Peak	PM Peak
Cherry Street/Mill Street	0.60	0.87
Cherry Street/Front Street	0.83	0.97
Cherry Street/Eastern Street	0.94	0.83
Cherry Street/King Street	0.48	0.51

Link Traffic Volumes

	AM Peak			PM Peak		
	NB/WB	SB/EB	2-way	NB/WB	SB/EB	2-way
Cherry Street @ south on Mill Street	451	833	1,284	656	783	1,439
Cherry Street @ south on Front Street	296	691	987	424	613	1,037
Cherry Street @ south on Eastern Street	410	346	756	340	374	714
Mill Street @ east of Cherry Street	368	243	611	367	421	788
Front Street @ east of Cherry Street	844	219	1,063	376	719	1,095

Option 2B: Transit in Curb Lane

Option 2B: Transit in Curb Lane

Key Assumptions

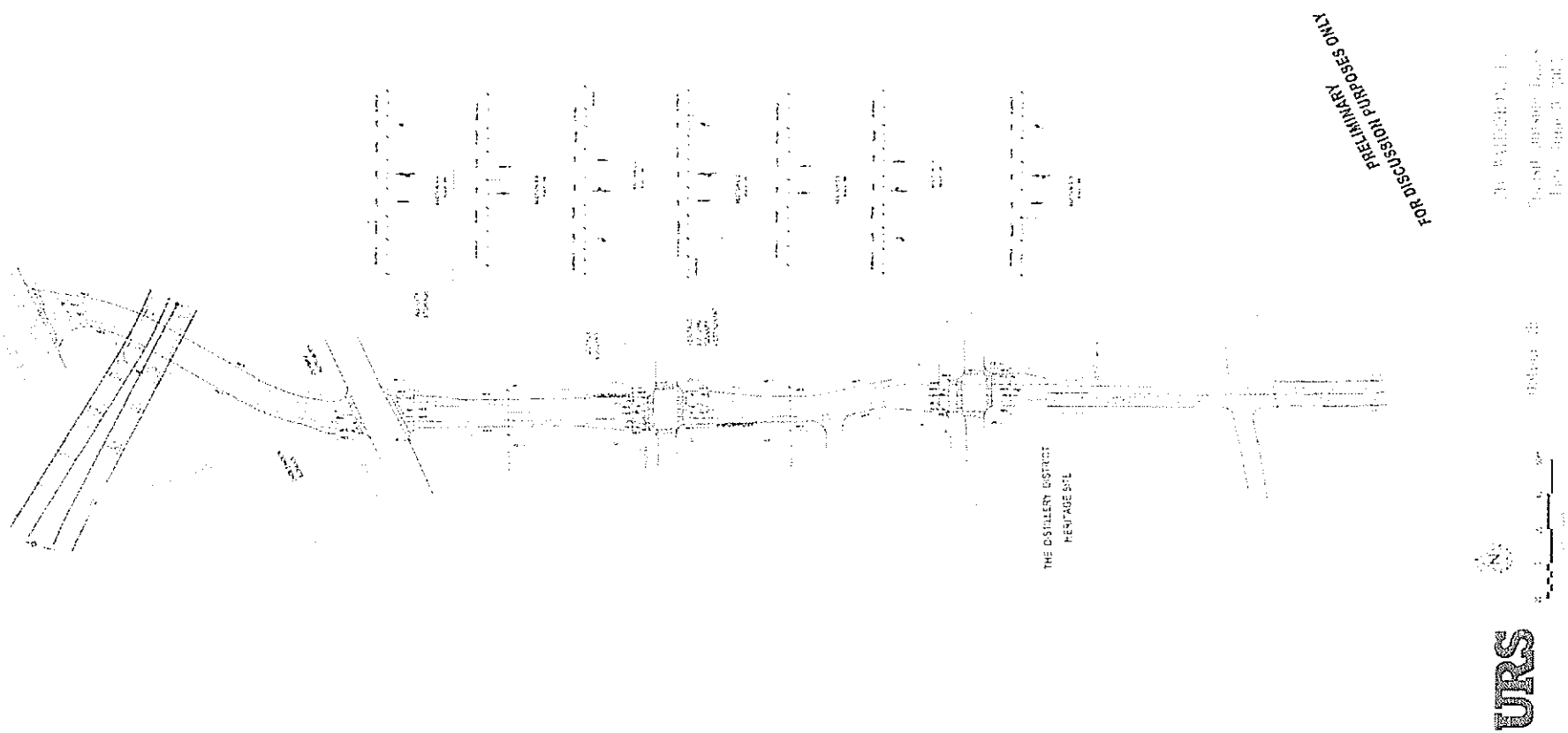
- Transit in curb 'diamond' (transit only) lane
  - surface textured / raised mid-block to discourage use / stopping
  - flush at intersections

- Right turn lanes at intersections
  - turns occur outside of transit lane
  - vehicles must cross transit lane to enter right turn lanes

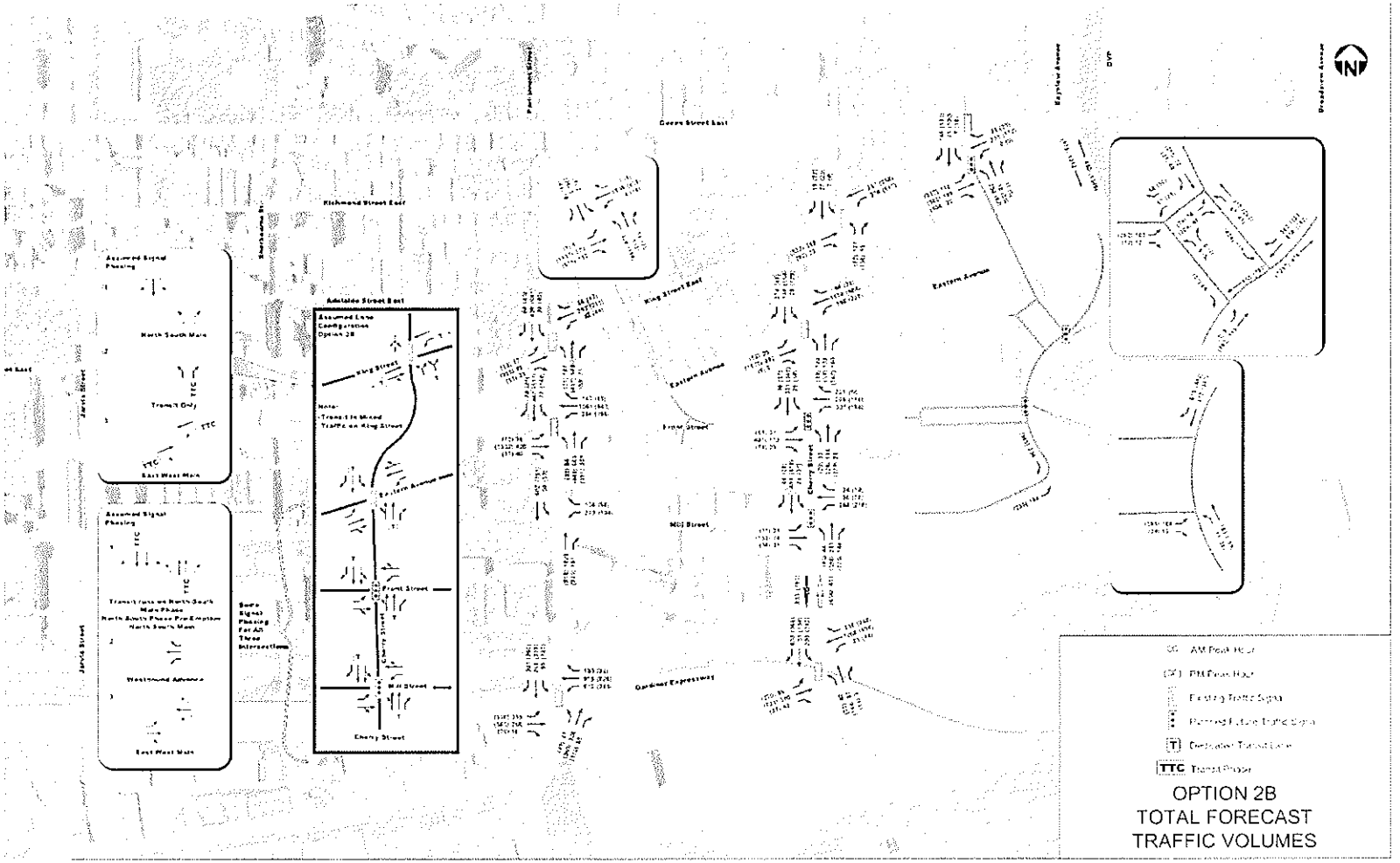
- NB and SB left turns occur from through lanes

- Transit moves with north-south main signal phases
  - priority through pre-emption of north-south phase

Option 2B - Plan



Option 2B - Volumes, Lane Configuration and Signal Phasing



Option 2B – Analysis Results / Link Volumes

Traffic Operations Results Summary

Intersection	Overall V/C Index	
	AM Peak	PM Peak
Cherry Street/Mill Street	0.58	0.70
Cherry Street/Front Street	0.75	0.85
Cherry Street/Eastern Street	0.78	0.79
Cherry Street/King Street	0.48	0.49

Link Traffic Volumes

	AM Peak			PM Peak		
	NB/WB	SB/EB	2-way	NB/WB	SB/EB	2-way
Cherry Street @ south on Mill Street	451	833	1,284	656	783	1,439
Cherry Street @ south on Front Street	296	691	987	424	613	1,037
Cherry Street @ south on Eastern Street	410	346	756	340	374	714
Mill Street @ east of Cherry Street	368	243	611	367	421	788
Front Street @ east of Cherry Street	844	219	1,063	376	719	1,095

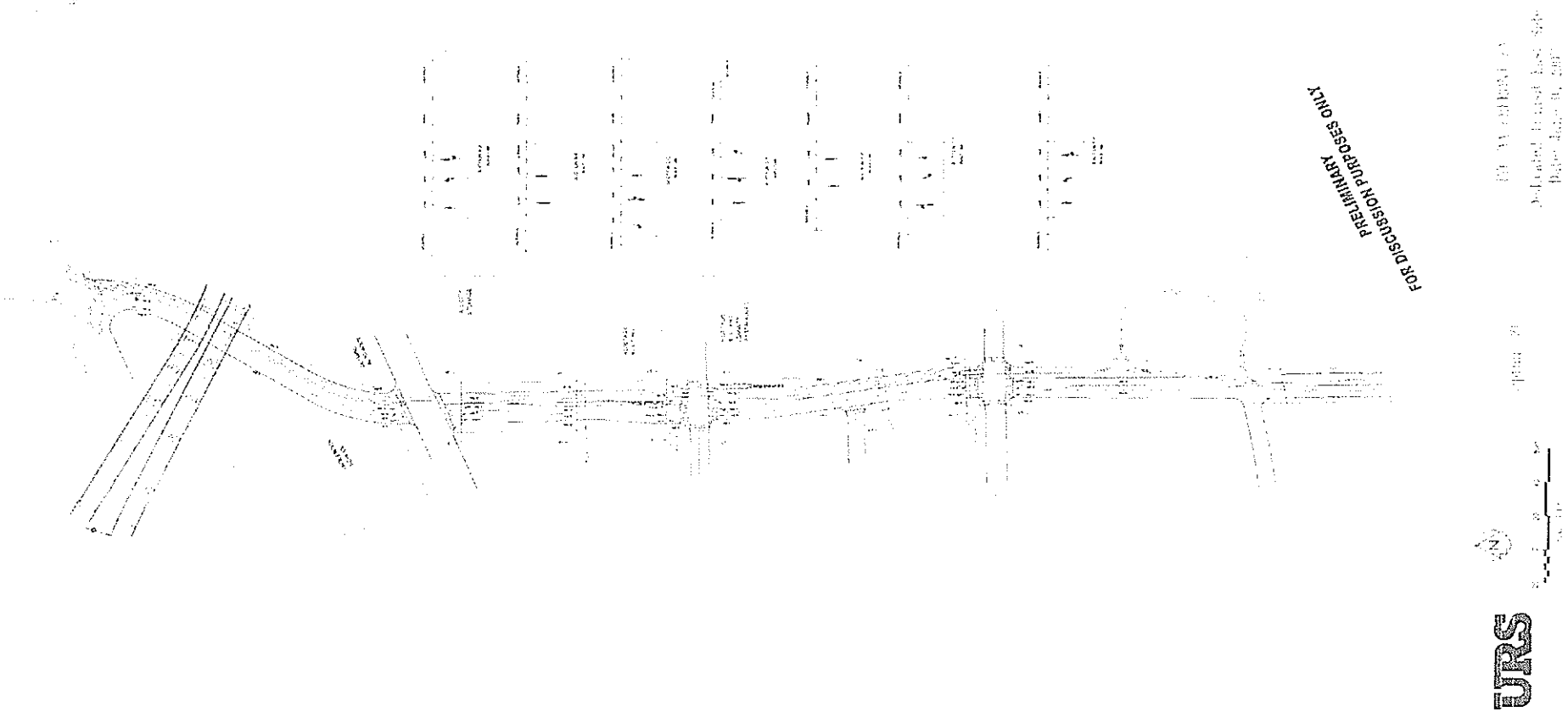
Option 3: Dedicated Transit East Side

Option 3B: Dedicated Transit East Side

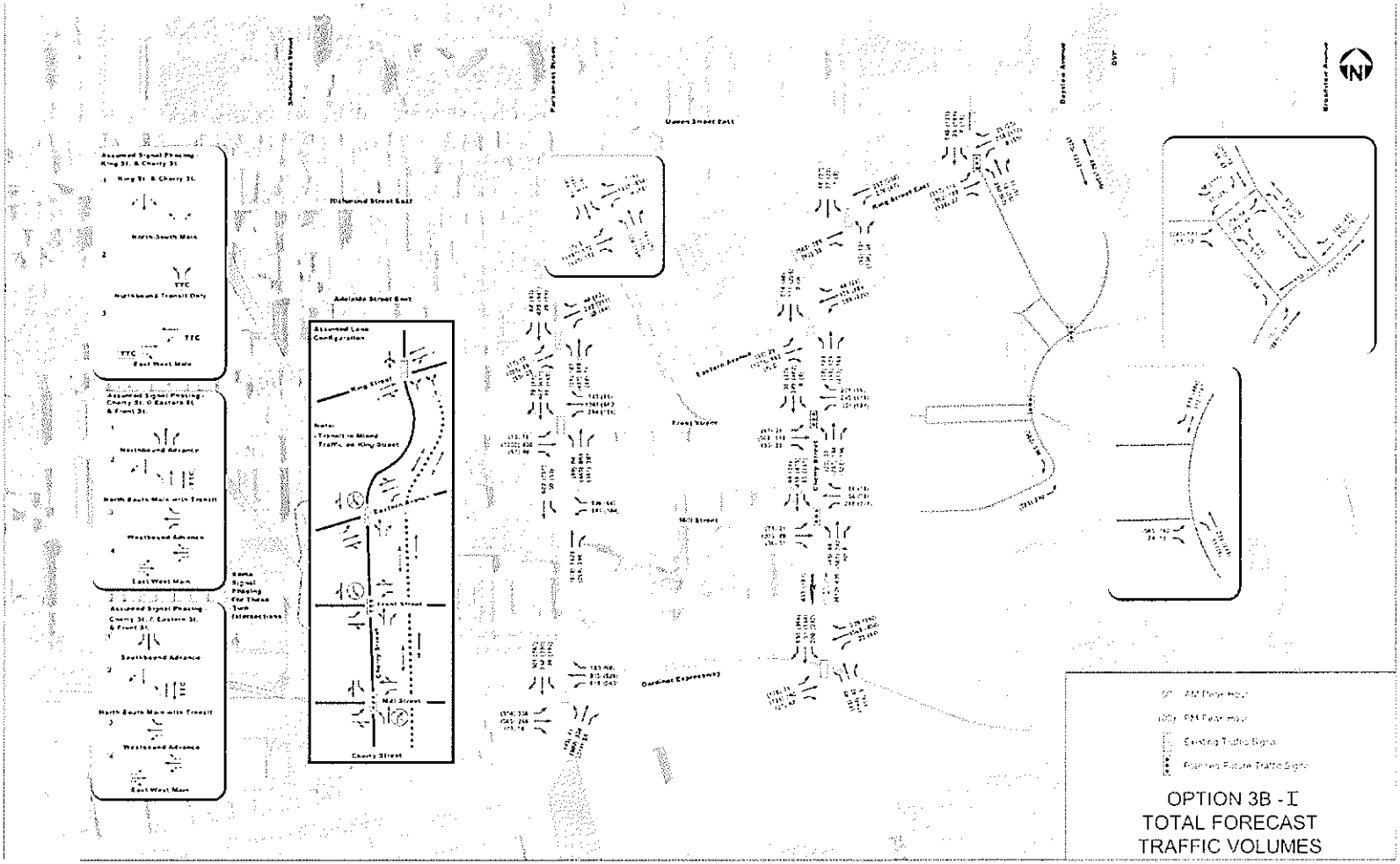
Key Assumptions

- Transit in dedicated right-of-way on east side of Cherry Street
- Three lane road cross-section on west side
- Three representative analysis scenarios reflecting different signal strategies:
  - Scenarios 1 and 2:
    - Transit moves with north-south through movements
    - right / left turns to east operate under restrictive phasing (short 'window'), red during transit movements
    - Transit pre-emption of north-south through movement phase
    - Separate signals and lanes provided for movements to east to address vehicular conflict issues
    - Where lane not provided, turn to east is prohibited
    - *Scenario 1 – NBR at Mill & SBL at Eastern & Front*
    - *Scenario 2 – NBR at Front & SBL at Eastern & Mill*
  - Scenario 3
    - Transit moves in dedicated, callable transit phase or 'window'
    - No turn prohibitions

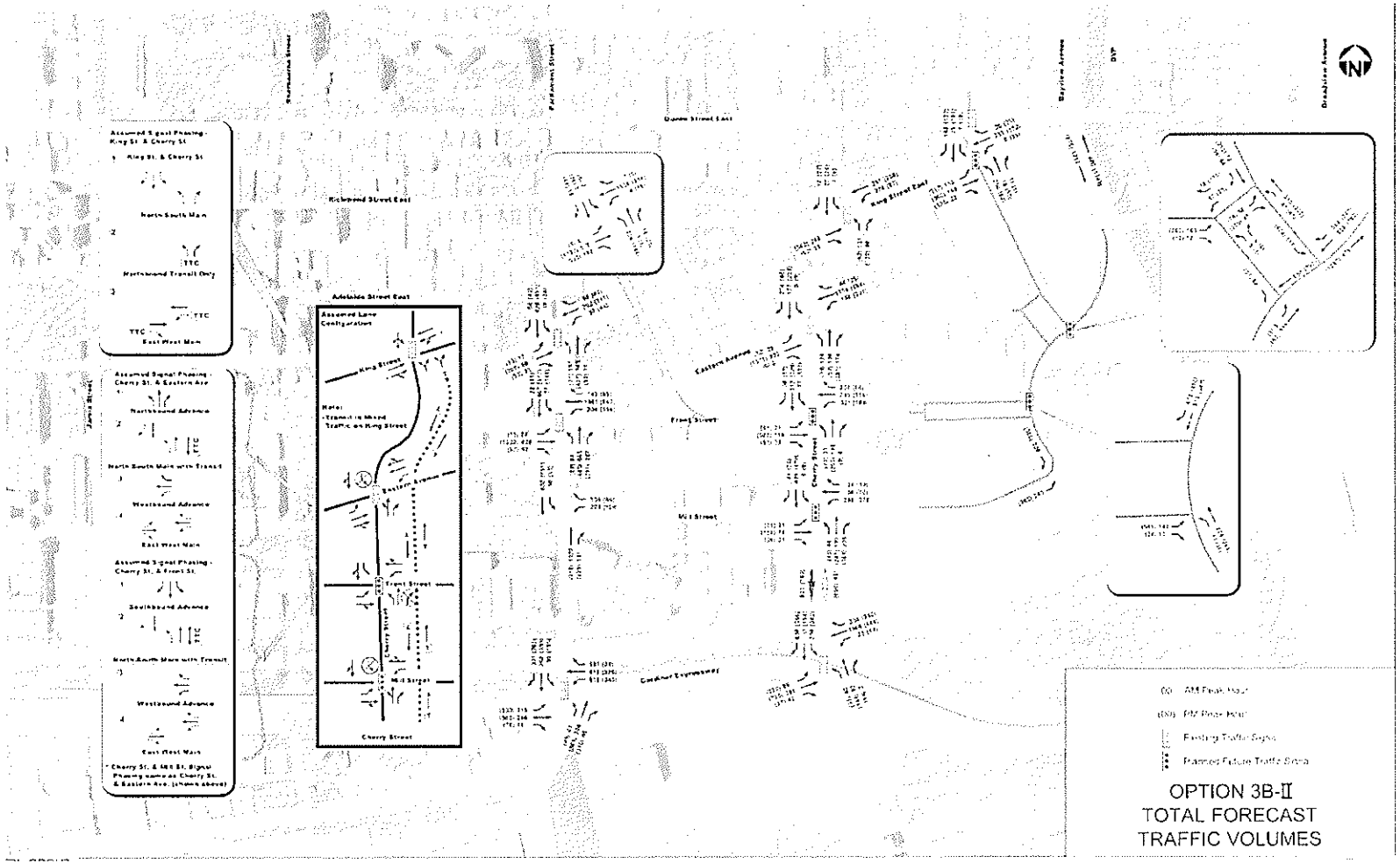
Option 3B - Plan



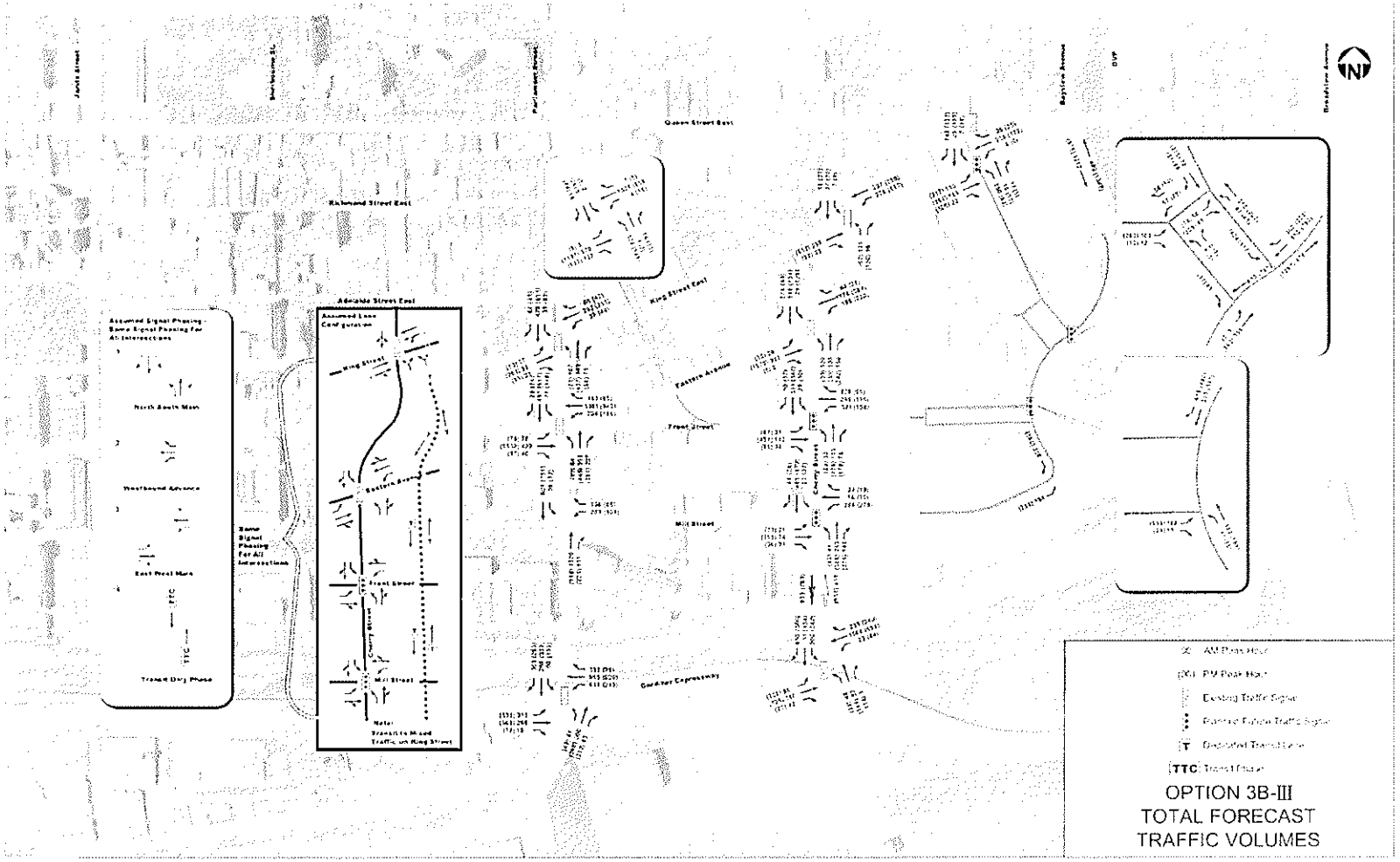
Option 3Bi - Volumes, Lane Configuration and Signal Phasing



Option 3Bii - Volumes, Lane Configuration and Signal Phasing



Option 3Biii - Volumes, Lane Configuration and Signal Phasing



Option 3B – Analysis Results / Link Volumes

Traffic Operations Results Summary

Intersection	Volume to Capacity					
	Scenario-1		Scenario-2		Scenario-3	
	AM Peak	PM Peak	AM Peak	PM Peak	AM Peak	PM Peak
Cherry Street/Mill Street	0.62	0.84	0.75	0.75	0.63	0.79
Cherry Street/Front Street	0.83	0.92	0.73	0.85	0.70	0.87
Cherry Street/Eastern Street	0.96 (0.89)[1]	0.92 (0.84)[1]	0.96 (0.87)[1]	0.85 (0.84)[1]	0.87	0.81
Cherry Street/King Street	0.40	0.52	0.40	0.52	0.44	0.60

1. With SBR turn lane

3Bi: Link Traffic Volumes

	AM Peak			PM Peak		
	NB/WB	SB/EB	2-way	NB/WB	SB/EB	2-way
Cherry Street @ south on Mill Street	436	833	1,269	612	783	1,395
Cherry Street @ south on Front Street	425	749	1,174	605	727	1,332
Cherry Street @ south on Eastern Street	419	375	794	371	451	822
Mill Street @ east of Cherry Street	368	172	540	367	354	721
Front Street @ east of Cherry Street	844	310	1,154	376	819	1,195

Option 3B – Analysis Results / Link Volumes

3Bii: Link Traffic Volumes

	AM Peak			PM Peak		
	NB/WB	SB/EB	2-way	NB/WB	SB/EB	2-way
Cherry Street @ south on Mill Street	451	833	1,284	656	783	1,439
Cherry Street @ south on Front Street	232	666	898	285	576	861
Cherry Street @ south on Eastern Street	424	375	799	424	451	875
Mill Street @ east of Cherry Street	368	282	650	367	523	890
Front Street @ east of Cherry Street	844	195	1,039	376	642	1,018

3Biii: Link Traffic Volumes

	AM Peak			PM Peak		
	NB/WB	SB/EB	2-way	NB/WB	SB/EB	2-way
Cherry Street @ south on Mill Street	451	833	1,284	656	783	1,439
Cherry Street @ south on Front Street	296	691	987	424	613	1037
Cherry Street @ south on Eastern Street	410	346	756	340	374	714
Mill Street @ east of Cherry Street	368	243	611	367	421	788
Front Street @ east of Cherry Street	844	219	1,063	376	719	1,095

Option 4: Dedicated Transit West Side

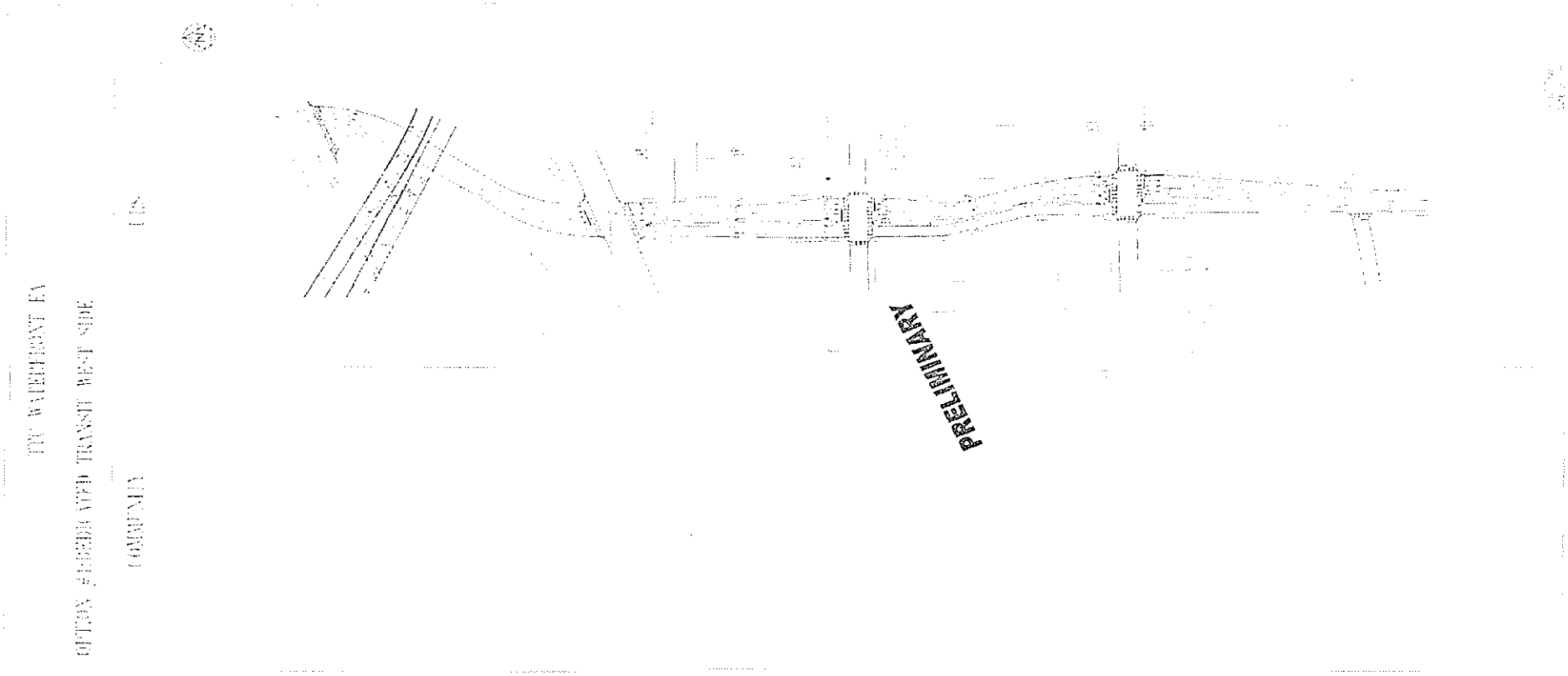
Option 4: Dedicated Transit West Side

Key Assumptions

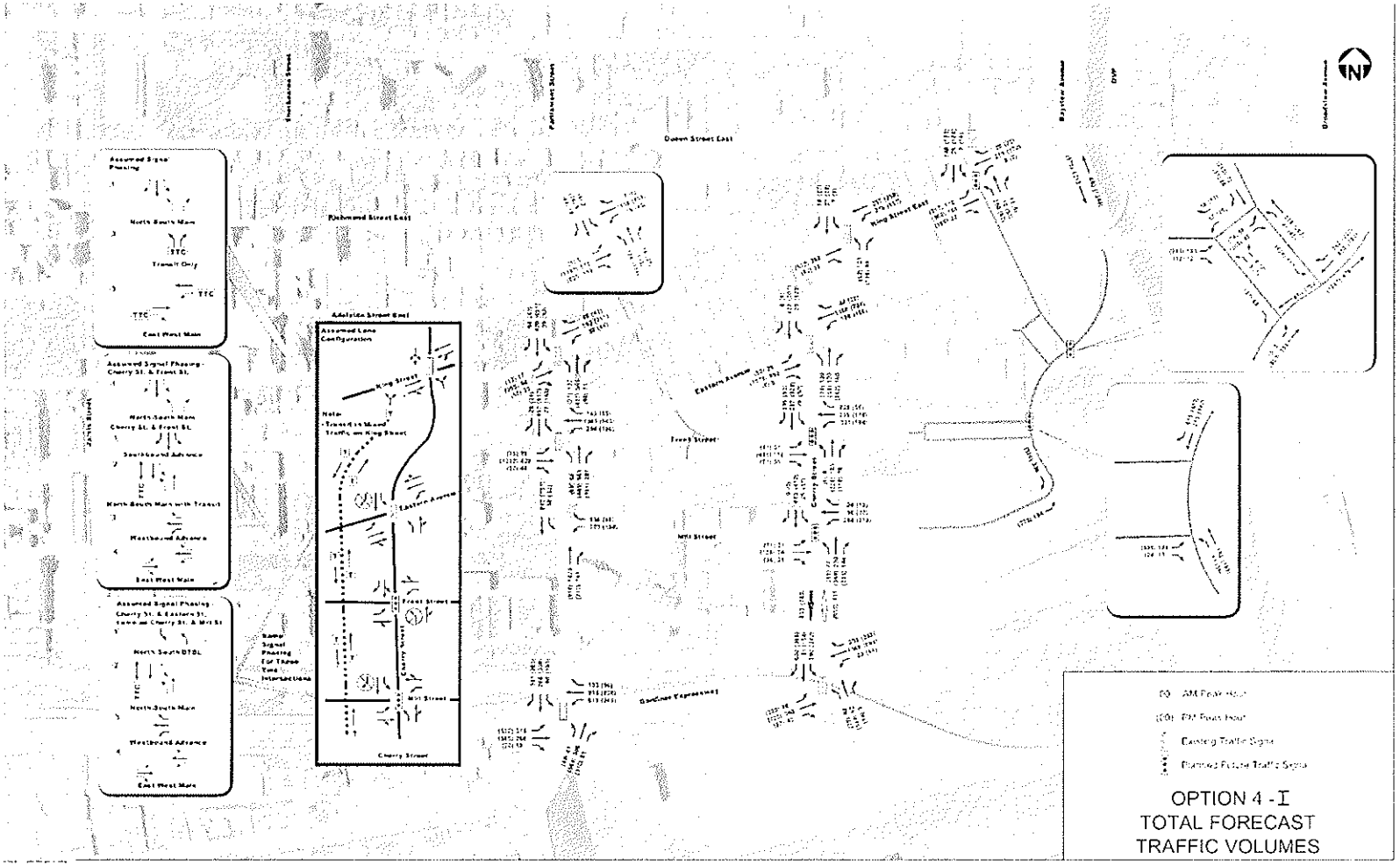
- Transit in dedicated right-of-way on west side of Cherry Street
- Three lane road cross-section on east side
- Transit moves with north-south through movements

  - separate signals and lanes provided for movements to west to address vehicular conflict issues
  - right / left turns to west operate under restrictive phasing (short 'window'), red during transit movements
  - transit pre-emption of north-south through movement phase
  - Where lane not provided, turn to west is prohibited
  - *Analysis Scenario – NBL at Mill and Eastern & SBR at Front*

Option 4 - Plan



Option 4 - Volumes, Lane Configuration and Signal Phasing



Option 4 – Analysis Results / Link Volumes

Traffic Operations Results Summary

Intersection	Overall V/C Index	
	AM Peak	PM Peak
Cherry Street/Mill Street	0.63	0.80
Cherry Street/Front Street	0.92	0.93
Cherry Street/Eastern Street	0.88	0.88
Cherry Street/King Street	0.41	0.55

Link Traffic Volumes

	AM Peak			PM Peak		
	NB/WB	SB/EB	2-way	NB/WB	SB/EB	2-way
Cherry Street @ south of Mill Street	451	833	1,284	656	783	1,439
Cherry Street @ south of Front Street	263	696	959	404	585	989
Cherry Street @ south of Eastern Street	410	608	1,018	340	399	739
Mill Street @ east of Cherry Street	368	243	611	367	421	788
Front Street @ east of Cherry Street	844	219	1,063	376	719	1,095

Option 5: Dedicated Transit in Centre

Option 5: Dedicated Transit in Centre

Key Assumptions

- Transit in dedicated right-of-way in centre of Cherry

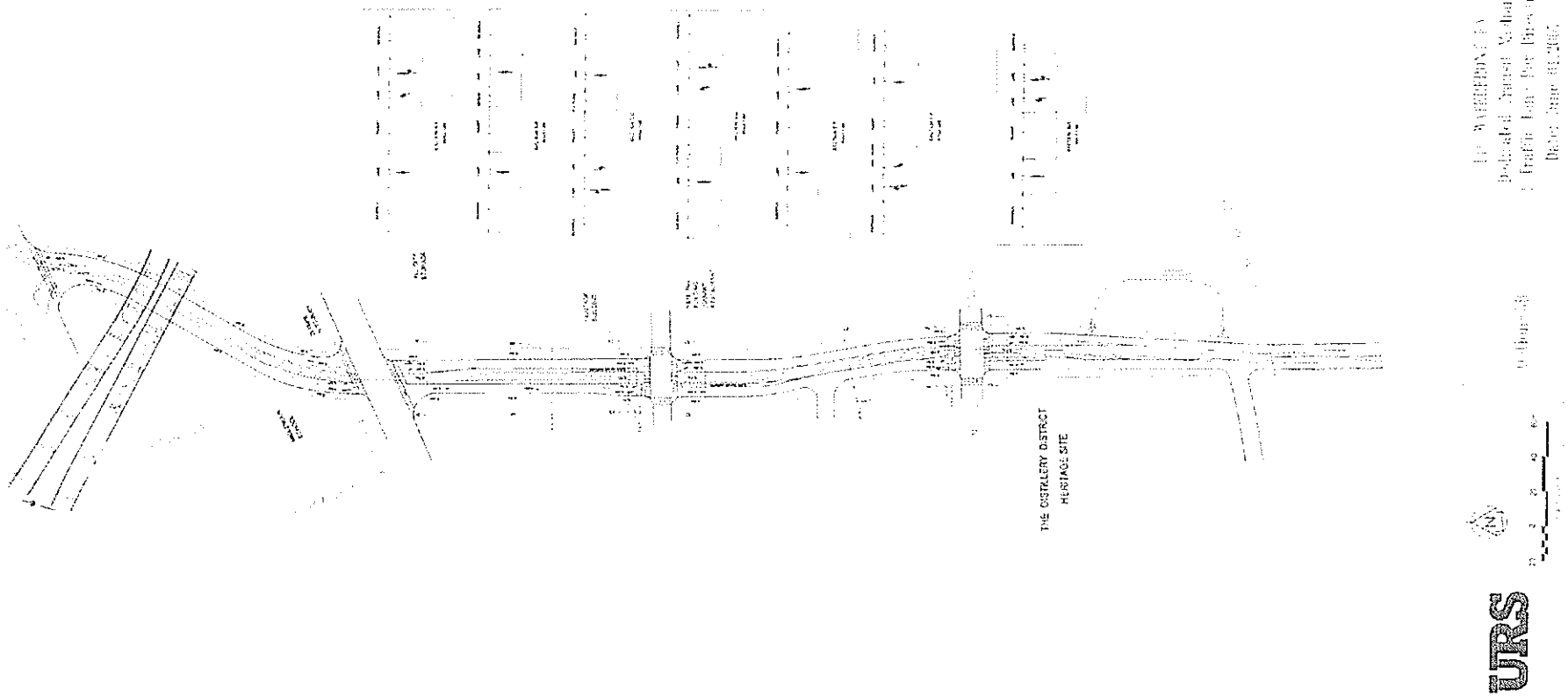
  - likely raised
  - flush at intersections

- NB and SB left turn lanes
  - right turns occur from north-south through lanes

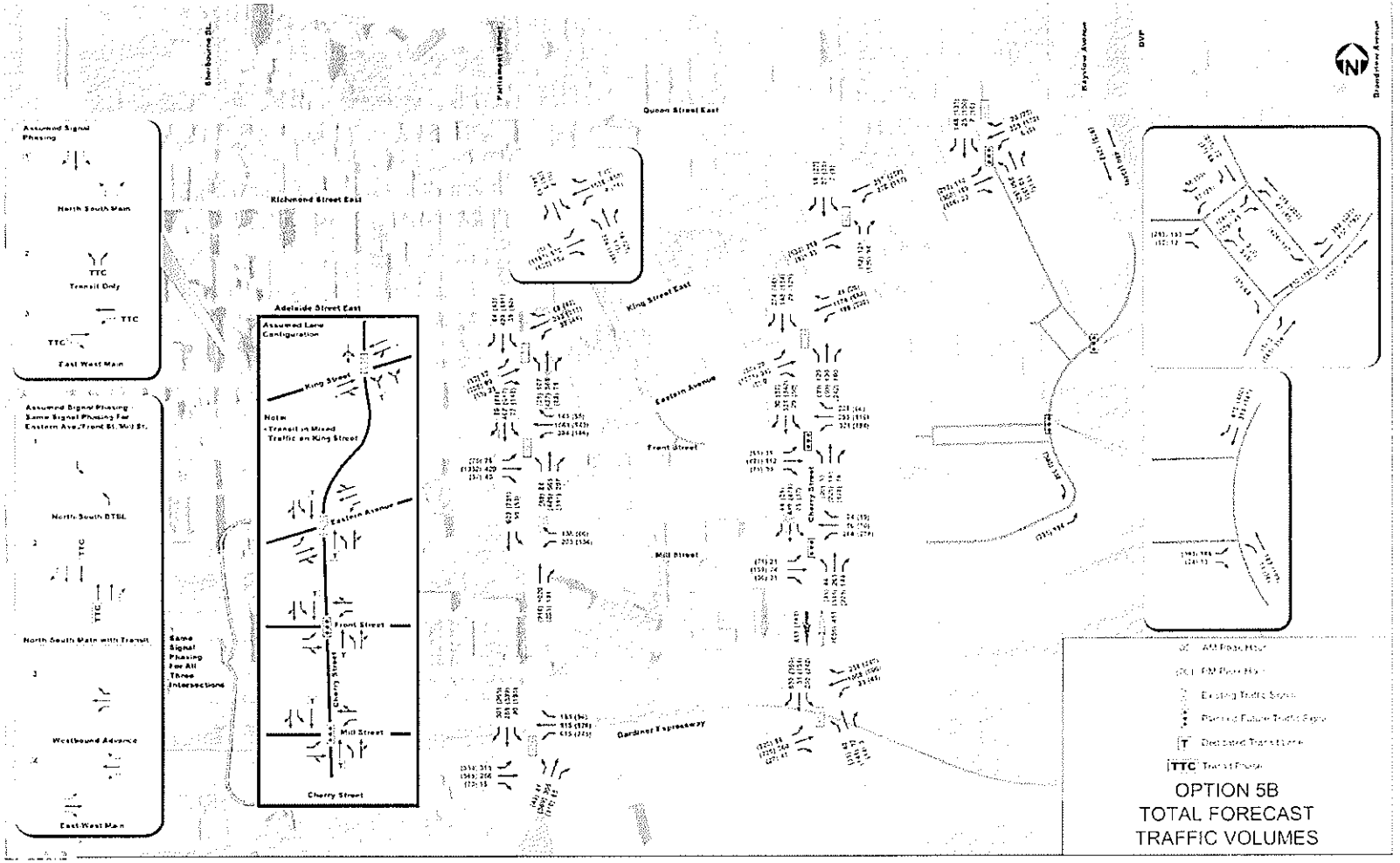
- Transit moves with north-south through movements

  - left turns move on restrictive phasing – short 'window'
  - left turns at red during transit movements
  - transit pre-emption of north-south through movement phase

Option 5 - Plan



Option 5 - Volumes, Lane Configuration and Signal Phasing



Option 5 – Analysis Results / Link Volumes

Traffic Operations Results Summary

Intersection	Overall V/C Index	
	AM Peak	PM Peak
Cherry Street/Mill Street	0.66	0.87
Cherry Street/Front Street	0.79	0.93
Cherry Street/Eastern Street	0.97	0.94
Cherry Street/King Street	0.48	0.60

Link Traffic Volumes

	AM Peak			PM Peak		
	NB/WB	SB/EB	2-way	NB/WB	SB/EB	2-way
Cherry Street @ south of Mill Street	451	833	1,284	656	783	1,439
Cherry Street @ south of Front Street	296	691	987	424	613	1,037
Cherry Street @ south of Eastern Street	410	346	756	340	374	714
Mill Street @ east of Cherry Street	368	243	611	367	421	788
Front Street @ east of Cherry Street	844	219	1,063	376	719	1,095

Option 6: Transit Mall

Option 6: Transit Mall

Key Assumptions

- Transit only on Cherry – Mill to Eastern
  - transit in pedestrian mall
  - east-west through movement on Front maintained

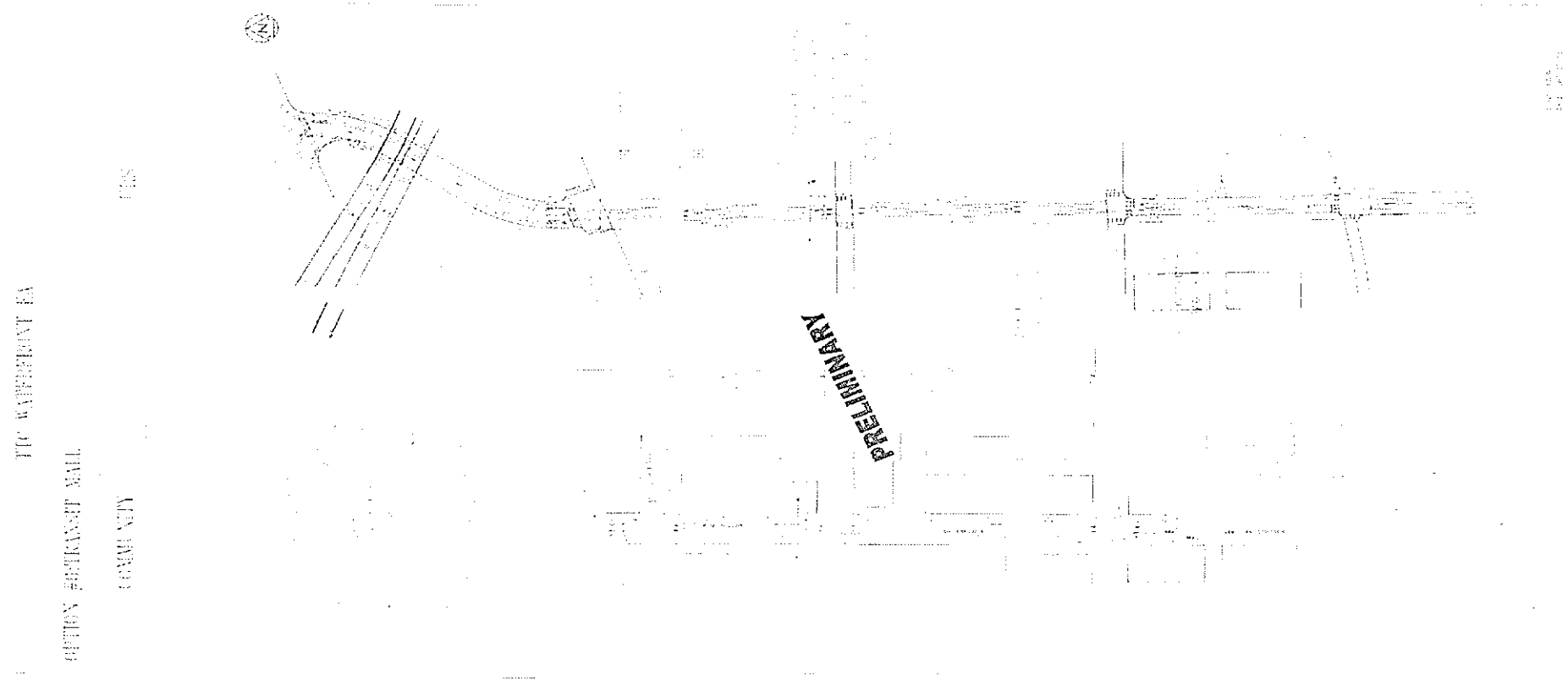
- Transit in mixed traffic:
  - north of Eastern
  - south of Mill

- Three lane road cross-section:
  - south of Mill
  - north of Eastern

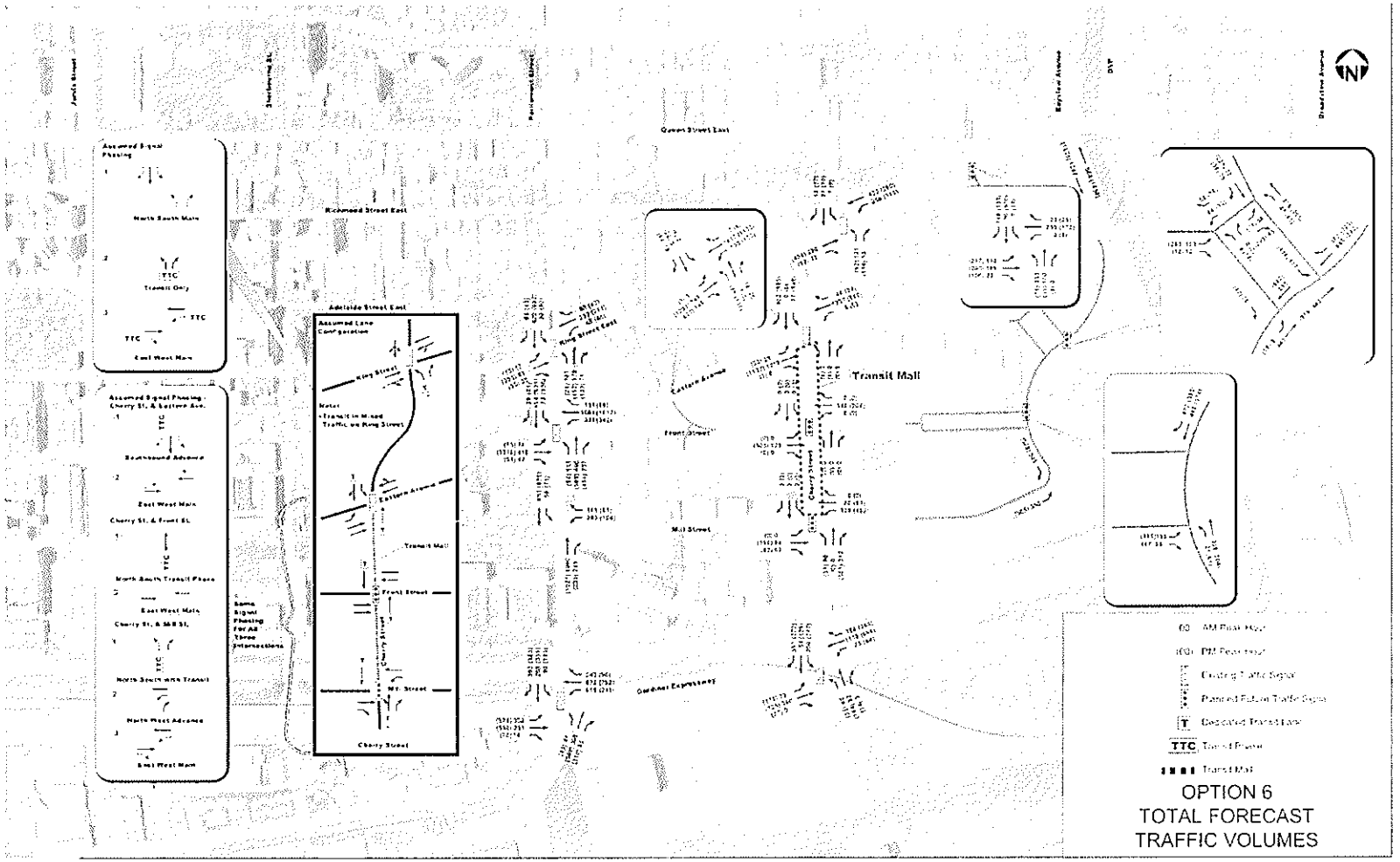
- Traffic volumes reassigned / re-routed around closed portion of Cherry
  - use Parliament, Front, Mill and Eastern

- Transit moves with north-south main phase:
  - Mill, Eastern and King

Option 6 - Plan



Option 6 - Volumes, Lane Configuration and Signal Phasing



Option 6 - Analysis Results / Link Volumes

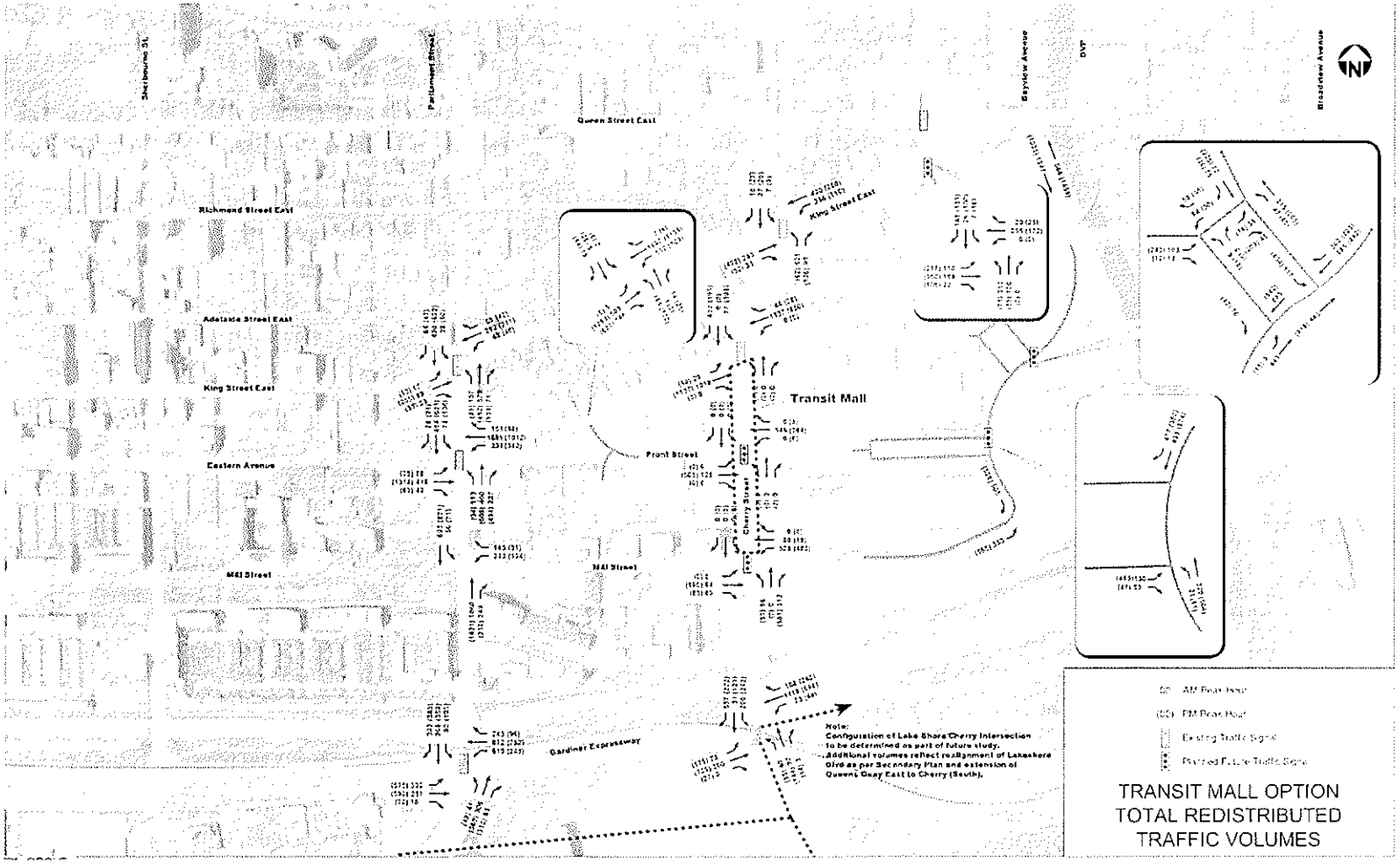
Traffic Operations Results Summary

Intersection	Overall V/C Index	
	AM Peak	PM Peak
Cherry Street/Mill Street	0.45	0.70
Cherry Street/Front Street	0.26	0.24
Cherry Street/Eastern Street	0.92	0.55
Cherry Street/King Street	0.47	0.53

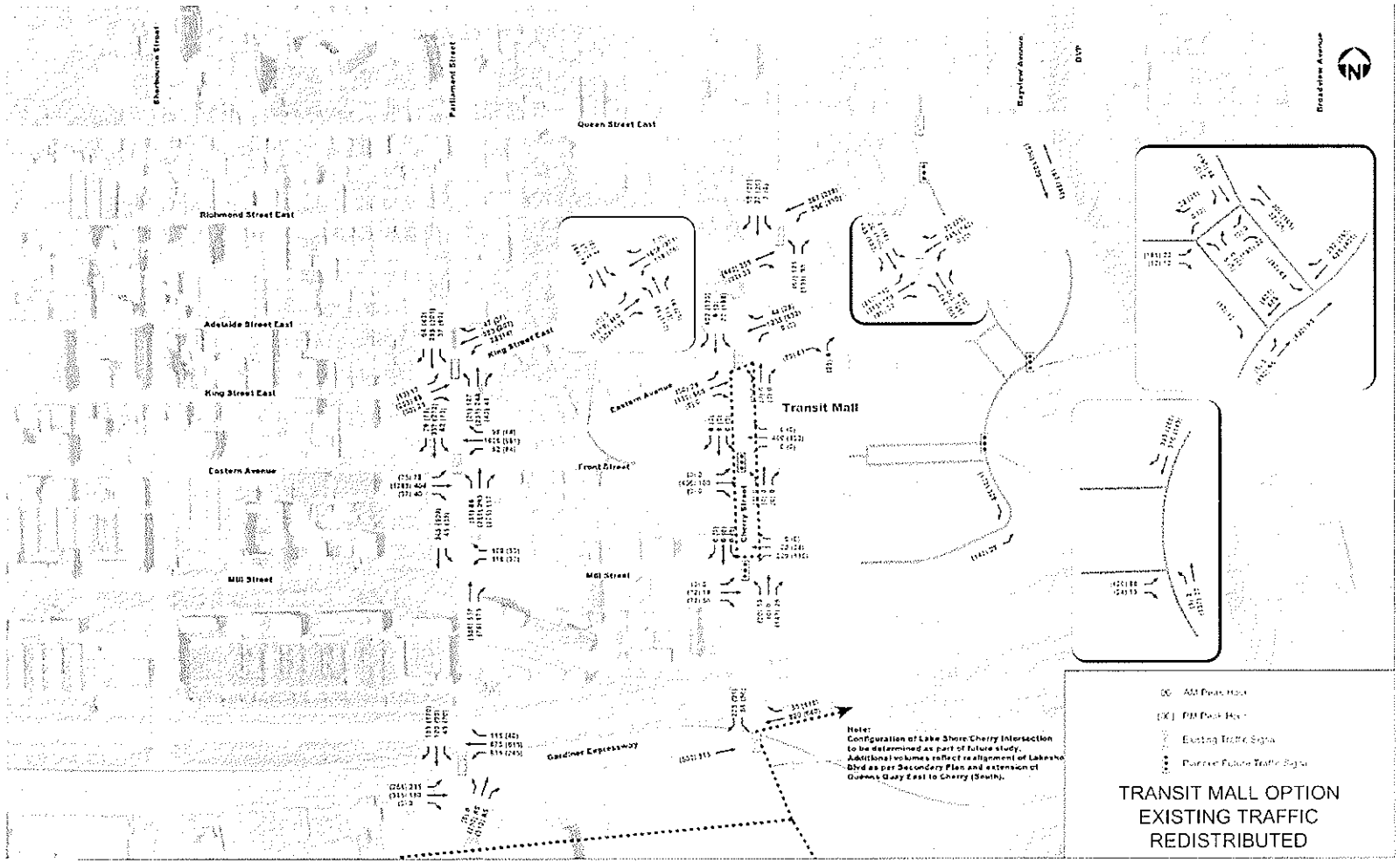
Link Traffic Volumes

	AM Peak			PM Peak		
	NB/WB	SB/EB	2-way	NB/WB	SB/EB	2-way
Cherry Street @ south of Mill Street	398	588	986	612	565	1,177
Cherry Street @ south of Front Street	0	0	0	0	0	0
Cherry Street @ south of Eastern Street	0	0	0	0	0	0
Mill Street @ east of Cherry Street	608	396	1,004	571	751	1,322
Front Street @ east of Cherry Street	546	128	674	264	505	769

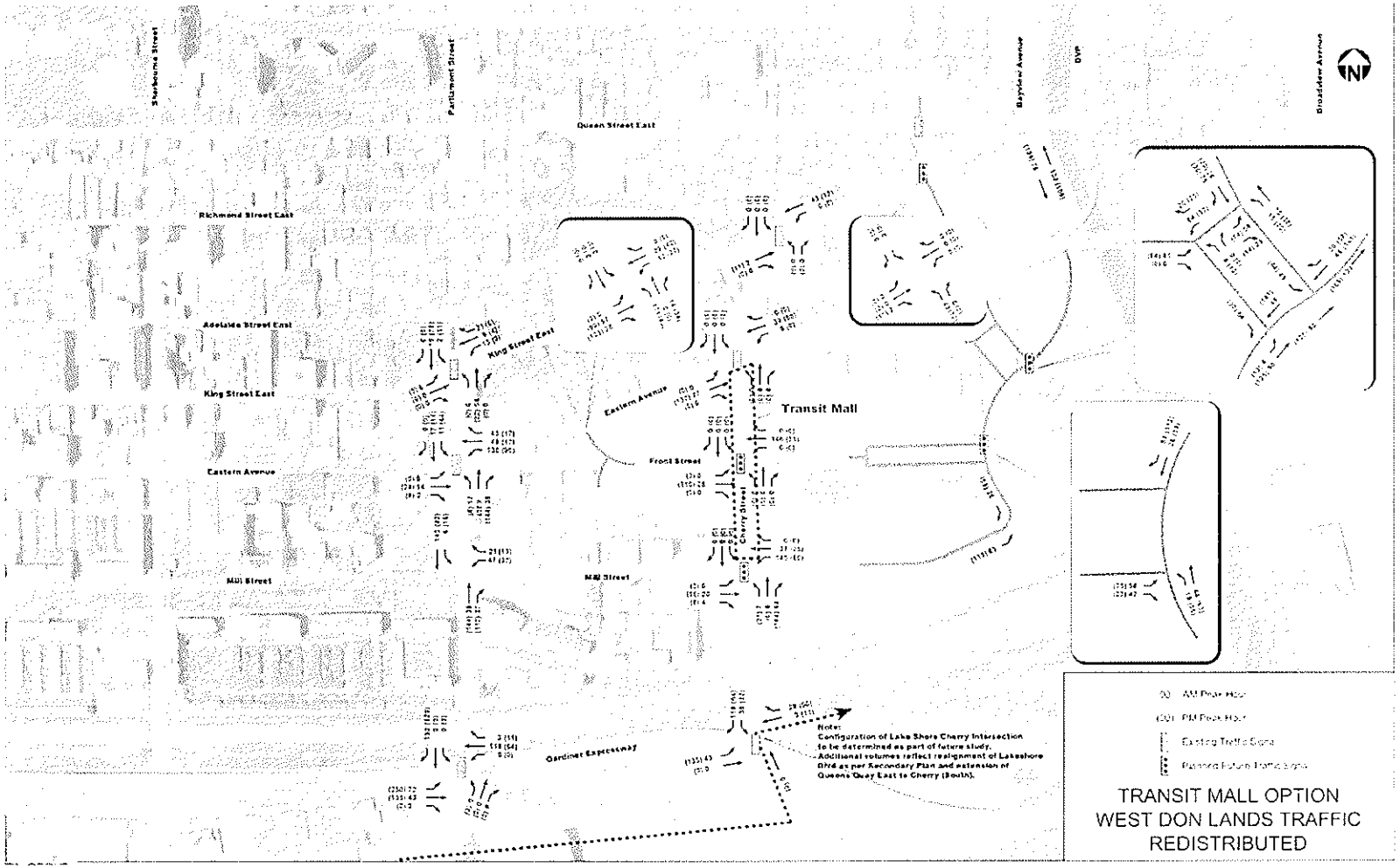
Option 6 – Total Redistributed Traffic Volumes



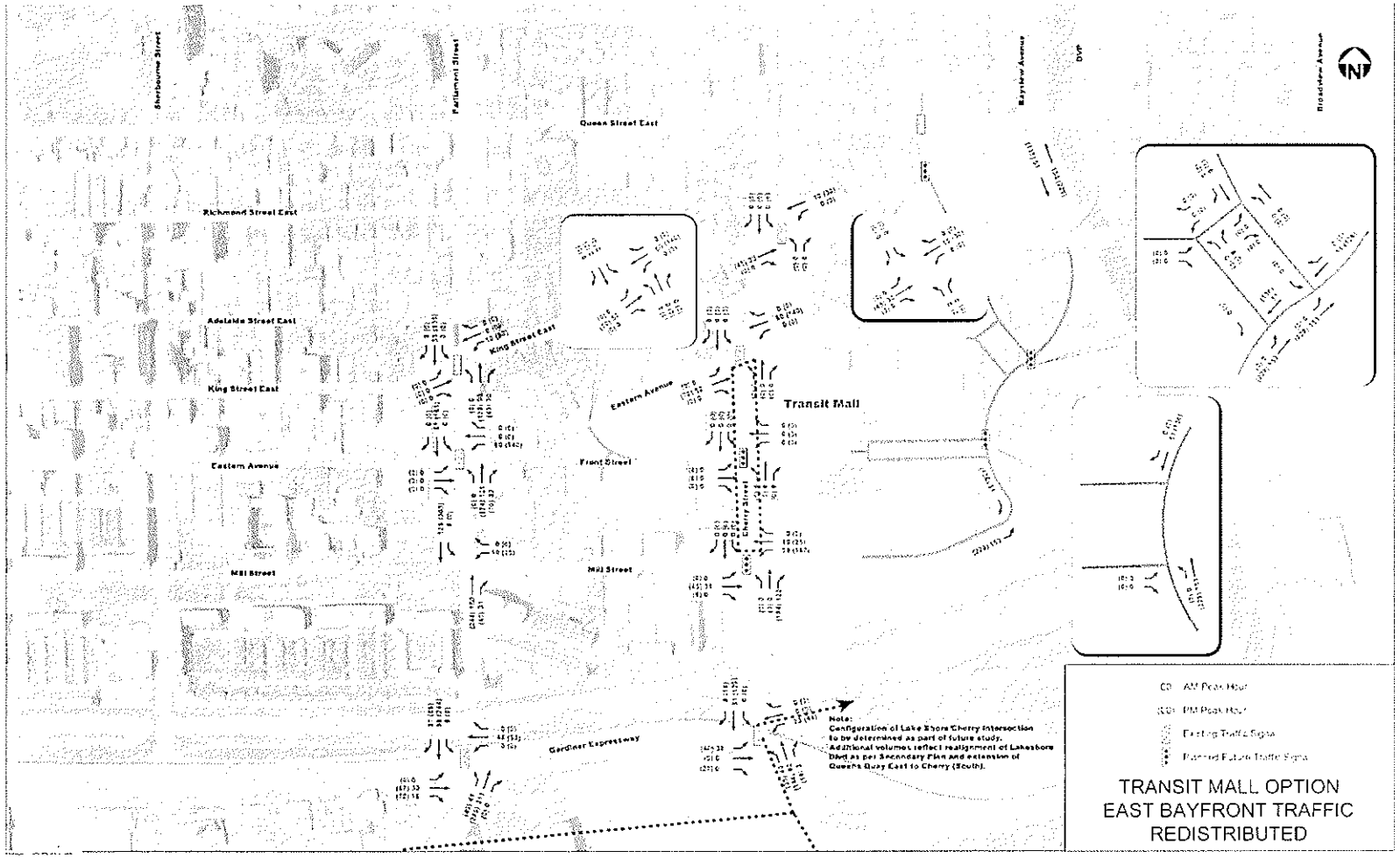
Option 6 – Existing Traffic Redistributed



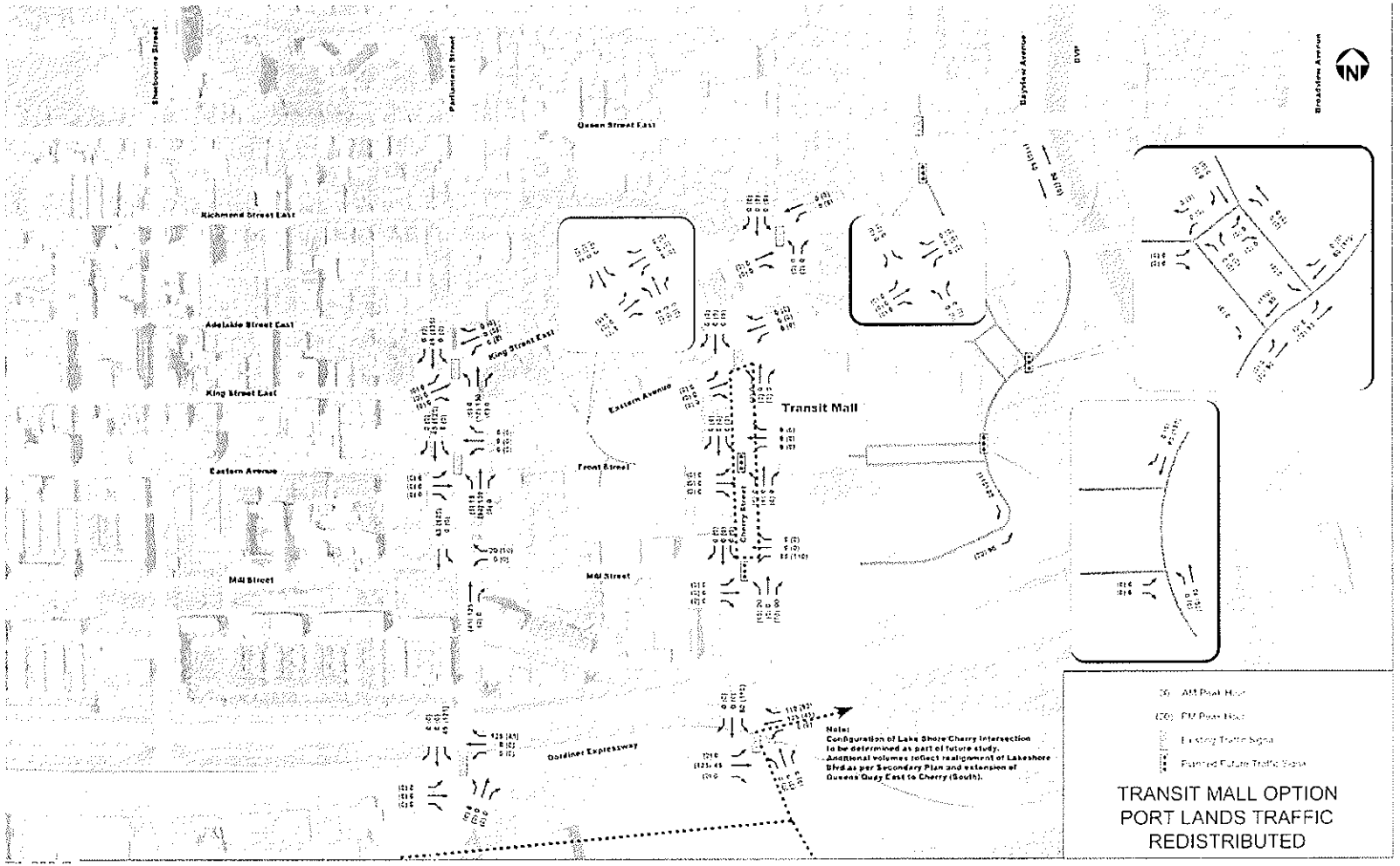
Option 6 – West Don Lands Traffic Redistributed



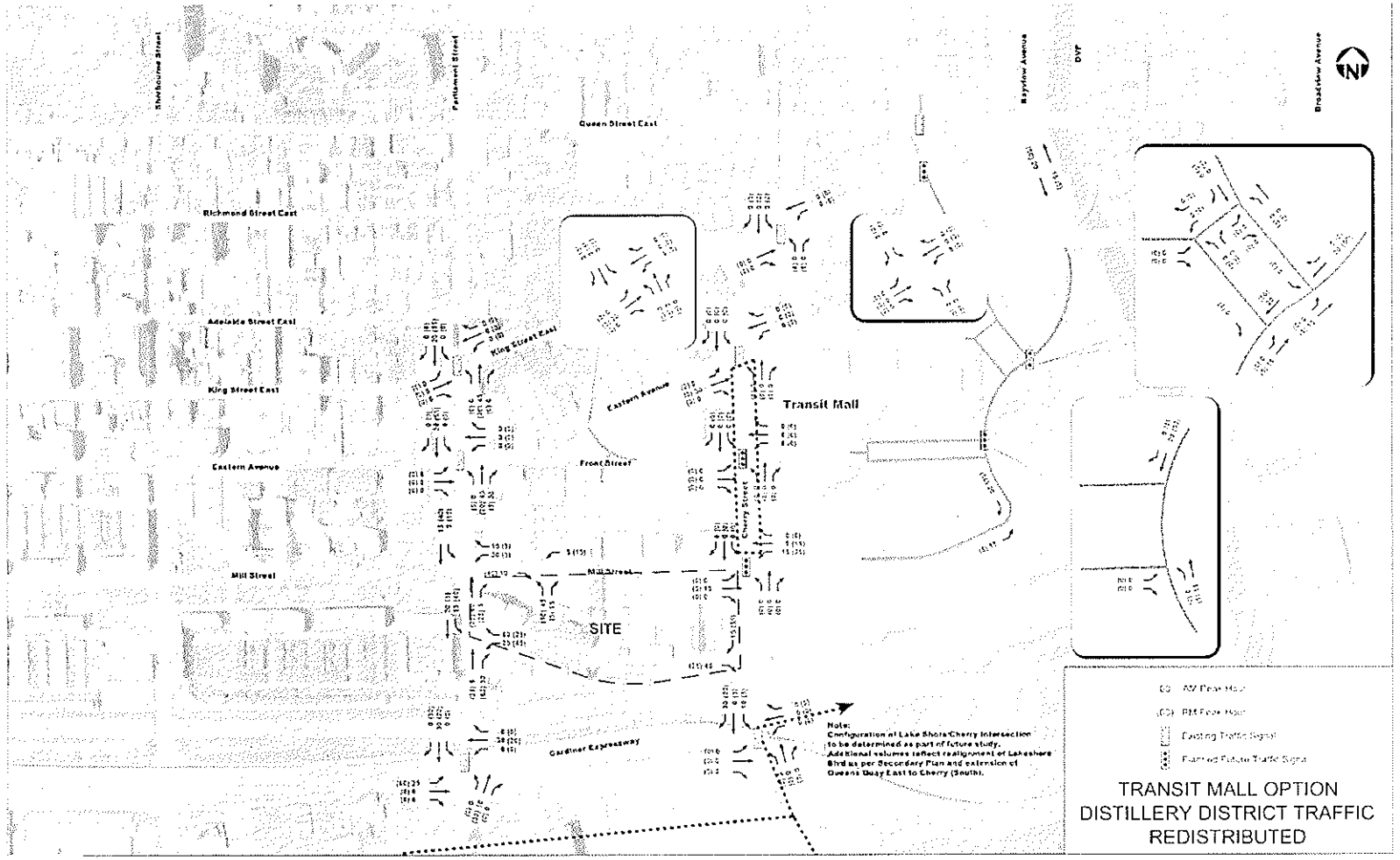
Option 6 – East Bayfront Traffic Redistributed



Option 6 – Port Lands Traffic Redistributed



Option 6 – Distillery District Traffic Redistributed



Option 7: Dedicated Transit Median (West Don Lands Precinct Plan)

Option 7: Dedicated Transit Median (West Don Lands Precinct Plan)

Key Assumptions

- Transit in dedicated right-of-way in centre of Cherry

  - likely raised
  - flush at intersections

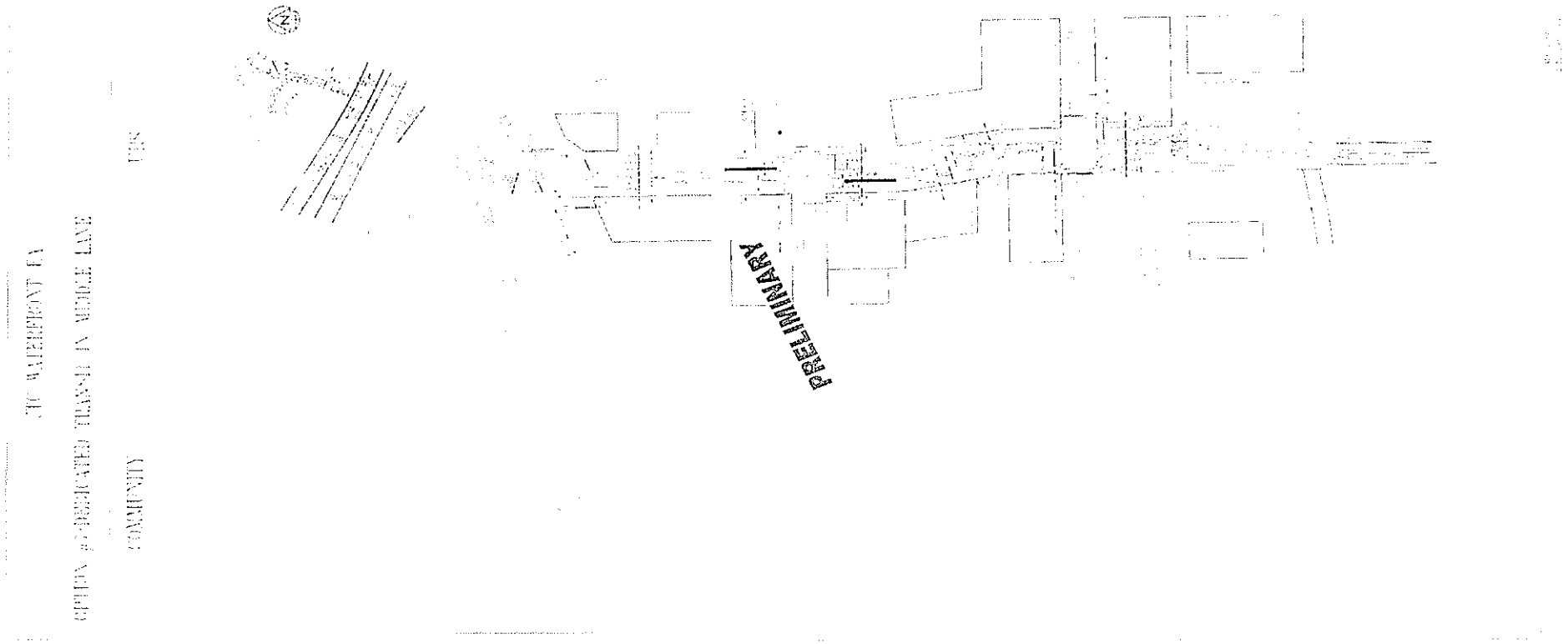
- NB and SB left turn lanes
  - right turns occur from north-south through lanes

- Two NB and SB through traffic lanes

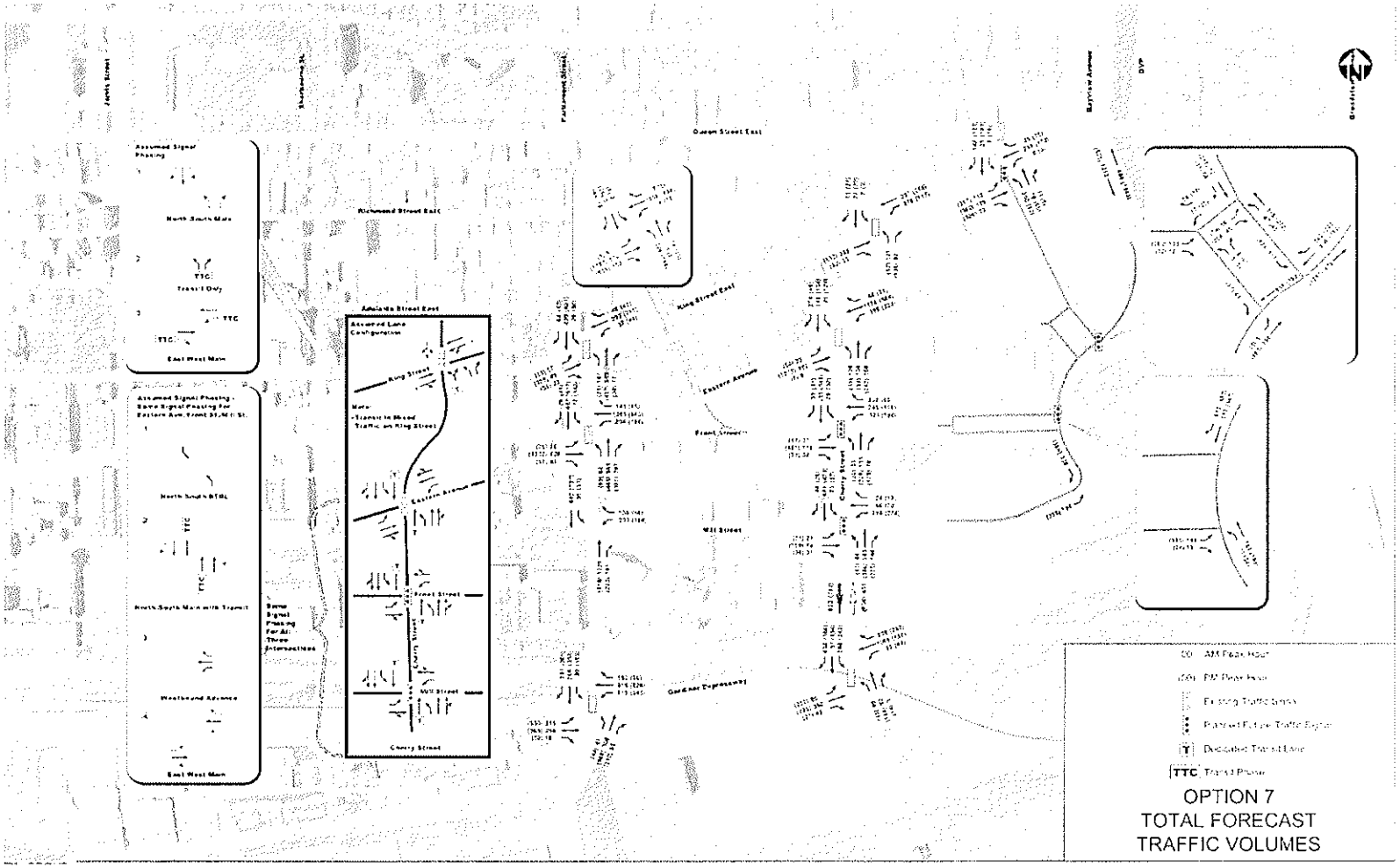
- Transit moves with north-south through movements

  - left turns move on restrictive phasing – short 'window'
  - left turns at red during transit movements
  - transit pre-emption of north-south through movement phase

Option 7 - Plan



Option 7 - Volumes, Lane Configuration and Signal Phasing



Option 7 – Analysis Results / Link Volumes

Traffic Operations Results Summary

Intersection	Overall V/C Index	
	AM Peak	PM Peak
Cherry Street/Mill Street	0.45	0.59
Cherry Street/Front Street	0.65	0.77
Cherry Street/Eastern Street	0.87	0.90
Cherry Street/King Street	0.43	0.52

Link Traffic Volumes

	AM Peak			PM Peak		
	NB/WB	SB/EB	2-way	NB/WB	SB/EB	2-way
Cherry Street @ south of Mill Street	451	833	1,284	656	783	1,439
Cherry Street @ south of Front Street	296	691	987	424	613	1,037
Cherry Street @ south of Eastern Street	410	346	756	340	374	714
Mill Street @ east of Cherry Street	368	243	611	367	421	788
Front Street @ east of Cherry Street	844	219	1,063	376	719	1,095

APPENDICES: Detailed Analysis Sheets

OPTION 1

CCG/CALC 2 PERFORMANCE ANALYSIS DATA SUMMARY
FUTURE TOTAL TRAFFIC

Project : CHERRY ST. REVIEW-JN07
Scenario : WKDAY AM P H OP1 3-L
Data File: TOT-AM1.PC2

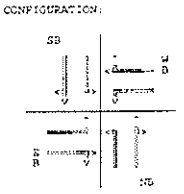
Page : 1
Printed On: June 20, 2007
Printed At: 9:09 PM

INTERSECTION: CHERRY/MILL

DEMAND VOLUMES:

Vehicles		Volume Adjustments		Pedestrian Volume	Pedestrian Walk Dst/Med Width(m)
25	24	3.0%	3.0%		
489	56	3.0%	3.0%	200	16/0
44	288	3.0%	3.0%		
				200 200	16/0 16/0
21	144	3.0%	3.0%		
74	263	3.0%	3.0%	200	16/0
31	44	3.0%	3.0%		

CONFIGURATION:



SIGNAL PHASING INFORMATION:

ϕ Type	Permitted Moves: SB	WB	NB	EB	Signal Timings: Green	Amber	Red	SAO	Effective Times: Eff. Green	Lost Time	Ped. X-W
1 N-S Main	RTL		RTL		54.0	3.0	2.0	0.0	54.0	5.0	20.3
2 WB Advance		RTL			9.0	2.0	1.0	0.0	9.0	2.0	3.0
3 E-W Main		RTL		RTL	25.0	3.0	2.0	0.0	25.0	5.0	20.3
Total:					87.0	8.0	5.0	0.0	88.0	12.0	

Methodology: Canadian Capacity Guide, 2nd Edition (1995) (vv)

Approach Specific Adjustments:	SB	WB	NB	EB
Lefts/Cycle on IG (PCU):	2.0	2.0	2.0	2.0
Shared Lefts/Cycle on IG (PCU):	0.0	0.0	0.0	0.0
Rights/Cycle on IG (PCU):	0.0	0.0	0.5	0.0
Progression Regime (1-6):	3	3	3	3
Prot Left Turn Sat'n Adj.:	1.00	1.00	1.00	1.00
Perm Left Turn Sat'n Adj.:	1.00	1.00	1.00	1.00
Right Turn (No Peds) Sat'n Adj.:	0.80	0.80	0.80	0.80
Through Lane Sat'n Adj.:	1.00	1.00	1.00	1.00

Other Settings:

Through Saturation:	1650 PCU/hour
Rights thru Pedestrians Formula:	Toronto
Pedestrian Walking Speed:	1.2 m/sec.
Min Pedestrian Walk Interval:	7.0 sec.
Delay Evaluation Interval:	60.0 min.
Confidence Level, Max Prob Queue:	95.0 %
Main Phase Grn Share Bal Crit:	2.0 %
Over-Capacity Permissive Left Adj.:	Off

PERFORMANCE RESULTS:

Flow Ratio Table:

ϕ Lane	Cfr. Vol.	Sat'n	y	Max. y	Eff. Green	Deg. Sat'n	Ped. Inc.
1 SB TR	549	1644	0.355	✓	54.0	0.657	
1 SB L	0	621	0.000		54.0	0.000	
1 NB TR	401	1311	0.306		54.0	0.557	
1 NB L	0	424	0.000		54.0	0.000	
2 WB TR	82	1535	0.054		9.0	0.536	
2 WB L	149	1650	0.090	✓	9.0	1.000	
3 EB TR	0	1276	0.000		25.0	0.000	
3 EB L	70	944	0.081		25.0	0.323	
3 EB TR	108	1281	0.084	✓	25.0	0.138	0.089
3 EB L	0	1650	0.000		25.0	+0.000	
Total:			0.529				+0.089

Other Measures:

Lane	Total Vol.	Total Cap.	Lane Deg. Satn	Avg. Veh. Delay	Avg. Queue (Cons)	Max. Prob. Queue	Prob. Disch. Ovrld.
SB TR	549	836	0.657	20	15	23	2.3%
SB L	26	438	0.063	11	1	1	0.0%
NB TR	419	726	0.578	19	12	19	0.0%
NB L	45	301	0.151	13	1	4	0.0%
EB TR	92	482	0.191	23	2	5	0.0%
WB L	237	456	0.650	35	8	14	4.2%
EB TR	108	320	0.338	14	3	7	0.1%
EB L	22	484	0.045	29	1	2	0.0%
Int'n:	1,548	4,015		24			

NOTE(S):
* Main Phase Green Times have NOT been Balanced.

SUMMARY of KEY RESULTS:

Cycle Time: 100.0 sec.
Lost Time: 12.0 sec.
Degree of Saturation: 0.601

CCG/CALC 2 PERFORMANCE ANALYSIS DATA SUMMARY
FUTURE TOTAL TRAFFIC

Project : CHERRY ST. REVIEW-JN07
Scenario : WKDAY AM P H OP1 3-L
Data File: TOT-AM1.PC2

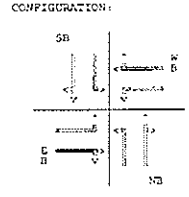
Page : 1
Printed On: June 20, 2007
Printed At: 9:46 PM

INTERSECTION: CHERRY/FRONT

DEMAND VOLUMES:

Vehicles		Volume Adjustments		Pedestrian Volume	Pedestrian Walk Dst/Med Width(m)
29	226	3.0%	3.0%		
331	295	3.0%	3.0%	200	16/0
30	321	3.0%	3.0%		
				200 200	16/0 16/0
31	78	3.0%	3.0%		
110	185	3.0%	3.0%	200	16/0
39	33	3.0%	3.0%		

CONFIGURATION:



SIGNAL PHASING INFORMATION:

ϕ Type	Permitted Moves: SB	WB	NB	EB	Signal Timings: Green	Amber	Red	SAO	Effective Times: Eff. Green	Lost Time	Ped. X-W
1 N-S Main	RTL		RTL		40.0	3.0	2.0	0.0	40.0	5.0	20.3
2 WB Advance		RTL			7.0	2.0	1.0	0.0	7.0	2.0	3.0
3 E-W Main		RTL		RTL	40.0	3.0	2.0	0.0	40.0	5.0	20.3
Total:					87.0	8.0	5.0	0.0	90.0	10.0	

Methodology: Canadian Capacity Guide, 2nd Edition (1995) (vv)

Approach Specific Adjustments:	SB	WB	NB	EB
Lefts/Cycle on IG (PCU):	2.0	2.0	2.0	2.0
Shared Lefts/Cycle on IG (PCU):	0.0	0.0	0.0	0.0
Rights/Cycle on IG (PCU):	0.0	0.0	1.0	0.0
Progression Regime (1-6):	3	3	3	3
Prot Left Turn Sat'n Adj.:	1.00	1.00	1.00	1.00
Perm Left Turn Sat'n Adj.:	1.00	1.00	1.00	1.00
Right Turn (No Peds) Sat'n Adj.:	0.67	0.80	0.39	0.80
Through Lane Sat'n Adj.:	0.94	1.00	0.47	1.00

Other Settings:

Through Saturation:	1650 PCU/hour
Rights thru Pedestrians Formula:	Toronto
Pedestrian Walking Speed:	1.2 m/sec.
Min Pedestrian Walk Interval:	7.0 sec.
Delay Evaluation Interval:	60.0 min.
Confidence Level, Max Prob Queue:	95.0 %
Main Phase Grn Share Bal Crit:	2.0 %
Over-Capacity Permissive Left Adj.:	Off

PERFORMANCE RESULTS:

Flow Ratio Table:

ϕ Lane	Cfr. Vol.	Sat'n	y	Max. y	Eff. Green	Deg. Sat'n	Ped. Inc.
1 SB TR	372	1325	0.281		40.0	0.701	
1 SB L	0	767	0.000		40.0	0.000	
1 NB TR	275	742	0.312	✓	40.0	0.771	
1 NB L	0	486	0.000		40.0	0.000	
2 WB TR	119	1488	0.080		8.0	1.000	
2 WB L	132	1650	0.080		8.0	1.000	
3 EB TR	330	1265	0.348	✓	42.0	0.821	
3 EB L	157	1272	0.123		40.0	0.327	
3 EB TR	156	1354	0.115		40.0	0.287	
3 EB L	0	435	0.000		40.0	0.000	
Total:			0.745				+0.000

Other Measures:

Lane	Total Vol.	Total Cap.	Lane Deg. Satn	Avg. Veh. Delay	Avg. Queue (Cons)	Max. Prob. Queue	Prob. Disch. Ovrld.
SB TR	372	530	0.701	33	10	17	6.1%
SB L	30	380	0.079	19	1	3	0.0%
NB TR	271	333	0.814	49	8	13	22.8%
NB L	34	264	0.129	20	1	2	0.0%
EB TR	519	625	0.862	39	15	23	24.8%
WB L	331	604	0.547	22	9	20	0.6%
EB TR	156	543	0.287	20	4	9	0.0%
EB L	32	246	0.130	20	1	3	0.0%
Int'n:	1,745	3,523		33			

NOTE(S):
* Main Phase Green Times have NOT been Balanced.

SUMMARY of KEY RESULTS:

Cycle Time: 100.0 sec.
Lost Time: 10.0 sec.
Degree of Saturation: 0.827

CCG/CALC 2 PERFORMANCE ANALYSIS DATA SUMMARY
FUTURE TOTAL TRAFFIC

Project : CHERRY ST. REVIEW-JN07
Scenario : WKDAY AM P H OP1 3-L
Data File: TOT-AM1.PC2

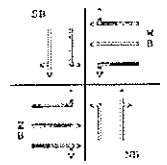
Page : 1
Printed On: June 20, 2007
Printed At: 9:52 PM

INTERSECTION: CHERRY/EASTERN

DEMAND VOLUMES:

Vehicles			Volume Adjustments		Pedestrian Volume		Pedestrian Walk Dst/Med Width(m)	
	29	44		3.0%	3.0%	<200		<21/0
	148	1,174		3.0%	3.0%			
	274	198		3.0%	3.0%			
	29	160		3.0%	3.0%	>200	>200	>21/0
	932	120		3.0%	3.0%			
	0	120		3.0%	3.0%	<200		<18/0

CONFIGURATION:



SIGNAL PHASING INFORMATION:

ϕ Type	Permitted Moves: SB	WB	NB	EB	Signal Timings: Green	Amber	Red	SAG	Effective Times: Eff. Green	Lost Time	Ped. X+W
1 N-S Main	RTL		RTL		45.0	3.0	2.0	0.0	45.0	5.0	26.2
2 WB Advance		RTL			10.0	3.0	1.0	0.0	11.0	2.0	0.0
3 E-W Main		RTL		RTL	32.0	3.0	1.0	0.0	32.0	5.0	24.5
Total:					87.0	9.0	5.0	0.0	88.0	12.0	

Methodology: Canadian Capacity Guide, 2nd Edition (1995) (vv)

Approach Specific Adjustments:	SB	WB	NB	EB
Lefts/Cycle on IG (PCU):	2.0	2.0	2.0	2.0
Shared Lefts/Cycle on IG (PCU):	0.0	0.0	0.0	0.0
Rights/Cycle on IG (PCU):	0.0	0.0	0.5	0.0
Progression Regime (1-6):	3	3	3	3
Prot Left Turn Sat'n Adj.:	1.00	1.00	1.00	1.00
Perm Left Turn Sat'n Adj.:	1.00	1.00	1.00	1.00
Right Turn (No Pedn) Sat'n Adj.:	0.80	0.80	0.80	0.80
Through Lane Sat'n Adj.:	1.00	1.00	1.00	1.00

Other Settings:

Through Saturation:	1650 PCU/hour
Rights thru Pedestrians Formula:	Toronto
Pedestrian Walking Speed:	1.2 m/sec.
Min Pedestrian Walk Interval:	7.0 sec.
Delay Evaluation Interval:	60.0 min.
Confidence Level, Max Prob Queue:	95.0 %
Main Phase Grn Share Bal Crit:	2.0 %
Over-Capacity Permissive Left Adj.:	Off

PERFORMANCE RESULTS:

Flow Ratio Table:

ϕ Lane	Clr. Vol.	Sat'n	y	Max. y	Eff. Green	Deg. Sat'n	Ped. Inc.
1 SB TR	435	1574	0.465	*	45.0	0.899	
1 SB L	0	733	0.000		45.0	0.000	
1 NB TR	281	1182	0.244		45.0	0.567	
1 NB L	130	456	0.311	*	45.0	0.252	
2 WB TR	178	1620	0.110	*	11.0	1.000	
2 WB T	161	1550	0.110		11.0	1.000	
2 WB L	132	1550	0.085		11.0	0.727	
3 WB TR	431	1546	0.280		34.0	0.823	
3 WB T	402	1550	0.260		34.0	0.823	
3 WB L	0	72	0.000	*	32.0	0.000	
3 EB TR	517	1650	0.330	*	32.0	0.968	
3 EB T	521	1550	0.310		32.0	0.968	
3 EB L	0	154	0.000		32.0	0.000	
Total:			3.824			+0.000	

Other Measures:

Lane	Total Vol.	Total Cap.	Lane Deg. Satn	Avg. Veh. Delay	Avg. Queue (Cons)	Max. Prob. Queue	Prob. Disch. Ovrld.
SB TR	435	483	0.899	54	12	19	32.6%
SB L	30	401	0.074	16	1	3	0.0%
NB TR	299	537	0.557	24	6	14	1.1%
NB L	124	277	0.446	24	3	7	0.0%
WB TR	611	704	0.868	41	17	35	19.3%
WB T	643	743	0.867	40	18	37	19.2%
WB L	204	277	0.737	43	6	11	11.0%
EB TR	511	528	0.968	87	14	23	35.0%
EB T	511	528	0.968	87	14	23	35.0%
EB L	30	121	0.246	30	1	3	1.0%
Int'n:	3,397	4,595		54			

NOTE(S):

SUMMARY of KEY RESULTS:

Cycle Time: 100.0 sec.
Lost Time: 12.0 sec.
Degree of Saturation: 0.937

CCG/CALC 2 PERFORMANCE ANALYSIS DATA SUMMARY
FUTURE TOTAL TRAFFIC

Project : CHERRY ST. REVIEW-JN07
Scenario : WKDAY AM P H OP1 3-L
Data File: TOT-AM1.PC2

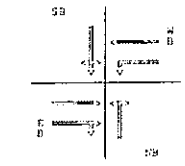
Page : 1
Printed On: June 20, 2007
Printed At: 9:55 PM

INTERSECTION: CHERRY/KING

DEMAND VOLUMES:

Vehicles			Volume Adjustments		Pedestrian Volume		Pedestrian Walk Dst/Med Width(m)	
	7	0		29.0%	3.0%	<200		<8.0/0
	27	227		3.0%	3.0%			
	13	276		3.0%	4.0%			
	0	99		3.0%	3.0%	>200	>200	>19/0
	288	0		15.0%	3.0%			
	33	121		4.0%	3.0%	<200		<29/0

CONFIGURATION:



SIGNAL PHASING INFORMATION:

ϕ Type	Permitted Moves: SB	WB	NB	EB	Signal Timings: Green	Amber	Red	SAG	Effective Times: Eff. Green	Lost Time	Ped. X+W
1 N-S Main	RTL		RTL		37.0	3.0	2.0	0.0	37.0	5.0	0.0
2 WB Advance		RTL			9.0	3.0	1.0	0.0	11.0	2.0	0.0
3 E-W Main		RTL		RTL	35.0	3.0	1.0	0.0	35.0	5.0	0.0
4 Peds only					3.0	1.0	1.0	0.0	0.0	5.0	31.2
Total:					84.0	10.0	6.0	0.0	83.0	17.0	

Methodology: Canadian Capacity Guide, 2nd Edition (1995) (vv)

Approach Specific Adjustments:	SB	WB	NB	EB
Lefts/Cycle on IG (PCU):	0.0	2.0	0.0	0.0
Shared Lefts/Cycle on IG (PCU):	0.0	0.0	0.0	0.0
Rights/Cycle on IG (PCU):	0.0	0.0	0.0	0.0
Progression Regime (1-6):	3	3	1	1
Prot Left Turn Sat'n Adj.:	1.00	1.00	0.70	1.00
Perm Left Turn Sat'n Adj.:	1.00	1.00	0.70	1.00
Right Turn (No Pedn) Sat'n Adj.:	0.80	0.70	0.56	0.66
Through Lane Sat'n Adj.:	1.00	0.87	0.70	0.92

Other Settings:

Through Saturation:	1650 PCU/hour
Rights thru Pedestrians Formula:	Toronto
Pedestrian Walking Speed:	1.2 m/sec.
Min Pedestrian Walk Interval:	7.0 sec.
Delay Evaluation Interval:	60.0 min.
Confidence Level, Max Prob Queue:	95.0 %
Main Phase Grn Share Bal Crit:	2.0 %
Over-Capacity Permissive Left Adj.:	Off

PERFORMANCE RESULTS:

Flow Ratio Table:

ϕ Lane	Clr. Vol.	Sat'n	y	Max. y	Eff. Green	Deg. Sat'n	Ped. Inc.
1 SB TRL	55	1523	0.036	*	37.0	0.098	
1 NB RL	254	569	0.363	*	37.0	0.638	
2 WB T	158	1436	0.110	*	11.0	1.000	
2 WB L	180	1650	0.110		11.0	1.000	
3 EB TR	169	1436	0.216		37.0	0.322	
3 EB L	34	704	0.048	*	35.0	0.334	
3 EB T	176	1410	0.125	*	35.0	0.357	
Total:			0.337			+0.000	

Other Measures:

Lane	Total Vol.	Total Cap.	Lane Deg. Satn	Avg. Veh. Delay	Avg. Queue (Cons)	Max. Prob. Queue	Prob. Disch. Ovrld.
SB TRL	55	563	0.098	21	2	4	0.0%
NB RL	326	423	0.533	38	6	10	1.2%
WB T	324	669	0.470	20	9	15	0.1%
WB L	287	500	0.574	25	8	14	1.7%
EB TR	176	493	0.357	26	5	10	0.0%
EB T	190	531	0.357	26	5	10	0.0%
Int'n:	1,257	3,200		25			

NOTE(S):
* Main Phase Green Times have NOT been Balanced.
* Minimum Pedestrian Crossing Requirements have not been met

SUMMARY of KEY RESULTS:

Cycle Time: 100.0 sec.
Lost Time: 17.0 sec.
Degree of Saturation: 0.478

CCG/CALC 2 PERFORMANCE ANALYSIS DATA SUMMARY
FUTURE TOTAL TRAFFIC

Project : CHERRY ST. REVIEW-JN07
Scenario : WKDAY PM P H OP1 3-L
Data File: TOT-PM1.PC2

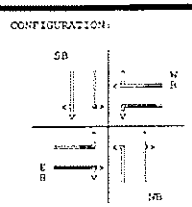
Page : 1
Printed On: June 20, 2007
Printed At: 9:57 PM

INTERSECTION: CHERRY/MILL

DEMAND VOLUMES:

Vehicles		Volume Adjustments		Pedestrian Volume		Pedestrian Walk Dst/Med Width(m)	
37	13	3.0%	3.0%				
429	70	4.0%	3.0%	200		16/0	
28	278	3.0%	3.0%				
				200	200	16/0	16/0
71	225	3.0%	3.0%				
159	286	3.0%	3.0%	200		16/0	
36	45	3.0%	3.0%				

CONFIGURATION:



SIGNAL PHASING INFORMATION:

	Permitted Moves:				Signal Timings:				Effective Times:		
ϕ Type	SB	WB	NB	EB	Green	Amber	Red	SAG	Eff. Green	Lost Time	Ped. X+W
1 N-S Main	RTL		RTL		57.0	3.0	2.0	0.0	57.0	5.0	20.3
2 WB Advance		RTL			10.0	3.0	1.0	0.0	11.0	2.0	0.0
3 E-W Main		RTL		RTL	20.0	3.0	2.0	0.0	20.0	5.0	20.3
Total:					87.0	9.0	5.0	0.0	88.0	12.0	

Methodology: Canadian Capacity Guide, 2nd Edition (1995) (vv)

Approach Specific Adjustments:	SB	WB	NB	EB
Lefts/Cycle on IG (PCU):	2.0	2.0	2.0	2.0
Shared Lefts/Cycle on IG (PCU):	0.0	0.0	0.0	0.0
Rights/Cycle on IG (PCU):	0.0	0.0	0.0	0.0
Progression Regime (1-6):	3	3	3	3
Prot Left Turn Sat'n Adj.:	1.00	1.00	1.00	1.00
Perm Left Turn Sat'n Adj.:	1.00	1.00	1.00	1.00
Right Turn (No Peds) Sat'n Adj.:	0.80	0.00	0.80	0.80
Through Lane Sat'n Adj.:	1.00	1.00	1.00	1.00

Other Settings:	
Through Saturation:	1650 PCU/hour
Rights thru Pedestrians Formula:	Toronto
Pedestrian Walking Speed:	1.2 m/sec.
Min Pedestrian Walk Interval:	7.0 sec.
Delay Evaluation Interval:	60.0 min.
Confidence Level, Max Prob Queue:	95.0 %
Main Phase Grn Share Sat Crit:	2.0 %
Over-Capacity Permissive Left Adj.:	Off

PERFORMANCE RESULTS:

Flow Ratio Table:

ϕ Lane	Cfr. Vol.	Sat'n	y	Max. y	Eff. Green	Deg. Sat'n	Ped. Inc.
1 SB TR	827	1676	0.354		57.0	0.587	
1 SB L	0	171	0.000		57.0	0.000	
1 NB TR	629	1254	0.502	✓	57.0	0.891	
1 NB L	0	484	0.000		57.0	0.000	
2 WB TR	92	1566	0.059		11.0	0.532	
2 WB L	185	1650	0.112	✓	11.0	1.000	
3 EB TR	0	1279	0.000		22.0	0.000	
3 EB L	33	431	0.076		20.0	0.381	
3 EB TR	201	1313	0.153	✓	20.0	0.761	0.021
3 EB L	1	1650	0.001		20.0	0.053	
Total:			0.764				+0.021

Other Measures:

Lane	Total Vol.	Total Cap.	Lane Deg. Satn	Avg. Veh. Delay	Avg. Queue (Cenu)	Max. Prob. Queue	Prob. Disch. Ovrld.
SB TR	527	938	0.562	17	15	23	0.5%
SB L	39	205	0.114	11	1	3	0.0%
NB TR	629	715	0.881	36	17	30	22.9%
NB L	46	348	0.133	11	1	4	0.3%
WB TR	92	454	0.202	25	3	6	0.0%
WB L	286	340	0.843	58	8	14	27.4%
EB TR	201	264	0.761	59	6	11	20.9%
EB L	73	452	0.162	34	2	5	0.5%
Int'n:	1,893	3,704		35			

NOTE(S):
* Main Phase Green Times have NOT been Balanced.

SUMMARY of KEY RESULTS:

Cycle Time: 100.0 sec.
Lost Time: 12.0 sec.
Degree of Saturation: 0.868

CCG/CALC 2 PERFORMANCE ANALYSIS DATA SUMMARY
FUTURE TOTAL TRAFFIC

Project : CHERRY ST. REVIEW-JN07
Scenario : WKDAY PM P H OP1 3-L
Data File: TOT-PM1.PC2

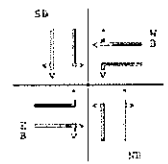
Page : 1
Printed On: June 20, 2007
Printed At: 9:59 PM

INTERSECTION: CHERRY/FRONT

DEMAND VOLUMES:

Vehicles		Volume Adjustments		Pedestrian Volume		Pedestrian Walk Dst/Med Width(m)	
50	66	3.0%	0.0%				
345	116	4.0%	0.0%	200		16/0	
37	194	3.0%	0.0%				
				200	200	16/0	16/0
61	179	0.0%	3.0%				
491	226	0.0%	3.0%	200		16/0	
71	20	0.0%	3.0%				

CONFIGURATION:



SIGNAL PHASING INFORMATION:

	Permitted Moves:				Signal Timings:				Effective Times:		
ϕ Type	SB	WB	NB	EB	Green	Amber	Red	SAG	Eff. Green	Lost Time	Ped. X+W
1 N-S Main	RTL		RTL		43.0	3.0	2.0	0.0	43.0	5.0	20.3
2 WB Advance		RTL			6.0	3.0	0.0	0.0	6.0	2.0	0.0
3 E-W Main		RTL		RTL	39.0	3.0	2.0	0.0	39.0	5.0	20.3
Total:					87.0	9.0	4.0	0.0	88.0	12.0	

Methodology: Canadian Capacity Guide, 2nd Edition (1995) (vv)

Approach Specific Adjustments:	SB	WB	NB	EB
Lefts/Cycle on IG (PCU):	2.0	2.0	2.0	2.0
Shared Lefts/Cycle on IG (PCU):	0.0	0.0	0.0	0.0
Rights/Cycle on IG (PCU):	0.0	0.0	0.0	0.0
Progression Regime (1-6):	3	3	3	3
Prot Left Turn Sat'n Adj.:	1.00	1.00	1.00	1.00
Perm Left Turn Sat'n Adj.:	1.00	1.00	1.00	1.00
Right Turn (No Peds) Sat'n Adj.:	0.45	0.80	0.67	0.80
Through Lane Sat'n Adj.:	0.60	1.00	0.84	1.00

Other Settings:	
Through Saturation:	1650 PCU/hour
Rights thru Pedestrians Formula:	Toronto
Pedestrian Walking Speed:	1.2 m/sec.
Min Pedestrian Walk Interval:	7.0 sec.
Delay Evaluation Interval:	60.0 min.
Confidence Level, Max Prob Queue:	95.0 %
Main Phase Grn Share Sat Crit:	2.0 %
Over-Capacity Permissive Left Adj.:	Off

PERFORMANCE RESULTS:

Flow Ratio Table:

ϕ Lane	Cfr. Vol.	Sat'n	y	Max. y	Eff. Green	Deg. Sat'n	Ped. Inc.
1 SB TR	400	960	0.417	✓	43.0	0.970	
1 SB L	0	480	0.000		43.0	0.000	
1 NB TR	416	1126	0.372		43.0	0.864	
1 NB L	0	480	0.000		43.0	0.000	
2 WB TR	91	1513	0.060	✓	5.0	1.000	
2 WB L	99	1650	0.060		5.0	1.000	
3 EB TR	551	1165	0.473		39.0	0.177	
3 EB L	91	250	0.364		39.0	0.267	
3 WB TR	542	1490	0.177	✓	39.0	0.367	
3 WB L	0	1241	0.000		39.0	0.000	
Total:			0.864				+0.000

Other Measures:

Lane	Total Vol.	Total Cap.	Lane Deg. Satn	Avg. Veh. Delay	Avg. Queue (Cenu)	Max. Prob. Queue	Prob. Disch. Ovrld.
SB TR	400	413	0.970	22	11	19	41.6%
SB L	52	268	0.193	19	1	4	0.0%
NB TR	416	481	0.864	48	12	19	27.3%
NB L	21	278	0.074	17	1	2	0.0%
WB TR	102	608	0.330	18	3	10	0.0%
WB L	124	257	0.755	44	5	13	17.7%
EB TR	662	691	0.967	80	16	24	39.6%
EB L	61	556	0.110	20	2	5	0.0%
Int'n:	1,892	3,441		61			

NOTE(S):

SUMMARY of KEY RESULTS:

Cycle Time: 100.0 sec.
Lost Time: 12.0 sec.
Degree of Saturation: 0.971

CCG/CALC 2 PERFORMANCE ANALYSIS DATA SUMMARY
FUTURE TOTAL TRAFFIC

Project : CHERRY ST. REVIEW-JN07
Scenario : WKDAY PM P H OP1 3-L
Data File: TOT-PM1.PC2

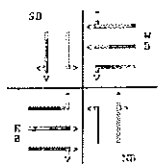
Page : 1
Printed On: June 20, 2007
Printed At: 9:59 PM

INTERSECTION: CHERRY/EASTERN

DEMAND VOLUMES:

Vehicles		Volume Adjustments		Pedestrian Volume		Pedestrian Walk Dst/Wid Width(m)	
129	23	3.0%	3.0%				
154	234	5.0%	3.0%	200		21/0	
46	220	3.0%	3.0%				
				200	200	23/0	23/0
50	242	3.0%	3.0%				
1,075	59	3.0%	3.0%	200		18/0	
6	37	3.0%	3.0%				

CONFIGURATION:



SIGNAL PHASING INFORMATION:

ϕ Type	Permitted Moves: SB	WB	NB	EB	Signal Timings: Green	Amber	Red	WAS	Effective Times: Eff. Green	Lost Time	Ped. X+W
1 N-S Main	RTL		RTL		38.0	3.0	2.0	0.0	38.0	5.0	26.2
2 WB Advance		RTL			6.0	2.0	1.0	0.0	7.0	2.0	0.0
3 E-W Main		RTL		RTL	43.0	3.0	2.0	0.0	43.0	5.0	24.5
Total:					87.0	8.0	5.0	0.0	88.0	12.0	

Methodology: Canadian Capacity Guide, 2nd Edition (1995) (vv)

Approach Specific Adjustments:	SB	WB	NB	EB
Lefts/Cycle on IG (PCU):	2.0	2.0	2.0	2.0
Shared Lefts/Cycle on IG (PCU):	0.0	0.0	0.0	0.0
Rights/Cycle on IG (PCU):	0.0	0.0	0.0	0.0
Progression Regime (1-6):	3	3	3	3
Prot Left Turn Sat'n Adj.:	1.00	1.00	1.00	1.00
Perm Left Turn Sat'n Adj.:	1.00	1.00	1.00	1.00
Right Turn (No Pede) Sat'n Adj.:	0.80	0.80	0.80	0.80
Through Lane Sat'n Adj.:	1.00	1.00	1.00	1.00

Other Settings:	
Through Saturation:	1650 PCU/hour
Rights thru Pedestrians Formula:	Toronto
Pedestrian Walking Speed:	1.2 m/sec.
Min Pedestrian Walk Interval:	7.0 sec.
Delay Evaluation Interval:	60.0 min.
Confidence Level, Max Prob Queue:	95.0 %
Main Phase Grn Share Bal Crit:	2.0 %
Over-Capacity Permissive Left Adj.:	Off

PERFORMANCE RESULTS:

Flow Ratio Table:

ϕ Lane	Clr. Vol.	Sat'n	y	Max. y	Eff. Green	Deg. Sat'n	Ped. Inc.
1 SB TR	206	1380	0.150		38.0	0.736	
1 SB L	91	571	0.159		38.0	0.295	
1 NB TR	320	970	0.330	Y	38.0	0.736	
1 NB L	0	812	0.000	Y	38.0	0.000	
2 WB TR	113	1618	0.070		7.0	1.000	
2 WB T	116	1650	0.070		7.0	1.000	
2 WB L	116	1650	0.070		7.0	1.000	
3 EB TR	244	1545	0.158		45.0	0.351	
3 EB T	251	1650	0.152		45.0	0.351	
3 EB L	19	152	0.125		45.0	0.351	
3 NB TR	534	1619	0.330	Y	43.0	0.788	
3 NB T	550	1650	0.333		43.0	0.788	
3 NB L	0	659	0.000		45.0	0.000	
Total:			0.726				+0.000

Other Measures:

Lane	Total Vol.	Total Cap.	Lane Deg. Satn	Avg. Veh. Delay	Avg. Queue (Cons)	Max. Prob. Queue	Prob. Disch. Ovrld.
SB TR	338	524	0.376	25	6	11	0.0%
SB L	133	286	0.465	29	4	8	1.4%
NB TR	310	371	0.836	51	9	15	24.9%
NB L	40	381	0.106	31	1	4	0.0%
WB TR	357	809	0.442	13	10	17	0.0%
WB T	376	858	0.438	17	10	17	0.0%
WB L	227	267	0.851	66	5	12	29.7%
EB TR	554	703	0.788	34	16	23	10.0%
EB T	592	710	0.788	34	16	24	10.7%
EB L	52	356	0.145	13	1	4	0.0%
Int'n:	2,816	5,254		32			

NOTE(S):

SUMMARY of KEY RESULTS:

Cycle Time: 100.0 sec.
Lost Time: 12.0 sec.
Degree of Saturation: 0.826

CCG/CALC 2 PERFORMANCE ANALYSIS DATA SUMMARY
FUTURE TOTAL TRAFFIC

Project : CHERRY ST. REVIEW-JN07
Scenario : WKDAY PM P H OP1 3-L
Data File: TOT-PM1.PC2

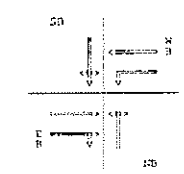
Page : 1
Printed On: June 21, 2007
Printed At: 8:34 AM

INTERSECTION: CHERRY/KING

DEMAND VOLUMES:

Vehicles		Volume Adjustments		Pedestrian Volume		Pedestrian Walk Dst/Wid Width(m)	
9	0	3.0%	3.0%				
23	278	3.0%	12.0%	200		0.0/0	
27	115	3.0%	6.0%				
				200	200	13/0	13/0
0	136	3.0%	3.0%				
532	3	10.0%	3.0%	200		29/0	
93	62	6.0%	3.0%				

CONFIGURATION



SIGNAL PHASING INFORMATION:

ϕ Type	Permitted Moves: SB	WB	NB	EB	Signal Timings: Green	Amber	Red	WAS	Effective Times: Eff. Green	Lost Time	Ped. X+W
1 N-S Main	RTL		RL		35.0	3.0	2.0	0.0	35.0	5.0	0.0
2 WB Advance		RTL			6.0	3.0	1.0	0.0	8.0	2.0	0.0
3 E-W Main		RTL		RTL	40.0	3.0	2.0	0.0	40.0	5.0	0.0
4 Ped-only					3.0	1.0	1.0	0.0	0.0	5.0	31.2 *
Total:					84.0	10.0	6.0	0.0	83.0	17.0	

TRANSIT PHASE

Methodology: Canadian Capacity Guide, 2nd Edition (1995) (vv)

Approach Specific Adjustments:	SB	WB	NB	EB
Lefts/Cycle on IG (PCU):	0.0	2.0	0.0	0.0
Shared Lefts/Cycle on IG (PCU):	0.0	0.0	0.0	0.0
Rights/Cycle on IG (PCU):	0.0	0.0	2.0	0.0
Progression Regime (1-6):	3	3	3	3
Prot Left Turn Sat'n Adj.:	1.00	1.00	1.00	1.00
Perm Left Turn Sat'n Adj.:	1.00	1.00	1.00	1.00
Right Turn (No Pede) Sat'n Adj.:	0.80	0.70	0.71	0.68
Through Lane Sat'n Adj.:	1.00	0.87	0.89	0.92

Other Settings:	
Through Saturation:	1650 PCU/hour
Rights thru Pedestrians Formula:	Toronto
Pedestrian Walking Speed:	1.2 m/sec.
Min Pedestrian Walk Interval:	7.0 sec.
Delay Evaluation Interval:	60.0 min.
Confidence Level, Max Prob Queue:	95.0 %
Main Phase Grn Share Bal Crit:	2.0 %
Over-Capacity Permissive Left Adj.:	Off

PERFORMANCE RESULTS:

Flow Ratio Table:

ϕ Lane	Clr. Vol.	Sat'n	y	Max. y	Eff. Green	Deg. Sat'n	Ped. Inc.
1 SB TRL	58	1477	0.039		15.0	0.125	
1 NB RL	339	1248	0.184	Y	35.0	0.256	
2 WB T	115	1436	0.080	Y	8.0	1.000	
2 WB L	50	1450	0.030		8.0	0.378	
3 EB TR	147	1436	0.132		42.0	0.326	
3 EB L	0	336	0.000		40.0	0.000	
3 EB T	359	1528	0.256	Y	40.0	0.591	
Total:			0.420				+0.000

Other Measures:

Lane	Total Vol.	Total Cap.	Lane Deg. Satn	Avg. Veh. Delay	Avg. Queue (Cons)	Max. Prob. Queue	Prob. Disch. Ovrld.
SB TRL	58	515	0.112	32	2	4	0.0%
NB RL	391	589	0.356	37	6	11	0.1%
WB T	311	718	0.434	16	3	10	0.0%
WB L	122	362	0.337	17	3	7	0.1%
EB TR	324	545	0.595	28	9	15	2.2%
EB T	359	607	0.592	28	10	17	1.4%
Int'n:	1,375	3,260		24			

NOTE(S):
* Main Phase Green Times have NOT been Balanced.
* Minimum Pedestrian Crossing Requirements have not been met.

SUMMARY of KEY RESULTS:

Cycle Time: 100.0 sec.
Lost Time: 17.0 sec.
Degree of Saturation: 0.506

OPTION 2B

CCG/CALC 2 PERFORMANCE ANALYSIS DATA SUMMARY
FUTURE TOTAL TRAFFIC

Project : CHERRY ST. REVIEW-JN07
Scenario : WKDAY AM P H OP2 4-L
Data File: TOT-AM2.PC2

Page : 1
Printed On: June 20, 2007
Printed At: 8:15 PM

INTERSECTION: CHERRY/MILL

DEMAND VOLUMES:

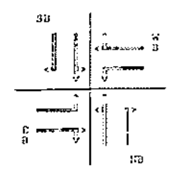
Vehicles: 25 | 24, 495 | 56, 44 | 286 / 21 | 114, 74 | 263, 31 | 44

Volume Adjustments: 3.0% 3.0% 3.0% | 3.0% 3.0% 3.0% / 3.0% 3.0% 3.0% | 3.0% 3.0% 3.0%

Pedestrian Volume: 200, 200, 200, 200

Pedestrian Walk Dst/Med Width(m): 23/0, 16/0, 16/0, 23/0

CONFIGURATION:



SIGNAL PHASING INFORMATION:

φ Type	Permitted Moves: SB	WB	NB	EB	Signal Timings: Green	Amber	Red	SAG	Effective Times: Eff. Green	Lost Time	Ped. X-W
1 N-S Main	RTL		RTL		51.0	3.0	2.0	0.0	51.0	5.0	20.1
2 WB Advance		RTL			6.0	2.0	1.0	0.0	9.0	2.0	0.0
3 E-W Main		RTL		RTL	28.0	3.0	2.0	0.0	28.0	5.0	26.2
Total:					87.0	8.0	5.0	0.0	88.0	12.0	

Methodology: Canadian Capacity Guide, 2nd Edition (1995) (vv)

Approach Specific Adjustments:	SB	WB	NB	EB
Lefts/Cycle on IG (PCU):	0.0	2.0	0.0	2.0
Shared Lefts/Cycle on IG (PCU):	0.0	0.0	0.0	0.0
Rights/Cycle on IG (PCU):	1.0	0.0	1.0	0.0
Progression Regime (1-6):	3	3	3	3
Prot Left Turn Sat'n Adj.:	1.00	1.00	1.00	1.00
Perm Left Turn Sat'n Adj.:	1.00	1.00	1.00	1.00
Right Turn (No Peds) Sat'n Adj.:	0.80	0.80	0.80	0.80
Through Lane Sat'n Adj.:	1.00	1.00	1.00	1.00

Other Settings:
- Through Saturation: 1650 PCU/hour
- Rights thru Pedestrians Formula: Toronto
- Pedestrian Walking Speed: 1.2 m/sec.
- Min Pedestrian Walk Interval: 7.0 sec.
- Delay Evaluation Interval: 60.0 min.
- Confidence Level, Max Prob Queue: 95.0 %
- Main Phase Grn Share Bal Crit: 2.0 %
- Over-Capacity Permissive Left Adj.: Off

PERFORMANCE RESULTS:

Flow Ratio Table:

φ	Lane	Clr. Vol.	Sat'n	y	Max. y	Eff. Green	Deg. Sat'n	Ped. Inc.
1	SB R	9	924	0.010		51.0	0.020	
1	SB TL	529	1555	0.340	√	51.0	0.667	
1	NB R	112	924	0.121		51.0	0.241	
1	NB TL	316	1152	0.274		51.0	0.538	
2	WB TR	82	1535	0.054		9.0	0.595	
2	WB L	149	1650	0.090	√	9.0	1.000	
3	WB TR	0	2280	0.000		28.0	0.000	
3	WB L	76	1603	0.076		28.0	0.271	
3	EB TR	109	1292	0.084	√	28.0	0.299	0.149
3	EB L	0	1650	0.000		28.0	0.000	
Total:					0.514			+0.140

Other Measures:

Lane	Total Vol.	Total Cap.	Lane Deg. Satn	Avg. Veh. Delay	Avg. Queue (Cons)	Max. Prob. Queue	Prob. Disch. Ovrld.
SB R	45	502	0.090	13	1	4	0.0%
SB TL	529	794	0.667	23	15	21	2.7%
NB R	148	502	0.295	16	4	8	0.0%
NB TL	316	588	0.538	20	9	15	0.9%
WB TR	82	524	0.157	20	2	6	0.0%
WB L	297	501	0.592	31	8	14	2.2%
EB TR	109	362	0.299	30	3	7	0.0%
EB L	22	534	0.041	26	1	2	0.0%
Int'n:	1,548	4,307		23			

NOTE(S):
- Main Phase Green Times have NOT been Balanced.

SUMMARY of KEY RESULTS:

Cycle Time: 100.0 sec.
Lost Time: 12.0 sec.
Degree of Saturation: 0.584

CCG/CALC 2 PERFORMANCE ANALYSIS DATA SUMMARY
FUTURE TOTAL TRAFFIC

Project : CHERRY ST. REVIEW-JN07
Scenario : WKDAY AM P H OP2 4-L
Data File: TOT-AM2.PC2

Page : 1
Printed On: June 20, 2007
Printed At: 8:03 PM

INTERSECTION: CHERRY/FRONT

DEMAND VOLUMES:

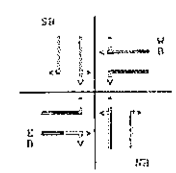
Vehicles: 29 | 226, 331 | 295, 30 | 321 / 39 | 78, 128 | 185, 44 | 33

Volume Adjustments: 3.0% 3.0% 3.0% | 3.0% 3.0% 3.0% / 3.0% 3.0% 3.0% | 3.0% 3.0% 3.0%

Pedestrian Volume: 200, 200, 200, 200

Pedestrian Walk Dst/Med Width(m): 23/0, 16/0, 16/0, 23/0

CONFIGURATION:



SIGNAL PHASING INFORMATION:

φ Type	Permitted Moves: SB	WB	NB	EB	Signal Timings: Green	Amber	Red	SAG	Effective Times: Eff. Green	Lost Time	Ped. X-W
1 N-S Main	RTL		RTL		40.0	3.0	2.0	0.0	40.0	5.0	20.1
2 WB Advance		RTL			7.0	2.0	1.0	0.0	8.0	2.0	0.0
3 E-W Main		RTL		RTL	40.0	3.0	2.0	0.0	40.0	5.0	26.2
Total:					87.0	8.0	5.0	0.0	90.0	10.0	

Methodology: Canadian Capacity Guide, 2nd Edition (1995) (vv)

Approach Specific Adjustments:	SB	WB	NB	EB
Lefts/Cycle on IG (PCU):	0.0	2.0	0.0	2.0
Shared Lefts/Cycle on IG (PCU):	0.0	0.0	0.0	0.0
Rights/Cycle on IG (PCU):	1.0	0.0	1.0	0.0
Progression Regime (1-6):	3	3	3	3
Prot Left Turn Sat'n Adj.:	1.00	1.00	1.00	1.00
Perm Left Turn Sat'n Adj.:	1.00	1.00	1.00	1.00
Right Turn (No Peds) Sat'n Adj.:	0.80	0.80	0.80	0.80
Through Lane Sat'n Adj.:	1.00	1.00	1.00	1.00

Other Settings:
- Through Saturation: 1650 PCU/hour
- Rights thru Pedestrians Formula: Toronto
- Pedestrian Walking Speed: 1.2 m/sec.
- Min Pedestrian Walk Interval: 7.0 sec.
- Delay Evaluation Interval: 60.0 min.
- Confidence Level, Max Prob Queue: 95.0 %
- Main Phase Grn Share Bal Crit: 2.0 %
- Over-Capacity Permissive Left Adj.: Off

PERFORMANCE RESULTS:

Flow Ratio Table:

φ	Lane	Clr. Vol.	Sat'n	y	Max. y	Eff. Green	Deg. Sat'n	Ped. Inc.
1	SB R	0	893	0.000		40.0	0.000	
1	SB TL	371	1523	0.244	√	40.0	0.610	
1	NB R	44	893	0.050		40.0	0.204	
1	NB TL	225	1207	0.186		40.0	0.465	
2	WB TR	119	1480	0.080	√	8.0	1.000	
2	WB L	132	1650	0.080		8.0	1.000	
3	WB TR	420	1205	0.348	√	40.0	0.862	
3	WB L	127	931	0.136		40.0	0.340	
3	EB TR	177	1356	0.131		40.0	0.327	
3	EB L	0	435	0.000		40.0	0.000	
Total:					0.672			+0.000

Other Measures:

Lane	Total Vol.	Total Cap.	Lane Deg. Satn	Avg. Veh. Delay	Avg. Queue (Cons)	Max. Prob. Queue	Prob. Disch. Ovrld.
SB R	31	393	0.079	19	1	3	0.0%
SB TL	371	607	0.610	28	10	17	1.9%
NB R	80	393	0.204	21	2	6	0.0%
NB TL	225	483	0.465	25	5	12	0.5%
WB TR	539	625	0.862	39	15	23	24.8%
WB L	331	577	0.574	23	7	16	1.3%
EB TR	177	542	0.327	22	5	10	0.0%
EB L	40	246	0.163	21	1	4	0.0%
Int'n:	1,793	3,867		29			

NOTE(S):
- Main Phase Green Times have NOT been Balanced.

SUMMARY of KEY RESULTS:

Cycle Time: 100.0 sec.
Lost Time: 10.0 sec.
Degree of Saturation: 0.747

CCG/CALC 2 PERFORMANCE ANALYSIS DATA SUMMARY
FUTURE TOTAL TRAFFIC

Project : CHERRY ST. REVIEW-JN07
Scenario : WKDAY AM P H OP2 4-L
Data File: TOT-AM2.PC2

Page : 1
Printed On: June 20, 2007
Printed At: 8:04 PM

INTERSECTION: CHERRY/EASTERN

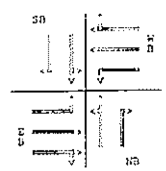
DEMAND VOLUMES:

Vehicles		Volume Adjustments	
29	44	3.0%	3.0%
148	1,174	3.0%	3.0%
274	198	3.0%	3.0%
29	160	3.0%	3.0%
992	130	3.0%	3.0%
0	120	3.0%	3.0%

Pedestrian Volume: 200 (top), 200 (left), 200 (right), 200 (bottom)

Pedestrian Walk Dst/Med Width(m): 29/0 (top), 23/0 (left), 23/0 (right), 24/0 (bottom)

CONFIGURATION:



SIGNAL PHASING INFORMATION:

φ Type	Permitted Moves: SB	WB	NB	EB	Signal Timings: Green	Amber	Red	SAG	Effective Times: Eff. Green	Lost Time	Ped. X+W
1 N-S Main	RTL		RTL		41.0	3.0	2.0	0.0	41.0	5.0	26.2
2 WB Advance		RTL			10.0	2.0	0.0	0.0	10.0	2.0	0.0
3 E-W Main		RTL		RTL	37.0	3.0	2.0	0.0	37.0	5.0	30.3
Total:					88.0	8.0	4.0	0.0	88.0	12.0	

Methodology: Canadian Capacity Guide, 2nd Edition (1995) (vv)

Approach Specific Adjustments:	SB	WB	NB	EB
Lefts/Cycle on IG (PCU):	0.0	2.0	0.0	2.0
Shared Lefts/Cycle on IG (PCU):	0.0	0.0	0.0	0.0
Rights/Cycle on IG (PCU):	1.0	0.0	1.0	0.0
Progression Regime (1-6):	3	3	3	3
Prot Left Turn Sat'n Adj.:	1.00	1.00	1.00	1.00
Perm Left Turn Sat'n Adj.:	1.00	1.00	1.00	1.00
Right Turn (No Peds) Sat'n Adj.:	0.80	0.80	0.80	0.80
Through Lane Sat'n Adj.:	1.00	1.00	1.00	1.00

Other Settings:
- Through Saturation: 1650 PCU/hour
- Rights thru Pedestrians Formula: Toronto
- Pedestrian Walking Speed: 1.2 m/sec.
- Min Pedestrian Walk Interval: 7.0 sec.
- Delay Evaluation Interval: 60.0 min.
- Confidence Level, Max Prob Queue: 95.0 %
- Main Phase Grn Share Bal Crit: 2.0 %
- Over-Capacity Permissive Left Adj.: Off

PERFORMANCE RESULTS:

Flow Ratio Table:

φ	Lane	Clr. Vol.	Sat'n	y	Max. y	Eff. Green	Deg. Sat'n	Ped. Inc.
1	SB R	246	895	0.275	✓	41.0	0.671	
1	SB TL	182	1366	0.133		41.0	0.325	
1	NB R	129	895	0.144		41.0	0.351	
1	NB TL	258	1202	0.214		41.0	0.522	
2	WB TR	162	1620	0.100	✓	10.0	1.000	
2	WB T	165	1650	0.100		10.0	1.000	
2	WB L	132	1650	0.080		10.0	0.800	
3	WB TR	449	1590	0.290		39.0	0.743	
3	WB T	478	1650	0.290		39.0	0.743	
3	WB L	0	132	0.000		37.0	0.000	
3	EB TR	511	1650	0.310	✓	37.0	0.837	
3	EB T	511	1650	0.310		37.0	0.837	
3	EB L	0	304	0.000		37.0	0.000	
Total:					0.685			+0.000

Other Measures:

Lane	Total Vol.	Total Cap.	Lane Deg. Satn	Avg. Veh. Delay	Avg. Queue (Cons)	Max. Prob. Queue	Prob. Disch. Ovrld.
SB R	282	403	0.700	35	8	14	10.1%
SB TL	182	560	0.325	22	5	10	0.0%
NB R	165	403	0.409	24	5	9	0.3%
NB TL	258	493	0.522	26	7	13	0.7%
WB TR	611	767	0.797	30	17	25	13.7%
WB T	643	809	0.796	30	18	27	13.0%
WB L	204	286	0.713	36	6	11	12.6%
EB TR	511	611	0.837	43	14	22	18.7%
EB T	511	611	0.837	43	14	22	18.7%
EB L	30	148	0.202	25	1	3	0.2%
Int'n:	3,397	5,089		34			

NOTE(S):
- Main Phase Green Times have NOT been Balanced

SUMMARY of KEY RESULTS:

Cycle Time: 100.0 sec.
Lost Time: 12.0 sec.
Degree of Saturation: 0.778

CCG/CALC 2 PERFORMANCE ANALYSIS DATA SUMMARY
FUTURE TOTAL TRAFFIC

Project : CHERRY ST. REVIEW-JN07
Scenario : WKDAY AM P H OP2 4-L
Data File: TOT-AM2.PC2

Page : 1
Printed On: June 20, 2007
Printed At: 8:05 PM

INTERSECTION: CHERRY/KING

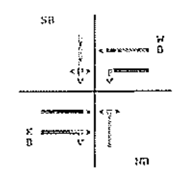
DEMAND VOLUMES:

Vehicles		Volume Adjustments	
7	0	29.0%	3.0%
27	297	3.0%	9.0%
18	276	3.0%	4.0%
0	98	1.0%	3.0%
288	0	15.0%	3.0%
33	121	4.0%	3.0%

Pedestrian Volume: 200 (top), 200 (left), 200 (right), 200 (bottom)

Pedestrian Walk Dst/Med Width(m): 8.0/0 (top), 19/0 (left), 19/0 (right), 29/0 (bottom)

CONFIGURATION:



SIGNAL PHASING INFORMATION:

φ Type	Permitted Moves: SB	WB	NB	EB	Signal Timings: Green	Amber	Red	SAG	Effective Times: Eff. Green	Lost Time	Ped. X+W
1 N-S Main	RTL		RL		35.0	3.0	2.0	0.0	35.0	5.0	0.0
2 ~~Peds-Only~~ TRANSIT PHASE					5.0	0.0	0.0	0.0	0.0	5.0	31.2 *
3 WB Advance		RTL			9.0	3.0	1.0	0.0	11.0	2.0	0.0
4 E-W Main		RTL		RTL	37.0	3.0	2.0	0.0	37.0	5.0	0.0
Total:					86.0	9.0	5.0	0.0	83.0	17.0	

Methodology: Canadian Capacity Guide, 2nd Edition (1995) (vv)

Approach Specific Adjustments:	SB	WB	NB	EB
Lefts/Cycle on IG (PCU):	0.0	2.0	0.0	0.0
Shared Lefts/Cycle on IG (PCU):	0.0	0.0	0.0	0.0
Rights/Cycle on IG (PCU):	0.0	0.0	2.0	0.0
Progression Regime (1-6):	3	3	3	3
Prot Left Turn Sat'n Adj.:	1.00	1.00	0.73	1.00
Perm Left Turn Sat'n Adj.:	1.00	1.00	0.73	1.00
Right Turn (No Peds) Sat'n Adj.:	0.80	0.70	0.56	0.66
Through Lane Sat'n Adj.:	1.00	0.87	0.73	0.92

Other Settings:
- Through Saturation: 1650 PCU/hour
- Rights thru Pedestrians Formula: Toronto
- Pedestrian Walking Speed: 1.2 m/sec.
- Min Pedestrian Walk Interval: 7.0 sec.
- Delay Evaluation Interval: 60.0 min.
- Confidence Level, Max Prob Queue: 95.0 %
- Main Phase Grn Share Bal Crit: 2.0 %
- Over-Capacity Permissive Left Adj.: Off

PERFORMANCE RESULTS:

Flow Ratio Table:

φ	Lane	Clr. Vol.	Sat'n	y	Max. y	Eff. Green	Deg. Sat'n	Ped. Inc.
1	SB TRL	55	1523	0.036		35.0	0.104	
1	NB RL	154	949	0.162	✓	35.0	0.463	
3	WB T	158	1435	0.110	✓	11.0	1.000	
3	WB L	182	1650	0.110		11.0	1.000	
4	WB T	166	1435	0.116		39.0	0.296	
4	WB L	34	738	0.045		37.0	0.123	
4	EB TR	176	1419	0.125	✓	37.0	0.337	
4	EB T	190	1518	0.125		37.0	0.337	
Total:					0.395			+0.000

Other Measures:

Lane	Total Vol.	Total Cap.	Lane Deg. Satn	Avg. Veh. Delay	Avg. Queue (Cons)	Max. Prob. Queue	Prob. Disch. Ovrld.
SB TRL	55	533	0.104	22	2	4	0.0%
NB RL	226	401	0.563	32	6	12	2.7%
WB T	324	718	0.451	18	9	15	0.0%
WB L	287	527	0.545	22	9	14	0.8%
EB TR	176	522	0.337	24	5	10	0.0%
EB T	190	562	0.337	24	5	10	0.0%
Int'n:	1,257	3,262		24			

NOTE(S):
- Main Phase Green Times have NOT been Balanced.
- Minimum Pedestrian Crossing Requirements have not been met.

SUMMARY of KEY RESULTS:

Cycle Time: 100.0 sec.
Lost Time: 17.0 sec.
Degree of Saturation: 0.480

CCG/CALC 2 PERFORMANCE ANALYSIS DATA SUMMARY
FUTURE TOTAL TRAFFIC

Project : CHERRY ST. REVIEW-JN07
Scenario : WKDAY PM P H OP2 4-L
Data File: TOT-PM2.PC2

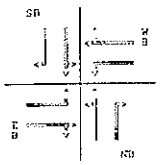
Page : 1
Printed On: June 20, 2007
Printed At: 8:07 PM

INTERSECTION: CHERRY/MILL

DEMAND VOLUMES:

Vehicles		Volume Adjustments		Pedestrian Volume		Pedestrian Walk Dst/Med Width(m)	
37	19	3.0%	3.0%				
479	70	4.0%	3.0%	200		23/0	
26	279	3.0%	3.0%				
				200	200	16/0	16/0
71	225	3.0%	3.0%				
159	386	3.0%	3.0%	200		23/0	
56	45	3.0%	3.0%				

CONFIGURATION:



SIGNAL PHASING INFORMATION:

#	Type	Permitted Moves: SB	WB	NB	EB	Signal Timings: Green	Amber	Red	SAG	Effective Times: Eff. Green	Lost Time	Fed. X+W
1	N-S Main	RTL		RTL		50.0	3.0	2.0	0.0	50.0	5.0	28.3
2	WB Advance		RTL			9.0	3.0	1.0	0.0	10.0	2.0	9.0
3	E-W Main		RTL		RTL	28.0	3.0	2.0	0.0	28.0	5.0	26.2
Total:						87.0	8.0	5.0	0.0	88.0	12.0	

Methodology: Canadian Capacity Guide, 2nd Edition (1995) (vv)

Approach Specific Adjustments:	SB	WB	NB	EB
Lefts/Cycle on IG (PCU):	0.0	2.0	0.0	2.0
Shared Lefts/Cycle on IG (PCU):	0.0	0.0	0.0	0.0
Rights/Cycle on IG (PCU):	1.0	0.0	1.0	0.0
Progression Regime (1-6):	3	3	3	3
Prot Left Turn Sat'n Adj.:	1.00	1.00	1.00	1.00
Perm Left Turn Sat'n Adj.:	1.00	1.00	1.00	1.00
Right Turn (No Peds) Sat'n Adj.:	0.80	0.80	0.80	0.80
Through Lane Sat'n Adj.:	1.00	1.00	1.00	1.00

Other Settings:	
Through Saturation:	1650 PCU/Hour
Rights thru Pedestrians Formula:	Toronto
Pedestrian Walking Speed:	1.2 m/sec.
Min Pedestrian Walk Interval:	7.0 sec.
Delay Evaluation Interval:	60.0 min.
Confidence Level, Max Prob Queue:	95.0 %
Main Phase Grn Share Bal Crit:	2.0 %
Over-Capacity Permissive Left Adj.:	Off

PERFORMANCE RESULTS:

Flow Ratio Table:

#	Lane	Cir. Vol.	Sat'n	y	Max. y	Eff. Green	Deg. Sat'n	Ped. Inc.
1	SB R	0	912	0.000		50.0	0.000	
1	SB TL	536	1421	0.377	✓	50.0	0.754	
1	SB TR	135	912	0.315		50.0	0.629	
1	NB TL	444	1235	0.360		50.0	0.719	
1	NB TR	92	1566	0.059		10.0	0.585	
2	WB L	165	1650	0.100	✓	10.0	1.000	
3	WB TR	0	2375	0.000		28.0	0.000	
3	EB L	49	645	0.077		28.0	0.275	
3	EB TR	201	1407	0.143	✓	28.0	0.510	0.039
3	EB L	1	1650	0.001		28.0	0.002	
Total:				0.620				+0.039

Other Measures:

Lane	Total Vol.	Total Cap.	Lane Deg. Satn	Avg. Veh. Delay	Avg. Queue (Cons)	Max. Prob. Queue	Prob. Disch. Ovrld.
SB R	39	492	0.080	13	1	3	0.0%
SB TL	536	712	0.754	28	15	23	7.9%
NB R	212	492	0.431	20	6	12	0.1%
NB TL	444	617	0.719	27	12	20	7.7%
NB TR	92	569	0.161	20	3	6	0.0%
WB L	236	418	0.686	35	9	16	4.2%
EB TR	291	394	0.510	35	6	11	1.2%
EB L	73	534	0.137	27	2	5	0.0%
Int'n:	1,693	4,228		28			

NOTE(S):
* Main Phase Green Times have NOT been Balanced.

SUMMARY of KEY RESULTS:

Cycle Time: 100.0 sec.
Lost Time: 12.0 sec.
Degree of Saturation: 0.704

CCG/CALC 2 PERFORMANCE ANALYSIS DATA SUMMARY
FUTURE TOTAL TRAFFIC

Project : CHERRY ST. REVIEW-JN07
Scenario : WKDAY PM P H OP2 4-L
Data File: TOT-PM2.PC2

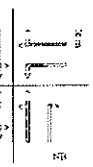
Page : 1
Printed On: June 20, 2007
Printed At: 8:11 PM

INTERSECTION: CHERRY/FRONT

DEMAND VOLUMES:

Vehicles		Volume Adjustments		Pedestrian Volume		Pedestrian Walk Dst/Med Width(m)	
50	66	3.0%	3.0%				
348	116	4.0%	3.0%	200		23/0	
37	194	3.0%	3.0%				
				200	200	16/0	16/0
61	178	3.0%	3.0%				
491	225	3.0%	3.0%	200		23/0	
71	20	3.0%	3.0%				

CONFIGURATION:



SIGNAL PHASING INFORMATION:

#	Type	Permitted Moves: SB	WB	NB	EB	Signal Timings: Green	Amber	Red	SAG	Effective Times: Eff. Green	Lost Time	Fed. X+W
1	N-S Main	RTL		RTL		40.0	3.0	2.0	0.0	40.0	5.0	20.3
2	WB Advance		RTL			6.0	2.0	0.0	1.0	7.0	2.0	9.0
3	E-W Main		RTL		RTL	41.0	3.0	2.0	0.0	41.0	5.0	26.2
Total:						87.0	8.0	4.0	1.0	88.0	12.0	

Methodology: Canadian Capacity Guide, 2nd Edition (1995) (vv)

Approach Specific Adjustments:	SB	WB	NB	EB
Lefts/Cycle on IG (PCU):	0.0	2.0	0.0	2.0
Shared Lefts/Cycle on IG (PCU):	0.0	0.0	0.0	0.0
Rights/Cycle on IG (PCU):	1.0	0.0	1.0	0.0
Progression Regime (1-6):	3	3	3	3
Prot Left Turn Sat'n Adj.:	1.00	1.00	1.00	1.00
Perm Left Turn Sat'n Adj.:	1.00	1.00	1.00	1.00
Right Turn (No Peds) Sat'n Adj.:	0.80	0.80	0.80	0.80
Through Lane Sat'n Adj.:	1.00	1.00	1.00	1.00

Other Settings:	
Through Saturation:	1650 PCU/Hour
Rights thru Pedestrians Formula:	Toronto
Pedestrian Walking Speed:	1.2 m/sec.
Min Pedestrian Walk Interval:	7.0 sec.
Delay Evaluation Interval:	60.0 min.
Confidence Level, Max Prob Queue:	95.0 %
Main Phase Grn Share Bal Crit:	2.0 %
Over-Capacity Permissive Left Adj.:	Off

PERFORMANCE RESULTS:

Flow Ratio Table:

#	Lane	Cir. Vol.	Sat'n	y	Max. y	Eff. Green	Deg. Sat'n	Ped. Inc.
1	SB R	2	831	0.002		45.0	0.006	
1	SB TL	413	1421	0.291	✓	45.0	0.727	
1	SB TR	147	893	0.165		45.0	0.412	
1	NB TL	263	1347	0.195		45.0	0.487	
2	NB TR	105	1513	0.070	✓	7.0	1.000	
2	WB L	116	1650	0.070		7.0	1.000	
3	WB TR	62	2361	0.026		45.0	0.100	
3	EB L	13	1231	0.011		41.0	0.139	
3	EB TR	579	1408	0.411	✓	41.0	0.347	
3	EB L	0	1295	0.000		41.0	0.000	
Total:				0.749				+0.000

Other Measures:

Lane	Total Vol.	Total Cap.	Lane Deg. Satn	Avg. Veh. Delay	Avg. Queue (Cons)	Max. Prob. Queue	Prob. Disch. Ovrld
SB R	36	393	0.092	19	1	3	0.0%
SB TL	413	569	0.727	34	11	19	7.6%
NB R	183	393	0.466	26	5	10	0.6%
NB TL	263	537	0.477	26	7	13	6.1%
NB TR	197	649	0.269	16	6	10	0.0%
WB L	200	282	0.708	35	9	17	11.0%
EB TR	579	661	0.947	66	16	24	34.0%
EB L	63	803	0.104	19	2	5	0.0%
Int'n:	1,917	4,852		39			

NOTE(S):
* Main Phase Green Times have NOT been Balanced.

SUMMARY of KEY RESULTS:

Cycle Time: 100.0 sec.
Lost Time: 12.0 sec.
Degree of Saturation: 0.851

CCG/CALC 2 PERFORMANCE ANALYSIS DATA SUMMARY
FUTURE TOTAL TRAFFIC

Project : CHERRY ST. REVIEW-JN07
Scenario : WKDAY PM P H OP2 4-L
Data File: TOT-PM2.PC2

Page : 1
Printed On: June 20, 2007
Printed At: 8:13 PM

INTERSECTION: CHERRY/EASTERN

DEMAND VOLUMES:

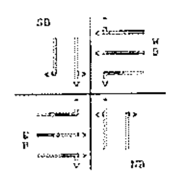
Vehicles: 129 | 23; 154 | 684; 46 | 220 / 50 | 242; 1,075 | 57; 6 | 39

Volume Adjustments: 3.0% | 3.0%; 4.0% | 3.0%; 3.0% | 3.0% / 3.0% | 3.0%; 3.0% | 3.0%; 3.0% | 3.0%

Pedestrian Volume: 200; 200; 200; 200

Pedestrian Walk Dst/Med Width(m): 28/0; 23/0; 23/0; 24/0

CONFIGURATION:



SIGNAL PHASING INFORMATION:

∅ Type	Permitted Moves: SB	WB	NB	EB	Signal Timings: Green	Amber	Red	SAG	Effective Times: Eff. Green	Lost Time	Ped. X-W
1 N-S Main	RTL		RTL		36.0	3.0	2.0	0.0	36.0	5.0	26.2
2 WB Advance		RTL			6.0	2.0	0.0	1.0	7.0	2.0	0.0
3 E-W Main		RTL		RTL	45.0	3.0	2.0	0.0	45.0	5.0	30.3
Total:					87.0	8.0	4.0	1.0	88.0	12.0	

Methodology: Canadian Capacity Guide, 2nd Edition (1995) (vv)

Approach Specific Adjustments:	SB	WB	NB	EB
Lefts/Cycle on IG (PCU):	0.0	2.0	0.0	2.0
Shared Lefts/Cycle on IG (PCU):	0.0	0.0	0.0	0.0
Rights/Cycle on IG (PCU):	0.0	0.0	0.0	0.0
Progression Regime (1-5):	3	3	3	3
Prot Left Turn Sat'n Adj.:	1.00	1.00	1.00	1.00
Perm Left Turn Sat'n Adj.:	1.00	1.00	1.00	1.00
Right Turn (No Peds) Sat'n Adj.:	0.80	0.80	0.80	0.80
Through Lane Sat'n Adj.:	1.00	1.00	1.00	1.00

Other Settings:
- Through Saturation: 1650 PCU/hour
- Rights thru Pedestrians Formula: Toronto
- Pedestrian Walking Speed: 1.2 m/sec.
- Min Pedestrian Walk Interval: 7.0 sec.
- Delay Evaluation Interval: 60.0 min.
- Confidence Level, Max Prob Queue: 95.0 %
- Main Phase Grn Share Bal Crit: 2.0 %
- Over-Capacity Permissive Left Adj.: Off

PERFORMANCE RESULTS:

Flow Ratio Table:

∅	Lane	Clr. Vol.	Sat'n	Y	Max. Y	Eff. Green	Deg. Sat'n	Ped. Inc.
1	SB R	47	882	0.054		36.0	0.149	
1	SB TL	233	1377	0.212		36.0	0.590	
1	NB R	249	882	0.282	✓	36.0	0.785	
1	NB TL	101	915	0.108		36.0	0.300	
2	WB TR	113	1618	0.070	✓	7.0	1.000	
2	WB T	116	1650	0.070		7.0	1.000	
2	WB L	116	1650	0.070		7.0	1.000	
3	WB TR	244	1546	0.158		47.0	0.335	
3	WB T	260	1650	0.158		47.0	0.336	
3	WB L	39	184	0.212		45.0	0.472	
3	EB TR	554	1635	0.339	✓	45.0	0.753	
3	EB T	553	1650	0.339		45.0	0.753	
3	EB L	0	687	0.000		45.0	0.000	
Total:					0.691			+0.000

Other Measures:

Lane	Total Vol.	Total Cap.	Lane Deg. Satn	Avg. Veh. Delay	Avg. Queue (Cons)	Max. Prob. Queue	Prob. Disch. Ovrld.
SB R	47	316	0.149	23	1	4	0.0%
SB TL	293	497	0.590	31	8	14	2.0%
NB R	249	319	0.785	48	7	12	15.2%
NB TL	101	337	0.300	25	3	6	0.1%
WB TR	357	840	0.425	15	10	17	0.0%
WB T	376	891	0.422	15	10	17	0.0%
WB L	227	270	0.839	52	6	12	18.5%
EB TR	554	736	0.753	30	15	23	10.1%
EB T	553	743	0.753	30	15	21	7.1%
EB L	52	381	0.135	17	1	4	0.0%
Int'n:	2,816	5,329		29			

NOTE(S):

SUMMARY of KEY RESULTS:

Cycle Time: 100.0 sec.
Lost Time: 12.0 sec.
Degree of Saturation: 0.786

CCG/CALC 2 PERFORMANCE ANALYSIS DATA SUMMARY
FUTURE TOTAL TRAFFIC

Project : CHERRY ST. REVIEW-JN07
Scenario : WKDAY PM P H OP2 4-L
Data File: TOT-PM2.PC2

Page : 1
Printed On: June 20, 2007
Printed At: 8:14 PM

INTERSECTION: CHERRY/KING

DEMAND VOLUMES:

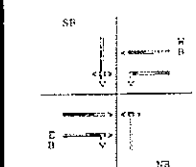
Vehicles: 9 | 3; 20 | 258; 27 | 122 / 0 | 136; 332 | 0; 32 | 52

Volume Adjustments: 3.0% | 3.0%; 3.0% | 12.0%; 3.0% | 6.0% / 3.0% | 1.0%; 10.0% | 3.0%; 6.0% | 3.0%

Pedestrian Volume: 200; 200; 200; 200

Pedestrian Walk Dst/Med Width(m): 8.3/0; 19/0; 19/0; 29/0

CONFIGURATION:



SIGNAL PHASING INFORMATION:

∅ Type	Permitted Moves: SB	WB	NB	EB	Signal Timings: Green	Amber	Red	SAG	Effective Times: Eff. Green	Lost Time	Ped. X-W
1 N-S Main	RTL		RL		35.0	3.0	2.0	0.0	38.0	2.0	0.0
2 ~~Peds Only~~ TRANSIT PHASE					5.0	0.0	0.0	0.0	0.0	5.0	31.2 *
3 WB Advance		RTL			6.0	1.0	1.0	0.0	6.0	2.0	0.0
4 E-W Main		RTL		RTL	40.0	3.0	2.0	0.0	40.0	5.0	0.0
Total:					86.0	9.0	5.0	0.0	86.0	14.0	

Methodology: Canadian Capacity Guide, 2nd Edition (1995) (vv)

Approach Specific Adjustments:	SB	WB	NB	EB
Lefts/Cycle on IG (PCU):	0.0	2.0	0.0	0.0
Shared Lefts/Cycle on IG (PCU):	0.0	0.0	0.0	0.0
Rights/Cycle on IG (PCU):	0.0	0.0	2.0	0.0
Progression Regime (1-5):	3	3	3	3
Prot Left Turn Sat'n Adj.:	1.00	1.00	1.00	1.00
Perm Left Turn Sat'n Adj.:	1.00	1.00	1.00	1.00
Right Turn (No Peds) Sat'n Adj.:	0.00	0.70	0.71	0.68
Through Lane Sat'n Adj.:	1.00	0.87	0.89	0.92

Other Settings:
- Through Saturation: 1650 PCU/hour
- Rights thru Pedestrians Formula: Toronto
- Pedestrian Walking Speed: 1.2 m/sec.
- Min Pedestrian Walk Interval: 7.0 sec.
- Delay Evaluation Interval: 60.0 min.
- Confidence Level, Max Prob Queue: 95.0 %
- Main Phase Grn Share Bal Crit: 2.0 %
- Over-Capacity Permissive Left Adj.: Off

PERFORMANCE RESULTS:

Flow Ratio Table:

∅	Lane	Clr. Vol.	Sat'n	Y	Max. Y	Eff. Green	Deg. Sat'n	Ped. Inc.
1	SB TRL	50	1473	0.039		38.0	0.103	
1	NB RL	229	1257	0.103	✓	38.0	0.270	
3	WB T	115	1435	0.080	✓	8.0	1.000	
3	WB L	57	1650	0.035		8.0	0.434	
4	WB T	174	1436	0.121		42.0	0.289	
4	WB L	0	324	0.000		40.0	0.000	
4	EB TR	324	1372	0.236		40.0	0.591	
4	EB T	359	1518	0.236	✓	40.0	0.591	
Total:					0.419			+0.000

Other Measures:

Lane	Total Vol.	Total Cap.	Lane Deg. Satn	Avg. Veh. Delay	Avg. Queue (Cons)	Max. Prob Queue	Prob. Disch. Ovrld.
SB TRL	58	560	0.103	20	2	4	0.0%
NB RL	201	550	0.366	24	6	11	0.0%
WB T	289	718	0.403	17	8	14	0.0%
WB L	129	362	0.358	13	4	8	0.1%
EB TR	324	549	0.591	28	9	15	2.2%
EB T	359	607	0.591	23	10	17	1.4%
Int'n:	1,360	3,345		24			

NOTE(S):
- Main Phase Green Times have NOT been Balanced.
- Minimum Pedestrian Crossing Requirements have not been met.

SUMMARY of KEY RESULTS:

Cycle Time: 100.0 sec.
Lost Time: 14.0 sec.
Degree of Saturation: 0.487

OPTION 3B

(3Bi, 3Bii, 3Biii)

CCG/CALC 2 PERFORMANCE ANALYSIS DATA SUMMARY
FUTURE TOTAL TRAFFIC

Project : CHERRY ST. REVIEW-JN07
Scenario : WKDAM OP3Bi E.S
Data File: TO-AM3B1.PC2

Page : 1
Printed On: June 22, 2007
Printed At: 11:59 AM

INTERSECTION: CHERRY/MILL

DEMAND VOLUMES:

Vehicles

83	24
489	56
44	288
21	0
89	392
31	44

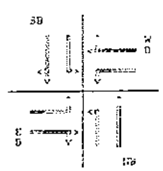
Volume Adjustments

3.0%	3.0%
3.0%	3.0%
3.0%	3.0%
3.0%	3.0%
3.0%	3.0%
3.0%	3.0%

Pedestrian Volume: 200 / 200 / 200 / 200

Pedestrian Walk Cat/Med Width(m): 23/0 / 16/0 / 16/0 / 23/0

CONFIGURATION:



SIGNAL PHASING INFORMATION:

# Type	Permitted Moves: SB	WB	NB	EB	Signal Timings: Green	Amber	Red	SAG	Effective Times: Eff. Green	Lost Time	Ped. X-W
1 SB Rot Lft	RTL				6.0	2.0	1.0	0.0	7.0	2.0	0.0
2 N-S Main	RT		TL		44.0	4.0	2.0	0.0	45.0	5.0	20.3
3 WB Advance		RTL			9.0	2.0	1.0	0.0	10.0	2.0	0.0
4 E-W Main		RTL		RTL	23.0	4.0	2.0	0.0	24.0	5.0	26.2
Total:					82.0	12.0	6.0	0.0	88.0	12.0	

Methodology: Canadian Capacity Guide, 2nd Edition (1995) (vv)

Approach Specific Adjustments:	SB	WB	NB	EB
Lefts/Cycle on IG (PCU):	0.0	2.0	2.0	2.0
Shared Lefts/Cycle on IG (PCU):	0.0	0.0	0.0	0.0
Rights/Cycle on IG (PCU):	0.0	0.0	0.0	0.0
Progression Regime (1-6):	3	3	3	3
Prot Left Turn Sat'n Adj.:	1.00	1.00	1.00	1.00
Perm Left Turn Sat'n Adj.:	1.00	1.00	1.00	1.00
Right Turn (No Peds) Sat'n Adj.:	0.80	0.80	0.80	0.80
Through Lane Sat'n Adj.:	1.00	1.00	1.00	1.00

Other Settings:
- Through Saturation: 1650 PCU/hour
- Rights thru Pedestrians Formula: Toronto
- Pedestrian Walking Speed: 1.2 m/sec.
- Min Pedestrian Walk Interval: 7.0 sec
- Delay Evaluation Interval: 60.0 min.
- Confidence Level, Max Prob Queue: 95.0 %
- Main Phase Grn Share Bal Crit: 2.0 %
- Over-Capacity Permissive Left Adj : Off

PERFORMANCE RESULTS:

Flow Ratio Table:

#	Lane	Cir. Vol.	Sat'n	y	Max. Y	Eff. Green	Deg. Sat'n	Ped. Inc.
1	SB TR	113	1627	0.070	✓	7.0	1.000	
1	SB L	85	1650	0.052		7.0	0.740	
2	SB TR	436	1545	0.282	✓	47.0	0.600	
2	NB T	404	1650	0.245		45.0	0.544	
2	NB L	0	487	0.000		45.0	0.000	
3	WB TR	82	1535	0.054		10.0	0.537	
3	WB L	165	1650	0.100	✓	10.0	1.000	
4	WB TR	0	1272	0.000		25.0	0.000	
4	WB L	60	847	0.070		24.0	0.294	
4	EB TR	124	1314	0.094	✓	24.0	0.392	0.138
4	EB L	0	1650	0.000		24.0	0.000	
Total:					0.546			+0.138

Other Measures:

Lane	Total Vol.	Total Cap.	Lane Deg. Satn	Avg. Veh. Delay	Avg. Queue (Cons)	Max. Prob. Queue	Prob. Disch. Ovrld.
SB L	85	116	0.740	86	2	6	21.6%
SB TR	549	839	0.654	20	15	23	2.3%
NB T	404	743	0.544	23	11	16	0.3%
NB L	45	269	0.157	17	1	4	0.0%
WB TR	82	484	0.170	21	2	6	0.0%
WB L	297	440	0.674	37	8	14	7.5%
EB TR	124	315	0.392	36	3	7	0.3%
EB L	22	468	0.046	29	1	2	0.0%
Int'n:	1,508	3,693		29			

NOTE(S):
- Main Phase Green Times have NOT been Balanced.

SUMMARY of KEY RESULTS:

Cycle Time: 100.0 sec.
Lost Time: 12.0 sec.
Degree of Saturation: 0.621

CCG/CALC 2 PERFORMANCE ANALYSIS DATA SUMMARY
FUTURE TOTAL TRAFFIC

Project : CHERRY ST. REVIEW-JN07
Scenario : WKDAM OP3Bi E.S
Data File: TO-AM3B1.PC2

Page : 1
Printed On: June 22, 2007
Printed At: 12:01 PM

INTERSECTION: CHERRY/FRONT

DEMAND VOLUMES:

Vehicles

0	228
369	295
30	321
31	195
112	134
33	33

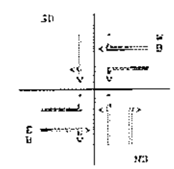
Volume Adjustments

3.0%	3.0%
3.0%	3.0%
3.0%	3.0%
3.0%	3.0%
3.0%	3.0%
3.0%	3.0%

Pedestrian Volume: 200 / 200 / 200 / 200

Pedestrian Walk Ent/Med Width(m): 23/0 / 16/0 / 16/0 / 23/0

CONFIGURATION:



SIGNAL PHASING INFORMATION:

# Type	Permitted Moves: SB	WB	NB	EB	Signal Timings: Green	Amber	Red	SAG	Effective Times: Eff. Green	Lost Time	Ped. X-W
1 N-S Main	RT		RT		12.0	2.0	1.0	0.0	13.0	2.0	20.3 *
2 N-S Main	RT		TL		28.0	4.0	2.0	0.0	29.0	5.0	20.3
3 WB Advance		RTL	R		7.0	2.0	1.0	0.0	8.0	2.0	0.0
4 E-W Main		RTL		RTL	35.0	4.0	2.0	0.0	36.0	5.0	26.2
Total.					82.0	12.0	6.0	0.0	88.0	12.0	

Methodology: Canadian Capacity Guide, 2nd Edition (1995) (vv)

Approach Specific Adjustments:	SB	WB	NB	EB
Lefts/Cycle on IG (PCU):	0.0	2.0	0.0	2.0
Shared Lefts/Cycle on IG (PCU):	0.0	0.0	0.0	0.0
Rights/Cycle on IG (PCU):	0.0	0.0	0.0	0.0
Progression Regime (1-6):	3	3	3	3
Prot Left Turn Sat'n Adj.:	1.00	1.00	1.00	1.00
Perm Left Turn Sat'n Adj.:	1.00	1.00	1.00	1.00
Right Turn (No Peds) Sat'n Adj.:	0.80	0.80	0.80	0.80
Through Lane Sat'n Adj.:	1.00	1.00	1.00	1.00

Other Settings:
- Through Saturation: 1650 PCU/hour
- Rights thru Pedestrians Formula: Toronto
- Pedestrian Walking Speed: 1.2 m/sec.
- Min Pedestrian Walk Interval: 7.0 sec.
- Delay Evaluation Interval: 60.0 min.
- Confidence Level, Max Prob Queue: 95.0 %
- Main Phase Grn Share Bal Crit: 2.0 %
- Over-Capacity Permissive Left Adj.: Off

PERFORMANCE RESULTS:

Flow Ratio Table:

#	Lane	Cir. Vol.	Sat'n	y	Max. Y	Eff. Green	Deg. Sat'n	Ped. Inc.
1	SB TR	134	1187	0.065		13.0	0.660	
1	NB R	98	893	0.110	✓	13.0	0.843	0.084
2	SB TR	298	1557	0.191	✓	29.0	0.660	
2	NB TL	172	1042	0.165		29.0	0.569	
3	WB TR	115	2400	0.080	✓	8.0	1.000	
3	WB L	132	2453	0.080		8.0	1.000	
3	NB R	105	1320	0.080		8.0	1.000	
4	WB TR	420	1195	0.351	✓	36.0	0.923	
4	WB L	127	949	0.134		36.0	0.372	
4	EB TR	155	1347	0.115		36.0	0.321	
4	EB L	0	373	0.000		36.0	0.000	
Total:					0.732			+0.084

Other Measures:

Lane	Total Vol.	Total Cap.	Lane Deg. Satn	Avg. Veh. Delay	Avg. Queue (Cons)	Max. Prob. Queue	Prob. Disch. Ovrld.
SB TR	432	654	0.660	25	12	19	3.7%
NB R	204	222	0.917	102	6	11	34.0%
NB TL	234	302	0.774	52	5	12	20.8%
WB TR	535	574	0.939	62	15	23	33.2%
WB L	331	544	0.608	26	9	16	2.6%
EB TR	156	485	0.321	25	4	9	0.0%
EB L	32	206	0.155	23	1	3	0.0%
Int'n:	1,926	2,987		46			

NOTE(S):
- Main Phase Green Times have NOT been Balanced.
- Minimum Pedestrian Crossing Requirements have not been met.

SUMMARY of KEY RESULTS:

Cycle Time: 100.0 sec.
Lost Time: 12.0 sec.
Degree of Saturation: 0.832

CCG/CALC 2 PERFORMANCE ANALYSIS DATA SUMMARY
FUTURE TOTAL TRAFFIC

Project : CHERRY ST. REVIEW-JN07
Scenario : WKDAM OP3Bi E.S
Data File: TO-AM3B1.PC2

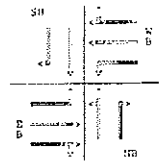
Page : 1
Printed On: June 22, 2007
Printed At: 12:03 PM

INTERSECTION: CHERRY/EASTERN

DEMAND VOLUMES:

Vehicles	Volume Adjustments	Pedestrian Volume	Pedestrian Walk Dst/Med Width(m)
0 | 44 / 177 | 1,174 / 274 | 198	3.0% | 3.0% / 3.0% | 3.0% / 3.0% | 3.0%	200	10/0
29 | 169 / 992 | 130 / 0 | 120	3.0% | 3.0% / 3.0% | 3.0% / 3.0% | 3.0%	200 / 200	23/5 / 23/0
		200	10/0

CONFIGURATION:



SIGNAL PHASING INFORMATION:

ϕ Type	Permitted Moves: SB	WB	NB	EB	Signal Timings: Green	Amber	Red	SAG	Effective Times: Eff. Green	Lost Time	Ped. X+W
1 NB Advance			RTL		7.0	2.0	0.0	1.0	8.0	2.0	0.0
2 N-S Main	RT		TR		32.0	4.0	2.0	0.0	33.0	5.0	26.2
3 WB Advance		RTL	R		30.0	3.0	6.0	0.0	31.0	2.0	0.0
4 E-W Main		RTL		RTL	33.0	4.0	2.0	0.0	34.0	5.0	32.0
Total:					82.0	13.0	4.0	1.0	86.0	14.0	

Methodology: Canadian Capacity Guide, 2nd Edition (1995) (vv)

Approach Specific Adjustments:	SB	WB	NB	EB
Lefts/Cycle on IG (PCU):	0.0	2.0	2.0	2.0
Shared Lefts/Cycle on IG (PCU):	0.0	0.0	0.0	0.0
Rights/Cycle on IG (PCU):	1.5	0.0	0.0	0.0
Progression Regime (1-6):	3	3	3	3
Prot Left Turn Sat'n Adj.:	1.00	1.00	1.00	1.00
Perm Left Turn Sat'n Adj.:	1.00	1.00	1.00	1.00
Right Turn (No Pedal Sat'n Adj.:	0.80	0.80	0.80	0.80
Through Lane Sat'n Adj.:	1.00	1.00	1.00	1.00

Other Settings:	
Through Saturation:	1650 PCU/hour
Rights thru Pedestriane Formula:	Toronto
Pedestrian Walking Speed:	1.2 m/sec.
Min Pedestrian Walk Interval:	7.0 sec.
Delay Evaluation Interval:	60.0 min.
Confidence Level, Max Prob Queue:	95.0 %
Main Phase Grn Share Bal Crit:	2.0 %
Over-Capacity Permissive Left Adj.:	Off

PERFORMANCE RESULTS:

Flow Ratio Table:

ϕ Lane	Cfr. Vol.	Sat'n	y	Max. y	Eff. Green	Deg. Sat'n	Ped. Inc.
1 NB R	104	1370	0.080	✓	8.0	1.000	
1 NB TR	132	1650	0.080		8.0	1.000	
2 SB R	228	873	0.262		33.0	0.793	
2 SB T	182	1650	0.110		33.0	0.335	
2 SB TR	125	1098	0.114		33.0	0.347	
3 WB TR	178	1650	0.210	✓	31.0	1.000	
3 WB T	101	1650	0.110		31.0	1.000	
3 WB L	132	1650	0.080		31.0	0.727	
3 WB R	48	1320	0.052		31.0	0.471	
4 WB TR	413	1650	0.280		36.0	0.777	
4 WB T	462	1650	0.280		36.0	0.777	
4 WB L	0	76	0.000		34.0	0.000	
4 EB TR	511	1650	0.310	✓	34.0	0.911	
4 EB T	511	1650	0.310		34.0	0.911	
4 EB L	0	182	0.000		34.0	0.000	
Total.			0.761			+0.000	

Other Measures:

Lane	Total Vol.	Total Cap.	Lane Deg. Satn	Avg. Veh. Delay	Avg. Queue (Cons)	Max. Prob. Queue	Prob. Disch. Ovrld.
NB R	174	251	0.694	54	5	10	11.7%
SB R	282	342	0.825	55	8	14	26.4%
SB T	182	545	0.335	27	5	10	0.0%
SB TL	258	494	0.521	26	7	15	0.7%
WB TR	611	736	0.831	55	17	26	19.3%
WB T	643	776	0.829	34	16	27	13.8%
WB L	204	286	0.713	57	6	11	12.0%
EB TR	511	561	0.911	59	14	22	26.1%
EB T	511	561	0.911	59	14	22	26.1%
EB L	30	134	0.225	27	1	3	0.2%
Int'n:	3,406	4,684		44			

NOTE(S):
* Main Phase Green Times have NOT been Balanced.

SUMMARY of KEY RESULTS:

Cycle Time: 100.0 sec.
Lost Time: 14.0 sec.
Degree of Saturation: 0.885

CCG/CALC 2 PERFORMANCE ANALYSIS DATA SUMMARY
FUTURE TOTAL TRAFFIC

Project : CHERRY ST. REVIEW-JN07
Scenario : WKDAM OP3Bi E.S
Data File: TO-AM3B1.PC2

Page : 1
Printed On: June 22, 2007
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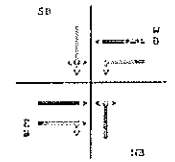
INTERSECTION: CHERRY/KING

DEMAND VOLUMES:

Vehicles	Volume Adjustments	Pedestrian Volume	Pedestrian Walk Dst/Med Width(m)
7 | 0 / 27 | 297 / 18 | 270	29.0% | 3.0% / 3.0% | 4.0% / 3.0%	200	9.0/0
0 | 98 / 288 | 0 / 33 | 21	3.0% | 3.0% / 15.0% | 3.0% / 4.0% | 3.0%	200 / 200	19/0 / 19/0
		200	29/0

CONFIGURATION:



SIGNAL PHASING INFORMATION:

ϕ Type	Permitted Moves: SB	WB	NB	SB	Signal Timings: Green	Amber	Red	SAG	Effective Times: Eff. Green	Lost Time	Ped. X+W
1 N-S Main	RTL		RL		35.0	3.0	2.0	0.0	35.0	5.0	0.0
2 WB Advance		RTL			8.0	2.0	1.0	0.0	9.0	2.0	0.0
3 E-W Main		RTL		RTL	38.0	4.0	2.0	0.0	39.0	5.0	0.0
4 Peds Only					3.0	1.0	1.0	0.0	0.0	5.0	31.2
Total:					84.0	10.0	6.0	0.0	83.0	17.0	

Methodology: Canadian Capacity Guide, 2nd Edition (1995) (vv)

Approach Specific Adjustments:	SB	WB	NB	SB
Lefts/Cycle on IG (PCU):	0.0	2.0	0.0	0.0
Shared Lefts/Cycle on IG (PCU):	0.0	0.0	0.0	0.0
Rights/Cycle on IG (PCU):	0.0	0.0	2.0	0.0
Progression Regime (1-6):	3	3	3	3
Prot Left Turn Sat'n Adj.:	1.00	1.00	1.00	1.00
Perm Left Turn Sat'n Adj.:	1.00	1.00	1.00	1.00
Right Turn (No Pedal Sat'n Adj.:	0.80	0.69	0.80	0.65
Through Lane Sat'n Adj.:	1.00	0.86	1.00	0.91

Other Settings:	
Through Saturation:	1650 PCU/hour
Rights thru Pedestrians Formula	Toronto
Pedestrian Walking Speed:	1.2 m/sec.
Min Pedestrian Walk Interval:	7.0 sec.
Delay Evaluation Interval:	60.0 min.
Confidence Level, Max Prob Queue:	95.0 %
Main Phase Grn Share Bal Crit:	2.0 %
Over-Capacity Permissive Left Adj.:	Off

PERFORMANCE RESULTS:

Flow Ratio Table:

ϕ Lane	Cfr. Vol.	Sat'n	y	Max. y	Eff. Green	Deg. Sat'n	Ped. Inc.
1 SB TRL	55	1523	0.036		35.0	0.124	
1 NB RL	134	1341	0.114	✓	35.0	0.327	
2 WB T	138	1419	0.098	✓	9.0	1.000	
2 WB L	148	1650	0.090		9.0	1.000	
3 EB T	196	1419	0.138		43.0	0.327	
3 EB L	69	776	0.089		39.0	0.220	
3 EB TR	176	1393	0.126	✓	39.0	0.324	
3 EB T	196	1502	0.126	✓ *	39.0	0.324	
Total.			0.331			+0.000	

Other Measures:

Lane	Total Vol.	Total Cap.	Lane Deg. Satn	Avg. Veh. Delay	Avg. Queue (Cons)	Max. Prob. Queue	Prob. Disch. Ovrld.
SB TRL	55	533	0.104	22	2	4	0.0%
NB RL	226	542	0.416	27	6	12	0.1%
WB T	324	710	0.456	18	9	15	0.0%
WB L	289	521	0.555	23	8	14	1.8%
EB TR	176	543	0.324	23	5	10	0.0%
EB T	196	584	0.324	23	5	10	0.0%
Int'n:	1,253	3,434		22			

NOTE(S):
* Minimum Pedestrian Crossing Requirements have not been met.
* Main phase critical move choice reflects lost time adjustment

SUMMARY of KEY RESULTS:

Cycle Time: 100.0 sec.
Lost Time: 17.0 sec.
Degree of Saturation: 0.398

CCG/CALC 2 PERFORMANCE ANALYSIS DATA SUMMARY
FUTURE TOTAL TRAFFIC

Project : CHERRY ST. REVIEW-JN07
Scenario : WKDPM OP3Bi E.S.
Data File: TO-PM3B1.PC2

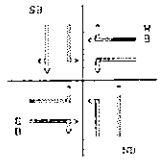
Page : 1
Printed On: June 22, 2007
Printed At: 12:05 PM

INTERSECTION: CHERRY/MILL

DEMAND VOLUMES:

Vehicles	Volume Adjustments	Pedestrian Volume	Pedestrian Walk Dst/Med Width(m)
151 | 19	3.0% 3.0%	200	23/0
477 | 70	3.0% 3.0%		
28 | 278	3.0% 3.0%	200 300	16/0 16/0
71 | 0	3.0% 3.0%		
203 | 557	3.0% 3.0%	200	23/0
16 | 45	3.0% 3.0%		

CONFIGURATION:



SIGNAL PHASING INFORMATION:

# Type	Permitted Moves: SB	WB	NB	EB	Signal Timings: Green	Amber	Red	SAG	Effective Times: Eff. Green	Lost Time	Ped. X-W
1 SB Rst Lft	RTL				10.0	2.0	0.0	1.0	11.0	2.0	0.0
2 N-S Main	RT		TL		41.0	4.0	2.0	0.0	42.0	5.0	20.1
3 WB Advance		RTL			6.0	3.0	0.0	0.0	7.0	3.0	0.0
4 E-W Main		RTL		RTL	23.0	4.0	2.0	0.0	24.0	5.0	26.2
Total:					82.0	13.0	4.0	1.0	86.0	14.0	

Methodology: Canadian Capacity Guide, 2nd Edition (1995) (vv)

Approach Specific Adjustments:	SB	WB	NB	EB
Lefts/Cycle on IG (PCU):	0.0	2.0	2.0	2.0
Shared Lefts/Cycle on IG (PCU):	0.0	0.0	0.0	0.0
Rights/Cycle on IG (PCU):	0.0	0.0	0.0	0.0
Progression Regime (1-6):	3	3	3	3
Prot Left Turn Sat'n Adj.:	1.00	1.00	1.00	1.00
Perm Left Turn Sat'n Adj.:	1.00	1.00	1.00	1.00
Right Turn (No Pedal Sat'n Adj.:	0.80	0.80	0.80	0.80
Through Lane Sat'n Adj.:	1.00	1.00	1.00	1.00

Other Settings:

Through Saturation:	1650 PCU/hour
Rights thru Pedestrians Formula:	Toronto
Pedestrian Walking Speed:	1.2 m/sec
Min Pedestrian Walk Interval:	7.0 sec.
Delay Evaluation Interval:	60.0 min.
Confidence Level, Max Prob Queue:	95.0 %
Main Phase Grn Share Bal Crit:	2.0 %
Over-Capacity Permissive Left Adj.:	Off

PERFORMANCE RESULTS:

Flow Ratio Table:

# Lane	Clr. Vol.	Sat'n	y	Max. y	Eff. Green	Deg. Sat'n	Ped. Inc.
1 SB TR	170	1650	0.110	Y	11.0	1.000	
1 SB L	156	1650	0.094		11.0	0.855	
2 NB TR	343	1577	0.218	/	42.0	0.495	
2 NB T	584	1650	0.354	/	42.0	0.843	
2 NB L	0	592	0.000		42.0	0.000	
3 WB TR	592	1666	0.355		42.0	0.850	
3 WB L	149	1650	0.090	Y	6.0	1.000	
4 WB TR	0	1362	0.000		26.0	0.000	
4 WB L	66	418	0.157		24.0	0.456	
4 EB TR	246	1438	0.171	/	24.0	0.314	0.060
4 EB L	1	1650	0.001		24.0	0.003	
Total:			0.725				+0.060

Other Measures:

Lane	Total Vol.	Total Cap.	Lane Deg. Satn	Avg. Veh. Delay	Avg. Queue (Cons)	Max. Prob. Queue	Prob. Disch. Ovrld.
SB L	156	182	0.857	96	4	9	26.3%
SB TR	522	573	0.528	18	15	22	0.3%
NB T	584	693	0.843	39	16	25	20.4%
NB L	46	321	0.145	19	1	4	0.3%
NB TR	92	495	0.185	23	3	6	0.3%
WB TR	286	321	0.892	71	5	15	22.8%
EB TR	246	345	0.714	66	7	12	8.1%
EB L	73	468	0.156	31	2	5	0.3%
Int'n:	2,005	3,696		42			

NOTE(S):
* Main Phase Green Times have NOT been Balanced.

SUMMARY of KEY RESULTS:

Cycle Time: 100.0 sec.
Lost Time: 14.0 sec.
Degree of Saturation: 0.844

CCG/CALC 2 PERFORMANCE ANALYSIS DATA SUMMARY
FUTURE TOTAL TRAFFIC

Project : CHERRY ST. REVIEW-JN07
Scenario : WKDPM OP3Bi E.S.
Data File: TO-PM3B1.PC2

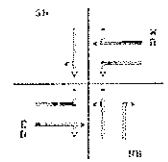
Page : 1
Printed On: June 22, 2007
Printed At: 12:07 PM

INTERSECTION: CHERRY/FRONT

DEMAND VOLUMES:

Vehicles	Volume Adjustments	Pedestrian Volume	Pedestrian Walk Dst/Med Width(m)
0 | 66	3.0% 3.0%	300	23/0
462 | 115	3.0% 3.0%		
37 | 194	3.0% 3.0%	200 200	16/0 16/0
61 | 320	3.0% 3.0%		
421 | 257	3.0% 3.0%	200	23/0
71 | 20	3.0% 3.0%		

CONFIGURATION:



SIGNAL PHASING INFORMATION:

# Type	Permitted Moves: SB	WB	NB	EB	Signal Timings: Green	Amber	Red	SAG	Effective Times: Eff. Green	Lost Time	Ped. X-W
1 N-S Main	RT		RTL		22.0	2.0	0.0	1.0	23.0	2.0	20.3
2 N-S Main	RT		TL		14.0	4.0	2.0	0.0	15.0	5.0	20.3
3 WB Advance		RTL R			10.0	2.0	0.0	1.0	11.0	2.0	0.0
4 E-W Main		RTL		RTL	36.0	4.0	2.0	0.0	37.0	5.0	26.2
Total:					82.0	12.0	4.0	2.0	96.0	14.0	

Methodology: Canadian Capacity Guide, 2nd Edition (1995) (vv)

Approach Specific Adjustments:	SB	WB	NB	EB
Lefts/Cycle on IG (PCU):	0.0	2.0	0.0	2.0
Shared Lefts/Cycle on IG (PCU):	0.0	0.0	0.0	0.0
Rights/Cycle on IG (PCU):	1.0	0.0	0.0	1.0
Progression Regime (1-6):	3	3	3	3
Prot Left Turn Sat'n Adj.:	1.00	1.00	1.00	1.00
Perm Left Turn Sat'n Adj.:	1.00	1.00	1.00	1.00
Right Turn (No Pedal Sat'n Adj.:	0.80	0.80	0.80	0.80
Through Lane Sat'n Adj.:	1.00	1.00	1.00	1.00

Other Settings:

Through Saturation:	1650 PCU/hour
Rights thru Pedestrians Formula:	Toronto
Pedestrian Walking Speed:	1.2 m/sec
Min Pedestrian Walk Interval:	7.0 sec.
Delay Evaluation Interval:	60.0 min.
Confidence Level, Max Prob Queue:	95.0 %
Main Phase Grn Share Bal Crit:	2.0 %
Over-Capacity Permissive Left Adj.:	Off

PERFORMANCE RESULTS:

Flow Ratio Table:

# Lane	Clr. Vol.	Sat'n	y	Max. y	Eff. Green	Deg. Sat'n	Ped. Inc.
1 SB TR	230	1650	0.175	Y	23.0	0.759	
1 SB L	233	683	0.217	/	23.0	0.943	
2 NB T	173	1243	0.139	/	23.0	0.604	
2 NB TR	168	1650	0.114	/	15.0	0.759	0.059
2 NB L	112	1243	0.091		15.0	0.604	
3 EB TR	166	1515	0.110	/	11.0	1.000	
3 EB L	128	1650	0.077		11.0	0.701	
4 EB TR	165	1528	0.110		11.0	1.000	
4 WB TR	21	1556	0.017		39.0	0.043	
4 WB L	0	211	0.000		37.0	0.000	
4 EB TR	543	1553	0.348	/	37.0	0.942	
4 EB L	0	1543	0.000		37.0	0.000	
Total:			0.769				+0.059

Other Measures:

Lane	Total Vol	Total Cap.	Lane Deg. Satn	Avg. Veh. Delay	Avg. Queue (Cons)	Max. Prob. Queue	Prob. Disch. Ovrld.
SB TR	514	699	0.735	34	14	22	8.8%
NB T	338	369	0.917	102	7	16	34.0%
NB TR	285	472	0.604	31	6	14	3.2%
NB L	187	556	0.286	16	5	10	0.0%
EB L	200	352	0.569	57	6	11	5.6%
EB TR	579	612	0.945	67	16	24	34.8%
EB L	63	642	0.098	21	2	5	0.0%
Int'n:	2,166	3,763		50			

NOTE(S):
* Main Phase Green Times have NOT been Balanced.
* Minimum Pedestrian Crossing Requirements have not been met

SUMMARY of KEY RESULTS:

Cycle Time: 100.0 sec.
Lost Time: 14.0 sec.
Degree of Saturation: 0.918

CCG/CALC 2 PERFORMANCE ANALYSIS DATA SUMMARY
FUTURE TOTAL TRAFFIC

Project : CHERRY ST. REVIEW-JN07
Scenario : WKDPM OP3Bi E.S.
Data File: TO-PM3B1.PC2

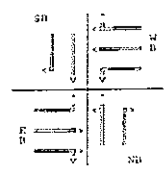
Page : 1
Printed On: June 22, 2007
Printed At: 12:08 PM

INTERSECTION: CHERRY/EASTERN

DEMAND VOLUMES:

Vehicles		Volume Adjustments		Pedestrian Volume	Pedestrian Walk Dst/Med Width(m)
0	28	3.0%	3.0%	200 (top)	30/0 (top)
225	604	3.0%	3.0%	200 / 200 (sides)	23/0 / 23/0 (sides)
46	220	3.0%	3.0%	200 (bottom)	30/0 (bottom)
50	273	3.0%	3.0%		
1,056	59	3.0%	3.0%		
6	39	3.0%	3.0%		

CONFIGURATION:



SIGNAL PHASING INFORMATION:

φ Type	SB	WB	NB	EB	Green	Amber	Red	SAG	Eff. Green	Lost Time	Ped. X+W
1 NB Advance			RTL		12.0	3.0	0.0	0.0	13.0	2.0	0.0
2 N-S Main	RT		TL		24.0	4.0	2.0	0.0	25.0	5.0	25.2
3 WB Advance		RTL	R		11.0	3.0	0.0	0.0	12.0	2.0	0.0
4 E-W Main		RTL		RTL	35.0	4.0	2.0	0.0	36.0	5.0	32.0
Total:					82.0	14.0	4.0	0.0	66.0	14.0	

Methodology: Canadian Capacity Guide, 2nd Edition (1995) (VV)

Approach Specific Adjustments:	SB	WB	NB	EB
Lefts/Cycle on IG (PCU):	2.0	2.0	2.0	2.0
Shared Lefts/Cycle on IG (PCU):	0.0	0.0	0.0	0.0
Rights/Cycle on IG (PCU):	0.0	0.0	0.0	0.0
Progression Regime (1-6):	3	3	3	3
Prot Left Turn Sat'n Adj.:	1.00	1.00	1.00	1.00
Perm Left Turn Sat'n Adj.:	1.00	1.00	1.00	1.00
Right Turn (No Peds) Sat'n Adj.:	0.80	0.80	0.80	0.80
Through Lane Sat'n Adj.:	1.00	1.00	1.00	1.00

Other Settings:
- Through Saturation: 1650 PCU/hour
- Rights thru Pedestrians Formula: Toronto
- Pedestrian Walking Speed: 1.2 m/sec
- Min Pedestrian Walk Interval: 7.0 sec.
- Delay Evaluation Interval: 60.0 min.
- Confidence Level, Max Prob Queue: 95.0 %
- Main Phase Grn Share Bal Crit: 2.0 %
- Over-Capacity Permissive Left Adj.: Off

PERFORMANCE RESULTS.

Flow Ratio Table:

φ Lane	Cir. Vol.	Sat'n	y	Max. y	Eff. Green	Deg. Sat'n	Ped. Inc.
1 NB R	172	1320	0.130	✓	13.0	1.000	
1 NB TL	101	1650	0.061		13.0	0.471	
2 SB R	47	835	0.057		25.0	0.227	
2 SB T	232	1650	0.140	✓	25.0	0.562	0.091
2 NB TL	0	840	0.020		25.0	0.000	
3 WB TR	194	1616	0.120	✓	12.0	1.000	
3 WB T	198	1650	0.120		12.0	1.005	
3 WB L	155	1650	0.094		12.0	0.781	
3 NB R	110	1320	0.083		12.0	0.692	
4 WB TR	165	1541	0.107		38.0	0.281	
4 WB T	176	1650	0.107		38.0	0.281	
4 WB L	0	92	0.000		36.0	0.000	
4 EB TR	544	1634	0.333	✓	36.0	0.925	
4 EB T	550	1650	0.333		36.0	0.925	
4 EB L	0	796	0.000		36.0	0.000	
Total:				0.724			+0.031

Other Measures:

Lane	Total Vol.	Total Cap.	Lane Deg. Satn	Avg. Veh. Delay	Avg. Queue (Cons)	Max. Prob Queue	Prob. Disch. Ovrld.
NB R	281	330	0.852	64	8	14	25.0%
SB R	47	209	0.227	32	1	4	0.0%
SB T	232	413	0.562	38	6	12	3.2%
NB TL	101	424	0.238	22	3	6	0.0%
WB TR	359	780	0.460	18	10	17	0.0%
WB T	374	825	0.454	18	10	17	0.0%
WB L	227	303	0.748	38	6	12	18.5%
EB TR	544	588	0.925	62	15	23	34.7%
EB T	550	594	0.925	61	15	23	35.2%
EB L	52	359	0.144	22	1	4	0.0%
Int'n:	2,767	4,821		44			

NOTE(S):
- Main Phase Green Times have NOT been Balanced

SUMMARY of KEY RESULTS:

Cycle Time: 100.0 sec.
Lost Time: 14.0 sec.
Degree of Saturation: 0.841

CCG/CALC 2 PERFORMANCE ANALYSIS DATA SUMMARY
FUTURE TOTAL TRAFFIC

Project : CHERRY ST. REVIEW-JN07
Scenario : WKDPM OP3Bi E.S.
Data File: TO-PM3B1.PC2

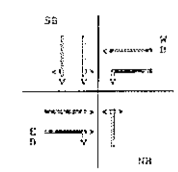
Page : 1
Printed On: June 22, 2007
Printed At: 12:09 PM

INTERSECTION: CHERRY/KING

DEMAND VOLUMES:

Vehicles		Volume Adjustments		Pedestrian Volume	Pedestrian Walk Dst/Med Width(m)
9	0	29.0%	3.0%	200 (top)	8.0/0 (top)
20	250	3.0%	9.0%	200 / 200 (sides)	19/0 / 19/0 (sides)
27	67	3.0%	4.0%	200 (bottom)	29/0 (bottom)
0	136	3.0%	3.0%		
502	0	15.0%	3.0%		
62	62	4.0%	3.0%		

CONFIGURATION:



SIGNAL PHASING INFORMATION:

φ Type	SB	WB	NB	EB	Green	Amber	Red	SAG	Eff. Green	Lost Time	Ped. X+W
1 N-S Main	RTL		RL		35.0	3.0	2.0	0.0	35.0	5.0	0.0
2 WB Advance		RTL			4.0	2.0	1.0	0.0	9.0	2.0	0.0
3 E-W Main		RTL		RTL	38.0	4.0	2.0	0.0	39.0	5.0	0.0
4 Peds Only					3.0	1.0	1.0	0.0	0.0	5.0	31.2 *
Total:					84.0	10.0	6.0	0.0	83.0	17.0	

Methodology: Canadian Capacity Guide, 2nd Edition (1995) (VV)

Approach Specific Adjustments:	SB	WB	NB	EB
Lefts/Cycle on IG (PCU):	0.0	2.0	0.0	0.0
Shared Lefts/Cycle on IG (PCU):	0.0	0.0	0.0	0.0
Rights/Cycle on IG (PCU):	0.0	0.0	2.0	0.0
Progression Regime (1-6):	3	3	3	3
Prot Left Turn Sat'n Adj.:	1.00	1.00	1.00	1.00
Perm Left Turn Sat'n Adj.:	1.00	1.00	1.00	1.00
Right Turn (No Peds) Sat'n Adj.:	0.80	0.69	0.80	0.65
Through Lane Sat'n Adj.:	1.00	0.86	1.00	0.91

Other Settings:
- Through Saturation: 1650 PCU/hour
- Rights thru Pedestrians Formula: Toronto
- Pedestrian Walking Speed: 1.2 m/sec.
- Min Pedestrian Walk Interval: 7.0 sec.
- Delay Evaluation Interval: 60.0 min.
- Confidence Level, Max Prob Queue: 95.0 %
- Main Phase Grn Share Bal Crit: 2.0 %
- Over-Capacity Permissive Left Adj.: Off

PERFORMANCE RESULTS:

Flow Ratio Table:

φ Lane	Cir. Vol.	Sat'n	y	Max. y	Eff. Green	Deg. Sat'n	Ped. Inc.
1 SB TR	28	1320	0.021		35.0	0.060	
1 SB TL	32	1600	0.020		35.0	0.056	
1 NB RL	132	1375	0.096	✓	35.0	0.274	
2 WB T	128	1413	0.090	✓	9.0	1.000	
2 WB L	19	1653	0.011		9.0	0.124	
3 WB T	154	1475	0.104		42.0	0.264	
3 WB L	0	354	0.000		39.0	0.000	
3 EB TR	342	1395	0.245	✓	39.0	0.629	
3 EB T	368	1502	0.245		39.0	0.629	
Total:				0.431			+0.000

Other Measures:

Lane	Total Vol.	Total Cap.	Lane Deg. Satn	Avg. Veh. Delay	Avg. Queue (Cons)	Max. Prob. Queue	Prob Disch. Ovrld.
SB TR	28	462	0.060	22	1	3	0.0%
SB TL	32	578	0.056	22	1	3	0.0%
NB RL	204	553	0.369	26	6	11	0.0%
WB T	281	710	0.396	17	8	14	0.0%
WB L	90	359	0.252	17	3	6	0.0%
EB TR	342	545	0.629	30	10	16	3.4%
EB T	368	586	0.629	30	10	17	3.2%
Int'n:	1,346	3,793		26			

NOTE(S):
- Main Phase Green Times have NOT been Balanced.
- Minimum Pedestrian Crossing Requirements have not been met.

SUMMARY of KEY RESULTS:

Cycle Time: 100.0 sec.
Lost Time: 17.0 sec.
Degree of Saturation: 0.520

CCG/CALC 2 PERFORMANCE ANALYSIS DATA SUMMARY
FUTURE TOTAL TRAFFIC

Project : CHERRY ST. REVIEW-JN07
Scenario : WKDAM OP3Bii E.S.
Data File: TO-AM3B2.PC2

Page : 1
Printed On: June 22, 2007
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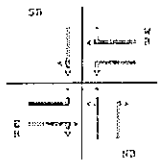
INTERSECTION: CHERRY/MILL

DEMAND VOLUMES:

Vehicles	Volume Adjustments	Pedestrian Volume	Pedestrian Walk Dst/Med Width(m)
0 | 24	3.0% | 3.0%		
489 | 56	3.0% | 3.0%	200	23/0
44 | 238	3.0% | 3.0%		
21 | 199	3.0% | 3.0%	200 | 200	16/0 | 16/0
74 | 206	3.0% | 3.0%	200	23/0
31 | 44	3.0% | 3.0%		

CONFIGURATION:



SIGNAL PHASING INFORMATION:

ϕ Type	Permitted Moves: SB	WB	NB	EB	Signal Timings: Green	Amber	Red	SAG	Effective Times: Eff. Green	Lost Time	Ped X+W
1 NB Advance			RTL		7.0	2.0	0.0	1.0	10.0	2.0	0.0
2 N-S Main	RT		TL		41.0	4.0	2.0	0.0	42.0	5.0	20.3
3 WB Advance		RTL	R		9.0	3.0	0.0	0.0	10.0	2.0	0.0
4 E-W Main		RTL		RTL	23.0	4.0	2.0	0.0	24.0	5.0	26.2
Total:					82.0	13.0	4.0	1.0	86.0	14.0	

Methodology: Canadian Capacity Guide, 2nd Edition (1995) (vv)

Approach Specific Adjustments:	SB	WB	NB	EB
Lefts/Cycle on IG (PCU):	2.0	2.0	2.0	2.0
Shared Lefts/Cycle on IG (PCU):	0.0	0.0	0.0	0.0
Rights/Cycle on IG (PCU):	0.0	0.0	0.0	0.0
Progression Regime (1-6):	3	3	3	3
Prot Left Turn Sat'n Adj.:	1.00	1.00	1.00	1.00
Perm Left Turn Sat'n Adj.:	1.00	1.00	1.00	1.00
Right Turn (No Peds) Sat'n Adj.:	0.80	0.80	0.80	0.80
Through Lane Sat'n Adj.:	1.00	1.00	1.00	1.00

Other Settings:

Through Saturation:	1650 PCU/hour
Rights: Thru Pedestrians Formula:	Toronto
Pedestrian Walking Speed:	1.2 m/sec.
Min Pedestrian Walk Interval:	7.0 sec.
Delay Evaluation Interval:	60.0 min.
Confidence Level, Max Prob Queue:	95.0 %
Main Phase Grn Share Bal Crit:	2.0 %
Over-Capacity Permissive Left Adj.:	Off

PERFORMANCE RESULTS:

Flow Ratio Table:

ϕ Lane	Clr. Vol.	Sat'n	y	Max. y	Eff. Green	Deg. Sat'n	Ped. Inc.
1 NB R	212	1320	0.160	✓	10.0	1.000	
1 NB TR	1161	1650	0.700		10.0	1.000	
2 SB TR	549	1543	0.356	✓	42.0	0.847	
3 WB TL	92	977	0.100		42.0	0.256	
3 WB TR	82	1535	0.054		10.0	0.553	
3 WB L	165	1650	0.200	✓	10.0	1.000	
4 EB R	93	1120	0.055		10.0	0.553	
4 EB TR	0	1272	0.000		24.0	0.000	
4 EB L	60	922	0.065		24.0	0.279	
4 EB TR	108	1275	0.085	/	24.0	0.353	0.147
4 EB L	0	1650	0.000		24.0	0.000	
Total:			0.640				+0.147

Other Measures:

Lane	Total Vol.	Total Cap.	Lane Deg. Satn	Avg. Veh. Delay	Avg. Queue (Cond)	Max Prob. Queue	Prob. Disch. Ovrld:
NB R	205	266	0.776	60	6	11	21.5%
SB TR	549	648	0.847	41	15	23	17.3%
WB TL	92	534	0.466	19	7	13	2.3%
WB TR	82	484	0.170	23	2	6	0.0%
WB L	297	458	0.647	35	8	14	4.2%
EB TR	109	309	0.353	35	3	7	2.1%
EB L	22	468	0.046	29	1	2	0.0%
Int'n:	1,522	3,163		37			

NOTE(S):
* Main Phase Green Times have NOT been Balanced.

SUMMARY of KEY RESULTS:

Cycle Time: 100.0 sec.
Lost Time: 14.0 sec.
Degree of Saturation: 0.745

CCG/CALC 2 PERFORMANCE ANALYSIS DATA SUMMARY
FUTURE TOTAL TRAFFIC

Project : CHERRY ST. REVIEW-JN07
Scenario : WKDAM OP3Bii E.S.
Data File: TO-AM3B2.PC2

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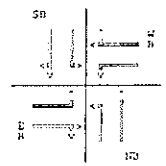
INTERSECTION: CHERRY/FRONT

DEMAND VOLUMES:

Vehicles	Volume Adjustments	Pedestrian Volume	Pedestrian Walk Dst/Med Width(m)
77 | 226	3.0% | 3.0%		
312 | 595	3.0% | 3.0%	200	23/0
33 | 121	3.0% | 3.0%		
31 | 0	3.0% | 3.0%	200 | 200	16/0 | 16/0
110 | 199	3.0% | 3.0%	200	23/0
33 | 33	3.0% | 3.0%		

CONFIGURATION:



SIGNAL PHASING INFORMATION:

ϕ Type	Permitted Moves: SB	WB	NB	EB	Signal Timings: Green	Amber	Red	SAG	Effective Times: Eff. Green	Lost Time	Ped X+W
1 SB Rat Lft	RTL				6.0	2.0	1.0	0.0	7.0	2.0	0.0
2 N-S Main	RT		TL		39.0	4.0	2.0	0.0	33.0	5.0	29.3
3 WB Advance		RTL	R		7.0	3.0	0.0	0.0	8.0	2.0	0.0
4 E-W Main		RTL		RTL	37.0	4.0	2.0	0.0	38.0	5.0	26.2
Total:					82.0	13.0	5.0	0.0	90.0	10.0	

Methodology: Canadian Capacity Guide, 2nd Edition (1995) (vv)

Approach Specific Adjustments:	SB	WB	NB	EB
Lefts/Cycle on IG (PCU):	0.0	2.0	0.0	2.0
Shared Lefts/Cycle on IG (PCU):	0.0	0.0	0.0	0.0
Rights/Cycle on IG (PCU):	0.0	0.0	0.0	0.0
Progression Regime (1-6):	3	3	3	3
Prot Left Turn Sat'n Adj.:	1.00	1.00	1.00	1.00
Perm Left Turn Sat'n Adj.:	1.00	1.00	1.00	1.00
Right Turn (No Peds) Sat'n Adj.:	0.80	0.80	0.80	0.80
Through Lane Sat'n Adj.:	1.00	1.00	1.00	1.00

Other Settings:

Through Saturation:	1650 PCU/hour
Rights: Thru Pedestrians Formula:	Toronto
Pedestrian Walking Speed:	1.2 m/sec.
Min Pedestrian Walk Interval:	7.0 sec.
Delay Evaluation Interval:	60.0 min.
Confidence Level, Max Prob Queue:	95.0 %
Main Phase Grn Share Bal Crit:	2.0 %
Over-Capacity Permissive Left Adj.:	Off

PERFORMANCE RESULTS:

Flow Ratio Table:

ϕ Lane	Clr. Vol.	Sat'n	y	Max. y	Eff. Green	Deg. Sat'n	Ped. Inc.
1 SB TR	311	1650	0.070	✓	7.0	1.000	
1 SB L	179	1650	0.046		7.0	0.647	
2 NB TR	239	1530	0.156	✓	35.0	0.447	0.017
2 NB L	205	1650	0.124		33.0	0.376	
3 WB L	74	675	0.050		33.0	0.153	
3 WB TR	115	1486	0.078	✓	8.0	1.000	
3 WB L	132	1650	0.080		8.0	1.000	
4 NB TR	429	1201	0.349	✓	40.0	0.874	
4 NB L	127	973	0.130		38.0	0.342	
4 EB TR	156	1389	0.112		38.0	0.295	
4 EB L	0	404	0.000		38.0	0.000	
Total:			0.650				+0.017

Other Measures:

Lane	Total Vol.	Total Cap.	Lane Deg. Satn	Avg. Veh. Delay	Avg. Queue (Cond)	Max Prob. Queue	Prob. Disch. Ovrld:
SB L	79	116	0.687	28	2	5	18.1%
SB TR	352	649	0.543	25	10	16	0.6%
NB T	205	545	0.376	28	6	11	0.0%
NB L	31	233	0.133	25	1	3	0.0%
WB TR	529	599	0.899	47	15	28	24.8%
WB L	331	574	0.576	24	3	10	1.3%
EB TR	156	528	0.295	23	4	9	0.0%
EB L	32	226	0.142	22	1	3	0.0%
Int'n:	1,727	3,458		34			

NOTE(S):
* Main Phase Green Times have NOT been Balanced.

SUMMARY of KEY RESULTS:

Cycle Time: 100.0 sec.
Lost Time: 10.0 sec.
Degree of Saturation: 0.729

CCG/CALC 2 PERFORMANCE ANALYSIS DATA SUMMARY
FUTURE TOTAL TRAFFIC

Project : CHERRY ST. REVIEW-JN07
Scenario : WKDAM OP3Bii E.S.
Data File: TO-AM3B2.PC2

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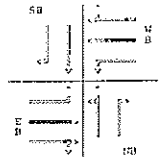
Printed On: June 22, 2007
Printed At: 12:15 PM

INTERSECTION: CHERRY/EASTERN

DEMAND VOLUMES:

Vehicles	Volume Adjustments	Pedestrian Volume	Pedestrian Walk Dst/Med Width(m)
0 | 44	3.0% | 3.0%	200	30/0
177 | 1,174	3.0% | 3.0%		
374 | 198	3.0% | 3.0%	200 | 200 | 23/0 | 23/0	
29 | 174	3.0% | 3.0%		
232 | 130	3.0% | 3.0%	200	30/0
0 | 120	3.0% | 3.0%		

CONFIGURATION:



SIGNAL PHASING INFORMATION:

ϕ Type	Permitted Moves: SB	WB	NB	EB	Signal Timings: Green	Amber	Red	SAG	Effective Times: Eff. Green	Lost Time	Ped. X+W
1 NB Advance			RTL		6.0	2.0	0.0	1.0	7.0	2.0	0.0
2 N-S Main	RT		TL		32.0	4.0	2.0	0.0	33.0	5.0	26.1
3 WB Advance		RTL	R		10.0	3.0	0.0	0.0	11.0	2.0	0.0
4 E-W Main		RTL		RTL	34.0	4.0	2.0	0.0	35.0	5.0	32.0
Total:					82.0	13.0	4.0	1.0	86.0	14.0	

Methodology: Canadian Capacity Guide, 2nd Edition (1995) (VV)

Approach Specific Adjustments:	SB	WB	NB	EB
Lefts/Cycle on IG (PCU):	2.0	2.0	2.0	2.0
Shared Lefts/Cycle on IG (PCU):	0.0	0.0	0.0	0.0
Rights/Cycle on IG (PCU):	1.5	0.0	0.0	0.0
Progression Regime (1-6):	3	3	3	3
Prot Left Turn Sat'n Adj.:	1.00	1.00	1.00	1.00
Perm Left Turn Sat'n Adj.:	1.00	1.00	1.00	1.00
Right Turn (No Pedal Sat'n Adj.:	0.80	0.80	0.80	0.80
Through Lane Sat'n Adj.:	1.00	1.00	1.00	1.00

Other Settings:

Through Saturation:	1650 PCU/hour
Rights thru Pedestrians Formula:	Toronto
Pedestrian Walking Speed:	1.2 m/sec.
Min Pedestrian Walk Interval:	7.0 sec.
Delay Evaluation Interval:	60.0 min.
Confidence Level, Max Prob Queue:	95.0 %
Main Phase Grn Share Bal Crit:	2.0 %
Over-Capacity Permissive Left Adj.:	Off

PERFORMANCE RESULTS:

Flow Ratio Table:

ϕ Lane	Clr. Vol.	Sat'n	y	Max. y	Eff. Green	Deg. Sat'n	Ped. Inc.
1 NB R	12	1320	0.070	✓	7.0	1.000	
1 NB TL	116	1650	0.070		7.0	1.000	
2 SB R	228	873	0.262	✓	33.0	0.793	
2 SB T	182	1650	0.110		33.0	0.335	
2 SB TL	182	1098	0.229	✓	33.0	0.392	
3 WB TR	178	1620	0.110	✓	11.0	1.000	
3 WB T	181	1650	0.110		11.0	1.000	
3 WB L	112	1650	0.068		11.0	0.927	
3 WB R	47	1320	0.036		11.0	0.488	
4 WB TR	633	1649	0.280		37.0	0.756	
4 WB T	468	1650	0.280		37.0	0.756	
4 WB L	0	108	0.000		35.0	0.000	
4 EB TR	511	1650	0.310	✓	35.0	0.885	
4 EB T	511	1650	0.310		35.0	0.885	
4 EB L	0	196	0.000		35.0	0.000	
Total:			0.751				+0.000

Other Measures:

Lane	Total Vol.	Total Cap.	Lane Deg. Satn	Avg. Veh. Delay	Avg. Queue (Cons)	Max. Prob. Queue	Prob. Disch. Ovrld.
NB R	179	238	0.754	61	5	10	13.1%
SB R	282	342	0.825	56	8	14	26.4%
SB T	182	545	0.335	27	5	10	0.0%
SB TL	258	478	0.539	27	7	13	1.5%
WB TR	611	751	0.814	53	17	26	13.9%
WB T	643	792	0.812	52	18	27	13.7%
WB L	204	291	0.700	56	6	11	12.0%
EB TR	511	578	0.885	52	14	22	26.1%
EB T	511	578	0.885	52	14	22	26.1%
EB L	30	141	0.213	26	1	3	0.2%
Int'n:	3,411	4,732		41			

NOTE(S):
* Main Phase Green Times have NOT been Balanced.

SUMMARY of KEY RESULTS:

Cycle Time: 100.0 sec.
Lost Time: 14.0 sec.
Degree of Saturation: 0.873

CCG/CALC 2 PERFORMANCE ANALYSIS DATA SUMMARY
FUTURE TOTAL TRAFFIC

Project : CHERRY ST. REVIEW-JN07
Scenario : WKDAM OP3Bii E.S.
Data File: TO-AM3B2.PC2

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INTERSECTION: CHERRY/KING

DEMAND VOLUMES:

Vehicles	Volume Adjustments	Pedestrian Volume	Pedestrian Walk Dst/Med Width(m)
7 | 0	29.0% | 3.0%	200	8.0/3
27 | 297	3.0% | 5.0%		
18 | 276	3.0% | 4.0%	200 | 200 | 19/0 | 19/0	
0 | 96	3.0% | 3.0%		
288 | 0	15.0% | 3.0%	200	29/0
33 | 121	4.0% | 3.0%		

CONFIGURATION:

SIGNAL PHASING INFORMATION:

ϕ Type	Permitted Moves: SB	WB	NB	EB	Signal Timings: Green	Amber	Red	SAG	Effective Times: Eff. Green	Lost Time	Ped. X+W
1 N-S Main	RTL		RL		35.0	3.0	2.0	0.0	35.0	5.0	0.0
2 WB Advance		RTL			9.0	2.0	1.0	0.0	9.0	2.0	0.0
3 E-W Main		RTL		RTL	38.0	4.0	2.0	0.0	39.0	5.0	0.0
4 Peds Only					3.0	1.0	1.0	0.0	0.0	5.0	31.2 *
Total:					84.0	10.0	6.0	0.0	83.0	17.0	

Methodology: Canadian Capacity Guide, 2nd Edition (1995) (VV)

Approach Specific Adjustments:	SB	WB	NB	EB
Lefts/Cycle on IG (PCU):	0.0	2.0	0.0	0.0
Shared Lefts/Cycle on IG (PCU):	0.0	0.0	0.0	0.0
Rights/Cycle on IG (PCU):	0.0	0.0	2.0	0.0
Progression Regime (1-6):	3	3	3	3
Prot Left Turn Sat'n Adj.:	1.00	1.00	1.00	1.00
Perm Left Turn Sat'n Adj.:	1.00	1.00	1.00	1.00
Right Turn (No Pedal Sat'n Adj.:	0.80	0.69	0.80	0.69
Through Lane Sat'n Adj.:	1.00	0.86	1.00	0.91

Other Settings:

Through Saturation:	1650 PCU/hour
Rights thru Pedestrians Formula:	Toronto
Pedestrian Walking Speed:	1.2 m/sec.
Min Pedestrian Walk Interval:	7.0 sec.
Delay Evaluation Interval:	60.0 min
Confidence Level, Max Prob Queue:	95.0 %
Main Phase Grn Share Bal Crit:	2.0 %
Over-Capacity Permissive Left Adj.:	Off

PERFORMANCE RESULTS:

Flow Ratio Table:

ϕ Lane	Clr. Vol.	Sat'n	y	Max. y	Eff. Green	Deg. Sat'n	Ped. Inc.
1 SB TRL	144	1521	0.095	✓	35.0	0.104	
1 NB RL	154	1343	0.114	✓	35.0	0.327	
2 WB T	138	1419	0.090		9.0	1.000	
2 WB L	145	1650	0.088		9.0	1.000	
3 EB T	196	1419	0.138		41.0	0.377	
3 EB L	67	770	0.087		39.0	0.221	
3 EB TR	176	1323	0.126		39.0	0.321	
5 EB T	190	1562	0.122	✓	34.0	0.324	
Total:			0.331				+0.000

Other Measures:

Lane	Total Vol.	Total Cap.	Lane Deg. Satn	Avg. Veh. Delay	Avg. Queue (Cons)	Max. Prob. Queue	Prob. Disch. Ovrld.
SB TRL	55	533	0.104	22	2	4	0.0%
NB RL	226	542	0.416	27	6	12	3.1%
WB T	324	710	0.456	18	9	15	0.0%
WB L	287	521	0.551	23	8	14	1.7%
EB TR	176	543	0.324	23	5	10	0.0%
EB T	190	586	0.324	23	5	10	0.0%
Int'n:	1,257	3,434		22			

NOTE(S):
* Minimum Pedestrian Crossing Requirements have not been met.
* Main phase critical move choice reflects lost time adjustment

SUMMARY of KEY RESULTS:

Cycle Time: 100.0 sec.
Lost Time: 17.0 sec.
Degree of Saturation: 0.398

CCG/CALC 2 PERFORMANCE ANALYSIS DATA SUMMARY
FUTURE TOTAL TRAFFIC

Project : CHERRY ST. REVIEW-JN07
Scenario : WKDPM OP3Bii E.S.
Data File: TO-PM3B2.PC2

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INTERSECTION: CHERRY/MILL

DEMAND VOLUMES:

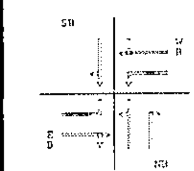
Vehicles: 0 | 19 ; 479 | 70 ; 28 | 279 ; 71 | 364 ; 159 | 247 ; 36 | 45

Volume Adjustments: 3.0% 3.0% / 3.0% 3.0% / 3.0% 3.0% / 3.0% 3.0% / 3.0% 3.0% / 3.0% 3.0%

Pedestrian Volume: 200, 200, 200, 200

Pedestrian Walk Dst/Med Width(m): 23/0, 16/0, 16/0, 23/0

CONFIGURATION:



SIGNAL PHASING INFORMATION:

φ Type	Permitted Moves: SB	WB	NB	EB	Signal Timings: Green	Amber	Red	SAG	Effective Times: Eff. Green	Lost Time	Ped. X-W
1 N-S Main	RT		RTL		22.0	2.0	0.0	1.0	23.0	2.0	20.3
2 N-S Main	RT		TL		30.0	4.0	2.0	0.0	31.0	5.0	20.3
3 WB Advance		RTL	R		8.0	3.0	0.0	0.0	9.0	2.0	0.0
4 E-W Main		RTL		RTL	22.0	4.0	2.0	0.0	23.0	5.0	26.2 *
Total:					82.0	13.0	4.0	1.0	86.0	14.0	

Methodology: Canadian Capacity Guide, 2nd Edition (1995) (vv)

Approach Specific Adjustments:	SB	WB	NB	EB
Lefts/Cycle on IG (PCU):	2.0	2.0	2.0	2.0
Shared Lefts/Cycle on IG (PCU):	0.0	0.0	0.0	0.0
Rights/Cycle on IG (PCU):	0.0	0.0	1.5	0.0
Progression Regime (1-6):	3	3	3	3
Prot Left Turn Sat'n Adj.:	1.00	1.00	1.00	1.00
Perm Left Turn Sat'n Adj.:	1.00	1.00	1.00	1.00
Right Turn (No Peds) Sat'n Adj.:	0.80	0.80	0.80	0.80
Through Lane Sat'n Adj.:	1.00	1.00	1.00	1.00

Other Settings:
Through Saturation: 1650 PCU/hour
Rights thru Pedestrians Formula: Toronto
Pedestrian Walking Speed: 1.2 m/sec.
Min Pedestrian Walk Interval: 7.0 sec.
Delay Evaluation Interval: 60.0 min.
Confidence Level, Max Prob Queue: 95.0 %
Main Phase Grn Share Bal Crit: 2.0 %
Over-Capacity Permissive Left Adj.: Off

PERFORMANCE RESULTS:

Flow Ratio Table:

φ Lane	Clr. Vol.	Sat'n	Y	Max. y	Eff. Green	Deg. Sat'n	Ped. Inc.
1 SB TR	222	1580	0.141		23.0	0.632	
1 NB R	297	1319	0.220	√	23.0	0.957	
1 NB TL	128	1175	0.109		23.0	0.474	
2 SB TR	300	1580	0.190	√	31.0	0.612	
2 NB TL	173	1175	0.147		31.0	0.474	
3 WB TR	92	2566	0.036		9.0	0.650	
3 WB L	349	1550	0.090	√	9.0	1.000	
3 NB R	219	1320	0.090		9.0	1.000	
4 WB TR	0	1358	0.000		25.0	0.000	
4 WB L	66	520	0.127		23.0	0.551	
4 EB TR	201	1391	0.144	√	23.0	0.628	0.087
4 EB L	1	1650	0.001		23.0	0.003	
Total:				0.644			+0.087

Other Measures:

Lane	Total Vol.	Total Cap.	Lane Deg. Satn	Avg. Veh Delay	Avg. Queue (Cons)	Max Prob. Queue	Prob Disch. Ovrld.
SB TR	522	853	0.612	19	15	22	0.6%
NB R	375	384	0.975	106	10	17	35.1%
NB TL	301	634	0.474	17	3	14	0.1%
WB TR	92	480	0.191	24	3	6	0.0%
WB L	286	340	0.842	58	8	14	27.5%
EB TR	201	320	0.628	44	6	11	5.6%
EB L	73	451	0.162	32	2	5	0.0%
Int'n:	1,850	3,464		46			

NOTE(S):
* Main Phase Green Times have NOT been Balanced.
* Minimum Pedestrian Crossing Requirements have not been met

SUMMARY of KEY RESULTS:

Cycle Time: 100.0 sec.
Lost Time: 14.0 sec.
Degree of Saturation: 0.749

CCG/CALC 2 PERFORMANCE ANALYSIS DATA SUMMARY
FUTURE TOTAL TRAFFIC

Project : CHERRY ST. REVIEW-JN07
Scenario : WKDPM OP3Bii E.S.
Data File: TO-PM3B2.PC2

Page : 1
Printed On: June 22, 2007
Printed At: 12:18 PM

INTERSECTION: CHERRY/FRONT

DEMAND VOLUMES:

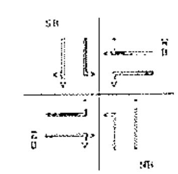
Vehicles: 133 | 56 ; 329 | 116 ; 37 | 194 ; 51 | 0 ; 509 | 265 ; 53 | 20

Volume Adjustments: 3.0% 3.0% / 3.0% 3.0% / 3.0% 3.0% / 3.0% 3.0% / 3.0% 3.0% / 3.0% 3.0%

Pedestrian Volume: 200, 200, 200, 200

Pedestrian Walk Dst/Med Width(m): 23/0, 16/0, 16/0, 23/0

CONFIGURATION:



SIGNAL PHASING INFORMATION:

φ Type	Permitted Moves: SB	WB	NB	EB	Signal Timings: Green	Amber	Red	SAG	Effective Times: Eff. Green	Lost Time	Ped. X-W
1 SB Ret Lft	RTL				12.0	3.0	0.0	0.0	13.0	2.0	0.0
2 N-S Main	RT		TL		24.0	4.0	2.0	0.0	25.0	5.0	20.3
3 WB Advance		RTL			5.0	2.0	1.0	0.0	6.0	2.0	0.0
4 E-W Main		RTL		RTL	41.0	4.0	2.0	0.0	42.0	5.0	26.2
Total:					82.0	13.0	5.0	0.0	86.0	14.0	

Methodology: Canadian Capacity Guide, 2nd Edition (1995) (vv)

Approach Specific Adjustments:	SB	WB	NB	EB
Lefts/Cycle on IG (PCU):	0.0	2.0	0.0	2.0
Shared Lefts/Cycle on IG (PCU):	0.0	0.0	0.0	0.0
Rights/Cycle on IG (PCU):	0.0	0.0	0.0	0.0
Progression Regime (1-6):	3	3	3	3
Prot Left Turn Sat'n Adj.:	1.00	1.00	1.00	1.00
Perm Left Turn Sat'n Adj.:	1.00	1.00	1.00	1.00
Right Turn (No Peds) Sat'n Adj.:	0.90	0.80	0.80	0.80
Through Lane Sat'n Adj.:	1.00	1.00	1.00	1.00

Other Settings:
Through Saturation: 1650 PCU/hour
Rights thru Pedestrians Formula: Toronto
Pedestrian Walking Speed: 1.2 m/sec.
Min Pedestrian Walk Interval: 7.0 sec.
Delay Evaluation Interval: 60.0 min.
Confidence Level, Max Prob Queue: 95.0 %
Main Phase Grn Share Bal Crit: 2.0 %
Over-Capacity Permissive Left Adj.: Off

PERFORMANCE RESULTS:

Flow Ratio Table:

φ Lane	Clr. Vol.	Sat'n	Y	Max. y	Eff. Green	Deg. Sat'n	Ped. Inc.
1 SB TR	209	1600	0.130	√	11.0	1.000	
1 SB L	137	1650	0.083		11.0	0.539	
2 SB TR	168	1502	0.112		27.0	0.414	
2 NB T	273	1650	0.165	√	25.0	0.662	0.038
2 NB L	21	734	0.029		25.0	0.112	
3 WB TR	91	2313	0.060	√	6.0	1.000	
3 WB L	99	1650	0.060		6.0	1.000	
4 WB TR	97	1265	0.076		44.0	0.174	
4 WB L	29	244	0.118		42.0	0.281	
4 EB TR	579	1529	0.379	√	42.0	0.901	
4 EB L	0	1245	0.000		42.0	0.000	
Total:				0.734			+0.038

Other Measures:

Lane	Total Vol.	Total Cap.	Lane Deg. Satn	Avg. Veh. Delay	Avg. Queue (Cons)	Max. Prob. Queue	Prob. Disch. Ovrld.
SB L	137	214	0.639	56	5	9	9.1%
SB TR	377	615	0.613	28	10	17	2.1%
NB T	273	413	0.662	42	8	13	8.4%
NB L	21	184	0.112	30	1	2	0.0%
WB TR	187	640	0.289	16	5	10	0.0%
WB L	200	274	0.730	38	5	11	11.0%
EB TR	579	642	0.901	50	16	24	26.6%
EB L	63	595	0.106	13	2	5	0.0%
Int'n:	1,836	3,594		39			

NOTE(S):
* Main Phase Green Times have NOT been Balanced.

SUMMARY of KEY RESULTS:

Cycle Time: 100.0 sec.
Lost Time: 14.0 sec.
Degree of Saturation: 0.853

CCG/CALC 2 PERFORMANCE ANALYSIS DATA SUMMARY
FUTURE TOTAL TRAFFIC

Project : CHERRY ST. REVIEW-JN07 — Page : 1
Scenario : WKDPM OP3Bii E.S. — Printed On: June 22, 2007
Data File: TO-PM3B2.PC2 — Printed At: 12:19 PM

INTERSECTION: CHERRY/EASTERN

DEMAND VOLUMES:

Vehicles

0	28
225	684
46	223
50	281
1,075	57
6	39

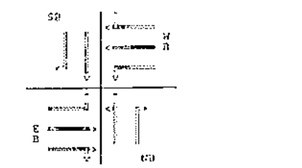
Volume Adjustments

3.0%	3.0%
3.0%	3.0%
3.0%	3.0%
3.0%	3.0%
3.0%	3.0%
3.0%	3.0%

Pedestrian Volume: 200 / 200 / 200 / 200

Pedestrian Walk Dst/Med Width(m): 33/0 / 23/0 / 23/0 / 33/0

CONFIGURATION:



SIGNAL PHASING INFORMATION:

# Type	Permitted Moves: SB	WB	NB	EB	Signal Timings: Green	Amber	Red	SAG	Effective Times: Eff. Green	Lost Time	Ped. X-W
1 NB Advance			RTL		12.0	2.0	0.0	1.0	13.0	2.0	0.0
2 N-S Main	RT		TL		26.0	4.0	2.0	0.0	27.0	5.0	26.2
3 WB Advance		RTL	R		10.0	3.0	0.0	0.0	11.0	2.0	0.0
4 E-W Main		RTL		RTL	34.0	4.0	2.0	0.0	35.0	5.0	32.0
Total:					82.0	13.0	4.0	1.0	86.0	14.0	

Methodology: Canadian Capacity Guide, 2nd Edition (1995) (vv)

Approach Specific Adjustments:	SB	WB	NB	EB
Lefts/Cycle on IG (PCU):	2.0	2.0	2.0	2.0
Shared Lefts/Cycle on IG (PCU):	0.0	0.0	0.0	0.0
Rights/Cycle on IG (PCU):	1.5	0.0	0.0	0.0
Progression Regime (1-6):	3	3	3	3
Prot Left Turn Sat'n Adj.:	1.00	1.00	1.00	1.00
Perm Left Turn Sat'n Adj.:	1.00	1.00	1.00	1.00
Right Turn (No Peds) Sat'n Adj.:	0.80	0.80	0.80	0.80
Through Lane Sat'n Adj.:	1.00	1.00	1.00	1.00

Other Settings:
Through Saturation: 1650 PCU/hour
Rights thru Pedestrians Formula: Toronto
Pedestrian Walking Speed: 1.2 m/sec.
Min Pedestrian Walk Interval: 7.0 sec.
Delay Evaluation Interval: 60.0 min.
Confidence Level, Max Prob Queue: 95.0 %
Main Phase Grn Share Bal Crit: 2.0 %
Over-Capacity Permissive Left Adj.: Off

PERFORMANCE RESULTS:

Flow Ratio Table:

# Lane	Clr. Vol.	Sat'n	y	Max. Y	Eff. Green	Deg. Sat'n	Ped. Inc.
1 NB R	172	1320	0.130	✓	13.0	1.000	
1 NB TL	101	1650	0.061		13.0	0.471	
2 SB R	0	846	0.000		27.0	0.030	
2 SB T	232	1650	0.140	✓	27.0	0.520	0.091
2 NB TL	0	977	0.000		27.0	0.030	
3 WB TR	178	1510	0.110	✓	11.0	1.000	
3 WB T	182	1650	0.110		11.0	1.000	
3 WB L	155	1650	0.094		11.0	0.852	
3 NB R	110	1320	0.083		11.0	0.813	
4 WB TR	181	1540	0.117		37.0	0.317	
4 WB T	193	1650	0.117		37.0	0.317	
4 WB L	0	74	0.000		35.0	0.030	
4 EB TR	554	1634	0.333	✓	35.0	0.969	
4 EB T	559	1650	0.339		35.0	0.959	
4 EB L	0	724	0.000		35.0	0.030	
Total:				0.719			+0.091

Other Measures:

Lane	Total Vol.	Total Cap.	Lane Deg. Satn	Avg. Veh. Delay	Avg. Queue (Cons)	Max. Prob. Queue	Prob. Disch. Ovrld.
NB R	289	317	0.914	83	8	14	23.8%
SB R	47	203	0.163	29	1	4	0.0%
SB T	232	446	0.520	35	6	12	1.5%
NB TL	101	457	0.221	21	3	6	0.0%
WB TR	358	748	0.479	20	10	17	0.1%
WB T	375	792	0.473	20	10	17	0.1%
WB L	227	279	0.811	43	6	12	19.5%
EB TR	554	572	0.969	81	15	23	37.4%
EB T	559	578	0.969	83	16	24	35.0%
EB L	52	325	0.158	23	1	4	0.0%
Int'n:	2,791	4,796		55			

NOTE(S):
* Main Phase Green Times have NOT been Balanced.

SUMMARY of KEY RESULTS:

Cycle Time: 100.0 sec.
Lost Time: 14.0 sec.
Degree of Saturation: 0.837

CCG/CALC 2 PERFORMANCE ANALYSIS DATA SUMMARY
FUTURE TOTAL TRAFFIC

Project : CHERRY ST. REVIEW-JN07 — Page : 1
Scenario : WKDPM OP3Bii E.S. — Printed On: June 22, 2007
Data File: TO-PM3B2.PC2 — Printed At: 12:19 PM

INTERSECTION: CHERRY/KING

DEMAND VOLUMES:

Vehicles

0	0
25	258
27	87
0	136
562	0
62	62

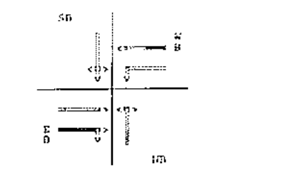
Volume Adjustments

29.0%	3.0%
3.0%	9.0%
3.0%	4.0%
3.0%	3.0%
15.0%	3.0%
4.0%	3.0%

Pedestrian Volume: 200 / 200 / 200 / 200

Pedestrian Walk Dst/Med Width(m): 9.0/0 / 19/0 / 19/0 / 29/0

CONFIGURATION:



SIGNAL PHASING INFORMATION:

# Type	Permitted Moves: SB	WB	NB	EB	Signal Timings: Green	Amber	Red	SAG	Effective Times: Eff. Green	Lost Time	Ped. X-W
1 N-S Main	RTL		RL		35.0	3.0	2.0	0.0	35.0	5.0	0.0
2 WB Advance		RTL			8.0	2.0	1.0	0.0	9.0	2.0	0.0
3 E-W Main		RTL		RTL	38.0	4.0	2.0	0.0	39.0	5.0	0.0
4 Peds Only					3.0	1.0	1.0	0.0	0.0	5.0	31.2 *
Total:					84.0	10.0	6.0	0.0	83.0	17.0	

Methodology: Canadian Capacity Guide, 2nd Edition (1995) (vv)

Approach Specific Adjustments:	SB	WB	NB	EB
Lefts/Cycle on IG (PCU):	0.0	2.0	0.0	0.0
Shared Lefts/Cycle on IG (PCU):	0.0	0.0	0.0	0.0
Rights/Cycle on IG (PCU):	0.0	0.0	2.0	0.0
Progression Regime (1-6):	3	3	3	3
Prot Left Turn Sat'n Adj.:	1.00	1.00	1.00	1.00
Perm Left Turn Sat'n Adj.:	1.00	1.00	1.00	1.00
Right Turn (No Peds) Sat'n Adj.:	0.80	0.69	0.80	0.65
Through Lane Sat'n Adj.:	1.00	0.86	1.00	0.91

Other Settings:
Through Saturation: 1650 PCU/hour
Rights thru Pedestrians Formula: Toronto
Pedestrian Walking Speed: 1.2 m/sec.
Min Pedestrian Walk Interval: 7.0 sec.
Delay Evaluation Interval: 60.0 min.
Confidence Level, Max Prob Queue: 95.0 %
Main Phase Grn Share Bal Crit: 2.0 %
Over-Capacity Permissive Left Adj.: Off

PERFORMANCE RESULTS:

Flow Ratio Table:

# Lane	Clr. Vol.	Sat'n	y	Max. Y	Eff. Green	Deg. Sat'n	Ped. Inc.
1 SB TRL	60	1479	0.041		35.0	0.116	
1 NB RL	132	1323	0.100	✓	35.0	0.285	
2 WB T	128	1419	0.090	✓	9.0	1.000	
2 WB L	18	1650	0.011		5.0	0.124	
3 WB T	154	1419	0.200		42.0	0.464	
3 WB L	0	354	0.000		39.0	0.000	
3 EB TR	342	1396	0.245	✓	39.0	0.629	
3 EB T	368	1503	0.245		39.0	0.629	
Total:				0.435			+0.000

Other Measures:

Lane	Total Vol.	Total Cap.	Lane Deg. Satn	Avg. Veh. Delay	Avg. Queue (Cons)	Max. Prob. Queue	Prob. Disch. Ovrld.
SB TRL	60	518	0.116	22	2	5	0.0%
NB RL	204	535	0.381	26	6	11	0.0%
WB T	281	710	0.396	17	6	14	0.0%
WB L	90	359	0.252	17	3	6	0.0%
EB TR	342	545	0.629	30	10	16	3.4%
EB T	368	586	0.629	30	10	17	3.2%
Int'n:	1,346	3,251		26			

NOTE(S):
* Main Phase Green Times have NOT been Balanced.
* Minimum Pedestrian Crossing Requirements have not been met

SUMMARY of KEY RESULTS:

Cycle Time: 100.0 sec.
Lost Time: 17.0 sec.
Degree of Saturation: 0.524

CCG/CALC 2 PERFORMANCE ANALYSIS DATA SUMMARY
FUTURE TOTAL TRAFFIC

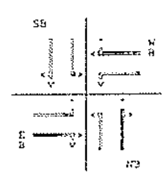
Project : CHERRY ST. REVIEW-JN07
Scenario : WKDAM OP3Biii E.S.
Data File: TO-AM3B3.PC2

Page : 1
Printed On: June 22, 2007
Printed At: 11:48 AM

INTERSECTION: CHERRY/MILL

DEMAND VOLUMES:

Vehicles		Volume Adjustments		Pedestrian Volume	Pedestrian Walk Dst/Med Width(m)
35	24	3.0%	3.0%	200	16/0
499	56	3.0%	3.0%	200 / 200	16/0 / 16/0
44	288	3.0%	3.0%	200	15/0
21	144	3.0%	3.0%		
74	263	3.0%	3.0%		
31	44	3.0%	3.0%		



SIGNAL PHASING INFORMATION:

φ Type	SB	WB	NB	EB	Green	Amber	Red	SAG	Eff. Green	Lost Time	Ped. X+W
1 N-S Main	RTL		RTL		54.0	3.0	2.0	0.0	54.0	5.0	0.0
2 WB Advance		RTL			8.0	2.0	1.0	0.0	9.0	2.0	0.0
3 E-W Main		RTL		RTL	20.0	3.0	2.0	0.0	20.0	5.0	0.0
4 Peds Only					3.0	1.0	1.0	0.0	0.0	5.0	20.3 *
Total:					65.0	9.0	6.0	0.0	83.0	17.0	

TRANSIT PHASE

Methodology: Canadian Capacity Guide, 2nd Edition (1995) (vv)

Approach Specific Adjustments:	SB	WB	NB	EB
Lefts/Cycle on IG (PCU):	2.0	2.0	2.0	2.0
Shared Lefts/Cycle on IG (PCU):	0.0	0.0	0.0	0.0
Rights/Cycle on IG (PCU):	0.0	0.0	0.0	0.0
Progression Regime (1-6):	3	3	3	3
Prot Left Turn Sat'n Adj.:	1.00	1.00	1.00	1.00
Perm Left Turn Sat'n Adj.:	1.00	1.00	1.00	1.00
Right Turn (No Peds) Sat'n Adj.:	0.80	0.80	0.80	0.80
Through Lane Sat'n Adj.:	1.00	1.00	1.00	1.00

Other Settings:
- Through Saturation: 1650 PCU/hour
- Rights thru Pedestrians Formula: Toronto
- Pedestrian Walking Speed: 1.2 m/sec.
- Min Pedestrian Walk Interval: 7.0 sec.
- Delay Evaluation Interval: 60.0 min.
- Confidence Level, Max Prob Queue: 95.0 %
- Main Phase Grn Share Bal Crit: 2.0 %
- Over-Capacity Permissive Left Adj.: Off

PERFORMANCE RESULTS:

Flow Ratio Table:

φ Lane	Clr. Vol.	Sat'n	y	Max. Y	Eff. Green	Deg. Sat'n	Ped. Inc.
1 SB TR	549	1657	0.340	✓	54.0	0.629	
1 SB L	0	595	0.000		54.0	0.000	
1 NB TR	417	1516	0.277		54.0	0.512	
1 NB L	0	424	0.000		54.0	0.000	
2 WB TR	82	1535	0.054		9.0	0.596	
2 WB L	149	1650	0.090	✓	9.0	1.000	
3 WB TR	0	1535	0.000		22.0	0.000	
3 WB L	75	824	0.093	✓	20.0	0.465	
3 EB TR	103	1527	0.070		20.0	0.352	
3 EB L	0	1650	0.000		20.0	0.000	
Total:				0.523			+0.000

Other Measures:

Lane	Total Vol.	Total Cap.	Lane Deg. Satn	Avg. Veh. Delay	Avg. Queue (Cons)	Max. Prob. Queue	Prob. Disch. Ovrld.
SB TR	549	873	0.629	19	15	21	1.3%
SB L	26	393	0.065	11	1	3	0.0%
NB TR	419	819	0.512	17	12	19	0.1%
NB L	45	301	0.151	13	1	4	0.0%
WB TR	82	476	0.173	26	2	6	0.0%
WB L	297	384	0.772	48	8	14	13.0%
EB TR	108	307	0.352	38	3	7	0.1%
EB L	22	402	0.054	33	1	2	0.0%
Int'n:	1,543	3,955		26			

NOTE(S):
- Main Phase Green Times have NOT been Balanced.
- Minimum Pedestrian Crossing Requirements have not been met.

SUMMARY of KEY RESULTS:

Cycle Time: 100.0 sec.
Lost Time: 17.0 sec.
Degree of Saturation: 0.630

CCG/CALC 2 PERFORMANCE ANALYSIS DATA SUMMARY
FUTURE TOTAL TRAFFIC

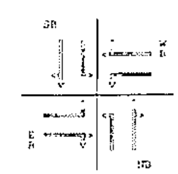
Project : CHERRY ST. REVIEW-JN07
Scenario : WKDAM OP3Biii E.S.
Data File: TO-AM3B3.PC2

Page : 1
Printed On: June 22, 2007
Printed At: 11:48 AM

INTERSECTION: CHERRY/FRONT

DEMAND VOLUMES:

Vehicles		Volume Adjustments		Pedestrian Volume	Pedestrian Walk Dst/Med Width(m)
29	229	3.0%	3.0%	200	16/0
331	295	3.0%	3.0%	200 / 200	16/0 / 16/0
30	321	3.0%	3.0%	200	16/0
31	78	3.0%	3.0%		
112	135	3.0%	3.0%		
39	33	3.0%	3.0%		



SIGNAL PHASING INFORMATION:

φ Type	SB	WB	NB	EB	Green	Amber	Red	SAG	Eff. Green	Lost Time	Ped. X+W
1 N-S Main	RTL		RTL		35.0	3.0	2.0	0.0	35.0	5.0	0.0
2 WB Advance		RTL			7.0	2.0	1.0	0.0	8.0	2.0	0.0
3 E-W Main		RTL		RTL	40.0	3.0	2.0	0.0	40.0	5.0	0.0
4 ~~Peds Only~~					3.0	1.0	1.0	0.0	0.0	5.0	20.3 *
Total:					65.0	9.0	6.0	0.0	85.0	15.0	

TRANSIT PHASE

Methodology: Canadian Capacity Guide, 2nd Edition (1995) (vv)

Approach Specific Adjustments:	SB	WB	NB	EB
Lefts/Cycle on IG (PCU):	2.0	2.0	2.0	2.0
Shared Lefts/Cycle on IG (PCU):	0.0	0.0	0.0	0.0
Rights/Cycle on IG (PCU):	0.0	0.0	0.0	0.0
Progression Regime (1-6):	3	3	3	3
Prot Left Turn Sat'n Adj.:	1.00	1.00	1.00	1.00
Perm Left Turn Sat'n Adj.:	1.00	1.00	1.00	1.00
Right Turn (No Peds) Sat'n Adj.:	0.80	0.80	0.80	0.80
Through Lane Sat'n Adj.:	1.00	1.00	1.00	1.00

Other Settings:
- Through Saturation: 1650 PCU/hour
- Rights thru Pedestrians Formula: Toronto
- Pedestrian Walking Speed: 1.2 m/sec.
- Min Pedestrian Walk Interval: 7.0 sec.
- Delay Evaluation Interval: 60.0 min.
- Confidence Level, Max Prob Queue: 95.0 %
- Main Phase Grn Share Bal Crit: 2.0 %
- Over-Capacity Permissive Left Adj.: Off

PERFORMANCE RESULTS:

Flow Ratio Table:

φ Lane	Clr. Vol.	Sat'n	y	Max. Y	Eff. Green	Deg. Sat'n	Ped. Inc.
1 SB TR	372	1026	0.330	✓	35.0	0.657	
1 SB L	0	597	0.000		35.0	0.000	
1 NB TR	271	1536	0.176		35.0	0.504	
1 NB L	0	397	0.000		35.0	0.000	
2 WB TR	113	1408	0.080	✓	8.0	1.000	
2 WB L	132	1650	0.080		8.0	1.000	
3 WB TR	420	1458	0.282	✓	40.0	0.672	
3 WB L	127	1000	0.127		40.0	0.317	
3 EB TR	156	1559	0.100		40.0	0.251	
3 EB L	0	425	0.000		40.0	0.000	
Total:				0.592			+0.000

Other Measures:

Lane	Total Vol.	Total Cap.	Lane Deg. Satn	Avg. Veh. Delay	Avg. Queue (Cons)	Max. Prob. Queue	Prob. Disch. Ovrld.
SB TR	372	566	0.657	33	10	17	3.5%
SB L	30	283	0.106	23	1	3	0.0%
NB TR	271	538	0.504	29	8	13	0.5%
NB L	34	211	0.161	24	1	3	0.0%
WB TR	539	744	0.724	26	15	23	5.2%
WB L	331	604	0.547	22	9	16	0.6%
EB TR	156	620	0.251	21	4	9	0.0%
EB L	32	246	0.130	20	1	3	0.0%
Int'n:	1,761	3,809		27			

NOTE(S):
- Minimum Pedestrian Crossing Requirements have not been met

SUMMARY of KEY RESULTS:

Cycle Time: 100.0 sec.
Lost Time: 15.0 sec.
Degree of Saturation: 0.697

CCG/CALC 2 PERFORMANCE ANALYSIS DATA SUMMARY
FUTURE TOTAL TRAFFIC

Project : CHERRY ST. REVIEW-JN07 — Page : 1
Scenario : WKDAM OP3Biii E.S. — Printed On: June 22, 2007
Data File: TO-AM3B3.PC2 — Printed At: 11:47 AM

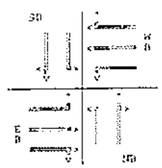
INTERSECTION: CHERRY/EASTERN

DEMAND VOLUMES:

Vehicles		Volume Adjustments	
29 / 146 / 274	44 / 1,174 / 198	3.0% / 3.0% / 3.0%	3.0% / 3.0% / 3.0%
29 / 992 / 0	150 / 130 / 120	3.0% / 3.0% / 3.0%	3.0% / 3.0% / 3.0%

Pedestrian Volume: 200 / 200 / 200 / 200
Pedestrian Walk Dat/Med Width(m): 21/0 / 23/0 / 23/0 / 18/0

CONFIGURATION:



SIGNAL PHASING INFORMATION:

# Type	Permitted Moves: SB	WB	NB	EB	Signal Timings: Green	Amber	Red	SAG	Effective Times: Eff. Green	Lost Time	Ped. X+W
1 N-S Main	RTL		RTL		40.0	3.0	2.0	0.0	40.0	5.0	0.0
2 WB Advance		RTL			10.0	2.0	1.0	0.0	11.0	2.0	0.0
3 E-W Main		RTL		RTL	32.0	3.0	2.0	0.0	32.0	5.0	0.0
4 ~~Pede-Only~~ TRANSIT PHASE					3.0	1.0	1.0	0.0	0.0	5.0	26.2 *
Total:					85.0	9.0	6.0	0.0	83.0	17.0	

Methodology: Canadian Capacity Guide, 2nd Edition (1995) (vv)

Approach Specific Adjustments:	SB	WB	NB	EB
Lefts/Cycle on IG (PCU):	2.0	2.0	2.0	2.0
Shared Lefts/Cycle on IG (PCU):	0.0	0.0	0.0	0.0
Rights/Cycle on IG (PCU):	0.0	0.0	0.0	0.0
Progression Regime (1-6):	3	3	3	3
Prot Left Turn Sat'n Adj.:	1.00	1.00	1.00	1.00
Perm Left Turn Sat'n Adj.:	1.00	1.00	1.00	1.00
Right Turn (No Peds) Sat'n Adj.:	0.80	0.80	0.80	0.80
Through Lane Sat'n Adj.:	1.00	1.00	1.00	1.00

Other Settings:
Through Saturation: 1650 PCU/hour
Rights thru Pedestrians Formula: Toronto
Pedestrian Walking Speed: 1.2 m/sec.
Min Pedestrian Walk Interval: 7.0 sec
Delay Evaluation Interval: 60.0 min
Confidence Level, Max Prob Queue: 95.0 %
Main Phase Grn Share Bal Crit: 2.0 %
Over-Capacity Permissive Left Adj.: Off

PERFORMANCE RESULTS:

Flow Ratio Table:

#	Lane	Clr. Vol.	Sat'n	Y	Max. Y	Eff. Green	Deg. Sat'n	Ped. Inc.
1	SB TR	435	1420	0.306	✓	40.0	0.765	
1	SB L	0	617	0.000		40.0	0.000	
1	NB TR	293	1450	0.206		40.0	0.515	
1	NB L	52	383	0.135		40.0	0.337	
2	WB TR	178	1620	0.110	✓	11.0	1.000	
2	WB T	181	1650	0.110		11.0	1.000	
2	WB L	132	1650	0.080		11.0	0.727	
3	WB TR	443	1620	0.274		34.0	0.805	
3	WB T	452	1650	0.274		34.0	0.805	
3	WB L	0	72	0.000		32.0	0.000	
3	EB TR	511	1650	0.310	✓	32.0	0.968	
3	EB T	512	1650	0.310		32.0	0.968	
3	EB L	0	154	0.000		32.0	0.000	
Total:					0.726			+0.000

Other Measures:

Lane	Total Vol.	Total Cap.	Lane Deg. Satn	Avg. Veh. Delay	Avg. Queue (Cons)	Max. Prob. Queue	Prob. Disch. Ovrld.
SB TR	435	568	0.765	36	12	19	13.5%
SB L	30	320	0.093	29	1	3	0.0%
NB TR	293	580	0.515	25	8	14	2.5%
NB L	124	225	0.549	33	3	7	4.0%
WB TR	622	729	0.852	34	17	26	21.3%
WB T	633	743	0.852	39	18	26	17.3%
WB L	204	277	0.737	41	6	11	12.0%
EB TR	511	528	0.968	87	14	22	35.0%
EB T	511	528	0.968	87	14	22	35.5%
EB L	30	121	0.246	30	1	3	1.0%
Int'n:	3,397	4,610		51			

NOTE(S):
- Main Phase Green Times have NOT been Balanced.
- Minimum Pedestrian Crossing Requirements have not been met.

SUMMARY of KEY RESULTS:

Cycle Time: 100.0 sec.
Lost Time: 17.0 sec.
Degree of Saturation: 0.874

CCG/CALC 2 PERFORMANCE ANALYSIS DATA SUMMARY
FUTURE TOTAL TRAFFIC

Project : CHERRY ST. REVIEW-JN07 — Page : 1
Scenario : WKDAM OP3Biii E.S. — Printed On: June 22, 2007
Data File: TO-AM3B3.PC2 — Printed At: 11:47 AM

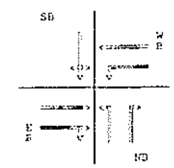
INTERSECTION: CHERRY/KING

DEMAND VOLUMES:

Vehicles		Volume Adjustments	
7 / 27 / 18	0 / 297 / 276	23.0% / 3.0% / 3.0%	3.0% / 3.0% / 4.0%
0 / 256 / 31	99 / 0 / 121	3.0% / 15.0% / 4.0%	3.0% / 3.0% / 3.0%

Pedestrian Volume: 200 / 200 / 200 / 200
Pedestrian Walk Dat/Med Width(m): 8.0/0 / 19/0 / 19/0 / 29/0

CONFIGURATION:



SIGNAL PHASING INFORMATION:

# Type	Permitted Moves: SB	WB	NB	EB	Signal Timings: Green	Amber	Red	SAG	Effective Times: Eff. Green	Lost Time	Ped. X+W
1 N-S Main	RTL		RL		40.0	3.0	2.0	0.0	40.0	5.0	0.0
2 WB Advance		RTL			9.0	1.0	1.0	0.0	11.0	2.0	0.0
3 E-W Main		RTL		RTL	32.0	3.0	2.0	0.0	32.0	5.0	0.0
4 ~~Pede-Only~~ TRANSIT PHASE					3.0	1.0	1.0	0.0	0.0	5.0	31.2 *
Total:					84.0	10.0	6.0	0.0	83.0	17.0	

Methodology: Canadian Capacity Guide, 2nd Edition (1995) (vv)

Approach Specific Adjustments:	SB	WB	NB	EB
Lefts/Cycle on IG (PCU):	0.0	2.0	0.0	0.0
Shared Lefts/Cycle on IG (PCU):	0.0	0.0	0.0	0.0
Rights/Cycle on IG (PCU):	0.0	0.0	2.0	0.0
Progression Regime (1-6):	3	3	3	3
Prot Left Turn Sat'n Adj.:	1.00	1.00	0.70	1.00
Perm Left Turn Sat'n Adj.:	1.00	1.00	0.70	1.00
Right Turn (No Peds) Sat'n Adj.:	0.80	0.70	0.56	0.66
Through Lane Sat'n Adj.:	1.00	0.87	0.70	0.92

Other Settings:
Through Saturation: 1650 PCU/hour
Rights thru Pedestrians Formula: Toronto
Pedestrian Walking Speed: 1.2 m/sec.
Min Pedestrian Walk Interval: 7.0 sec.
Delay Evaluation Interval: 60.0 min.
Confidence Level, Max Prob Queue: 95.0 %
Main Phase Grn Share Bal Crit: 2.0 %
Over-Capacity Permissive Left Adj.: Off

PERFORMANCE RESULTS:

Flow Ratio Table:

#	Lane	Clr. Vol.	Sat'n	Y	Max. Y	Eff. Green	Deg. Sat'n	Ped. Inc.
1	SB TRL	55	1523	0.036		40.0	0.091	
1	NB R	27	924	0.031		40.0	0.078	
1	NB L	125	968	0.129	✓	40.0	0.323	
2	WB T	158	1436	0.110	✓	11.0	1.000	
2	WB L	182	1650	0.110		11.0	1.000	
3	WB T	166	1436	0.116		34.0	0.342	
3	WB L	34	648	0.052		32.0	0.162	
3	EB TR	176	1420	0.125	✓	32.0	0.390	
3	EB T	190	1524	0.125		32.0	0.390	
Total:					0.364			+0.000

Other Measures:

Lane	Total Vol	Total Cap.	Lane Deg. Satn	Avg. Veh. Delay	Avg. Queue (Cons)	Max. Prob. Queue	Prob. Disch. Ovrld.
SB TRL	55	609	0.091	19	2	4	0.0%
NB R	101	442	0.229	21	3	6	0.0%
NB L	125	387	0.322	23	3	7	0.0%
WB T	324	646	0.501	22	9	15	0.2%
WB L	287	461	0.623	29	8	14	1.3%
EB TR	176	451	0.390	29	5	10	0.1%
EB T	190	486	0.390	29	5	10	0.1%
Int'n.	1,257	3,461		25			

NOTE(S):
- Main Phase Green Times have NOT been Balanced.
- Minimum Pedestrian Crossing Requirements have not been met

SUMMARY of KEY RESULTS:

Cycle Time: 100.0 sec.
Lost Time: 17.0 sec.
Degree of Saturation: 0.438

CCG/CALC 2 PERFORMANCE ANALYSIS DATA SUMMARY
FUTURE TOTAL TRAFFIC

Project : CHERRY ST. REVIEW-JN07
Scenario : WKDPM OP3Biii E.S.
Data File: TO-PM3B3.PC2

Page : 1
Printed On: June 22, 2007
Printed At: 11:51 AM

INTERSECTION: CHERRY/MILL

DEMAND VOLUMES:

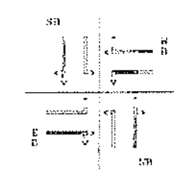
Vehicles: SB 37 | 19, 479 | 70, 29 | 278; NB 71 | 225, 159 | 385, 36 | 45

Volume Adjustments: 3.0% | 3.0%, 3.0% | 3.0%, 3.0% | 3.0%; 3.0% | 3.0%, 3.0% | 3.0%, 3.0% | 3.0%

Pedestrian Volume: 200 / 200 / 200 / 200

Pedestrian Walk Dst/Med Width(m): 16/0 / 16/0 / 16/0 / 16/0

CONFIGURATION:



SIGNAL PHASING INFORMATION:

φ Type	SB	WB	NB	EB	Green	Amber	Red	SAG	Eff. Green	Lost Time	Ped. X+W
1 N-S Main	RTL		RTL		54.0	3.0	2.0	0.0	54.0	5.0	0.0
2 WB Advance		RTL			8.0	2.0	1.0	0.0	9.0	2.0	0.0
3 E-W Main		RTL		RTL	20.0	3.0	2.0	0.0	20.0	5.0	0.0
4 ~~Peds Only~~					3.0	1.0	1.0	0.0	0.0	5.0	20.0 *
Total:					85.0	9.0	6.0	0.0	83.0	17.0	

TRANSIT PHASE

Methodology: Canadian Capacity Guide, 2nd Edition (1995) (vv)

Approach Specific Adjustments:	SB	WB	NB	EB
Lefts/Cycle on IG (PCU):	2.0	2.0	2.0	2.0
Shared Lefts/Cycle on IG (PCU):	0.0	0.0	0.0	0.0
Rights/Cycle on IG (PCU):	0.0	0.0	0.0	0.0
Progression Regime (1-6):	3	3	3	3
Prot Left Turn Sat'n Adj.:	1.00	1.00	1.00	1.00
Perm Left Turn Sat'n Adj.:	1.00	1.00	1.00	1.00
Right Turn (No Peds) Sat'n Adj.:	0.80	0.80	0.80	0.80
Through Lane Sat'n Adj.:	1.00	1.00	1.00	1.00

Other Settings:
- Through Saturation: 1650 PCU/hour
- Rights thru Pedestrians Formula: Toronto
- Pedestrian Walking Speed: 1.2 m/sec.
- Min Pedestrian Walk Interval: 7.0 sec.
- Delay Evaluation Interval: 60.0 min.
- Confidence Level, Max Prob Queue: 95.0 %
- Main Phase Grn Share Bal Crit: 2.0 %
- Over-Capacity Permissive Left Adj.: Off

PERFORMANCE RESULTS:

Flow Ratio Table:

φ Lane	Clr. Vol.	Sat'n	y	Max. y	Eff. Green	Deg. Sat'n	Ped. Inc.
1 SB TR	522	1623	0.321		54.0	0.594	
1 SB L	0	249	0.000		54.0	0.000	
1 NB TR	629	1511	0.417	✓	54.0	0.771	
1 NB L	0	655	0.000		54.0	0.000	
2 WB TR	92	1566	0.059		9.0	0.653	
2 WB L	149	1653	0.090	✓	9.0	1.000	
3 WB TR	0	1566	0.000		20.0	0.000	
3 WB L	66	431	0.153	✓	20.0	0.763	
3 EB TR	201	1577	0.127		20.0	0.437	
3 EB L	1	1653	0.001		20.0	0.603	
Total:				0.659			+0.000

Other Measures:

Lane	Total Vol.	Total Cap.	Lane Deg Satn	Avg. Veh. Delay	Avg. Queue (Cons)	Max. Prob. Queue	Prob Disch. Ovrld.
SB TR	522	879	0.594	19	15	22	0.8%
SB L	38	256	0.149	13	1	3	0.0%
NB TR	629	816	0.771	25	17	26	5.0%
NB L	46	318	0.146	12	1	4	0.0%
WB TR	92	486	0.183	26	3	6	0.0%
WB L	286	307	0.933	91	8	14	27.8%
EB TR	201	319	0.637	47	6	11	5.8%
EB L	71	402	0.182	34	2	5	0.0%
Int'n	1,880	3,778		35			

NOTE(S):
* Minimum Pedestrian Crossing Requirements have not been met.

SUMMARY of KEY RESULTS:

Cycle Time: 100.0 sec.
Lost Time: 17.0 sec.
Degree of Saturation: 0.794

CCG/CALC 2 PERFORMANCE ANALYSIS DATA SUMMARY
FUTURE TOTAL TRAFFIC

Project : CHERRY ST. REVIEW-JN07
Scenario : WKDPM OP3Biii E.S.
Data File: TO-PM3B3.PC2

Page : 1
Printed On: June 22, 2007
Printed At: 11:54 AM

INTERSECTION: CHERRY/FRONT

DEMAND VOLUMES:

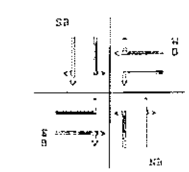
Vehicles: SB 50 | 66, 318 | 116, 37 | 194; NB 61 | 178, 491 | 226, 71 | 20

Volume Adjustments: 3.0% | 3.0%, 3.0% | 3.0%, 3.0% | 3.0%; 3.0% | 3.0%, 3.0% | 3.0%, 3.0% | 3.0%

Pedestrian Volume: 200 / 200 / 200 / 200

Pedestrian Walk Dst/Med Width(m): 16/0 / 16/0 / 16/0 / 16/0

CONFIGURATION:



SIGNAL PHASING INFORMATION:

φ Type	SB	WB	NB	EB	Green	Amber	Red	SAG	Eff. Green	Lost Time	Ped. X+W
1 N-S Main	RTL		RTL		33.0	3.0	2.0	0.0	33.0	5.0	0.0
2 WB Advance		RTL			7.0	2.0	1.0	0.0	8.0	2.0	0.0
3 E-W Main		RTL		RTL	42.0	3.0	2.0	0.0	42.0	5.0	0.0
4 ~~Peds Only~~					3.0	1.0	1.0	0.0	0.0	5.0	20.0 *
Total:					85.0	9.0	6.0	0.0	83.0	17.0	

TRANSIT PHASE

Methodology: Canadian Capacity Guide, 2nd Edition (1995) (vv)

Approach Specific Adjustments:	SB	WB	NB	EB
Lefts/Cycle on IG (PCU):	2.0	2.0	2.0	2.0
Shared Lefts/Cycle on IG (PCU):	0.0	0.0	0.0	0.0
Rights/Cycle on IG (PCU):	0.0	0.0	0.0	0.0
Progression Regime (1-6):	3	3	3	3
Prot Left Turn Sat'n Adj.:	1.00	1.00	1.00	1.00
Perm Left Turn Sat'n Adj.:	1.00	1.00	1.00	1.00
Right Turn (No Peds) Sat'n Adj.:	0.80	0.80	0.80	0.80
Through Lane Sat'n Adj.:	1.00	1.00	1.00	1.00

Other Settings:
- Through Saturation: 1650 PCU/hour
- Rights thru Pedestrians Formula: Toronto
- Pedestrian Walking Speed: 1.2 m/sec.
- Min Pedestrian Walk Interval: 7.0 sec.
- Delay Evaluation Interval: 60.0 min.
- Confidence Level, Max Prob Queue: 95.0 %
- Main Phase Grn Share Bal Crit: 2.0 %
- Over-Capacity Permissive Left Adj.: Off

PERFORMANCE RESULTS:

Flow Ratio Table:

φ Lane	Clr. Vol.	Sat'n	y	Max. y	Eff. Green	Deg. Sat'n	Ped. Inc.
1 SB TR	397	1621	0.244		33.0	0.740	
1 SB L	0	294	0.000		33.0	0.000	
1 NB TR	416	1486	0.280	✓	33.0	0.846	
1 NB L	0	325	0.000		33.0	0.000	
2 WB TR	121	1513	0.080	✓	8.0	1.000	
2 WB L	128	1650	0.077		8.0	0.958	
3 WB TR	66	1513	0.044		42.0	0.105	
3 WB L	0	246	0.000		42.0	0.000	
3 EB TR	579	1597	0.362	✓	42.0	0.862	
3 EB L	0	1361	0.000		42.0	0.000	
Total:				0.722			+0.000

Other Measures:

Lane	Total Vol.	Total Cap.	Lane Deg. Satn	Avg. Veh. Delay	Avg. Queue (Cons)	Max. Prob. Queue	Prob. Disch. Ovrld.
SB TR	397	532	0.746	39	11	18	9.3%
SB L	52	159	0.305	30	1	4	0.4%
NB TR	416	490	0.849	50	12	19	19.0%
NB L	21	178	0.116	25	1	2	0.0%
WB TR	187	787	0.238	14	5	10	0.0%
WB L	200	307	0.652	29	6	11	5.6%
EB TR	579	672	0.862	42	15	24	19.3%
EB L	63	644	0.098	19	2	5	0.0%
Int'n:	1,914	3,778		38			

NOTE(S):
* Minimum Pedestrian Crossing Requirements have not been met.

SUMMARY of KEY RESULTS:

Cycle Time: 100.0 sec.
Lost Time: 17.0 sec.
Degree of Saturation: 0.870

CCG/CALC 2 PERFORMANCE ANALYSIS DATA SUMMARY
FUTURE TOTAL TRAFFIC

Project : CHERRY ST. REVIEW-JN07
Scenario : WKDPM OP3Biii E.S.
Data File: TO-PM3B3.PC2

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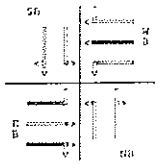
INTERSECTION: CHERRY/EASTERN

DEMAND VOLUMES:

Vehicles	Volume Adjustments	Pedestrian Volume	Pedestrian Walk Dst/Wid(m)
127 | 59	3.0% | 3.0%	200	21/0
154 | 684	3.0% | 3.0%		
46 | 220	3.0% | 3.0%	200 | 200	23/0 | 23/0
50 | 242	3.0% | 3.0%		
1,077 | 59	3.0% | 3.0%	230	18/0
6 | 39	3.0% | 3.0%		

CONFIGURATION:



SIGNAL PHASING INFORMATION:

ϕ Type	Permitted Moves: SB	WB	NB	EB	Signal Timings: Green	Amber	Red	SAG	Effective Times: Eff. Green	Lost Time	Ped. X+W
1 N-S Main	RTL			RTL	35.0	3.0	2.0	0.0	35.0	5.0	0.0
2 NB Advance			RTL		10.0	2.0	1.0	0.0	11.0	2.0	0.0
3 E-W Main			RTL	RTL	37.0	3.0	2.0	0.0	37.0	5.0	0.0
4 Peds only					3.0	1.0	1.0	0.0	0.0	5.0	26.2 *
Total:					85.0	9.0	6.0	0.0	83.0	17.0	

TRANSIT PHASE

Methodology: Canadian Capacity Guide, 2nd Edition (1995) (vv)

Approach Specific Adjustments:	SB	WB	NB	EB
Lefts/Cycle on IG (PCU):	2.0	2.0	2.0	2.0
Shared Lefts/Cycle on IG (PCU):	0.0	0.0	0.0	0.0
Rights/Cycle on IG (PCU):	0.0	0.0	0.0	0.0
Progression Regime (1-6):	3	3	3	3
Prot Left Turn Satn Adj.:	1.00	1.00	1.00	1.00
Perm Left Turn Satn Adj.:	1.00	1.00	1.00	1.00
Right Turn (No Peds) Satn Adj.:	0.80	0.80	0.80	0.80
Through Lane Satn Adj.:	1.00	1.00	1.00	1.00

Other Settings:	
Through Saturation:	1650 PCU/hour
Rights thru Pedestriana Formula:	Toronto
Pedestrian Walking Speed:	1.2 m/sec.
Min Pedestrian Walk Interval:	7.0 sec.
Delay Evaluation Interval:	60.0 min.
Confidence Level, Max Prob Queue	95.0 %
Main Phase Grn Share Rat Crit:	2.0 %
Over-Capacity Permissive Left Adj.:	Off

PERFORMANCE RESULTS:

Flow Ratio Table:

ϕ Lane	Cir. Vol.	Satn	y	Max. Y	Eff. Green	Deg. Satn	Ped. Inc.
1 SB TR	205	1543	0.133		35.0	0.377	
1 SB L	61	511	0.119	y	35.0	0.341	
1 SB *	310	1374	0.226	y	35.0	0.645	
2 NB TR	0	967	0.000		35.0	0.000	
2 NB L	0	967	0.000	y	11.0	1.000	
2 NB *	178	1618	0.110	y	11.0	1.000	
3 WB T	182	1650	0.110		11.0	1.000	
3 WB L	155	1650	0.094		11.0	1.000	
3 WB *	1345	1613	0.114		39.0	0.293	
4 EB TR	199	1681	0.118		39.0	0.299	
4 EB L	0	95	0.000	y	37.0	0.000	
4 EB *	668	1655	0.338		37.0	0.811	
5 EB T	557	1650	0.338		37.0	0.811	
5 EB L	0	967	0.000		37.0	0.000	
Total:			0.674				+0.000

Other Measures:

Lane	Total Vol.	Total Cap.	Lane Deg. Satn	Avg. Veh. Delay	Avg. Queue (Comb)	Max. Prob Queue	Prob Disch Cycle
SB TR	200	546	0.377	26	6	11	3.0%
SB L	133	351	0.539	34	4	9	3.5%
NB TR	310	481	0.645	34	9	15	5.6%
NB L	40	141	0.118	23	1	4	0.0%
WB TR	353	803	0.449	18	10	17	0.0%
WB T	370	825	0.449	18	10	17	0.0%
WB L	227	289	0.785	43	6	12	18.5%
EB TR	556	609	0.913	57	15	24	29.0%
EB T	557	611	0.913	56	15	24	29.0%
EB L	52	352	0.146	22	1	4	0.0%
Int'n:	2,814	5,112		39			

NOTE(S):
* Main Phase Green Times have NOT been Balanced
* Minimum Pedestrian Crossing Requirements have not been met

SUMMARY of KEY RESULTS:

Cycle Time: 100.0 sec.
Lost Time: 17.0 sec.
Degree of Saturation: 0.811

CCG/CALC 2 PERFORMANCE ANALYSIS DATA SUMMARY
FUTURE TOTAL TRAFFIC

Project : CHERRY ST. REVIEW-JN07
Scenario : WKDPM OP3Biii E.S.
Data File: TO-PM3B3.PC2

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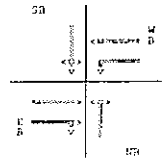
INTERSECTION: CHERRY/KING

DEMAND VOLUMES:

Vehicles	Volume Adjustments	Pedestrian Volume	Pedestrian Walk Dst/Wid(m)
9 | 0	29.0% | 3.0%		
25 | 258	3.0% | 0.0%	200	9.0/0
27 | 122	3.0% | 4.0%		
0 | 136	3.0% | 3.0%	200 | 200	19/0 | 19/0
532 | 0	15.0% | 3.0%		
92 | 62	4.0% | 3.0%	200	29/0

CONFIGURATION:



SIGNAL PHASING INFORMATION:

ϕ Type	Permitted Moves: SB	WB	NB	EB	Signal Timings: Green	Amber	Red	SAG	Effective Times: Eff. Green	Lost Time	Ped. X+W
1 N-S Main	RTL		RL		40.0	3.0	2.0	0.0	40.0	5.0	0.0
2 NB Advance		RTL			7.0	3.0	1.0	0.0	11.0	2.0	0.0
3 E-W Main		RTL		RTL	12.0	3.0	2.0	0.0	32.0	5.0	0.0
4 Peds only					3.0	1.0	1.0	0.0	0.0	5.0	31.2 *
Total:					84.0	10.0	6.0	0.0	83.0	17.0	

TRANSIT PHASE

Methodology: Canadian Capacity Guide, 2nd Edition (1995) (vv)

Approach Specific Adjustments:	SB	WB	NB	EB
Lefts/Cycle on IG (PCU):	0.0	2.0	0.0	0.0
Shared Lefts/Cycle on IG (PCU):	0.0	0.0	0.0	0.0
Rights/Cycle on IG (PCU):	0.0	0.0	2.0	0.0
Progression Regime (1-6):	3	3	3	3
Prot Left Turn Satn Adj.:	1.00	1.00	0.70	1.00
Perm Left Turn Satn Adj.:	1.00	1.00	0.70	1.00
Right Turn (No Peds) Satn Adj.:	0.80	0.70	0.56	0.66
Through Lane Satn Adj.:	1.00	0.89	0.70	0.92

Other Settings:	
Through Saturation:	1650 PCU/hour
Rights thru Pedestriana Formula:	Toronto
Pedestrian Walking Speed:	1.2 m/sec.
Min Pedestrian Walk Interval:	7.0 sec.
Delay Evaluation Interval:	60.0 min.
Confidence Level, Max Prob Queue	95.0 %
Main Phase Grn Share Rat Crit:	2.0 %
Over-Capacity Permissive Left Adj.:	Off

PERFORMANCE RESULTS:

Flow Ratio Table:

ϕ Lane	Cir. Vol.	Satn	y	Max. Y	Eff. Green	Deg. Satn	Ped. Inc.
1 SB TRL	60	1477	0.041		40.0	0.101	
1 NB RL	212	938	0.141	y	40.0	0.452	
2 NB T	158	1430	0.110	y	11.0	1.000	
2 NB *	55	1650	0.033		11.0	0.302	
3 WB T	155	1431	0.096		34.0	0.253	
3 WB L	0	343	0.000		32.0	0.000	
3 WB TR	936	1364	0.245	y	32.0	0.767	
3 WB *	991	1519	0.245		32.0	0.767	
Total:			0.496				+0.000

Other Measures:

Lane	Total Vol.	Total Cap.	Lane Deg. Satn	Avg. Veh. Delay	Avg. Queue (Comb)	Max. Prob. Queue	Prob Disch Cycle
SB TRL	69	591	0.101	19	2	6	0.0%
NB RL	294	647	0.456	25	6	11	0.0%
WB T	291	646	0.435	21	8	14	0.0%
WB L	127	331	0.353	23	4	8	0.3%
WB TR	335	433	0.767	44	9	16	14.7%
EB T	173	486	0.767	43	10	17	16.2%
Int'n.	1,300	2,938		33			

NOTE(S):
* Main Phase Green Times have NOT been Balanced.
* Minimum Pedestrian Crossing Requirements have not been met

SUMMARY of KEY RESULTS:

Cycle Time: 100.0 sec.
Lost Time: 17.0 sec.
Degree of Saturation: 0.598

OPTION 4

CCG/CALC 2 PERFORMANCE ANALYSIS DATA SUMMARY
FUTURE TOTAL TRAFFIC

Project : CHERRY ST. REVIEW-JN07
Scenario : WKDAY AM OP4i W.S
Data File: TO-AM4I.PC2

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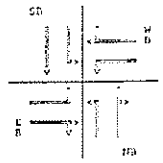
INTERSECTION: CHERRY/MILL

DEMAND VOLUMES:

Vehicles			Volume Adjustments		Pedestrian Volume		Pedestrian Walk Dst/Med Width(m)	
25	24		3.0%	3.0%				
489	56		3.0%	3.0%	200		23/0	
0	298		3.0%	3.0%				
	21	144	3.0%	3.0%	200	200	16/0	16/0
	74	230	3.0%	3.0%	200			
	31	77	3.0%	3.0%			23/0	

CONFIGURATION:



SIGNAL PHASING INFORMATION:

φ	Type	Permitted Moves: SB	WB	NB	EB	Signal Timings: Green	Amber	Red	SAG	Effective Times: Eff. Green	Lost Time	Ped. X+W
1	NB RTNL Rst	L		L		6.0	2.0	0.0	1.0	7.0	2.0	2.0
2	N-S Main	TL		RT		41.0	4.0	2.0	0.0	45.0	5.0	20.3
3	WB Advance		RTL			9.0	2.0	1.0	0.0	10.0	2.0	0.0
4	E-W Main		RTL		RTL	23.0	4.0	2.0	0.0	24.0	5.0	26.2
Total:						82.0	12.0	5.0	1.0	86.0	14.0	

Methodology: Canadian Capacity Guide, 2nd Edition (1995) (vv)

Approach Specific Adjustments:

	SB	WB	NB	EB
Lefts/Cycle on IG (PCU):	2.0	2.0	2.0	2.0
Shared Lefts/Cycle on IG (PCU):	0.0	0.0	0.0	0.0
Rights/Cycle on IG (PCU):	0.0	0.0	0.0	0.0
Progression Regime (1-5):	3	3	3	3
Prot Left Turn Sat'n Adj.:	1.00	1.00	1.00	1.00
Perm Left Turn Sat'n Adj.:	1.00	1.00	1.00	1.00
Right Turn (No Pedal Sat'n Adj.:	0.80	0.80	0.80	0.80
Through Lane Sat'n Adj.:	1.00	1.00	1.00	1.00

Other Settings:

Through Saturation:	1650 PCU/hour
Rights thru Pedestrians Formula:	Toronto
Pedestrian Walking Speed:	1.2 m/sec.
Min Pedestrian Walk Interval:	7.0 sec.
Delay Evaluation Interval:	60.0 min.
Confidence Level, Max Prob Queue:	95.0 %
Main Phase Grn Share Bal Crit:	5.0 %
Over-Capacity Permissive Left Adj.:	Off

PERFORMANCE RESULTS:

Flow Ratio Table:

φ	Lane	Clr Vol	Sat'n	y	Max. y	Eff. Green	Deg. Sat'n	Ped. Inc.
1	SB L	0	1650	0.000		7.0	0.000	
1	NB L	79	1650	0.048	✓	7.0	0.687	
2	SB T	504	1650	0.305		45.0	0.678	
2	SB L	0	532	0.000		45.0	0.020	
2	NB TR	305	1252	0.358	✓	45.0	6.684	
3	WB TR	62	2535	0.024		10.0	0.553	
3	WB L	165	1650	0.100	✓	10.0	1.000	
4	WB TR	0	1272	0.000		24.0	0.000	
4	WB L	60	922	0.065		24.0	0.279	
4	EB TR	169	1276	0.095	✓	24.0	0.353	0.147
4	EB L	0	1650	0.000		24.0	0.000	
Total:				0.540				+0.147

Other Measures:

Lane	Total Vol.	Total Cap.	Lane Deg. Satn	Avg. Veh. Delay	Avg. Queue (Cond'l)	Max Prob Queue	Prob. Disch Ovrld.
NB L	79	115	0.687	78	2	5	18.1%
SB T	504	743	0.678	27	14	22	0.0%
SB L	26	427	0.060	12	1	3	0.0%
NB TR	385	563	0.684	29	11	18	4.6%
WB TR	82	484	0.170	23	2	6	0.0%
WB L	297	658	0.647	35	8	14	1.2%
EB TR	169	305	0.553	25	3	7	0.0%
EB L	22	468	0.046	29	1	2	0.0%
Int'n:	1.503	3.565		32			

NOTE(S):
* Main Phase Green Times Have NOT been Balanced.

SUMMARY of KEY RESULTS:

Cycle Time: 100.0 sec.
Lost Time: 14.0 sec.
Degree of Saturation: 0.628

CCG/CALC 2 PERFORMANCE ANALYSIS DATA SUMMARY
FUTURE TOTAL TRAFFIC

Project : CHERRY ST. REVIEW-JN07
Scenario : WKDAY AM OP4i W.S
Data File: TO-AM4I.PC2

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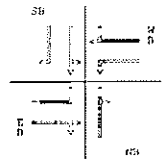
INTERSECTION: CHERRY/FRONT

DEMAND VOLUMES:

Vehicles			Volume Adjustments		Pedestrian Volume		Pedestrian Walk Dst/Med Width(m)	
39	228		3.0%	3.0%				
267	299		3.0%	3.0%	200		23/0	
136	321		3.0%	3.0%				
	31	78	3.0%	3.0%	200	200	16/0	16/0
	112	135	3.0%	3.0%	200			
	39	0	3.0%	3.0%			23/0	

CONFIGURATION:



SIGNAL PHASING INFORMATION:

φ	Type	Permitted Moves: SB	WB	NB	EB	Signal Timings: Green	Amber	Red	SAG	Effective Times: Eff. Green	Lost Time	Ped. X+W
1	SB Rst Rt	RT				16.0	2.0	1.0	0.3	17.0	2.0	0.0
2	N-S Main	T		RT		22.0	4.0	2.0	0.3	23.0	5.0	20.3
3	WB Advance		RTL	R		7.0	2.0	1.0	0.3	8.0	2.0	0.0
4	E-W Main		RTL		RTL	37.0	4.0	2.0	0.3	38.0	5.0	26.2
Total:						82.0	12.0	6.0	0.3	86.0	12.0	

Methodology: Canadian Capacity Guide, 2nd Edition (1995) (vv)

Approach Specific Adjustments:

	SB	WB	NB	EB
Lefts/Cycle on IG (PCU):	0.0	2.0	0.0	2.0
Shared Lefts/Cycle on IG (PCU):	0.0	0.0	0.0	0.0
Rights/Cycle on IG (PCU):	0.0	0.0	0.0	0.0
Progression Regime (1-5):	3	3	3	3
Prot Left Turn Sat'n Adj.:	1.00	1.00	1.00	1.00
Perm Left Turn Sat'n Adj.:	1.00	1.00	1.00	1.00
Right Turn (No Pedal Sat'n Adj.:	0.80	0.80	0.80	0.80
Through Lane Sat'n Adj.:	1.00	1.00	1.00	1.00

Other Settings:

Through Saturation:	1650 PCU/hour
Rights thru Pedestrians Formula:	Toronto
Pedestrian Walking Speed:	1.2 m/sec.
Min Pedestrian Walk Interval:	7.0 sec.
Delay Evaluation Interval:	60.0 min.
Confidence Level, Max Prob Queue:	95.0 %
Main Phase Grn Share Bal Crit:	5.0 %
Over-Capacity Permissive Left Adj.:	Off

PERFORMANCE RESULTS:

Flow Ratio Table:

φ	Lane	Clr Vol	Sat'n	y	Max. y	Eff. Green	Deg. Sat'n	Ped. Inc.
1	SB R	224	1328	0.170	✓	17.0	1.000	
2	NB TR	271	1270	0.213	✓	23.0	0.927	
3	WB TR	533	1488	0.680	✓	8.0	1.000	
3	WB L	331	1650	0.080		8.0	1.000	
4	EB TR	425	1281	0.349	✓	40.0	0.878	
4	EB L	127	971	0.110		38.0	0.342	
4	EB TR	156	1351	0.115		38.0	0.303	
4	SB L	0	484	0.000		38.0	0.000	
Total:				0.813				+0.000

Other Measures:

Lane	Total Vol.	Total Cap.	Lane Deg. Satn	Avg. Veh. Delay	Avg. Queue (Cond'l)	Max Prob. Queue	Prob. Disch Ovrld.
SB R	224	224	1.000	162	6	12	43.1%
NB TR	271	292	0.927	93	8	13	14.1%
WB TR	533	599	0.893	47	15	23	24.6%
WB L	331	574	0.576	24	9	16	1.2%
EB TR	156	513	0.303	23	4	9	0.0%
EB L	32	226	0.142	32	1	3	0.0%
Int'n:	1.848	2.429		62			

NOTE(S):

SUMMARY of KEY RESULTS:

Cycle Time: 100.0 sec.
Lost Time: 12.0 sec.
Degree of Saturation: 0.924

CCG/CALC 2 PERFORMANCE ANALYSIS DATA SUMMARY
FUTURE TOTAL TRAFFIC

Project : CHERRY ST. REVIEW-JN07
Scenario : WKDAY AM OP4i W.S
Data File: TO-AM4I.PC2

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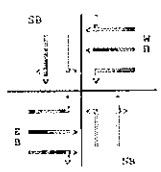
INTERSECTION: CHERRY/EASTERN

DEMAND VOLUMES:

Vehicles	Volume Adjustments	Pedestrian Volume	Pedestrian Walk Dst/Med Width(m)
29 | 14	3.0% | 3.0%	200	30/0
422 | 1,136	3.0% | 3.0%		
0 | 186	3.0% | 3.0%	200 | 200	23/0 | 23/0
39 | 160	3.0% | 3.0%		
992 | 110	3.0% | 3.0%	200	30/0
0 | 120	3.0% | 3.0%		

CONFIGURATION:



SIGNAL PHASING INFORMATION:

# Type	Permitted Moves: SB	WB	NB	EB	Signal Timings: Green	Amber	Red	SAG	Effective Times: Eff. Green	Lost Time	Ped. X+W
1 NB RTOL Rst	L		L		5.0	2.0	0.0	1.0	9.0	2.0	0.0
2 N-S Main	TL		RT		33.0	4.0	2.0	0.0	34.0	5.0	26.2
3 WB Advance		RTL	R		9.0	2.0	0.0	1.0	10.0	2.0	0.0
4 E-W Main		RTL		RTL	32.0	4.0	2.0	0.0	33.0	5.0	32.0
Total:					82.0	12.0	4.0	2.0	86.0	14.0	

Methodology: Canadian Capacity Guide, 2nd Edition (1995) (vv)

Approach Specific Adjustments:	SB	WB	NB	EB
Lefts/Cycle on IG (PCU):	2.0	2.0	2.0	2.0
Shared Lefts/Cycle on IG (PCU):	0.0	0.0	0.0	0.0
Rights/Cycle on IG (PCU):	0.0	0.0	0.0	0.0
Progression Regime (1-6):	3	3	3	3
Prot Left Turn Sat'n Adj.:	1.00	1.00	1.00	1.00
Perm Left Turn Sat'n Adj.:	1.00	1.00	1.00	1.00
Right Turn (No Peds) Sat'n Adj.:	0.80	0.80	0.80	0.80
Through Lane Sat'n Adj.:	1.00	1.00	1.00	1.00

Other Settings:	
Through Saturation:	1650 PCU/hour
Rights thru Pedestrians Formula:	Toronto
Pedestrian Walking Speed:	1.2 m/sec.
Min Pedestrian Walk Interval:	7.0 sec.
Delay Evaluation Interval:	60.0 min.
Confidence Level, MAX Prob Queue:	95.0 %
Main Phase Grn Share Bal Crit:	2.0 %
Over-Capacity Permissive Left Adj :	Off

PERFORMANCE RESULTS:

Flow Ratio Table:

# Lane	Clr. Vol.	Sat'n	y	Max. Y	Eff. Green	Deg. Sat'n	Ped. Inc.
1 SB L	0	1650	0.000		7.0	0.000	
1 NB L	124	1650	0.075	✓	9.0	0.832	
2 SB L	0	516	0.000		34.0	0.000	
2 NB T	299	1109	0.269	✓	34.0	0.792	
3 NB TR	167	1421	0.100		10.0	1.000	
3 WB T	116	1650	0.070		10.0	1.000	
3 EB L	126	1650	0.072		10.0	0.725	
4 WB TR	655	1549	0.294		35.0	0.849	
4 WB T	485	1650	0.294		35.0	0.840	
4 EB L	0	84	0.000		33.0	0.000	
4 SB TR	511	1650	0.310	✓	33.0	0.938	
4 EB T	511	1652	0.310		33.0	0.938	
4 EB L	0	145	0.000		33.0	0.000	
Total:			0.754				+0.000

Other Measures:

Lane	Total Vol.	Total Cap.	Lane Deg. Satn	Avg. Veh. Delay	Avg. Queue (Cond)	Max. Prob. Queue	Prob. Disch. Ovrld.
NB L	124	149	0.832	96	3	7	26.2%
SB L	30	306	0.075	17	1	3	0.0%
NB TR	299	377	0.793	47	2	14	22.5%
NB TR	517	704	0.877	42	17	26	26.4%
WB T	650	743	0.875	41	16	23	26.4%
WB L	192	266	0.724	61	5	10	16.9%
EB TR	511	545	0.938	76	14	21	35.0%
EB T	511	545	0.938	76	14	21	35.0%
EB L	30	120	0.249	29	1	3	1.0%
Int'n:	3,397	3,842		53			

NOTE(S):
• Main Phase Green Times have NOT been Balanced.

SUMMARY of KEY RESULTS:

Cycle Time: 100.0 sec.
Lost Time: 14.0 sec.
Degree of Saturation: 0.877

CCG/CALC 2 PERFORMANCE ANALYSIS DATA SUMMARY
FUTURE TOTAL TRAFFIC

Project : CHERRY ST. REVIEW-JN07
Scenario : WKDAY AM OP4i W.S
Data File: TO-AM4I.PC2

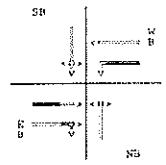
Page : 1
Printed On: June 22, 2007
Printed At: 12:31 PM

INTERSECTION: CHERRY/KING

DEMAND VOLUMES:

Vehicles	Volume Adjustments	Pedestrian Volume	Pedestrian Walk Dst/Med Width(m)
7 | 0	3.0% | 3.0%	200	3.0/0
37 | 227	3.0% | 3.0%		
18 | 275	3.0% | 3.0%	200 | 200	19/0 | 19/0
0 | 32	3.0% | 3.0%		
268 | 0	15.0% | 3.0%	200	29/0
33 | 121	3.0% | 3.0%		

CONFIGURATION:



SIGNAL PHASING INFORMATION:

# Type	Permitted Moves: SB	WB	NB	EB	Signal Timings: Green	Amber	Red	SAG	Effective Times: Eff. Green	Lost Time	Ped. X+W
1 N-S Main	PTL		RL		35.0	4.0	1.0	0.0	33.0	5.0	0.0
2 WB Advance		RTL			9.0	2.0	1.0	0.0	10.0	2.0	0.0
3 E-W Main		RTL		RTL	33.0	4.0	2.0	0.0	40.0	5.0	0.0
4 Peds Only					3.0	1.0	1.0	0.0	0.0	5.0	31.2 *
Total:					80.0	9.0	5.0	0.0	83.0	17.0	

Methodology: Canadian Capacity Guide, 2nd Edition (1995) (vv)

Approach Specific Adjustments:	SB	WB	NB	EB
Lefts/Cycle on IG (PCU):	0.0	2.0	0.0	0.0
Shared Lefts/Cycle on IG (PCU):	0.0	0.0	0.0	0.0
Rights/Cycle on IG (PCU):	0.0	0.0	2.0	0.0
Progression Regime (1-6):	3	3	3	3
Prot Left Turn Sat'n Adj.:	1.00	1.00	1.00	1.00
Perm Left Turn Sat'n Adj.:	1.00	1.00	1.00	1.00
Right Turn (No Peds) Sat'n Adj.:	0.80	0.69	0.80	0.69
Through Lane Sat'n Adj.:	1.00	0.86	1.00	0.71

Other Settings:	
Through Saturation:	1650 PCU/hour
Rights thru Pedestrians Formula:	Toronto
Pedestrian Walking Speed:	1.2 m/sec.
Min Pedestrian Walk Interval:	7.0 sec.
Delay Evaluation Interval:	60.0 min.
Confidence Level, Max Prob Queue:	95.0 %
Main Phase Grn Share Bal Crit:	2.0 %
Over-Capacity Permissive Left Adj.:	Off

PERFORMANCE RESULTS:

Flow Ratio Table:

# Lane	Clr. Vol.	Sat'n	y	Max. Y	Eff. Green	Deg. Sat'n	Ped. Inc.
1 SB TRL	85	1553	0.054		33.0	0.110	
1 NB RL	156	1323	0.118	✓	33.0	0.450	
2 NB T	142	1419	0.100		10.0	1.000	
3 NB L	155	1650	0.100		10.0	1.000	
3 WB T	182	1419	0.128		40.0	0.338	
3 EB L	50	780	0.064		40.0	0.152	
5 EB TR	196	1593	0.226		40.0	0.316	
5 EB T	196	1909	0.126	✓	40.0	0.316	
Total:			0.342				+0.000

Other Measures:

Lane	Total Vol.	Total Cap.	Lane Deg. Satn	Avg. Veh. Delay	Avg. Queue (Cond)	Max. Prob. Queue	Prob. Disch. Ovrld.
SB TRL	85	502	0.170	24	2	4	0.0%
NB RL	226	511	0.442	22	6	12	0.2%
WB T	324	730	0.439	17	9	15	0.0%
NB L	227	551	0.521	20	8	14	0.6%
EB TR	196	557	0.316	22	5	10	0.0%
EB T	196	601	0.316	22	5	10	0.0%
Int'n:	1,257	3,460		22			

NOTE(S):
• Main Phase Green Times have NOT been Balanced.
• Minimum Pedestrian Crossing Requirements have not been met.
• Main phase critical move choice reflects lost time adjustment

SUMMARY of KEY RESULTS:

Cycle Time: 100.0 sec.
Lost Time: 17.0 sec.
Degree of Saturation: 0.412

CCG/CALC 2 PERFORMANCE ANALYSIS DATA SUMMARY
FUTURE TOTAL TRAFFIC

Project : CHERRY ST. REVIEW-JN07
Scenario : WKDAY PM OP4i W.S
Data File: TO-PM4I.PC2

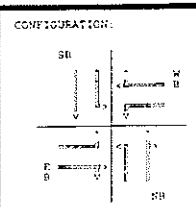
Page : 1
Printed On: June 22, 2007
Printed At: 12:33 PM

INTERSECTION: CHERRY/MILL

DEMAND VOLUMES:

Vehicles			Volume Adjustments			Pedestrian Volume		Pedestrian Walk Dst/Med Width(m)	
	37	19		3.0%	3.0%				
	479	70		3.0%	3.0%	200		23/0	
	0	275		3.0%	3.0%				
						200	200	16/0	16/0
	71	225		3.0%	3.0%				
	159	366		3.0%	3.0%	200		23/0	
	36	66		3.0%	3.0%				

CONFIGURATION:



SIGNAL PHASING INFORMATION:

Φ	Type	Permitted Moves: SB	WB	NB	EB	Signal Timings: Green	Amber	Red	SAG	Effective Times: Eff. Green	Lost Time	Ped. X+W
1	NB DTBL Rst	L		L		6.0	2.0	0.0	1.0	7.0	2.0	0.0
2	N-S Main	TL		RT		44.0	4.0	2.0	0.0	45.0	5.0	20.3
3	WB Advance		RTL			9.0	2.0	1.0	0.0	10.0	2.0	0.0
4	E-W Main		RTL		RTL	23.0	4.0	2.0	0.0	24.0	5.0	26.2
Total:						82.0	12.0	5.0	1.0	86.0	14.0	

Methodology: Canadian Capacity Guide, 2nd Edition (1995) (vv)

Approach Specific Adjustments:	SB	WB	NB	EB
Lefts/Cycle on IG (PCU):	2.0	2.0	2.0	2.0
Shared Lefts/Cycle on IG (PCU):	0.0	0.0	0.0	0.0
Rights/Cycle on IG (PCU):	0.0	0.0	2.0	0.0
Progression Regime (1-6):	3	3	3	3
Prot Left Turn Sat'n Adj.:	1.00	1.00	1.00	1.00
Perm Left Turn Sat'n Adj.:	1.00	1.00	1.00	1.00
Right Turn (No Peds) Sat'n Adj.:	0.80	0.80	0.80	0.80
Through Lane Sat'n Adj.:	1.00	1.00	1.00	1.00

Other Settings:

Through Saturation:	1650 PCU/hour
Rights thru Pedestrians Formula:	Toronto
Pedestrian Walking Speed:	1.2 m/sec.
Min Pedestrian Walk Interval:	7.0 sec.
Delay Evaluation Interval:	60.0 min.
Confidence Level, Max Prob Queue:	95.0 %
Main Phase Grn Share Sat Crit:	2.0 %
Over-Capacity Permissive Left Adj.:	Off

PERFORMANCE RESULTS:

Flow Ratio Table:

Φ	Lane	Clr. Vol.	Sat'n	y	Max. y	Eff. Green	Deg. Sat'n	Fed. Inc.
1	SB L	6	1650	0.006		7.0	0.020	
1	NB L	68	1650	0.041	/	7.0	0.189	
2	SB T	493	1650	0.299		45.0	0.664	
2	SB L	0	327	0.000		45.0	0.000	
2	NB TR	537	1325	0.405	/	45.0	0.930	
3	NB TR	92	1956	0.060	/	10.0	0.585	
3	NB L	185	1650	0.160	/	10.0	1.609	
4	EB TR	0	1352	0.000		25.0	0.000	
4	WB L	49	547	0.090		24.0	0.376	
4	EB TR	201	1395	0.144	/	24.0	0.600	0.088
4	EB L	1	1650	0.001		24.0	0.003	
Total:				0.650				+0.088

Other Measures:

Lane	Total Vol.	Total Cap.	Lane Deg. Satn	Avg. Veh. Delay	Avg. Queue (Cons)	Max Prob Queue	Prob. Disch. Ovrld.
SB L	66	126	0.523	67	2	6	12.3%
SB T	493	743	0.664	24	14	23	2.4%
SB L	39	334	0.114	13	1	3	0.0%
NB TR	609	669	0.911	50	17	29	25.6%
WB TR	92	551	0.167	23	3	6	0.0%
WB L	286	363	0.778	46	8	14	14.0%
EB TR	201	335	0.600	42	6	11	5.8%
EB L	73	469	0.156	31	2	5	0.0%
Int'n:	1,860	3,542		40			

NOTE(S)
* Main Phase Green Times have NOT been Balanced.

SUMMARY of KEY RESULTS:

Cycle Time: 100.0 sec.
Lost Time: 14.0 sec.
Degree of Saturation: 0.803

CCG/CALC 2 PERFORMANCE ANALYSIS DATA SUMMARY
FUTURE TOTAL TRAFFIC

Project : CHERRY ST. REVIEW-JN07
Scenario : WKDAY PM OP4i W.S
Data File: TO-PM4I.PC2

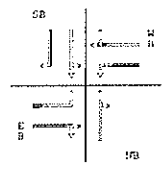
Page : 1
Printed On: June 22, 2007
Printed At: 12:35 PM

INTERSECTION: CHERRY/FRONT

DEMAND VOLUMES:

Vehicles			Volume Adjustments			Pedestrian Volume		Pedestrian Walk Dst/Med Width(m)	
	50	66		3.0%	3.0%				
	320	216		3.0%	3.0%	200		23/0	
	93	194		3.0%	3.0%				
						200	230	16/0	16/0
	61	128		3.0%	3.0%				
	491	226		3.0%	3.0%	200		23/0	
	71	0		3.0%	3.0%				

CONFIGURATION:



SIGNAL PHASING INFORMATION:

Φ	Type	Permitted Moves: SB	WB	NB	EB	Signal Timings: Green	Amber	Red	SAG	Effective Times: Eff. Green	Lost Time	Ped. X+W
1	SB Rst Rt	RT				10.0	2.0	1.0	0.0	11.0	2.0	0.0
2	N-S Main	T		RT		27.0	4.0	2.0	0.0	28.0	5.0	30.3
3	NB Advance		RTL	R		6.0	2.0	1.0	0.0	7.0	2.0	0.0
4	E-W Main		RTL		RTL	39.0	4.0	2.0	0.0	40.0	5.0	26.2
Total:						82.0	12.0	6.0	0.0	86.0	14.0	

Methodology: Canadian Capacity Guide, 2nd Edition (1995) (vv)

Approach Specific Adjustments:	SB	WB	NB	EB
Lefts/Cycle on IG (PCU):	0.0	2.0	0.0	2.0
Shared Lefts/Cycle on IG (PCU):	0.0	0.0	0.0	0.0
Rights/Cycle on IG (PCU):	0.0	0.0	2.0	0.0
Progression Regime (1-6):	3	3	3	3
Prot Left Turn Sat'n Adj.:	1.00	1.00	1.00	1.00
Perm Left Turn Sat'n Adj.:	1.00	1.00	1.00	1.00
Right Turn (No Peds) Sat'n Adj.:	0.80	0.80	0.80	0.80
Through Lane Sat'n Adj.:	1.00	1.00	1.00	1.00

Other Settings:

Through Saturation:	1650 PCU/hour
Rights thru Pedestrians Formula:	Toronto
Pedestrian Walking Speed:	1.2 m/sec.
Min Pedestrian Walk Interval:	7.0 sec.
Delay Evaluation Interval:	60.0 min.
Confidence Level, Max Prob Queue:	95.0 %
Main Phase Grn Share Sat Crit:	2.0 %
Over-Capacity Permissive Left Adj.:	Off

PERFORMANCE RESULTS:

Flow Ratio Table:

Φ	Lane	Clr. Vol.	Sat'n	y	Max. y	Eff. Green	Deg. Sat'n	Fed. Inc.
1	SB R	36	1529	0.073	/	11.0	0.665	
2	NB TR	344	1269	0.272	/	28.0	0.971	
3	NB TR	156	1513	0.079	/	7.0	1.000	
3	NB L	116	1650	0.070		7.0	1.000	
4	WB L	87	1262	0.069		42.0	0.154	
4	WB L	12	218	0.055	/	40.0	0.341	
4	NB TR	573	1439	0.398	/	40.0	0.971	
4	EB L	0	1297	0.000		40.0	0.000	
Total:				0.803				+0.000

Other Measures:

Lane	Total Vol.	Total Cap.	Lane Deg. Satn	Avg. Veh. Delay	Avg. Queue (Cons)	Max. Prob. Queue	Prob. Disch. Ovrld.
SB R	96	145	0.660	66	3	6	11.1%
NB TR	416	426	0.976	103	12	19	37.6%
NB TR	197	636	0.295	16	5	10	0.0%
NB L	200	275	0.727	38	6	11	11.0%
EB TR	579	596	0.971	80	16	24	34.6%
EB L	63	587	0.107	19	2	5	0.0%
Int'n:	1,870	2,666		66			

NOTE(S):

SUMMARY of KEY RESULTS:

Cycle Time: 100.0 sec.
Lost Time: 14.0 sec.
Degree of Saturation: 0.933

CCG/CALC 2 PERFORMANCE ANALYSIS DATA SUMMARY
FUTURE TOTAL TRAFFIC

Project : CHERRY ST. REVIEW-JN07
Scenario : WKDAY PM OP4i W.S
Data File: TO-PM4I.PC2

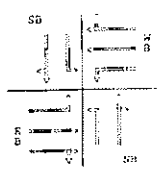
Page : 1
Printed On: June 22, 2007
Printed At: 12:35 PM

INTERSECTION: CHERRY/EASTERN

DEMAND VOLUMES:

Vehicles			Volume Adjustments		Pedestrian Volume		Pedestrian Ped/Med Width(m)	
	129	28	3.0%	3.0%				
	207	364	3.0%	3.0%	360		30/0	
	9	186	3.0%	3.0%				
	53	242	3.0%	3.0%	200	200	33/0	33/0
1,075		59	3.0%	3.0%	200		30/0	
	6	39	3.0%	3.0%				

CONFIGURATION:



SIGNAL PHASING INFORMATION:

¢ Type	Permitted Moves: SB	WB	NB	EB	Signal Timings: Green	Amber	Red	SAG	Effective Times: Eff. Green	Lost Time	Ped. X+W
1 NB STRL Rst	L		L		8.0	2.0	0.0	1.0	9.0	2.0	0.0
2 N-S Main	TL		RT		32.0	4.0	2.0	0.0	33.0	5.0	26.2
3 NB Advance			RTL	R	9.0	2.0	0.0	1.0	10.0	5.0	0.0
4 E-W Main			RTL	RTL	33.0	4.0	2.0	0.0	34.0	5.0	32.0
Total:					82.0	12.0	4.0	2.0	86.0	14.0	

Methodology: Canadian Capacity Guide, 2nd Edition (1995) (vv)

Approach Specific Adjustments:	SB	WB	NB	EB
Lefts/Cycle on IG (PCU):	2.0	2.0	2.0	2.0
Shared Lefts/Cycle on IG (PCU):	0.0	0.0	0.0	0.0
Rights/Cycle on IG (PCU):	0.0	0.0	1.0	0.0
Progression Regime (1-6):	3	3	3	3
Prot Left Turn Sat'n Adj.:	1.00	1.00	1.00	1.00
Perm Left Turn Sat'n Adj.:	1.00	1.00	1.00	1.00
Right Turn (No Pedsl Sat'n Adj.:	0.80	0.80	0.80	0.80
Through Lane Sat'n Adj.:	1.00	1.00	1.00	1.00

Other Settings:	
Through Saturation:	1650 PCU/hour
Rights thru Pedestrians Formula:	Toronto
Pedestrian Walking Speed:	1.2 m/sec.
Min Pedestrian Walk Interval:	7.0 sec.
Delay Evaluation Interval:	60.0 min.
Confidence Level, Max Prob Queue:	95.0 %
Main Phase Grn Share Bal Crit:	2.0 %
Over-Capacity Permissive Left Adj.:	Off

PERFORMANCE RESULTS:

Flow Ratio Table:

¢ Lane	Clr Vol.	Sat'n	y	Max. y	Eff. Green	Deg. Sat'n	Ped. Inc.
1 SB L	61	1680	0.037		9.0	0.410	
1 SB L	40	1650	0.024		9.0	0.271	
2 SB L	0	552	0.000		33.0	0.000	
2 SB T	274	934	0.293	*	33.0	0.852	
3 NB TR	162	1619	0.100		10.0	1.000	
3 NB T	165	1650	0.100	*	10.0	1.000	
3 NB L	320	1650	0.032		36.0	0.372	
4 NB TR	206	1542	0.134		36.0	0.372	
4 NB T	221	1650	0.134		36.0	0.372	
4 NB L	0	67	0.000		34.0	0.000	
4 EB TR	554	1634	0.339	*	34.0	0.997	
4 EB T	529	1650	0.322		34.0	0.997	
4 EB L	0	624	0.000		34.0	0.000	
Total:			0.757				+0.000

Other Measures: Lane	Total Vol.	Total Cap.	Lane Deg. Satn	Avg. Veh. Delay	Avg. Queue (Cond)	Max. Prob. Queue	Prob. Disch. Ovrld.
NB L	40	149	0.271	47	1	4	0.6%
NB L	133	493	0.330	22	4	8	0.9%
NB TR	330	358	0.867	51	9	19	24.7%
NB TR	166	737	0.514	22	10	17	6.3%
NB T	386	759	0.508	21	11	18	0.3%
EB TR	192	258	0.741	42	5	10	16.9%
EB TR	554	556	0.997	127	15	23	47.2%
EB T	552	561	0.997	126	16	24	38.5%
EB L	52	204	0.191	35	1	4	0.0%
Int'n:	2,807	4,344		64			

NOTE(S):
* Main Phase Green Times have NOT been Balanced

SUMMARY of KEY RESULTS:

Cycle Time: 100.0 sec.
Lost Time: 14.0 sec.
Degree of Saturation: 0.880

CCG/CALC 2 PERFORMANCE ANALYSIS DATA SUMMARY
FUTURE TOTAL TRAFFIC

Project : CHERRY ST. REVIEW-JN07
Scenario : WKDAY PM OP4i W.S
Data File: TO-PM4I.PC2

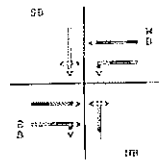
Page : 1
Printed On: June 22, 2007
Printed At: 12:36 PM

INTERSECTION: CHERRY/KING

DEMAND VOLUMES:

Vehicles			Volume Adjustments		Pedestrian Volume		Pedestrian Ped/Med Width(m)	
	9	0	29.0%	3.0%				
	22	258	3.0%	9.0%	200		0.0/3	
	27	122	3.0%	4.0%				
	0	136	3.0%	3.0%	200	200	19/0	19/0
	532	0	15.0%	3.0%				
	92	62	4.0%	3.0%	200		29/0	

CONFIGURATION:



SIGNAL PHASING INFORMATION:

¢ Type	Permitted Moves: SB	WB	NB	EB	Signal Timings: Green	Amber	Red	SAG	Effective Times: Eff. Green	Lost Time	Ped. X+W
1 N-S Main	RTL		RL		36.0	2.0	1.0	0.0	34.0	5.0	0.0
2 WB Advance		RTL			10.0	2.0	1.0	0.0	11.0	5.0	0.0
3 E-W Main		RTL		RTL	37.0	4.0	2.0	0.0	38.0	5.0	31.2 *
4 Peds Only					3.0	1.0	1.0	0.0	0.0	5.0	
Total:					86.0	9.0	5.0	0.0	83.0	17.0	

Methodology: Canadian Capacity Guide, 2nd Edition (1995) (vv)

Approach Specific Adjustments:	SB	WB	NB	EB
Lefts/Cycle on IG (PCU):	0.0	2.0	0.0	0.0
Shared Lefts/Cycle on IG (PCU):	0.0	0.0	0.0	0.0
Rights/Cycle on IG (PCU):	0.0	0.0	2.0	0.0
Progression Regime (1-6):	3	3	3	3
Prot Left Turn Sat'n Adj.:	1.00	1.00	1.00	1.00
Perm Left Turn Sat'n Adj.:	1.00	1.00	1.00	1.00
Right Turn (No Pedsl Sat'n Adj.:	0.80	0.69	0.80	0.69
Through Lane Sat'n Adj.:	1.00	0.86	1.00	0.91

Other Settings:	
Through Saturation:	1650 PCU/hour
Rights thru Pedestrians Formula:	Toronto
Pedestrian Walking Speed:	1.2 m/sec.
Min Pedestrian Walk Interval:	7.0 sec.
Delay Evaluation Interval:	60.0 min.
Confidence Level, Max Prob Queue:	95.0 %
Main Phase Grn Share Bal Crit:	2.0 %
Over-Capacity Permissive Left Adj.:	Off

PERFORMANCE RESULTS:

Flow Ratio Table:

¢ Lane	Clr Vol.	Sat'n	y	Max. y	Eff. Green	Deg. Sat'n	Ped. Inc.
1 SB TRL	60	1473	0.041		34.0	0.119	
1 NB PL	412	1331	0.310	*	34.0	0.294	
2 NB T	156	1419	0.110		11.0	1.000	
2 WB T	55	1652	0.033		11.0	0.302	
3 WB T	158	2419	0.065		40.0	0.220	
3 EB L	0	1341	0.000		36.0	0.000	
3 EB TR	336	1547	0.248	*	38.0	0.654	
3 EB T	371	1502	0.248	*	38.0	0.654	
Total			0.456				+0.000

Other Measures: Lane	Total Vol.	Total Cap.	Lane Deg. Satn	Avg. Veh. Delay	Avg. Queue (Cond)	Max. Prob. Queue	Prob. Disch. Ovrld.
SB TRL	60	503	0.119	23	1	5	0.0%
NB PL	264	520	0.392	27	6	11	0.1%
NB T	281	724	0.389	17	8	14	0.0%
WB L	127	383	0.331	18	4	8	0.0%
EB TR	335	512	0.654	32	9	16	5.2%
EB T	373	571	0.654	31	10	17	3.6%
Int'n:	1,360	3,213		24			

NOTE(S):
* Main Phase Green Times have NOT been Balanced.
* Minimum Pedestrian Crossing Requirements have not been met

SUMMARY of KEY RESULTS:

Cycle Time: 100.0 sec.
Lost Time: 17.0 sec.
Degree of Saturation: 0.552

OPTION 5B

CCG/CALC 2 PERFORMANCE ANALYSIS DATA SUMMARY
FUTURE TOTAL TRAFFIC

Project : CHERRY ST. REVIEW-JN07
Scenario : WKDAY AM OP5B CTR
Data File: TO-AM5B.PC2

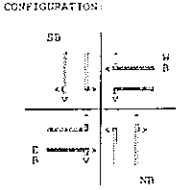
Page : 1
Printed On: June 20, 2007
Printed At: 8:28 PM

INTERSECTION: CHERRY/MILL

DEMAND VOLUMES:

Vehicles		Volume Adjustments		Pedestrian Volume		Pedestrian Walk Dst/Med Width(m)	
25	24	3.0%	3.0%	<-- 200 -->		<-- 16/0 -->	
489	56	3.0%	3.0%				
44	284	3.0%	3.0%	200 V	200 V	16/0 V	16/0 V
21	144	3.0%	3.0%				
74	263	3.0%	3.0%	200 <--		16/0 <--	
31	44	3.0%	3.0%				

CONFIGURATION:



SIGNAL PHASING INFORMATION:

Φ	Type	Permitted Moves: SB	WB	NB	EB	Signal Timings: Green	Amber	Red	SAG	Effective Times: Eff. Green	Lost Time	Ped. X+W
1	NS BTOL Rst	L		L		6.0	2.0	1.0	0.0	7.0	2.0	0.0
2	N-S Main	RT		RT		50.0	3.0	2.0	0.0	50.0	5.0	20.3
3	NB Advance		RTL			8.0	2.0	1.0	0.0	9.0	2.0	0.0
4	E-W Main		RTL		RTL	20.0	3.0	2.0	0.0	20.0	5.0	20.3
Total:						84.0	10.0	6.0	0.0	86.0	14.0	

Methodology: Canadian Capacity Guide, 2nd Edition (1995) (vv)

Approach Specific Adjustments:	SB	WB	NB	EB
Left/Cycle on IG (PCU):	2.0	2.0	2.0	2.0
Shared Lefts/Cycle on IG (PCU):	0.0	0.0	0.0	0.0
Rights/Cycle on IG (PCU):	0.0	0.0	0.0	0.0
Progression Regime (1-6):	3	3	3	3
Prot Left Turn Sat'n Adj.:	1.00	1.00	1.00	1.00
Perm Left Turn Sat'n Adj.:	1.00	1.00	1.00	1.00
Right Turn (No Peds) Sat'n Adj.:	0.80	0.80	0.80	0.80
Through Lane Sat'n Adj.:	1.00	1.00	1.00	1.00

Other Settings:

Through Saturation:	1650 PCU/hour
Rights thru Pedestrians Formula:	Toronto
Pedestrian Walking Speed:	1.2 m/sec.
Min Pedestrian Walk Interval:	7.0 sec.
Delay Evaluation Interval:	60.0 min.
Confidence Level, Max Prob Queue:	95.0 %
Main Phase Grn Share Bal Crit:	2.0 %
Over-Capacity Permissive Left Adj.:	Off

PERFORMANCE RESULTS:

Flow Ratio Table:

Φ	Lane	Cfr. Vol.	Sat'n	y	Max. y	Eff. Green	Deg. Sat'n	Ped. Inc.
1	SB L	26	1650	0.016		7.0	0.323	
1	NB L	45	1650	0.027	V	7.0	0.350	
2	SB TR	549	1547	0.355	V	50.0	0.710	
2	NB TR	419	1293	0.324		50.0	0.653	
3	WB TR	182	1335	0.054		9.0	0.156	
3	EB L	149	1650	0.090	V	9.0	0.260	
4	WB TR	0	1248	0.000		22.0	0.000	
4	WB L	26	918	0.093	/	20.0	0.465	0.000
4	EB TR	108	1253	0.086		20.0	0.431	
4	EB L	0	1650	0.000		20.0	0.000	
Total:				0.565				+0.000

Other Measures:

Lane	Total Vol.	Total Cap.	Lane Deg. Satn	Avg. Veh. Delay	Avg. Queue (Cons)	Max Prob. Queue	Prob. Disch. Overld.
SB L	26	116	0.223	46	1	3	0.6%
NB L	45	116	0.392	54	1	4	1.0%
SB TR	549	773	0.710	25	15	23	6.1%
NB TR	419	642	0.653	24	12	19	4.9%
WB TR	182	833	0.209	26	3	6	0.0%
EB L	149	573	0.260	28	4	14	13.0%
WB L	297	384	0.772	48	8	17	1.3%
EB TR	108	251	0.431	40	3	7	1.3%
SB L	22	402	0.054	33	1	2	0.0%
Int'n:	1,548	3,096		32			

NOTE(S):
* Main Phase Green Times have NOT been Balanced.

SUMMARY of KEY RESULTS:

Cycle Time: 100.0 sec.
Lost Time: 14.0 sec.
Degree of Saturation: 0.658

CCG/CALC 2 PERFORMANCE ANALYSIS DATA SUMMARY
FUTURE TOTAL TRAFFIC

Project : CHERRY ST. REVIEW-JN07
Scenario : WKDAY AM OP5B CTR
Data File: TO-AM5B.PC2

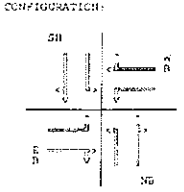
Page : 1
Printed On: June 20, 2007
Printed At: 8:28 PM

INTERSECTION: CHERRY/FRONT

DEMAND VOLUMES:

Vehicles		Volume Adjustments		Pedestrian Volume		Pedestrian Walk Dst/Med Width(m)	
29	226	3.0%	3.0%	<-- 200 -->		<-- 16/0 -->	
121	295	3.0%	3.0%				
30	125	3.0%	3.0%	200 V	200 V	16/0 V	16/0 V
39	78	3.0%	3.0%				
128	165	3.0%	3.0%	200 <--		16/0 <--	
44	33	3.0%	3.0%				

CONFIGURATION:



SIGNAL PHASING INFORMATION:

Φ	Type	Permitted Moves: SB	WB	NB	EB	Signal Timings: Green	Amber	Red	SAG	Effective Times: Eff. Green	Lost Time	Ped. X+W
1	NS BTOL Rst	L		L		6.0	2.0	1.0	0.0	6.0	2.0	0.0
2	N-S Main	RT		RT		31.0	3.0	2.0	0.0	31.0	5.0	20.3
3	NB Advance		RTL			6.0	2.0	1.0	0.0	7.0	2.0	0.0
4	E-W Main		RTL		RTL	40.0	3.0	2.0	0.0	40.0	5.0	20.3
Total:						84.0	10.0	6.0	0.0	88.0	12.0	

Methodology: Canadian Capacity Guide, 2nd Edition (1995) (vv)

Approach Specific Adjustments:	SB	WB	NB	EB
Left/Cycle on IG (PCU):	2.0	2.0	2.0	2.0
Shared Lefts/Cycle on IG (PCU):	0.0	0.0	0.0	0.0
Rights/Cycle on IG (PCU):	0.0	0.0	0.0	0.0
Progression Regime (1-6):	3	3	3	3
Prot Left Turn Sat'n Adj.:	1.00	1.00	1.00	1.00
Perm Left Turn Sat'n Adj.:	1.00	1.00	1.00	1.00
Right Turn (No Peds) Sat'n Adj.:	0.80	0.80	0.80	0.80
Through Lane Sat'n Adj.:	1.00	1.00	1.00	1.00

Other Settings:

Through Saturation:	1650 PCU/hour
Rights thru Pedestrians Formula	Toronto
Pedestrian Walking Speed:	1.2 m/sec.
Min Pedestrian Walk Interval:	7.0 sec.
Delay Evaluation Interval:	60.0 min.
Confidence Level, Max Prob Queue:	95.0 %
Main Phase Grn Share Bal Crit:	2.0 %
Over-Capacity Permissive Left Adj.:	Off

PERFORMANCE RESULTS:

Flow Ratio Table:

Φ	Lane	Cfr. Vol.	Sat'n	y	Max. y	Eff. Green	Deg. Sat'n	Ped. Inc.
1	SB L	30	1650	0.014		6.0	0.302	
1	NB L	134	1605	0.621	V	6.0	0.143	
2	SB TR	372	1535	0.242	V	31.0	0.733	
2	NB TR	571	1305	0.203		31.0	0.629	
3	WB TR	104	1488	0.070	V	7.0	0.665	
3	EB L	111	1650	0.675		7.0	1.000	
4	NB TR	435	1205	0.361	/	42.0	0.859	
4	WB L	143	931	0.154		40.0	0.364	
4	EB TR	177	1356	0.131		40.0	0.327	
4	EB L	0	423	0.000		40.0	0.000	
Total:				0.693				+0.000

Other Measures:

Lane	Total Vol.	Total Cap.	Lane Deg. Satn	Avg. Veh. Delay	Avg. Queue (Cons)	Max. Prob. Queue	Prob. Disch. Ovrld.
SB L	30	97	0.302	52	1	3	1.0%
NB L	134	99	0.143	55	1	3	1.6%
SB TR	372	507	0.733	33	10	17	10.2%
NB TR	571	431	0.629	35	8	13	4.4%
WB TR	539	613	0.883	43	15	33	24.8%
EB L	111	560	0.590	24	3	10	1.3%
EB TR	177	542	0.327	22	5	10	0.0%
EB L	40	237	0.169	21	1	4	0.0%
Int'n:	1,793	3,085		35			

NOTE(S):
* Main Phase Green Times have NOT been Balanced.

SUMMARY of KEY RESULTS:

Cycle Time: 100.0 sec.
Lost Time: 12.0 sec.
Degree of Saturation: 0.788

CCG/CALC 2 PERFORMANCE ANALYSIS DATA SUMMARY
FUTURE TOTAL TRAFFIC

Project : CHERRY ST. REVIEW-JN07 — Page : 1
Scenario : WKDAY AM OP5B CTR — Printed On: June 20, 2007
Data File: TO-AM5B.PC2 — Printed At: 8:29 PM

INTERSECTION: CHERRY/EASTERN

DEMAND VOLUMES:

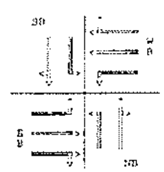
Vehicles: 29 | 44; 148 | 1,174; 274 | 150 — 29 | 160; 992 | 130; 0 | 120

Volume Adjustments: 3.0% | 3.0%; 3.0% | 3.0%; 3.0% | 3.0% — 3.0% | 3.0%; 3.0% | 3.0%; 3.0% | 3.0%

Pedestrian Volume: 200; 200 | 200; 200

Pedestrian Walk Dst/Med Width(m): 21/0; 23/0 | 23/0; 16/0

CONFIGURATION:



SIGNAL PHASING INFORMATION:

φ Type	Permitted Moves: SB	WB	NB	EB	Signal Timings: Green	Amber	Red	SAG	Effective Times: Eff. Green	Lost Time	Ped. X-W
1 NS BTSL Rsc	L		L		7.0	2.0	1.0	0.0	0.0	2.0	0.0
2 N-S Main	RT		RT		36.0	3.0	2.0	0.0	36.0	5.0	26.2
3 WB Advance		RTL			9.0	2.0	1.0	0.0	10.0	2.0	0.0
4 E-W Main		RTL		RTL	32.0	3.0	2.0	0.0	32.0	5.0	24.5
Total:					84.0	10.0	6.0	0.0	86.0	14.0	

Methodology: Canadian Capacity Guide, 2nd Edition (1995) (vv)

Approach Specific Adjustments:	SB	WB	NB	EB
Lefts/Cycle on IG (PCU):	2.0	2.0	2.0	2.0
Shared Lefts/Cycle on IG (PCU):	0.0	0.0	0.0	0.0
Rights/Cycle on IG (PCU):	1.5	0.0	1.0	0.0
Progression Regime (1-6):	3	3	3	3
Prot Left Turn Sat'n Adj.:	1.00	1.00	1.00	1.00
Perm Left Turn Sat'n Adj.:	1.00	1.00	1.00	1.00
Right Turn (No Peds) Sat'n Adj.:	0.80	0.80	0.80	0.80
Through Lane Sat'n Adj.:	1.00	1.00	1.00	1.00

Other Settings:
- Through Saturation: 1650 PCU/hour
- Rights thru Pedestrians Formula: Toronto
- Pedestrian Walking Speed: 1.2 m/sec.
- Min Pedestrian Walk Interval: 7.0 sec.
- Delay Evaluation Interval: 60.0 min.
- Confidence Level, Max Prob Queue: 95.0 %
- Main Phase Grn Share Bal Crit: 2.0 %
- Over-Capacity Permissive Left Adj.: Off

PERFORMANCE RESULTS:

Flow Ratio Table:

φ Lane	Clr. Vol.	Sat'n	Y	Max. Y	Eff. Green	Deg. Sat'n	Ped. Inc.
1 SB L	30	1650	0.018	✓	0.0	0.226	
1 NB L	124	1650	0.075	✓	8.0	0.936	
2 SB TR	379	1086	0.349	✓	36.0	0.969	
2 NB TR	263	1157	0.227		26.0	0.631	
3 WB TR	162	1620	0.100	✓	10.0	1.000	
3 WB T	165	1650	0.100		10.0	1.000	
3 WB L	132	1650	0.080		10.0	0.800	
4 WB TR	449	1546	0.290		34.0	0.853	
4 WB T	479	1650	0.290		34.0	0.853	
4 WB L	0	72	0.000		32.0	0.000	
4 EB TR	511	1650	0.310	✓	32.0	0.968	
4 EB T	511	1650	0.310		32.0	0.968	
4 EB L	0	138	0.000		32.0	0.000	
Total:				0.834			+0.000

Other Measures:

Lane	Total Vol.	Total Cap.	Lane Deg. Satn	Avg. Veh. Delay	Avg. Queue (Cons)	Max. Prob. Queue	Prob. Disch. Ovrld.
SB L	30	132	0.226	47	1	3	0.2%
NB L	124	132	0.936	151	3	7	26.2%
SB TR	435	447	0.973	95	12	19	43.2%
NB TR	299	452	0.660	35	8	14	4.4%
WB TR	611	688	0.888	45	17	25	26.1%
WB T	644	726	0.887	44	19	27	26.0%
WB L	204	260	0.784	49	6	11	21.1%
EB TR	511	528	0.968	87	14	22	35.0%
EB T	511	528	0.968	87	14	22	35.0%
EB L	30	116	0.257	31	1	3	1.0%
Int'n:	3,397	4,009		67			

NOTE(S):

SUMMARY of KEY RESULTS:

Cycle Time: 100.0 sec.
Lost Time: 14.0 sec.
Degree of Saturation: 0.969

CCG/CALC 2 PERFORMANCE ANALYSIS DATA SUMMARY
FUTURE TOTAL TRAFFIC

Project : CHERRY ST. REVIEW-JN07 — Page : 1
Scenario : WKDAY AM OP5B CTR — Printed On: June 20, 2007
Data File: TO-AM5B.PC2 — Printed At: 8:30 PM

INTERSECTION: CHERRY/KING

DEMAND VOLUMES:

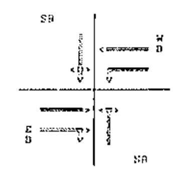
Vehicles: 7 | 0; 27 | 297; 18 | 276 — 0 | 98; 288 | 0; 33 | 121

Volume Adjustments: 29.0% | 3.0%; 3.0% | 9.0%; 3.0% | 4.0% — 3.0% | 3.0%; 15.0% | 3.0%; 4.0% | 3.0%

Pedestrian Volume: 200; 200 | 200; 200

Pedestrian Walk Dst/Med Width(m): 4.0/0; 19/0 | 19/0; 29/0

CONFIGURATION:



SIGNAL PHASING INFORMATION:

φ Type	Permitted Moves: SB	WB	NB	EB	Signal Timings: Green	Amber	Red	SAG	Effective Times: Eff. Green	Lost Time	Ped. X-W
1 N-S Main	RTL		RL		37.0	3.0	2.0	0.0	37.0	5.0	0.0
2 WB Advance		RTL			9.0	1.0	1.0	0.0	11.0	2.0	0.0
3 E-W Main		RTL		RTL	35.0	3.0	2.0	0.0	35.0	5.0	0.0
4 ~~Peds Only~~ TRANSIT PHASE					3.0	1.0	1.0	0.0	0.0	5.0	31.2 *
Total:					84.0	10.0	6.0	0.0	83.0	17.0	

Methodology: Canadian Capacity Guide, 2nd Edition (1995) (vv)

Approach Specific Adjustments:	SB	WB	NB	EB
Lefts/Cycle on IG (PCU):	0.0	2.0	0.0	0.0
Shared Lefts/Cycle on IG (PCU):	3.0	0.0	0.0	0.0
Rights/Cycle on IG (PCU):	3.0	0.0	2.0	0.0
Progression Regime (1-6):	3	3	3	3
Prot Left Turn Sat'n Adj.:	1.00	1.00	0.70	1.00
Perm Left Turn Sat'n Adj.:	1.00	1.00	0.70	1.00
Right Turn (No Peds) Sat'n Adj.:	0.80	0.70	0.56	0.66
Through Lane Sat'n Adj.:	1.00	0.87	0.70	0.92

Other Settings:
- Through Saturation: 1650 PCU/hour
- Rights thru Pedestrians Formula: Toronto
- Pedestrian Walking Speed: 1.2 m/sec.
- Min Pedestrian Walk Interval: 7.0 sec
- Delay Evaluation Interval: 60.0 min.
- Confidence Level, Max Prob Queue: 95.0 %
- Main Phase Grn Share Bal Crit: 2.0 %
- Over-Capacity Permissive Left Adj.: Off

PERFORMANCE RESULTS:

Flow Ratio Table:

φ Lane	Clr. Vol.	Sat'n	Y	Max. Y	Eff. Green	Deg. Sat'n	Ped. Inc.
1 SB TRL	55	1521	0.036		37.0	0.098	
1 NB RL	154	948	0.162	✓	37.0	0.438	
2 WB T	158	1436	0.110	✓	11.0	1.000	
2 WB L	182	1650	0.110		11.0	1.000	
3 WB T	166	1436	0.116		37.0	0.312	
3 WB L	74	704	0.048		30.0	0.159	
3 EB TR	176	1410	0.125	✓	35.0	0.357	
3 EB T	190	1514	0.125		35.0	0.357	
Total:				0.397			+0.000

Other Measures:

Lane	Total Vol.	Total Cap.	Lane Deg. Satn	Avg. Veh. Delay	Avg. Queue (Cons)	Max. Prob. Queue	Prob. Disch. Ovrld.
SB TRL	55	563	0.098	21	2	4	0.0%
NB RL	226	423	0.533	30	6	12	1.2%
WB T	324	689	0.470	20	9	15	0.1%
WB L	287	500	0.574	25	6	14	1.7%
EB TR	176	493	0.357	26	5	10	0.0%
EB T	190	531	0.357	26	5	10	0.0%
Int'n:	1,257	3,200		25			

NOTE(S):
- Main Phase Green Times have NOT been Balanced.
- Minimum Pedestrian Crossing Requirements have not been met.

SUMMARY of KEY RESULTS:

Cycle Time: 100.0 sec.
Lost Time: 17.0 sec.
Degree of Saturation: 0.478

CCG/CALC 2 PERFORMANCE ANALYSIS DATA SUMMARY
FUTURE TOTAL TRAFFIC

Project : CHERRY ST. REVIEW-JN07
Scenario : WKDAY PM OP5B CTR
Data File: TO-PM5B.PC2

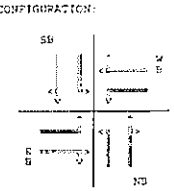
Page : 1
Printed On: June 20, 2007
Printed At: 8:31 PM

INTERSECTION: CHERRY/MILL

DEMAND VOLUMES:

Vehicles		Volume Adjustments		Pedestrian Volume		Pedestrian Walk Dst/Med Width(m)	
37	19	3.0%	3.0%				
479	70	3.0%	3.0%	200		16/0	
28	276	3.0%	3.0%				
71	329	3.0%	3.0%	200	200	16/0	16/0
159	385	3.0%	3.0%	200		16/0	
36	45	3.0%	3.0%				

CONFIGURATION:



SIGNAL PHASING INFORMATION:

ϕ	Type	Permitted Moves: SB	WB	NB	EB	Signal Timings: Green	Amber	Red	SAG	Effective Times: Eff. Green	Lost Time	Ped. X-W
1	NS BTBL Rst	L		L		6.0	2.0	1.0	0.0	6.0	2.0	0.0
2	N-S Main	RT		RT		51.0	3.0	2.0	0.0	51.0	5.0	20.3
3	WB Advance		RTL			9.0	2.0	1.0	0.0	9.0	2.0	0.0
4	E-W Main		RTL		RTL	20.0	3.0	2.0	0.0	20.0	5.0	20.3
Total:						84.0	10.0	6.0	0.0	86.0	14.0	

Methodology: Canadian Capacity Guide, 2nd Edition (1995) (vv)

Approach Specific Adjustments:	SB	WB	NB	EB
Lefts/Cycle on IG (PCU):	2.0	2.0	2.0	2.0
Shared Lefts/Cycle on IG (PCU):	0.0	0.0	0.0	0.0
Rights/Cycle on IG (PCU):	0.0	0.0	0.5	0.0
Progression Regime (1-6):	3	3	3	3
Prot Left Turn Sat'n Adj.:	1.00	1.00	1.00	1.00
Perm Left Turn Sat'n Adj.:	1.00	1.00	1.00	1.00
Right Turn (No Peds) Sat'n Adj.:	0.80	0.80	0.80	0.80
Through Lane Sat'n Adj.:	1.00	1.00	1.00	1.00

Other Settings:

Through Saturation:	1650 PCU/hour
Rights thru Pedestrians Formula:	Toronto
Pedestrian Walking Speed:	1.2 m/sec.
Min Pedestrian Walk Interval:	7.0 sec.
Delay Evaluation Interval:	60.0 min.
Confidence Level, Max Prob Queue:	95.0 %
Main Phase Grn Share Sat Crit:	2.0 %
Over-Capacity Permissive Left Adj.:	Off

PERFORMANCE RESULTS:

Flow Ratio Table:

ϕ	Lane	Cfr. Vol.	Sat'n	y	Max. y	Eff. Green	Deg. Sat'n	Ped. Inc.
1	SB L	38	1650	0.023		6.0	0.385	
1	NB L	46	1650	0.028	✓	6.0	0.468	
2	SB TR	502	1580	0.317		51.0	0.648	
2	NB TR	511	1698	0.475	✓	51.0	0.931	
3	WB TR	92	1365	0.068		9.0	0.666	
3	WB L	149	1650	0.090	✓	9.0	1.000	
4	EB TR	0	1343	0.000		22.0	0.000	
4	WB L	66	431	0.153	✓	20.0	0.763	0.021
4	EB TR	201	1373	0.146		20.0	0.729	
4	EB L	1	1650	0.001		20.0	0.003	
Total:				0.745				+0.021

Other Measures:

Lane	Total Vol.	Total Cap.	Lane Deg. Satn	Avg. Veh. Delay	Avg. Queue (Cond)	Max. Prob. Queue	Prob. Disch. Ovrld.
SB L	38	99	0.385	56	1	3	2.3%
NB L	46	99	0.468	61	1	4	4.2%
SB TR	502	806	0.648	22	15	22	2.4%
NB TR	629	675	0.933	53	17	26	30.4%
WB TR	92	636	0.210	27	3	6	0.0%
WB L	286	307	0.913	91	8	14	27.8%
EB TR	231	275	0.729	54	6	11	11.2%
EB L	73	402	0.182	34	2	5	0.0%
Int'n:	1,888	3,099		48			

NOTE(S):
* Main Phase Green Times have NOT been Balanced.

SUMMARY of KEY RESULTS:

Cycle Time: 100.0 sec.
Lost Time: 14.0 sec.
Degree of Saturation: 0.867

CCG/CALC 2 PERFORMANCE ANALYSIS DATA SUMMARY
FUTURE TOTAL TRAFFIC

Project : CHERRY ST. REVIEW-JN07
Scenario : WKDAY PM OP5B CTR
Data File: TO-PM5B.PC2

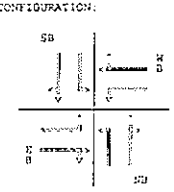
Page : 1
Printed On: June 20, 2007
Printed At: 8:32 PM

INTERSECTION: CHERRY/FRONT

DEMAND VOLUMES:

Vehicles		Volume Adjustments		Pedestrian Volume		Pedestrian Walk Dst/Med Width(m)	
52	69	3.0%	3.0%				
348	116	3.0%	3.0%	200		16/0	
37	194	3.0%	3.0%				
61	170	3.0%	3.0%	200	200	16/0	16/0
492	226	3.0%	3.0%	200		16/0	
71	29	3.0%	3.0%				

CONFIGURATION:



SIGNAL PHASING INFORMATION:

ϕ	Type	Permitted Moves: SB	WB	NB	EB	Signal Timings: Green	Amber	Red	SAG	Effective Times: Eff. Green	Lost Time	Ped. X-W
1	NS BTBL Rst	L		L		6.0	2.0	1.0	0.3	7.0	2.0	0.0
2	N-S Main	RT		RT		32.0	3.0	2.0	0.3	32.0	5.0	20.3
3	WB Advance		RTL			6.0	2.0	1.0	0.3	7.0	2.0	0.0
4	E-W Main		RTL		RTL	40.0	3.0	2.0	0.3	40.0	5.0	20.3
Total:						84.0	10.0	6.0	0.3	86.0	14.0	

Methodology: Canadian Capacity Guide, 2nd Edition (1995) (vv)

Approach Specific Adjustments:	SB	WB	NB	EB
Lefts/Cycle on IG (PCU):	2.0	2.0	2.0	2.0
Shared Lefts/Cycle on IG (PCU):	0.0	0.0	0.0	0.0
Rights/Cycle on IG (PCU):	0.0	0.0	1.0	0.0
Progression Regime (1-6):	3	3	3	3
Prot Left Turn Sat'n Adj.:	1.00	1.00	1.00	1.00
Perm Left Turn Sat'n Adj.:	1.00	1.00	1.00	1.00
Right Turn (No Peds) Sat'n Adj.:	0.80	0.80	0.80	0.80
Through Lane Sat'n Adj.:	1.00	1.00	1.00	1.00

Other Settings:

Through Saturation:	1650 PCU/hour
Rights thru Pedestrians Formula:	Toronto
Pedestrian Walking Speed:	1.2 m/sec.
Min Pedestrian Walk Interval:	7.0 sec.
Delay Evaluation Interval:	60.0 min.
Confidence Level, Max Prob Queue:	95.0 %
Main Phase Grn Share Sat Crit:	2.0 %
Over-Capacity Permissive Left Adj.:	Off

PERFORMANCE RESULTS:

Flow Ratio Table:

ϕ	Lane	Cfr. Vol.	Sat'n	y	Max. y	Eff. Green	Deg. Sat'n	Ped. Inc.
1	SB L	52	1650	0.031		7.0	0.446	
1	NB L	21	1650	0.012		7.0	0.178	
2	SB TR	397	1519	0.261		32.0	0.816	
2	NB TR	500	1424	0.351	✓	32.0	0.971	
3	WB TR	106	1613	0.066		7.0	1.000	
3	WB L	110	1650	0.070		7.0	1.000	
4	NB TR	82	1262	0.065		42.0	0.154	
4	WB L	12	218	0.056		40.0	0.141	
4	EB TR	599	1490	0.368	✓	40.0	0.971	
4	EB L	0	1287	0.000		40.0	0.000	
Total:				0.600				+0.000

Other Measures:

Lane	Total Vol.	Total Cap.	Lane Deg. Satn	Avg. Veh. Delay	Avg. Queue (Cond)	Max. Prob. Queue	Prob. Disch. Ovrld.
SB L	52	116	0.446	57	1	4	5.7%
NB L	21	116	0.178	47	1	2	0.3%
SB TR	397	486	0.816	47	11	16	14.7%
NB TR	416	428	0.973	99	12	19	37.4%
WB TR	187	636	0.295	16	5	10	0.0%
WB L	260	275	0.727	38	6	11	11.0%
EB TR	579	596	0.971	80	16	24	34.0%
EB L	63	567	0.107	19	2	5	0.0%
Int'n:	1,914	3,238		64			

NOTE(S):

SUMMARY of KEY RESULTS:

Cycle Time: 100.0 sec.
Lost Time: 14.0 sec.
Degree of Saturation: 0.931

CCG/CALC 2 PERFORMANCE ANALYSIS DATA SUMMARY
FUTURE TOTAL TRAFFIC

Project : CHERRY ST. REVIEW-JN07
Scenario : WKDAY PM OP5B CTR
Data File: TO-PM5B.PC2

Page : 1
Printed On: June 20, 2007
Printed At: 8:33 PM

INTERSECTION: CHERRY/EASTERN

DEMAND VOLUMES:

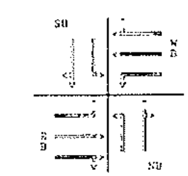
Vehicles: 129 | 28; 154 | 684; 46 | 220; 59 | 242; 1,075 | 59; 6 | 39

Volume Adjustments: 3.0% | 3.0%; 3.0% | 3.0%; 3.0% | 3.0%; 3.0% | 3.0%; 3.0% | 3.0%; 3.0% | 3.0%

Pedestrian Volume: 200; 200; 200; 200

Pedestrian Walk Dst/Med Width(m): 21/0; 23/0; 23/0; 18/0

CONFIGURATION:



SIGNAL PHASING INFORMATION:

φ Type	Permitted Moves: SB	NB	WB	EB	Signal Timings: Green	Amber	Red	SAG	Effective Times: Eff. Green	Lost Time	Ped. X-W
1 NS BTBL Rot	L		L		8.0	2.0	1.0	0.0	9.0	2.0	0.0
2 N-S Main	RT		RT		33.0	3.0	2.0	0.0	33.0	5.0	26.2
3 WB Advance		RTL			8.0	2.0	1.0	0.0	9.0	2.0	0.0
4 E-W Main		RTL		RTL	35.0	3.0	2.0	0.0	35.0	5.0	24.5
Total:					84.0	10.0	6.0	0.0	86.0	14.0	

Methodology: Canadian Capacity Guide, 2nd Edition (1995) (vv)

Approach Specific Adjustments:	SB	WB	NB	EB
Lefts/Cycle on IG (PCU):	2.0	2.0	2.0	2.0
Shared Lefts/Cycle on IG (PCU):	0.0	0.0	0.0	0.0
Rights/Cycle on IG (PCU):	0.0	0.0	0.5	0.0
Progression Regime (1-6):	3	3	3	3
Prot Left Turn Sat'n Adj.:	1.00	1.00	1.00	1.00
Perm Left Turn Sat'n Adj.:	1.00	1.00	1.00	1.00
Right Turn (No Peds) Sat'n Adj.:	0.80	0.80	0.80	0.80
Through Lane Sat'n Adj.:	1.00	1.00	1.00	1.00

Other Settings:
- Through Saturation: 1650 PCU/hour
- Rights thru Pedestrians Formula: Toronto
- Pedestrian Walking Speed: 1.2 m/sec.
- Min Pedestrian Walk Interval: 7.0 sec.
- Delay Evaluation Interval: 60.0 min.
- Confidence Level, Max Prob Queue: 95.0 %
- Main Phase Grn Share Bal Crit: 2.0 %
- Over-Capacity Permissive Left Adj.: Off

PERFORMANCE RESULTS:

Flow Ratio Table:

φ	Lane	Clr. Vol.	Sat'n	Y	Max. Y	Eff. Green	Deg. Sat'n	Ped. Inc.
1	SB L	133	1650	0.081	√	9.0	0.895	
1	NB L	40	1650	0.024		9.0	0.271	
2	SB TR	206	1369	0.150		33.0	0.456	
2	NB TR	292	967	0.302	√	33.0	0.915	
3	WB TR	146	2516	0.030	√	9.0	1.050	
3	WB T	149	1650	0.090		9.0	1.000	
3	WB L	149	1650	0.090		9.0	1.000	
4	WB TR	212	1540	0.138		37.0	0.372	
4	WB T	227	1650	0.138		37.0	0.372	
4	WB L	6	74	0.003		35.0	0.336	
4	EB TR	554	1634	0.339	√	35.0	0.969	
4	EB T	559	1650	0.339		35.0	0.969	
4	EB L	0	623	0.000		35.0	0.000	
Total:					0.611			+0.000

Other Measures:

Lane	Total Vol.	Total Cap.	Lane Deg. Satn	Avg. Veh. Delay	Avg. Queue (Cons)	Max. Prob. Queue	Prob. Disch. Ovrld.
SB L	133	149	0.835	119	4	8	31.1%
NB L	40	149	0.271	47	1	4	0.6%
SB TR	206	452	0.456	30	5	11	0.2%
NB TR	310	337	0.919	78	7	15	35.2%
WB TR	358	715	0.500	21	10	17	0.1%
WB T	376	759	0.495	21	10	17	0.1%
WB L	227	246	0.920	86	5	12	29.7%
EB TR	554	572	0.969	83	15	23	37.4%
EB T	559	578	0.969	83	15	24	38.8%
EB L	52	290	0.177	24	1	4	0.0%
Int'n:	2,814	4,246		63			

NOTE(S):

SUMMARY of KEY RESULTS:

Cycle Time: 100.0 sec.
Lost Time: 14.0 sec.
Degree of Saturation: 0.944

CCG/CALC 2 PERFORMANCE ANALYSIS DATA SUMMARY
FUTURE TOTAL TRAFFIC

Project : CHERRY ST. REVIEW-JN07
Scenario : WKDAY PM OP5B CTR
Data File: TO-PM5B.PC2

Page : 1
Printed On: June 20, 2007
Printed At: 8:34 PM

INTERSECTION: CHERRY/KING

DEMAND VOLUMES:

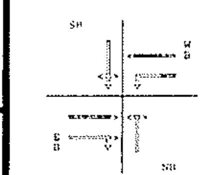
Vehicles: 9 | 0; 20 | 258; 27 | 122; 0 | 136; 532 | 0; 92 | 62

Volume Adjustments: 27.0% | 3.0%; 3.0% | 9.0%; 3.0% | 4.0%; 3.0% | 3.0%; 15.0% | 3.0%; 4.0% | 3.0%

Pedestrian Volume: 200; 200; 200; 200

Pedestrian Walk Dst/Med Width(m): 8.0/0; 19/0; 19/0; 29/0

CONFIGURATION:



SIGNAL PHASING INFORMATION:

φ Type	Permitted Moves: SB	WB	NB	EB	Signal Timings: Green	Amber	Red	SAG	Effective Times: Eff. Green	Lost Time	Ped. X-W
1 N-S Main	RTL		RL		37.0	3.0	2.0	0.0	37.0	5.0	0.0
2 WB Advance		RTL			9.0	3.0	1.0	0.0	11.0	2.0	0.0
3 E-W Main		RTL		RTL	35.0	3.0	2.0	0.0	35.0	5.0	0.0
4 ~~Peds Only~~ TRANSIT PHASE					3.0	1.0	1.0	0.0	0.0	5.0	31.2 *
Total:					84.0	10.0	6.0	0.0	83.0	17.0	

Methodology: Canadian Capacity Guide, 2nd Edition (1995) (vv)

Approach Specific Adjustments:	SB	WB	NB	EB
Lefts/Cycle on IG (PCU):	0.0	2.0	0.0	0.0
Shared Lefts/Cycle on IG (PCU):	0.0	0.0	0.0	0.0
Rights/Cycle on IG (PCU):	0.0	0.0	2.0	0.0
Progression Regime (1-6):	3	3	3	3
Prot Left Turn Sat'n Adj.:	1.00	1.00	0.70	1.00
Perm Left Turn Sat'n Adj.:	1.00	1.00	0.70	1.00
Right Turn (No Peds) Sat'n Adj.:	0.60	0.70	0.56	0.66
Through Lane Sat'n Adj.:	1.00	0.87	0.70	0.92

Other Settings:
- Through Saturation: 1650 PCU/hour
- Rights thru Pedestrians Formula: Toronto
- Pedestrian Walking Speed: 1.2 m/sec.
- Min Pedestrian Walk Interval: 7.0 sec.
- Delay Evaluation Interval: 60.0 min.
- Confidence Level, Max Prob Queue: 95.0 %
- Main Phase Grn Share Bal Crit: 2.0 %
- Over-Capacity Permissive Left Adj.: Off

PERFORMANCE RESULTS:

Flow Ratio Table:

φ	Lane	Clr. Vol.	Sat'n	Y	Max. Y	Eff. Green	Deg. Sat'n	Ped. Inc.
1	SB TRL	60	1477	0.041		37.0	0.110	
1	NB RL	132	931	0.142	√	37.0	0.383	
2	WB T	158	1436	0.110	√	11.0	1.000	
2	WB L	55	1650	0.033		11.0	0.302	
3	WB T	123	2430	0.086		37.0	0.232	
3	WB L	0	273	0.000		35.0	0.000	
3	EB TR	335	1364	0.245	√	35.0	0.701	
3	EB T	373	1518	0.245		35.0	0.701	
Total:					0.497			+0.008

Other Measures:

Lane	Total Vol.	Total Cap.	Lane Deg. Satn	Avg. Veh. Delay	Avg. Queue (Cons)	Max. Prob. Queue	Prob. Disch. Ovrld.
SB TRL	60	547	0.110	21	2	5	0.0%
NB RL	204	417	0.490	28	6	11	0.6%
WB T	281	689	0.408	19	8	14	0.0%
WB L	127	356	0.356	23	1	5	0.1%
EB TR	335	478	0.701	37	9	16	9.0%
EB T	373	531	0.701	36	10	17	6.2%
Int'n:	1,380	3,018		29			

NOTE(S):
- Main Phase Green Times have NOT been Balanced.
- Minimum Pedestrian Crossing Requirements have not been met

SUMMARY of KEY RESULTS:

Cycle Time: 100.0 sec.
Lost Time: 17.0 sec.
Degree of Saturation: 0.599

OPTION 6

CCG/CALC 2 PERFORMANCE ANALYSIS DATA SUMMARY
FUTURE TOTAL TRAFFIC

Project : CHERRY ST. REVIEW-JN07
Scenario : WKDAY AM P H OP6 MAL
Data File: TOT-AM6.PC2

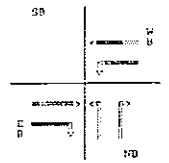
Page : 1
Printed On: June 21, 2007
Printed At: 8:30 AM

INTERSECTION: CHERRY/MILL

DEMAND VOLUMES:

Vehicles	Volume Adjustments	Pedestrian Volume	Pedestrian Walk Dst/Med Width(m)
0 | 0	3.0% | 3.0%	200	0/0
0 | 60	3.0%		
0 | 520	3.0%		
0 | 312	3.0% | 3.0%	200 | 200	16/0 | 16/0
84 | 0	3.0% | 3.0%	200	13/0
60 | 86	3.0% | 3.0%		

CONFIGURATION:



SIGNAL PHASING INFORMATION:

# Type	Permitted Moves: SB	WB	NB	EB	Signal Timings: Green	Amber	Red	SAG	Effective Times: Eff. Green	Lost Time	Ped. X+W
1 NB Main			RL		44.0	3.0	2.0	0.0	44.0	5.0	20.3
2 WB Advance	TL	R			22.0	3.0	0.0	0.0	22.0	3.0	0.0
3 E-W Main	TL			RT	22.0	3.0	2.0	0.0	22.0	5.0	22.0
Total:					87.0	9.0	4.0	0.0	88.0	12.0	

Methodology: Canadian Capacity Guide, 2nd Edition (1995) (vv)

Approach Specific Adjustments:	SB	WB	NB	EB
Lefts/Cycle on IG (PCU):	0.0	2.0	0.3	0.0
Shared Lefts/Cycle on IG (PCU):	0.0	0.0	0.3	0.0
Rights/Cycle on IG (PCU):	0.0	0.0	1.9	0.0
Progression Regime (1-6):	3	3	3	3
Prot Left Turn Sat'n Adj.:	1.00	1.00	1.00	1.00
Perm Left Turn Sat'n Adj.:	1.00	1.00	1.00	1.00
Right Turn (No Peds) Sat'n Adj.:	0.80	0.80	0.80	0.80
Through Lane Sat'n Adj.:	1.00	1.00	1.00	1.00

Other Settings:

Through Saturation:	1650 PCU/hour
Rights thru Pedestrians Formula:	Toronto
Pedestrian Walking Speed:	1.2 m/sec.
Min Pedestrian Walk Interval:	7.0 sec.
Delay Evaluation Interval:	60.0 min.
Confidence Level, Max Prob Queue:	95.0 %
Main Phase Grn Share Bal Crit:	2.0 %
Over-Capacity Permissive Left Adj.:	Off

PERFORMANCE RESULTS:

Flow Ratio Table:

# Lane	Clr. Vol.	Sat'n	y	Max. y	Eff. Green	Deg. Sat'n	Ped. Inc.
1 NB R	0	1650	0.000		44.0	0.000	
1 NB L	49	1650	0.054		44.0	0.222	0.228
2 NB T	82	1650	0.050		22.0	0.227	
3 WB L	363	1650	0.220		22.0	1.000	
1 WB R	286	1320	0.216		22.0	0.591	
1 WB T	0	1650	0.000		22.0	0.000	
2 WB T	169	792	0.213		22.0	0.768	0.062
1 EB L	62	814	0.076		22.0	0.345	
2 EB T	87	1650	0.053		22.0	0.239	
Total:			0.383				+0.290

Other Measures:

Lane	Total Vol.	Total Cap.	Lane Deg. Satn	Avg. Veh. Delay	Avg. Queue (Cons)	Max. Prob. Queue	Prob. Disch. Ovrld.
NB R	321	723	0.444	16	9	15	0.0%
NB L	89	726	0.122	17	2	6	0.0%
NB T	82	359	0.109	16	2	6	0.0%
WB L	544	654	0.832	36	15	23	19.8%
WB R	62	179	0.345	26	2	6	0.0%
EB T	87	363	0.238	34	2	6	0.0%
Int'n:	1,185	3,404		27			

NOTE(S):
* Main Phase Green Times have NOT been Balanced.

SUMMARY of KEY RESULTS:

Cycle Time: 100.0 sec.
Lost Time: 12.0 sec.
Degree of Saturation: 0.435

CCG/CALC 2 PERFORMANCE ANALYSIS DATA SUMMARY
FUTURE TOTAL TRAFFIC

Project : CHERRY ST. REVIEW-JN07
Scenario : WKDAY AM P H OP6 MAL
Data File: TOT-AM6.PC2

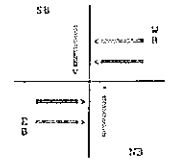
Page : 1
Printed On: June 21, 2007
Printed At: 8:17 AM

INTERSECTION: CHERRY/FRONT

DEMAND VOLUMES:

Vehicles	Volume Adjustments	Pedestrian Volume	Pedestrian Walk Dst/Med Width(m)
0 | 0	3.0% | 3.0%	200	23/0
0 | 545	3.0%		
0 | 0	3.0%		
0 | 0	3.0% | 3.0%	200 | 200	16/0 | 16/0
128 | 0	3.0%	200	23/0
0 | 0	3.0% | 3.0%		

CONFIGURATION:



SIGNAL PHASING INFORMATION:

# Type	Permitted Moves: SB	WB	NB	EB	Signal Timings: Green	Amber	Red	SAG	Effective Times: Eff. Green	Lost Time	Ped. X+W
1 N-S Main	RTL		RTL		24.0	3.0	2.0	0.0	24.0	5.0	20.3
2 E-W Main		RTL		RTL	66.0	3.0	2.0	0.0	66.0	5.0	76.2
Total:					90.0	6.0	4.0	0.0	66.0	34.0	

Methodology: Canadian Capacity Guide, 2nd Edition (1995) (vv)

Approach Specific Adjustments:	SB	WB	NB	EB
Lefts/Cycle on IG (PCU):	0.0	0.0	0.0	0.0
Shared Lefts/Cycle on IG (PCU):	0.0	0.0	0.0	0.0
Rights/Cycle on IG (PCU):	0.0	0.0	0.0	0.0
Progression Regime (1-6):	3	3	3	3
Prot Left Turn Sat'n Adj.:	1.00	1.00	1.00	1.00
Perm Left Turn Sat'n Adj.:	1.00	1.00	1.00	1.00
Right Turn (No Peds) Sat'n Adj.:	0.80	0.80	0.80	0.80
Through Lane Sat'n Adj.:	1.00	1.00	1.00	1.00

Other Settings:

Through Saturation:	1650 PCU/hour
Rights thru Pedestrians Formula:	Toronto
Pedestrian Walking Speed:	1.2 m/sec.
Min Pedestrian Walk Interval:	7.0 sec.
Delay Evaluation Interval:	60.0 min.
Confidence Level, Max Prob Queue:	95.0 %
Main Phase Grn Share Bal Crit:	2.0 %
Over-Capacity Permissive Left Adj.:	Off

PERFORMANCE RESULTS:

Flow Ratio Table:

# Lane	Clr. Vol.	Sat'n	y	Max. y	Eff. Green	Deg. Sat'n	Ped. Inc.
1 SB T	0	1650	0.000		24.0	0.000	
1 NB T	0	1650	0.000		24.0	0.000	
2 WB T	281	1650	0.170	*	66.0	0.258	0.061
2 WB T	281	1650	0.170		66.0	0.258	
2 EB T	66	1650	0.040		66.0	0.061	
2 EB T	66	1650	0.040		66.0	0.061	
Total:			0.170				+0.061

Other Measures:

Lane	Total Vol.	Total Cap.	Lane Deg. Satn	Avg. Veh. Delay	Avg. Queue (Cons)	Max. Prob. Queue	Prob. Disch. Ovrld.
SB T	0	396	0.000	29	0	0	0.0%
NB T	0	396	0.000	29	0	0	0.0%
WB T	281	1,089	0.258	8	8	14	0.0%
WB T	281	1,089	0.258	8	8	14	0.0%
EB T	66	1,089	0.061	6	2	5	0.0%
EB T	66	1,089	0.061	6	2	5	0.0%
Int'n:	694	5,148		7			

NOTE(S):
* Main Phase Green Times have NOT been Balanced.

SUMMARY of KEY RESULTS:

Cycle Time: 100.0 sec.
Lost Time: 34.0 sec.
Degree of Saturation: 0.258

CCG/CALC 2 PERFORMANCE ANALYSIS DATA SUMMARY
FUTURE TOTAL TRAFFIC

Project : CHERRY ST. REVIEW-JN07
Scenario : WKDAY AM P H OP6 MAL
Data File: TOT-AM6.PC2

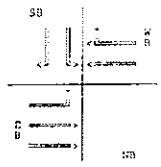
Page : 1
Printed On: June 20, 2007
Printed At: 9:24 PM

INTERSECTION: CHERRY/EASTERN

DEMAND VOLUMES:

Vehicles	Volume Adjustments	Pedestrian Volume	Pedestrian Walk Dst/Med Width(m)
77 / 44 / 402 / 0 / 1,337 / 0	3.0% / 3.0% / 3.0%	200	13/0
29 / 0 / 1,019 / 0 / 0 / 0	3.0% / 3.0% / 3.0%	200	13/0
	3.0% / 3.0% / 3.0%	200 / 200	23/0 / 23/0

CONFIGURATION:



SIGNAL PHASING INFORMATION:

ϕ Type	Permitted Moves: SB	WB	NB	EB	Signal Timings: Green	Amber	Red	SAG	Effective Times: Eff. Green	Lost Time	Ped. X+W
1 SB Main	RL				41.0	3.0	2.0	0.0	41.0	5.0	26.3
2 E-W Main		RTL		RTL	49.0	3.0	2.0	0.0	49.0	5.0	33.8
Total:					90.0	6.0	4.0	0.0	90.0	10.0	

Methodology: Canadian Capacity Guide, 2nd Edition (1995) (vv)

Approach Specific Adjustments:	SB	WB	NB	EB
Lefts/Cycle on IG (PCU):	2.0	0.0	0.0	1.0
Shared Lefts/Cycle on IG (PCU):	0.0	0.0	0.0	0.0
Rights/Cycle on IG (PCU):	2.0	0.0	0.0	0.0
Progression Regime (1-6):	3	3	3	3
Prot Left Turn Sat'n Adj.:	1.00	1.00	1.00	1.00
Perm Left Turn Sat'n Adj.:	1.00	1.00	1.00	1.00
Right Turn (No Pedal Sat'n Adj.:	0.80	0.80	0.80	0.80
Through Lane Sat'n Adj.:	1.00	1.00	1.00	1.00

Other Settings:	
Through Saturation:	1650 PCU/hour
Rights thru Pedestrians Formula:	Toronto
Pedestrian Walking Speed:	1.2 m/sec.
Min Pedestrian Walk Interval:	7.0 sec.
Delay Evaluation Interval:	60.0 min.
Confidence Level, Max Prob Queue:	95.0 %
Main Phase Grn Share Bal Crit:	2.0 %
Over-Capacity Permissive Left Adj.:	Off

PERFORMANCE RESULTS:

Flow Ratio Table:

ϕ Lane	Clr. Vol.	Sat'n	y	Max. y	Eff. Green	Deg. Sat'n	Ped. Inc.
1 SB R	342	895	0.382	✓	41.0	0.332	
1 SB L	7	1650	0.004		41.0	0.011	
2 WB TR	693	1567	0.442	✓	49.0	0.902	
2 WB T	730	1650	0.442		49.0	0.902	
3 EB T	525	1650	0.318		49.0	0.649	
3 EB T	525	1650	0.318		49.0	0.649	
3 EB L	0	110	0.000		49.0	0.000	
Total:			0.824				+0.009

Other Measures:

Lane	Total Vol.	Total Cap.	Lane Deg. Satn	Avg. Veh. Delay	Avg. Queue (Cond)	Max. Prob. Queue	Prob. Disch. Ovrld.
SB R	414	439	0.943	76	12	19	35.7%
SB L	79	749	0.106	18	2	5	0.5%
WB TR	693	768	0.902	45	19	28	39.4%
WB T	730	809	0.902	42	20	30	30.0%
EB T	525	809	0.649	23	15	22	2.5%
EB T	525	809	0.649	23	15	22	2.5%
EB L	30	90	0.332	25	1	3	1.5%
Int'n:	2,995	4,471		33			

NOTE(S):

SUMMARY of KEY RESULTS:

Cycle Time: 100.0 sec.
Lost Time: 10.0 sec.
Degree of Saturation: 0.916

CCG/CALC 2 PERFORMANCE ANALYSIS DATA SUMMARY
FUTURE TOTAL TRAFFIC

Project : CHERRY ST. REVIEW-JN07
Scenario : WKDAY AM P H OP6 MAL
Data File: TOT-AM6.PC2

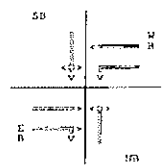
Page : 1
Printed On: June 20, 2007
Printed At: 9:39 PM

INTERSECTION: CHERRY/KING

DEMAND VOLUMES:

Vehicles	Volume Adjustments	Pedestrian Volume	Pedestrian Walk Dst/Med Width(m)
7 / 0 / 27 / 420 / 18 / 256	22.0% / 3.0% / 3.0%	200	8.0/5
0 / 98 / 290 / 0 / 33 / 121	3.0% / 15.0% / 3.0% / 4.0%	200 / 200	19/0 / 19/0
		200	29/0

CONFIGURATION:



SIGNAL PHASING INFORMATION:

ϕ Type	Permitted Moves: SB	WB	NB	EB	Signal Timings: Green	Amber	Red	SAG	Effective Times: Eff. Green	Lost Time	Ped. X+W
1 N-S Main	RTL		RL		33.0	3.0	2.0	0.0	33.0	5.0	22.8
2 WB Advance		RTL			9.0	3.0	1.0	0.0	11.0	2.0	0.0
3 E-W Main		RTL		RTL	39.0	3.0	2.0	0.0	39.0	5.0	31.2
4 EB-Left			L		3.0	1.0	1.0	0.0	0.0	3.0	0.0
Total:					84.0	10.0	6.0	0.0	85.0	15.0	

Methodology: Canadian Capacity Guide, 2nd Edition (1995) (vv)

Approach Specific Adjustments:	SB	WB	NB	EB
Lefts/Cycle on IG (PCU):	0.0	2.0	0.0	0.0
Shared Lefts/Cycle on IG (PCU):	0.0	0.0	0.0	0.0
Rights/Cycle on IG (PCU):	0.0	0.0	2.0	0.0
Progression Regime (1-6):	3	3	3	3
Prot Left Turn Sat'n Adj.:	1.00	1.00	1.00	1.00
Perm Left Turn Sat'n Adj.:	1.00	1.00	1.00	1.00
Right Turn (No Pedal Sat'n Adj.:	0.80	0.69	0.80	0.65
Through Lane Sat'n Adj.:	1.00	0.86	1.00	0.91

Other Settings:	
Through Saturation:	1850 PCU/hour
Rights thru Pedestrians Formula:	Toronto
Pedestrian Walking Speed:	1.2 m/sec.
Min Pedestrian Walk Interval:	7.0 sec.
Delay Evaluation Interval:	60.0 min.
Confidence Level, Max Prob Queue:	95.0 %
Main Phase Grn Share Bal Crit:	2.0 %
Over-Capacity Permissive Left Adj.:	Off

PERFORMANCE RESULTS:

Flow Ratio Table:

ϕ Lane	Clr. Vol.	Sat'n	y	Max. y	Eff. Green	Deg. Sat'n	Ped. Inc.
1 SB TRL	55	1425	0.059		11.0	0.116	
1 NB RL	284	1868	0.153	✓	33.0	0.343	0.085
2 WB T	175	1591	0.110	✓	11.0	1.000	
2 WB L	194	1850	0.105		11.0	0.954	
3 EB T	260	1591	0.578	✓	41.0	0.404	0.164
3 EB L	6	159	0.000		29.0	0.000	
3 SB TR	172	1661	0.116		39.0	0.298	
3 SB T	136	1662	0.116		39.0	0.298	
Total:			0.401				+0.189

Other Measures:

Lane	Total Vol.	Total Cap.	Lane Deg. Satn	Avg. Veh. Delay	Avg. Queue (Cond)	Max. Prob. Queue	Prob. Disch. Ovrld.
SB TRL	55	479	0.116	24	2	4	0.0%
NB RL	226	520	0.434	29	6	12	0.2%
WB T	458	827	0.553	19	11	20	0.3%
WB L	266	611	0.436	18	7	13	0.1%
EB TR	172	578	0.298	22	5	9	0.0%
EB T	196	657	0.298	22	5	10	0.0%
Int'n:	1,373	3,663		22			

NOTE(S):
* Main Phase Green Times have NOT been Balanced.

SUMMARY of KEY RESULTS:

Cycle Time: 100.0 sec.
Lost Time: 15.0 sec.
Degree of Saturation: 0.472

CCG/CALC 2 PERFORMANCE ANALYSIS DATA SUMMARY
FUTURE TOTAL TRAFFIC

Project : CHERRY ST. REVIEW-JN07
Scenario : WKDAY PM P H OP6 MAL
Data File: TOT-PM6.PC2

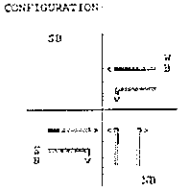
Page : 1
Printed On: June 20, 2007
Printed At: 9:33 PM

INTERSECTION: CHERRY/MILL

DEMAND VOLUMES:

Vehicles	Volume Adjustments	Pedestrian Volume	Pedestrian Walk Dst/Med Width(m)
SB: 0 / 0 / 89 / 482	3.0% / 3.0% / 3.0% / 3.0%	200	0/0
NB: 0 / 561 / 190 / 0 / 63 / 51	3.0% / 3.0% / 3.0% / 3.0%	200 / 200 / 200	16/0 / 16/0 / 18/0

CONFIGURATION:



SIGNAL PHASING INFORMATION:

Φ Type	Permitted Moves: SB	NB	NB	EB	Signal Timings: Green	Amber	Red	SAG	Effective Times: Eff. Green	Lost Time	Ped. X+W
1 NB Main			RL		42.0	3.0	2.0	0.0	42.0	5.0	23.3
2 NB Advance		TL	R		21.0	3.0	3.0	0.0	22.0	3.0	5.0
3 S-W Main		TL		RT	24.0	3.0	2.0	0.0	24.0	5.0	22.0
Total:					87.0	9.0	4.0	0.0	88.0	12.0	

Methodology: Canadian Capacity Guide, 2nd Edition (1995) (vv)

Approach Specific Adjustments:	SB	WB	NB	EB
Lefts/Cycle on IG (PCU):	0.0	2.0	0.0	0.0
Shared Lefts/Cycle on IG (PCU):	0.0	0.0	0.0	0.0
Rights/Cycle on IG (PCU):	0.0	0.0	1.0	0.0
Progression Regime (1-6):	3	3	3	3
Prot Left Turn Sat'n Adj.:	1.00	1.00	1.00	1.00
Perm Left Turn Sat'n Adj.:	1.00	1.00	1.00	1.00
Right Turn (No Peds) Sat'n Adj.:	0.80	0.80	0.80	0.80
Through Lane Sat'n Adj.:	1.00	1.00	1.00	1.00

Other Settings:

Through Saturation:	1650 PCU/hour
Rights thru Pedestrians Formula:	Toronto
Pedestrian Walking Speed:	1.2 m/sec.
Min Pedestrian Walk Interval:	7.0 sec.
Delay Evaluation Interval:	60.0 min.
Confidence Level, Max Prob Queue:	95.0 %
Main Phase Grn Share Bal Crit:	5.0 %
Over-Capacity Permissive Left Adj.:	Off

PERFORMANCE RESULTS:

Flow Ratio Table:

Φ Lane	Clr. Vol.	Sat'n	y	Max. y	Eff. Green	Deg. Sat'n	Ped. Inc.
1 NB R	251	803	0.380	✓	42.0	0.662	
1 NB L	51	1650	0.032		42.0	0.036	
2 WB T	92	1650	0.056		22.0	0.353	
2 WB L	363	1650	0.220	✓	22.0	1.030	
2 WB R	290	1320	0.220		22.0	1.030	
3 EB T	0	1650	0.000		24.0	0.000	
3 WB L	61	653	0.093		24.0	0.455	
3 EB R	86	853	0.293	✓	24.0	0.405	
3 EB T	376	1650	0.119		24.0	0.444	0.071
Total:			0.619				+0.071

Other Measures:

Lane	Total Vol.	Total Cap.	Lane Deg. Satn	Avg. Veh. Delay	Avg. Queue (Cons)	Max. Prob. Queue	Prob. Disch. Ovrld.
NB R	578	733	0.821	25	16	24	13.5%
NB L	51	693	0.076	18	1	4	0.0%
WB T	92	792	0.116	15	1	5	0.0%
WB L	496	570	0.871	44	14	21	22.6%
WB R	85	329	0.430	39	3	5	1.1%
EB T	196	396	0.494	37	5	10	1.0%
Int'n:	1,503	3,354		33			

NOTE(S):
* Main Phase Green Times have NOT been Balanced

SUMMARY of KEY RESULTS:

Cycle Time: 100.0 sec.
Lost Time: 12.0 sec.
Degree of Saturation: 0.703

CCG/CALC 2 PERFORMANCE ANALYSIS DATA SUMMARY
FUTURE TOTAL TRAFFIC

Project : CHERRY ST. REVIEW-JN07
Scenario : WKDAY PM P H OP6 MAL
Data File: TOT-PM6.PC2

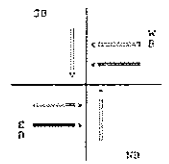
Page : 1
Printed On: June 21, 2007
Printed At: 8:17 AM

INTERSECTION: CHERRY/FRONT

DEMAND VOLUMES:

Vehicles	Volume Adjustments	Pedestrian Volume	Pedestrian Walk Dst/Med Width(m)
SB: 0 / 0 / 264 / 0	3.0% / 3.0% / 3.0% / 3.0%	200	23/0
NB: 0 / 3 / 565 / 0 / 0	3.0% / 3.0% / 3.0% / 3.0%	200 / 200 / 200	16/0 / 16/0 / 23/0

CONFIGURATION:



SIGNAL PHASING INFORMATION:

Φ Type	Permitted Moves: SB	NB	NB	EB	Signal Timings: Green	Amber	Red	SAG	Effective Times: Eff. Green	Lost Time	Ped. X+W
1 W-S Main	RTL		RTL		18.0	3.0	2.0	0.0	18.0	5.0	20.3
2 E-W Main		RTL		RTL	66.0	3.0	2.0	0.0	66.0	5.0	26.2
3 EB Rec Rt				L	4.0	1.0	1.0	0.0	0.0	0.0	0.0
Total:					88.0	7.0	5.0	0.0	66.0	34.0	

Methodology: Canadian Capacity Guide, 2nd Edition (1995) (vv)

Approach Specific Adjustments:	SB	WB	NB	EB
Lefts/Cycle on IG (PCU):	0.0	0.0	0.0	0.0
Shared Lefts/Cycle on IG (PCU):	0.0	0.0	0.0	0.0
Rights/Cycle on IG (PCU):	0.0	0.0	0.0	0.0
Progression Regime (1-6):	3	3	3	3
Prot Left Turn Sat'n Adj.:	1.00	1.00	1.00	1.00
Perm Left Turn Sat'n Adj.:	1.00	1.00	1.00	1.00
Right Turn (No Peds) Sat'n Adj.:	0.80	0.80	0.80	0.80
Through Lane Sat'n Adj.:	1.00	1.00	1.00	1.00

Other Settings:

Through Saturation:	1650 PCU/hour
Rights thru Pedestrians Formula:	Toronto
Pedestrian Walking Speed:	1.2 m/sec.
Min Pedestrian Walk Interval:	7.0 sec.
Delay Evaluation Interval:	60.0 min.
Confidence Level, Max Prob Queue:	95.0 %
Main Phase Grn Share Bal Crit:	5.0 %
Over-Capacity Permissive Left Adj.:	Off

PERFORMANCE RESULTS:

Flow Ratio Table:

Φ Lane	Clr. Vol.	Sat'n	y	Max. y	Eff. Green	Deg. Sat'n	Ped. Inc.
1 SB T	0	1650	0.000		18.0	0.000	
1 NB T	0	1650	0.000		18.0	0.000	
2 WB T	136	1650	0.082		66.0	0.125	
2 WB T	136	1650	0.082	✓	66.0	0.237	0.074
2 EB T	260	1650	0.158		66.0	0.239	
2 EB T	260	1650	0.158		66.0	0.239	
Total:			0.158				+0.074

Other Measures:

Lane	Total Vol.	Total Cap.	Lane Deg. Satn	Avg. Veh. Delay	Avg. Queue (Cons)	Max. Prob. Queue	Prob. Disch. Ovrld.
SB T	0	297	0.000	34	0	0	0.0%
NB T	0	297	0.000	34	0	0	0.0%
WB T	136	1,089	0.125	7	4	8	0.0%
WB T	136	1,089	0.125	7	4	8	0.0%
EB T	260	1,089	0.239	7	7	13	0.0%
EB T	260	1,089	0.239	7	7	13	0.0%
Int'n:	792	4,950		7			

NOTE(S):
* Main Phase Green Times have NOT been Balanced

SUMMARY of KEY RESULTS:

Cycle Time: 100.0 sec.
Lost Time: 34.0 sec.
Degree of Saturation: 0.239

CCG/CALC 2 PERFORMANCE ANALYSIS DATA SUMMARY
FUTURE TOTAL TRAFFIC

Project : CHERRY ST. REVIEW-JN07
Scenario : WKDAY PM P H OP6 MAL
Data File: TOT-PM6.PC2

Page : 1
Printed On: June 20, 2007
Printed At: 9:36 PM

INTERSECTION: CHERRY/EASTERN

DEMAND VOLUMES:

Vehicles

196	26
0	550
195	0
50	0
1,137	0
0	0

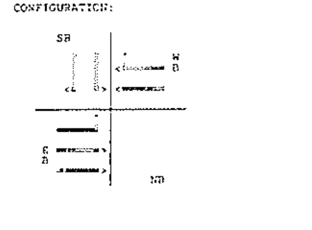
Volume Adjustments

3.0%	3.0%
3.0%	3.0%
3.0%	3.0%
3.0%	3.0%
3.0%	3.0%
3.0%	3.0%

Pedestrian Volume: 200 (top), 200 (left), 200 (right), 200 (bottom)

Pedestrian Walk Dst/Med Width(m): 19/0 (top), 23/0 (left), 23/0 (right), 19/0 (bottom)

CONFIGURATION:



SIGNAL PHASING INFORMATION:

φ Type	Permitted Moves: SB	WB	NB	EB	Signal Timings: Green	Amber	Red	SAG	Effective Times: Eff. Green	Lost Time	Ped. X-W
1 SB Main	RL				41.0	3.0	2.0	0.0	41.0	5.0	26.2
2 E-W Main		RTL		RTL	49.0	3.0	2.0	0.0	49.0	5.0	22.3
Total:					90.0	6.0	4.0	0.0	90.0	10.0	

Methodology: Canadian Capacity Guide, 2nd Edition (1995) (vv)

Approach Specific Adjustments:	SB	WB	NB	EB
Lefts/Cycle on IG (PCU):	2.0	0.0	0.0	1.0
Shared Lefts/Cycle on IG (PCU):	0.0	0.0	0.0	0.0
Rights/Cycle on IG (PCU):	2.0	0.0	0.0	0.0
Progression Regime (1-6):	3	3	3	3
Prot Left Turn Sat'n Adj.:	1.00	1.00	1.00	1.00
Perm Left Turn Sat'n Adj.:	1.00	1.00	1.00	1.00
Right Turn (No Peds) Sat'n Adj.:	0.60	0.80	0.80	0.80
Through Lane Sat'n Adj.:	1.00	1.00	1.00	1.00

Other Settings:

Through Saturation:	1650 PCU/hour
Rights thru Pedestrians Formula:	Toronto
Pedestrian Walking Speed:	1.2 m/sec.
Min Pedestrian Walk Interval:	7.0 sec.
Delay Evaluation Interval:	60.0 min.
Confidence Level, Max Prob Queue:	95.0 %
Main Phase Grn Share Bal Crit:	2.0 %
Over-Capacity Permissive Left Adj.:	Off

PERFORMANCE RESULTS:

Flow Ratio Table:

φ Lane	Clr. Vol.	Sat'n	y	Max. y	Eff. Green	Deg. Sat'n	Ped. Inc.
1 SB R	329	855	0.144	✓	41.0	0.351	0.088
1 SB L	132	1650	0.000		41.0	0.155	
2 WB TR	440	1567	0.281		49.0	0.574	
2 WB T	464	1650	0.281		49.0	0.574	
2 EB T	586	1650	0.355	✓	49.0	0.724	
2 EB T	586	1650	0.355		49.0	0.724	
2 EB L	16	347	0.045		49.0	0.091	
Total:				0.439			+0.088

Other Measures:

Lane	Total Vol.	Total Cap.	Lane Deg. Satn	Avg. Veh. Delay	Avg. Queue (Cons)	Max. Prob. Queue	Prob. Disch. Ovrld.
SB R	201	439	0.457	25	6	11	0.5%
SB L	204	749	0.272	20	6	11	0.0%
WB TR	440	768	0.574	21	12	20	0.7%
WB T	464	809	0.574	21	13	20	0.7%
EB T	586	809	0.724	26	16	25	6.7%
EB T	586	809	0.724	26	16	25	6.7%
EB L	52	206	0.250	16	1	4	0.1%
Int'n:	2,532	4,587		24			

NOTE(S):
* Main Phase Green Times have NOT been Balanced.

SUMMARY of KEY RESULTS:

Cycle Time: 100.0 sec.
Lost Time: 10.0 sec.
Degree of Saturation: 0.554

CCG/CALC 2 PERFORMANCE ANALYSIS DATA SUMMARY
FUTURE TOTAL TRAFFIC

Project : CHERRY ST. REVIEW-JN07
Scenario : WKDAY PM P H OP6 MAL
Data File: TOT-PM6.PC2

Page : 1
Printed On: June 20, 2007
Printed At: 9:38 PM

INTERSECTION: CHERRY/KING

DEMAND VOLUMES:

Vehicles

9	0
20	260
27	110
0	135
498	0
92	52

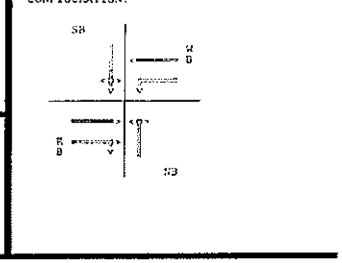
Volume Adjustments

27.0%	3.0%
3.0%	9.0%
3.0%	4.0%
3.0%	3.0%
15.0%	3.0%
4.0%	3.0%

Pedestrian Volume: 200 (top), 200 (left), 200 (right), 200 (bottom)

Pedestrian Walk Dst/Med Width(m): 8.0/0 (top), 19/0 (left), 19/0 (right), 23/0 (bottom)

CONFIGURATION:



SIGNAL PHASING INFORMATION:

φ Type	Permitted Moves: SB	WB	NB	EB	Signal Timings: Green	Amber	Red	SAG	Effective Times: Eff. Green	Lost Time	Ped. X-W
1 N-S Main	RTL		RL		33.0	3.0	2.0	0.0	33.0	5.0	22.6
2 WB Advance		RTL			9.0	3.0	1.0	0.0	11.0	2.0	0.0
3 E-W Main		RTL		RTL	39.0	3.0	2.0	0.0	39.0	5.0	31.2
4 ~~EB Lef-Rt~~				L	3.0	1.0	1.0	0.0	0.0	5.0	0.0
Total:					84.0	10.0	6.0	0.0	83.0	17.0	

TRANSIT PHASE

Methodology: Canadian Capacity Guide, 2nd Edition (1995) (vv)

Approach Specific Adjustments:	SB	WB	NB	EB
Lefts/Cycle on IG (PCU):	0.0	2.0	0.0	0.0
Shared Lefts/Cycle on IG (PCU):	0.0	0.0	0.0	0.0
Rights/Cycle on IG (PCU):	0.0	0.0	2.0	0.0
Progression Regime (1-6):	3	3	3	3
Prot Left Turn Sat'n Adj.:	1.00	1.00	1.00	1.00
Perm Left Turn Sat'n Adj.:	1.00	1.00	1.00	1.00
Right Turn (No Peds) Sat'n Adj.:	0.80	0.69	0.80	0.65
Through Lane Sat'n Adj.:	1.00	0.86	1.00	0.91

Other Settings:

Through Saturation:	1650 PCU/hour
Rights thru Pedestrians Formula:	Toronto
Pedestrian Walking Speed:	1.2 m/sec.
Min Pedestrian Walk Interval:	7.0 sec.
Delay Evaluation Interval:	60.0 min.
Confidence Level, Max Prob Queue:	95.0 %
Main Phase Grn Share Bal Crit:	2.0 %
Over-Capacity Permissive Left Adj.:	Off

PERFORMANCE RESULTS:

Flow Ratio Table:

φ Lane	Clr. Vol.	Sat'n	y	Max. y	Eff. Green	Deg. Sat'n	Ped. Inc.
1 SB TRL	60	1709	0.046	✓	33.0	0.139	
1 NB RL	132	1166	0.111	✓	33.0	0.343	0.085
2 WB T	175	1591	0.110	✓	11.0	1.000	
2 WB L	42	1850	0.023		11.0	0.208	
3 WB T	106	2591	0.088		42.0	0.164	
3 WB L	0	439	0.000		39.0	0.000	
3 EB TR	301	1382	0.218		39.0	0.559	
3 EB T	367	1684	0.218	✓	39.0	0.559	0.064
Total:				0.441			+0.149

Other Measures:

Lane	Total Vol.	Total Cap.	Lane Deg. Satn	Avg. Veh. Delay	Avg. Queue (Cons)	Max. Prob. Queue	Prob. Disch. Ovrld.
SB TRL	60	432	0.139	24	2	5	0.0%
NB RL	204	457	0.446	29	6	11	0.2%
WB T	283	827	0.343	15	8	14	0.0%
WB L	114	447	0.256	16	3	7	0.0%
EB TR	301	539	0.559	28	8	14	1.2%
EB T	367	657	0.559	27	10	17	0.9%
Int'n:	1,330	3,359		24			

NOTE(S):
* Main Phase Green Times have NOT been Balanced.

SUMMARY of KEY RESULTS:

Cycle Time: 100.0 sec.
Lost Time: 17.0 sec.
Degree of Saturation: 0.531

OPTION 7

CCG/CALC 2 PERFORMANCE ANALYSIS DATA SUMMARY
FUTURE TOTAL TRAFFIC

Project : CHERRY ST. REVIEW-JN07 — Page : 1
Scenario : WKDAY AM P H OP7 5-L — Printed On: June 20, 2007
Data File: TO-AM7.PC2 — Printed At: 8:42 PM

INTERSECTION: CHERRY/MILL

DEMAND VOLUMES:

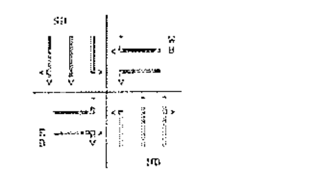
Vehicles: 25 | 24 ; 489 | 56 ; 44 | 298 ; 21 | 144 ; 74 | 263 ; 31 | 44

Volume Adjustments: 3.0% (all approaches)

Pedestrian Volume: 200 / 200 / 200 / 200

Pedestrian Walk Dst/Med Width(m): 16/0 / 16/0 / 16/0 / 16/0

CONFIGURATION:



SIGNAL PHASING INFORMATION:

# Type	SB	WB	NB	EB	Green	Amber	Red	SAG	Eff. Green	Lost Time	Ped. X-W
1 NS BTBL Rst	L		L		6.0	2.0	1.0	0.0	7.0	2.0	0.0
2 N-S Main	RT		RT		50.0	3.0	2.0	0.0	50.0	5.0	20.3
3 WB Advance		RTL			8.0	2.0	1.0	0.0	9.0	2.0	0.0
4 E-W Main		RTL		RTL	20.0	3.0	2.0	0.0	20.0	5.0	20.3
Total.					84.0	10.0	6.0	0.0	86.0	14.0	

Methodology: Canadian Capacity Guide, 2nd Edition (1995) (vv)

Approach Specific Adjustments:	SB	WB	NB	EB
Lefts/Cycle on IG (PCU):	2.0	2.0	2.0	2.0
Shared Lefts/Cycle on IG (PCU):	0.0	0.0	0.0	0.0
Rights/Cycle on IG (PCU):	0.0	0.0	0.0	0.0
Progression Regime (1-5):	3	3	3	3
Prot Left Turn Sat'n Adj.:	1.00	1.00	1.00	1.00
Perm Left Turn Sat'n Adj.:	1.00	1.00	1.00	1.00
Right Turn (No Peds) Sat'n Adj.:	0.80	0.80	0.80	0.80
Through Lane Sat'n Adj.:	1.00	1.00	1.00	1.00

Other Settings:
Through Saturation: 1650 PCU/hour
Rights thru Pedestrians Formula: Toronto
Pedestrian Walking Speed: 1.2 m/sec.
Min Pedestrian Walk Interval: 7.0 sec.
Delay Evaluation Interval: 60.0 min.
Confidence Level, Max Prob Queue: 95.0 %
Main Phase Grn Share Bal Crit: 2.0 %
Over-Capacity Permissive Left Adj.: Off

PERFORMANCE RESULTS:

Flow Ratio Table:

# Lane	Cir. Vol.	Sat'n	y	Max. y	Eff. Green	Deg. Sat'n	Ped. Inc.
1 SB L	26	1650	0.016		7.0	0.223	
1 NB L	45	1650	0.027	✓	7.0	0.392	
2 SB TR	255	1444	0.177	✓	50.0	0.355	
2 SB T	293	1650	0.177		50.0	0.355	
2 NB TR	150	916	0.163		50.0	0.327	
2 NB T	270	1650	0.163		50.0	0.327	
3 WB TR	82	1535	0.054		9.0	0.595	
3 WB L	149	1650	0.090	✓	9.0	1.000	
4 WB TR	0	1248	0.000		22.0	0.000	
4 WB L	76	819	0.093	✓	20.0	0.465	0.080
4 EB TR	108	1253	0.085		20.0	0.431	
4 EB L	0	1650	0.000		20.0	0.000	
Total.				0.308			+0.080

Other Measures:

Lane	Total Vol.	Total Cap.	Lane Deg. Satn	Avg. Veh. Delay	Avg. Queue (Cons)	Max. Prob. Queue	Prob. Disch. Ovrld.
SB L	26	116	0.223	48	1	3	0.6%
NB L	45	115	0.392	54	1	4	3.9%
SB TR	256	722	0.355	17	7	13	0.0%
SB T	293	825	0.355	16	8	14	0.0%
NB TR	150	458	0.327	17	4	9	0.0%
NB T	270	825	0.327	16	7	13	0.0%
WB TR	82	413	0.200	26	2	6	0.0%
WB L	297	384	0.772	48	8	14	13.0%
EB TR	108	251	0.431	40	3	7	1.2%
EB L	27	402	0.054	33	1	2	0.0%
Int'n:	1,548	4,510		27			

NOTE(S):
* Main Phase Green Times have NOT been Balanced.

SUMMARY of KEY RESULTS:
Cycle Time: 100.0 sec.
Lost Time: 14.0 sec.
Degree of Saturation: 0.451

CCG/CALC 2 PERFORMANCE ANALYSIS DATA SUMMARY
FUTURE TOTAL TRAFFIC

Project : CHERRY ST. REVIEW-JN07 — Page : 1
Scenario : WKDAY AM P H OP7 5-L — Printed On: June 20, 2007
Data File: TO-AM7.PC2 — Printed At: 8:42 PM

INTERSECTION: CHERRY/FRONT

DEMAND VOLUMES:

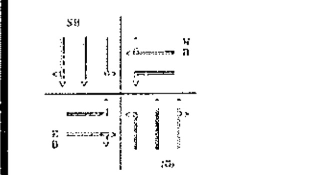
Vehicles: 23 | 228 ; 331 | 295 ; 30 | 321 ; 31 | 78 ; 112 | 195 ; 39 | 33

Volume Adjustments: 3.0% (all approaches)

Pedestrian Volume: 200 / 200 / 200 / 200

Pedestrian Walk Dst/Med Width(m): 16/0 / 16/0 / 16/0 / 16/0

CONFIGURATION:



SIGNAL PHASING INFORMATION:

# Type	SB	WB	NB	EB	Green	Amber	Red	SAG	Eff. Green	Lost Time	Ped. X-W
1 NS BTBL Rst	L		L		5.0	2.0	1.0	0.0	6.0	2.0	0.0
2 N-S Main	RT		RT		33.0	3.0	2.0	0.0	33.0	5.0	20.3
3 WB Advance		RTL			6.0	2.0	1.0	0.0	7.0	2.0	0.0
4 E-W Main		RTL		RTL	40.0	3.0	2.0	0.0	40.0	5.0	20.3
Total.					84.0	10.0	6.0	0.0	88.0	12.0	

Methodology: Canadian Capacity Guide, 2nd Edition (1995) (vv)

Approach Specific Adjustments:	SB	WB	NB	EB
Lefts/Cycle on IG (PCU):	2.0	2.0	2.0	2.0
Shared Lefts/Cycle on IG (PCU):	0.0	0.0	0.0	0.0
Rights/Cycle on IG (PCU):	0.0	0.0	0.0	0.0
Progression Regime (1-6):	3	3	3	3
Prot Left Turn Sat'n Adj.:	1.00	1.00	1.00	1.00
Perm Left Turn Sat'n Adj.:	1.00	1.00	1.00	1.00
Right Turn (No Peds) Sat'n Adj.:	0.80	0.80	0.80	0.80
Through Lane Sat'n Adj.:	1.00	1.00	1.00	1.00

Other Settings:
Through Saturation: 1650 PCU/hour
Rights thru Pedestrians Formula: Toronto
Pedestrian Walking Speed: 1.2 m/sec.
Min Pedestrian Walk Interval: 7.0 sec.
Delay Evaluation Interval: 60.0 min.
Confidence Level, Max Prob Queue: 95.0 %
Main Phase Grn Share Bal Crit: 2.0 %
Over-Capacity Permissive Left Adj.: Off

PERFORMANCE RESULTS:

Flow Ratio Table:

# Lane	Cir. Vol.	Sat'n	y	Max. y	Eff. Green	Deg. Sat'n	Ped. Inc.
1 SB L	30	1650	0.018		6.0	0.302	
1 NB L	34	1650	0.021	✓	6.0	0.343	
2 SB TR	172	1423	0.121		33.0	0.367	
2 SB T	200	1650	0.121	✓	33.0	0.367	0.052
2 NB TR	100	960	0.104		33.0	0.314	
2 NB T	171	1650	0.104		33.0	0.314	
3 WB TR	104	1498	0.070	✓	7.0	1.000	
3 WB L	116	1650	0.070		7.0	1.000	
4 WB TR	435	1205	0.361	✓	42.0	0.899	
4 WB L	143	1000	0.143		40.0	0.358	
4 EB TR	156	1354	0.115		40.0	0.287	
4 EB L	0	413	0.000		40.0	0.000	
Total.				0.572			+0.052

Other Measures:

Lane	Total Vol.	Total Cap.	Lane Deg. Satn	Avg. Veh. Delay	Avg. Queue (Cons)	Max. Prob. Queue	Prob. Disch. Ovrld.
SB L	30	99	0.302	53	1	3	1.0%
NB L	34	99	0.343	55	1	3	1.6%
SB TR	172	469	0.367	28	5	9	0.0%
SB T	200	545	0.367	27	6	11	0.0%
NB TR	100	317	0.314	28	3	6	0.1%
NB T	171	545	0.314	27	5	9	0.0%
WB TR	539	610	0.883	43	15	23	24.8%
WB L	331	587	0.563	23	7	16	1.3%
EB TR	156	541	0.287	22	4	9	0.0%
EB L	32	237	0.135	20	1	3	0.0%
Int'n:	1,763	4,050		32			

NOTE(S):
* Main Phase Green Times have NOT been Balanced.

SUMMARY of KEY RESULTS:
Cycle Time: 100.0 sec.
Lost Time: 12.0 sec.
Degree of Saturation: 0.650

CCG/CALC 2 PERFORMANCE ANALYSIS DATA SUMMARY
FUTURE TOTAL TRAFFIC

Project : CHERRY ST. REVIEW-JN07
Scenario : WKDAY AM P H OP7 5-L
Data File: TO-AM7.PC2

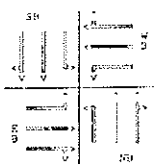
Page : 1
Printed On: June 20, 2007
Printed At: 8:42 PM

INTERSECTION: CHERRY/EASTERN

DEMAND VOLUMES:

Vehicles			Volume Adjustments		Pedestrian Volume		Pedestrian Walk Dst/Med Width(m)	
29	44		3.0%	3.0%				
140	1,174		3.0%	3.0%	200		21/3	
271	138		3.0%	3.0%				
23	160		3.0%	3.0%	200	200	23/0	23/0
992	130		3.0%	3.0%				
9	120		3.0%	3.0%	200		16/0	

CONFIGURATION:



SIGNAL PHASING INFORMATION:

# Type	Permitted Moves: SB	WB	NB	EB	Signal Timings: Green	Amber	Red	SAG	Effective Times: Eff. Green	Lost Time	Ped. X-W
1 NS RTOL Rst	L		L		7.0	2.0	1.0	0.0	8.0	2.0	0.0
2 N-S Main	RT		RT		33.0	3.0	2.0	0.0	33.0	5.0	26.2
3 WB Advance		RTL			9.0	3.0	1.0	0.0	13.0	2.0	6.0
4 E-W Main		RTL		RTL	35.0	3.0	2.0	0.0	35.0	5.0	24.5
Total:					84.0	10.0	6.0	0.0	86.0	14.0	

Methodology: Canadian Capacity Guide, 2nd Edition (1995) (vv)

Approach Specific Adjustments:	SB	WB	NB	EB
Lefts/Cycle on IG (PCU):	2.0	2.0	2.0	2.0
Shared Lefts/Cycle on IG (PCU):	0.0	0.0	0.0	0.0
Rights/Cycle on IG (PCU):	1.5	0.0	1.0	0.0
Progression Regime (1-6):	3	3	3	3
Prot Left Turn Sat'n Adj.:	1.00	1.00	1.00	1.00
Perm Left Turn Sat'n Adj.:	1.00	1.00	1.00	1.00
Right Turn (No Peds) Sat'n Adj.:	0.80	0.80	0.80	0.80
Through Lane Sat'n Adj.:	1.00	1.00	1.00	1.00

Other Settings:	
Through Saturation:	1650 PCU/hour
Rights thru Pedestrians Formula:	Toronto
Pedestrian Walking Speed:	1.2 m/sec.
Min Pedestrian Walk Interval:	7.0 sec.
Delay Evaluation Interval:	60.0 min.
Confidence Level, Max Prob Queue:	95.0 %
Main Phase Grn Share Bal Crit:	2.0 %
Over-Capacity Permissive Left Adj.:	Off

PERFORMANCE RESULTS:

Flow Ratio Table:

# Lane	Clr. Vol.	Sat'n	y	Max. y	Eff. Green	Deg. Sat'n	Ped. Inc.
1 SB L	30	1650	0.018		8.0	0.226	
1 NB L	124	1650	0.075		8.0	0.936	
2 SB TR	226	871	0.259	✓	33.0	0.786	
2 SB T	152	1650	0.092		33.0	0.280	
2 NB TR	139	673	0.148		35.0	0.447	
2 NB T	134	1650	0.081		35.0	0.246	
3 WB TR	162	1620	0.100	✓	10.0	1.000	
3 WB T	165	1650	0.100		10.0	1.000	
3 WB L	1132	1650	0.686		10.0	0.000	
4 EB TR	449	1542	0.291		37.0	0.784	
4 EB T	478	1650	0.290		37.0	0.784	
4 EB L	0	108	0.000		35.0	0.000	
4 EB TR	511	1650	0.310	✓	35.0	0.885	
4 EB T	511	1650	0.310		35.0	0.885	
4 EB L	0	178	0.000		35.0	0.000	
Total:			0.744				+0.000

Other Measures:

Lane	Total Vol.	Total Cap.	Lane Deg. Satn	Avg. Veh. Delay	Avg. Queue (Cons)	Max. Prob. Queue	Prob. Disch. Ovrld.
SB L	30	132	0.226	47	1	3	0.2%
NB L	124	132	0.936	151	3	7	26.2%
SB TR	202	344	0.821	53	8	14	56.9%
SB T	152	545	0.280	26	6	9	0.0%
NB TR	165	124	0.909	33	0	9	1.9%
NB T	134	545	0.246	26	4	8	0.0%
WB TR	611	735	0.831	35	17	29	19.3%
WB T	665	776	0.830	34	18	27	13.8%
WB L	304	275	0.742	41	6	11	12.0%
EB TR	511	578	0.886	52	14	32	56.1%
EB T	511	578	0.885	52	14	32	56.1%
EB L	36	134	0.225	37	1	3	0.3%
Int'n:	3,397	5,095		45			

NOTE(S):
* Main Phase Green Times have NOT been Balanced

SUMMARY of KEY RESULTS:

Cycle Time: 100.0 sec.
Lost Time: 14.0 sec.
Degree of Saturation: 0.865

CCG/CALC 2 PERFORMANCE ANALYSIS DATA SUMMARY
FUTURE TOTAL TRAFFIC

Project : CHERRY ST. REVIEW-JN07
Scenario : WKDAY AM P H OP7 5-L
Data File: TO-AM7.PC2

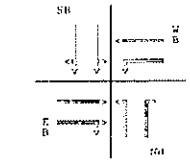
Page : 1
Printed On: June 20, 2007
Printed At: 8:43 PM

INTERSECTION: CHERRY/KING

DEMAND VOLUMES:

Vehicles			Volume Adjustments		Pedestrian Volume		Pedestrian Walk Dst/Med Width(m)	
7	0		25.0%	3.0%				
27	297		3.0%	9.0%	200		8.0/0	
18	276		3.0%	4.0%				
0	98		3.0%	3.0%	230	200	19/0	15/0
268	0		15.0%	3.0%	260		23/0	
53	121		4.0%	3.0%				

CONFIGURATION:



SIGNAL PHASING INFORMATION:

# Type	Permitted Moves: SB	WB	NB	EB	Signal Timings: Green	Amber	Red	SAG	Effective Times: Eff. Green	Lost Time	Ped. X-W
1 N-S Main	RTL		RL		37.0	3.0	2.0	0.0	37.0	5.0	0.0
2 WB Advance		RTL			9.0	3.0	1.0	0.0	11.0	2.0	3.0
3 E-W Main		RTL		RTL	35.0	3.0	2.0	0.0	35.0	5.0	0.0
4 Ped Only					3.0	1.0	1.0	0.0	0.0	5.0	31.2
Total:					84.0	10.0	6.0	0.0	83.0	17.0	

TRANSIT PHASE

Methodology: Canadian Capacity Guide, 2nd Edition (1995) (vv)

Approach Specific Adjustments:	SB	WB	NB	EB
Lefts/Cycle on IG (PCU):	0.0	2.0	0.0	0.0
Shared Lefts/Cycle on IG (PCU):	0.0	0.0	0.0	0.0
Rights/Cycle on IG (PCU):	0.0	0.0	2.0	0.0
Progression Regime (1-6):	3	3	3	3
Prot Left Turn Sat'n Adj.:	1.00	1.00	0.70	1.00
Perm Left Turn Sat'n Adj.:	1.00	1.00	0.70	1.00
Right Turn (No Peds) Sat'n Adj.:	0.80	0.70	0.56	0.56
Through Lane Sat'n Adj.:	1.00	0.87	0.70	0.92

Other Settings:	
Through Saturation:	1650 PCU/hour
Rights thru Pedestrians Formula:	Toronto
Pedestrian Walking Speed:	1.2 m/sec.
Min Pedestrian Walk Interval:	7.0 sec.
Delay Evaluation Interval:	60.0 min.
Confidence Level, Max Prob Queue:	95.0 %
Main Phase Grn Share Bal Crit:	2.0 %
Over-Capacity Permissive Left Adj.:	Off

PERFORMANCE RESULTS:

Flow Ratio Table:

# Lane	Clr. Vol.	Sat'n	y	Max. y	Eff. Green	Deg. Sat'n	Ped. Inc.
1 SB TR	25	1565	0.016		37.0	0.049	
1 SB L	30	1657	0.018		37.0	0.049	
1 NB R	101	414	0.244		37.0	0.685	
1 NB L	125	1025	0.122		37.0	0.329	
2 WB T	324	1650	0.196	✓	11.0	1.000	
2 WB T	150	1436	0.110		11.0	1.000	
3 WB L	182	1650	0.110		11.0	1.000	
3 WB T	266	1836	0.116		37.0	0.312	
3 WB T	84	709	0.049		35.0	0.136	
4 EB TR	476	1410	0.155	✓	35.0	0.359	
4 EB T	270	1510	0.128		35.0	0.359	
Total:			0.356				+0.000

Other Measures:

Lane	Total Vol.	Total Cap.	Lane Deg. Satn	Avg. Veh. Delay	Avg. Queue (Cons)	Max. Prob. Queue	Prob. Disch. Ovrld.
SB TR	25	516	0.049	20	1	3	0.0%
SB L	30	611	0.049	20	1	3	0.0%
NB R	101	414	0.244	23	3	8	0.0%
NB L	125	379	0.329	25	5	7	0.0%
WB T	324	669	0.479	23	9	15	0.1%
WB L	287	560	0.574	25	8	14	1.7%
WB TR	176	493	0.357	20	5	10	0.0%
EB T	190	531	0.357	20	5	10	0.0%
Int'n:	1,257	4,134		24			

NOTE(S):
* Main Phase Green Times have NOT been Balanced.
* Minimum Pedestrian Crossing Requirements have not been met.

SUMMARY of KEY RESULTS:

Cycle Time: 100.0 sec.
Lost Time: 17.0 sec.
Degree of Saturation: 0.429

CCG/CALC 2 PERFORMANCE ANALYSIS DATA SUMMARY
FUTURE TOTAL TRAFFIC

Project : CHERRY ST. REVIEW-JN07
Scenario : WKDAY PM P H OP7 5-L
Data File: TO-PM7.PC2

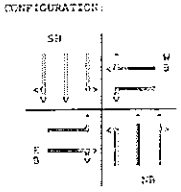
Page : 1
Printed On: June 20, 2007
Printed At: 8:44 PM

INTERSECTION: CHERRY/MILL

DEMAND VOLUMES:

Vehicles		Volume Adjustments		Pedestrian Volume		Pedestrian Walk Dst/Wid Width(m)	
37	19	3.0%	3.0%			16/0	
479	79	3.0%	3.0%	200			
26	278	3.0%	3.0%				
				200	200	16/0	16/0
71	229	3.0%	3.0%				
159	386	3.0%	3.0%	200		16/0	
36	45	3.0%	3.0%				

CONFIGURATION:



SIGNAL PHASING INFORMATION:

¢	Type	Permitted Moves: SB	WB	NB	EB	Signal Timings: Green	Amber	Red	SAG	Effective Times: Eff. Green	Lost Time	Ped. X-W
1	NS RTOL Pat	L		L		5.0	2.0	1.0	0.0	6.0	2.0	0.0
2	N-S Main	RT		RT		51.0	3.0	2.0	0.0	51.0	5.0	20.3
3	WB Advance		RTL			8.0	2.0	1.0	0.0	9.0	2.0	0.0
4	E-W Main		RTL		RTL	20.0	3.0	2.0	0.0	20.0	5.0	20.3
Total:						84.0	10.0	6.0	0.0	86.0	14.0	

Methodology: Canadian Capacity Guide, 2nd Edition (1995) (vv)

Approach Specific Adjustments:	SB	WB	NB	EB
Lefts/Cycle on 10 (PCU):	2.0	2.0	2.0	2.0
Shared Lefts/Cycle on 10 (PCU):	0.0	0.0	0.0	0.0
Rights/Cycle on 10 (PCU):	0.0	0.0	0.5	0.0
Progression Regime (1-6):	3	3	3	3
Prot Left Turn Sat'n Adj.:	1.00	1.00	1.00	1.00
Perm Left Turn Sat'n Adj.:	1.00	1.00	1.00	1.00
Right Turn (No Peds) Sat'n Adj.:	0.86	0.86	0.86	0.86
Through Lane Sat'n Adj.:	1.00	1.00	1.00	1.00

Other Settings:

Through Saturation:	1650 PCU/hour
Rights thru Pedestrians Formula:	Toronto
Pedestrian Walking Speed:	1.2 m/sec.
Min Pedestrian Walk Interval:	7.0 sec.
Delay Evaluation Interval:	60.0 min.
Confidence Level, Max Prob Queue:	95.0 %
Main Phase Grn Share Bal Crit:	2.0 %
Over-Capacity Permissive Left Adj.:	Off

PERFORMANCE RESULTS:

Flow Ratio Table:

¢	Lane	Cfr. Vol.	Sat'n	y	Max. y	Eff. Green	Deg. Sat'n	Ped. Inc.
1	SB L	38	1650	0.023	✓	6.0	0.385	
1	NB L	46	1650	0.028	✓	6.0	0.468	
2	SB TR	249	1669	0.149		51.0	0.324	
2	SB T	273	1650	0.165		51.0	0.324	
2	NB T	238	1650	0.144	✓	51.0	0.466	
2	NB TR	220	1525	0.237	✓	51.0	0.466	
3	WB L	392	1650	0.237		51.0	0.466	
3	WB TR	92	1656	0.056	✓	9.0	0.856	
4	EB L	149	1650	0.090	✓	9.0	1.000	
4	EB TR	0	1343	0.000		20.0	0.000	
4	WB L	66	431	0.153	✓	20.0	0.763	0.021
4	EB TR	201	1377	0.146		20.0	0.729	
4	EB L	1	1650	0.001		20.0	0.003	
Total:				0.508				+0.021

Other Measures:

Lane	Total Vol.	Total Cap.	Lane Deg. Satn	Avg. Veh. Delay	Avg. Queue (Cons)	Max. Prob. Queue	Prob. Disch. Gvrld.
SB L	38	99	0.385	56	1	3	2.3%
NB L	46	99	0.468	61	1	4	4.2%
SB TR	249	770	0.324	16	7	12	0.0%
SB T	273	842	0.324	16	8	13	0.0%
NB T	238	490	0.485	15	7	12	0.3%
NB TR	392	842	0.466	16	11	18	0.0%
WB TR	92	436	0.210	27	3	6	0.0%
WB L	206	307	0.933	91	6	14	27.8%
EB TR	201	275	0.729	55	5	11	11.2%
EB L	73	402	0.182	54	2	5	0.0%
Int'n:	1,886	4,561		35			

NOTE(S):
* Main Phase Green Times have NOT been Balanced.

SUMMARY of KEY RESULTS:

Cycle Time: 100.0 sec.
Lost Time: 14.0 sec.
Degree of Saturation: 0.591

CCG/CALC 2 PERFORMANCE ANALYSIS DATA SUMMARY
FUTURE TOTAL TRAFFIC

Project : CHERRY ST. REVIEW-JN07
Scenario : WKDAY PM P H OP7 5-L
Data File: TO-PM7.PC2

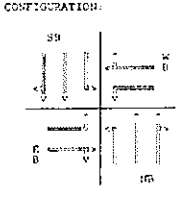
Page : 1
Printed On: June 20, 2007
Printed At: 8:45 PM

INTERSECTION: CHERRY/FRONT

DEMAND VOLUMES:

Vehicles		Volume Adjustments		Pedestrian Volume		Pedestrian Walk Dst/Wid Width(m)	
50	66	3.0%	3.0%			16/0	
346	116	3.0%	3.0%	200			
37	394	3.0%	3.0%				
				200	200	16/0	16/0
61	170	3.0%	3.0%				
491	226	3.0%	3.0%	200		16/0	
71	20	3.0%	3.0%				

CONFIGURATION:



SIGNAL PHASING INFORMATION:

¢	Type	Permitted Moves: SB	WB	NB	EB	Signal Timings: Green	Amber	Red	SAG	Effective Times: Eff. Green	Lost Time	Ped. X-W
1	NS RTOL Pat	L		L		6.0	2.0	1.0	0.0	7.0	2.0	0.0
2	N-S Main	RT		RT		32.0	3.0	2.0	0.0	32.0	5.0	20.3
3	WB Advance		RTL			6.0	2.0	1.0	0.0	7.0	2.0	0.0
4	E-W Main		RTL		RTL	40.0	3.0	2.0	0.0	40.0	5.0	20.3
Total:						84.0	10.0	6.0	0.0	86.0	14.0	

Methodology: Canadian Capacity Guide, 2nd Edition (1995) (vv)

Approach Specific Adjustments:	SB	WB	NB	EB
Lefts/Cycle on 10 (PCU):	2.0	2.0	2.0	2.0
Shared Lefts/Cycle on 10 (PCU):	0.0	0.0	0.0	0.0
Rights/Cycle on 10 (PCU):	0.0	0.0	1.0	0.0
Progression Regime (1-6):	3	3	3	3
Prot Left Turn Sat'n Adj.:	1.00	1.00	1.00	1.00
Perm Left Turn Sat'n Adj.:	1.00	1.00	1.00	1.00
Right Turn (No Peds) Sat'n Adj.:	0.86	0.86	0.86	0.86
Through Lane Sat'n Adj.:	1.00	1.00	1.00	1.00

Other Settings:

Through Saturation:	1650 PCU/hour
Rights thru Pedestrians Formula:	Toronto
Pedestrian Walking Speed:	1.2 m/sec.
Min Pedestrian Walk Interval:	7.0 sec.
Delay Evaluation Interval:	60.0 min.
Confidence Level, Max Prob Queue:	95.0 %
Main Phase Grn Share Bal Crit:	2.0 %
Over-Capacity Permissive Left Adj.:	Off

PERFORMANCE RESULTS:

Flow Ratio Table:

¢	Lane	Cfr. Vol.	Sat'n	y	Max. y	Eff. Green	Deg. Sat'n	Ped. Inc.
1	SB L	52	1650	0.031	✓	7.0	0.446	
1	NB L	21	1650	0.012		7.0	0.170	
2	SB TR	191	1384	0.138		32.0	0.408	
2	SB T	215	1650	0.131		32.0	0.408	
2	NB TR	147	869	0.170	✓	32.0	0.530	0.004
2	NB T	233	1650	0.141		32.0	0.441	
3	WB TR	107	1513	0.071	✓	7.0	1.000	
3	WB L	516	1650	0.070		7.0	1.000	
4	EB TR	83	1262	0.066		40.0	0.154	
4	WB L	12	218	0.056		40.0	0.141	
4	EB TR	579	1490	0.388	✓	40.0	0.971	
4	EB L	0	1287	0.000		40.0	0.000	
Total:				0.659				+0.004

Other Measures:

Lane	Total Vol.	Total Cap.	Lane Deg. Satn	Avg. Veh. Delay	Avg. Queue (Cons)	Max. Prob. Queue	Prob. Disch. Gvrld.
SB L	52	116	0.446	57	1	4	9.7%
NB L	21	116	0.178	47	1	2	0.3%
SB TR	191	444	0.408	29	5	10	0.2%
SB T	215	523	0.408	29	6	11	0.0%
NB TR	183	314	0.584	36	5	10	3.5%
NB T	233	528	0.441	30	6	12	0.1%
WB TR	107	636	0.295	16	5	10	0.0%
WB L	590	595	0.727	38	6	11	11.0%
EB TR	579	596	0.971	90	16	24	14.8%
EB L	63	587	0.107	19	2	5	0.0%
Int'n:	1,914	4,133		46			

NOTE(S):
* Main Phase Green Times have NOT been Balanced.

SUMMARY of KEY RESULTS:

Cycle Time: 100.0 sec.
Lost Time: 14.0 sec.
Degree of Saturation: 0.766

CCG/CALC 2 PERFORMANCE ANALYSIS DATA SUMMARY
FUTURE TOTAL TRAFFIC

Project : CHERRY ST. REVIEW-JN07
Scenario : WKDAY PM P H OP7 5-L
Data File: TO-PM7.PC2

Page : 1
Printed On: June 20, 2007
Printed At: 8:46 PM

INTERSECTION: CHERRY/EASTERN

DEMAND VOLUMES:

Vehicles	Volume Adjustments	Pedestrian Volume	Pedestrian Walk Dst/Med Width(m)
129 | 28 154 | 684 46 | 220	3.0% | 3.0% 3.0% | 3.0% 3.0% | 3.0%	200	21/0
50 | 342 1.07% | 59 6 | 35	3.0% | 3.0% 3.0% | 3.0% 3.0% | 3.0%	200 | 200 200	23/0 | 23/0 18/0

CONFIGURATION:

SIGNAL PHASING INFORMATION:

# Type	Permitted Moves: SB	WB	NB	EB	Signal Timings: Green	Amber	Red	SAG	Effective Times: Eff. Green	Lost Time	Ped. X-W
1 NS BTRL Ror	L		L		8.0	2.0	1.0	0.0	9.0	2.0	0.0
2 N-S Main	RT		RT		31.0	3.0	2.0	0.0	31.0	5.0	26.2
3 WB Advance		RTL			8.0	2.0	1.0	0.0	9.0	2.0	0.0
4 E-W Main		RTL		RTL	37.0	3.0	2.0	0.0	37.0	5.0	24.5
Total:					84.0	10.0	6.0	0.0	86.0	14.0	

Methodology: Canadian Capacity Guide, 2nd Edition (1995) (vv)

Approach Specific Adjustments:	SB	WB	NB	EB
Lefts/Cycle on IG (PCU):	2.0	2.0	2.0	2.0
Shared Lefts/Cycle on IG (PCU):	0.0	0.0	0.0	0.0
Rights/Cycle on IG (PCU):	0.0	0.0	0.5	0.0
Progression Regime (1-6):	3	3	3	3
Prot Left Turn Sat'n Adj.:	1.00	1.00	1.00	1.00
Perm Left Turn Sat'n Adj.:	1.00	1.00	1.00	1.00
Right Turn (No Peds) Sat'n Adj.:	0.80	0.80	0.80	0.80
Through Lane Sat'n Adj.:	1.00	1.00	1.00	1.00

Other Settings:

Through Saturation:	1650 PCU/hour
Rights thru Pedestrians Formula:	Toronto
Pedestrian Walking Speed:	1.2 m/sec.
Min Pedestrian Walk Interval:	7.0 sec.
Delay Evaluation Interval:	60.0 min.
Confidence Level, Max Prob Queue:	95.0 %
Main Phase Grn Share Bal Crit:	2.0 %
Over-Capacity Permissive Left Adj.:	Off

PERFORMANCE RESULTS:

Flow Ratio Table:

# Lane	Clr. Vol.	Sat'n	y	Max. y	Eff. Green	Deg. Sat'n	Ped. Inc.
1 SB L	231	1650	0.140	✓	9.0	0.837*	
1 SB T	40	1650	0.024		9.0	0.271	
1 SB TR	82	1080	0.075		31.0	0.243	
2 SB L	124	1650	0.075	✓	31.0	0.240	
2 SB TR	249	865	0.287		31.0	0.862	
1 NB L	61	1650	0.037		31.0	0.119	
1 NB T	358	1618	0.690	✓	9.0	1.000	
2 NB TR	168	1618	0.104		9.0	1.000	
1 WB L	249	1650	0.093		9.0	1.000	
2 WB T	249	1650	0.093		9.0	1.000	
1 WB R	249	1650	0.150		9.0	1.000	
1 EB L	113	1542	0.139		39.0	0.353	
1 EB TR	227	1650	0.138		39.0	0.353	
1 NB L	6	95	0.064		37.0	0.173	
1 EB TR	554	1634	0.339		37.0	0.916	
2 EB T	559	1650	0.339	✓	37.0	0.916	
2 EB L	0	657	0.000		37.0	0.000	
Total:			0.977				+0.000

Other Measures:

Lane	Total Vol.	Total Cap.	Lane Deg. Satn	Avg. Veh. Delay	Avg. Queue (Cons)	Max. Prob. Queue	Prob. Disch. Ovrld.
SB L	133	149	0.895	119	4	8	31.1%
SB T	40	149	0.271	47	1	4	0.6%
SB TR	82	335	0.243	27	1	5	0.0%
SB T	124	512	0.241	27	2	5	0.0%
SB TR	249	286	0.871	69	7	12	26.1%
NB L	61	512	0.119	25	2	5	0.0%
NB TR	358	747	0.479	20	10	17	3.1%
NB L	168	792	0.474	20	10	17	3.1%
WB L	227	256	0.885	69	6	12	23.7%
WB TR	554	605	0.916	58	15	25	29.6%
EB L	559	611	0.916	57	14	24	27.4%
EB L	52	315	0.164	22	2	4	0.0%
Int'n:	2,814	5,266		49			

NOTE(S):

SUMMARY of KEY RESULTS:

Cycle Time: 100.0 sec.
Lost Time: 14.0 sec.
Degree of Saturation: 0.903

CCG/CALC 2 PERFORMANCE ANALYSIS DATA SUMMARY
FUTURE TOTAL TRAFFIC

Project : CHERRY ST. REVIEW-JN07
Scenario : WKDAY PM P H OP7 5-L
Data File: TO-PM7.PC2

Page : 1
Printed On: June 20, 2007
Printed At: 8:46 PM

INTERSECTION: CHERRY/KING

DEMAND VOLUMES:

Vehicles	Volume Adjustments	Pedestrian Volume	Pedestrian Walk Dst/Med Width(m)
9 | 0 20 | 258 27 | 122	29.0% | 3.0% 3.0% | 9.0% 3.0% | 4.0%	200	8.0/0
0 | 136 532 | 0 92 | 62	3.0% | 3.0% 15.0% | 3.0% 4.0% | 3.0%	200 | 200 200	19/0 | 19/0 29/0

CONFIGURATION:

SIGNAL PHASING INFORMATION:

# Type	Permitted Moves: SB	WB	NB	EB	Signal Timings: Green	Amber	Red	SAG	Effective Times: Eff. Green	Lost Time	Ped. X-W
1 N-S Main	RTL		RTL		37.0	3.0	2.0	0.0	37.0	5.0	0.0
2 WB Advance		RTL			9.0	3.0	1.0	0.0	11.0	2.0	0.0
3 E-W Main		RTL		RTL	35.0	3.0	2.0	0.0	35.0	5.0	0.0
4 Ped-Only					3.0	1.0	1.0	0.0	0.0	5.0	31.2
Total:					84.0	10.0	6.0	0.0	83.0	17.0	

TRANSIT PHASE

Methodology: Canadian Capacity Guide, 2nd Edition (1995) (vv)

Approach Specific Adjustments:	SB	WB	NB	EB
Lefts/Cycle on IG (PCU):	0.0	2.0	0.0	0.0
Shared Lefts/Cycle on IG (PCU):	0.0	0.0	0.0	0.0
Rights/Cycle on IG (PCU):	0.0	0.0	2.0	0.0
Progression Regime (1-6):	3	3	3	3
Prot Left Turn Sat'n Adj.:	1.00	1.00	0.70	1.00
Perm Left Turn Sat'n Adj.:	1.00	1.00	0.70	1.00
Right Turn (No Peds) Sat'n Adj.:	0.80	0.70	0.56	0.66
Through Lane Sat'n Adj.:	1.00	0.87	0.70	0.92

Other Settings:

Through Saturation:	1650 PCU/hour
Rights thru Pedestrians Formula:	Toronto
Pedestrian Walking Speed:	1.2 m/sec.
Min Pedestrian Walk Interval:	7.0 sec.
Delay Evaluation Interval:	60.0 min.
Confidence Level, Max Prob Queue:	95.0 %
Main Phase Grn Share Bal Crit:	2.0 %
Over-Capacity Permissive Left Adj.:	Off

PERFORMANCE RESULTS:

Flow Ratio Table:

# Lane	Clr. Vol.	Sat'n	y	Max. y	Eff. Green	Deg. Sat'n	Ped. Inc.
1 SB TR	28	1226	0.023		37.0	0.047	
1 SB T	32	1650	0.020		37.0	0.053	
1 SB R	140	824	0.074	✓	37.0	0.197	
1 NB L	64	1015	0.063		37.0	0.170	
2 NB T	158	1436	0.110	✓	11.0	1.000	
2 NB TR	155	1650	0.094		11.0	0.303	
1 WB T	121	1426	0.085		37.0	0.232	
1 WB R	0	1583	0.000		35.0	0.000	
1 EB TR	315	1764	0.179	✓	35.0	0.701	
1 EB T	373	1519	0.245		35.0	0.701	
Total:			0.429				+0.000

Other Measures:

Lane	Total Vol.	Total Cap.	Lane Deg. Satn	Avg. Veh. Delay	Avg. Queue (Cons)	Max. Prob. Queue	Prob. Disch. Ovrld.
SB TR	28	488	0.057	20	1	3	0.0%
SB T	32	611	0.053	20	1	3	0.0%
SB R	140	424	0.330	22	4	9	9.1%
NB L	64	374	0.170	22	2	5	0.0%
NB T	281	689	0.408	19	8	14	9.0%
WB L	127	356	0.356	20	4	8	9.1%
EB TR	335	479	0.701	37	9	16	9.0%
EB T	373	531	0.701	36	10	17	6.2%
Int'n:	1,380	3,942		29			

NOTE(S):
* Main Phase Green Times have NOT been Balanced.
* Minimum Pedestrian Crossing Requirements have not been met.

SUMMARY of KEY RESULTS:

Cycle Time: 100.0 sec.
Lost Time: 17.0 sec.
Degree of Saturation: 0.517

DRAFT

Waterfront Transit Environmental Assessment

West Don Lands – City of Toronto

Cherry Street –Design Alternatives

(Option 3, 5, 8)

Traffic Volume Forecasts & Operations Analysis

Prepared For:
TTC-WATERFRONToronto

August 2007

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BA GROUP
Transportation Consultants

Signal Timing/Phasing Summary
Available Green Time N-S transit Movements

Cherry Street/Mill Street

Options	N/S Crossing Distance	Minimum Ped Crossig Time (Sec)*	N/S Advance /NBR/SBR/ N/S BTBL Protected	N/S Main Phase Green	N/S Green Available to Transit	E/W Crossing distance	Minimum Ped Crossig Time (Sec)*	WB Advanced Green	E/W Main Phase Green
AM Peak									
3Bi	16	15.4	6	44	44	25	20.3	9	23
3Bii	16	15.4	9	41	41	25	20.3	9	23
5B	16	15.4	6	43	43	25	20.3	9	23
8	16	15.4	20	41	41	25	20.3		23
PM Peak									
3Bi	16	15.4	10	41	41	25	20.3	8	23
3Bii	16	15.4	22	28	28	25	20.3	8	23
5B	16	15.4	6	44	44	25	20.3	8	23
8	16	15.4	28	33	33	25	20.3		23

Cherry Street/Front Street

Options	N/S Crossing Distance	Minimum Ped Crossig Time (Sec)*	N/S Advance /NBR/SBR/ N/S BTBL Protected	N/S Main Phase Green	N/S Green Available to Transit	E/W Crossing distance	Minimum Ped Crossig Time (Sec)*	WB Advanced Green	E/W Main Phase Green
AM Peak									
3Bi	16	15.4	18	26	26	25	20.3	7	36
3Bii	16	15.4	6	33	33	25	20.3	7	36
5B	16	15.4	6	32	32	25	20.3	7	36
8	16	15.4	7	31	31	23	20.3	7	36
PM Peak									
3Bi	16	15.4	18	19	19	25	20.3	6	38
3Bii	16	15.4	8	30	30	25	20.3	6	38
5B	16	15.4	6	31	31	25	20.3	6	38
8	16	15.4	8	29	29	25	20.3	6	38

Cherry Street/Eastern Street

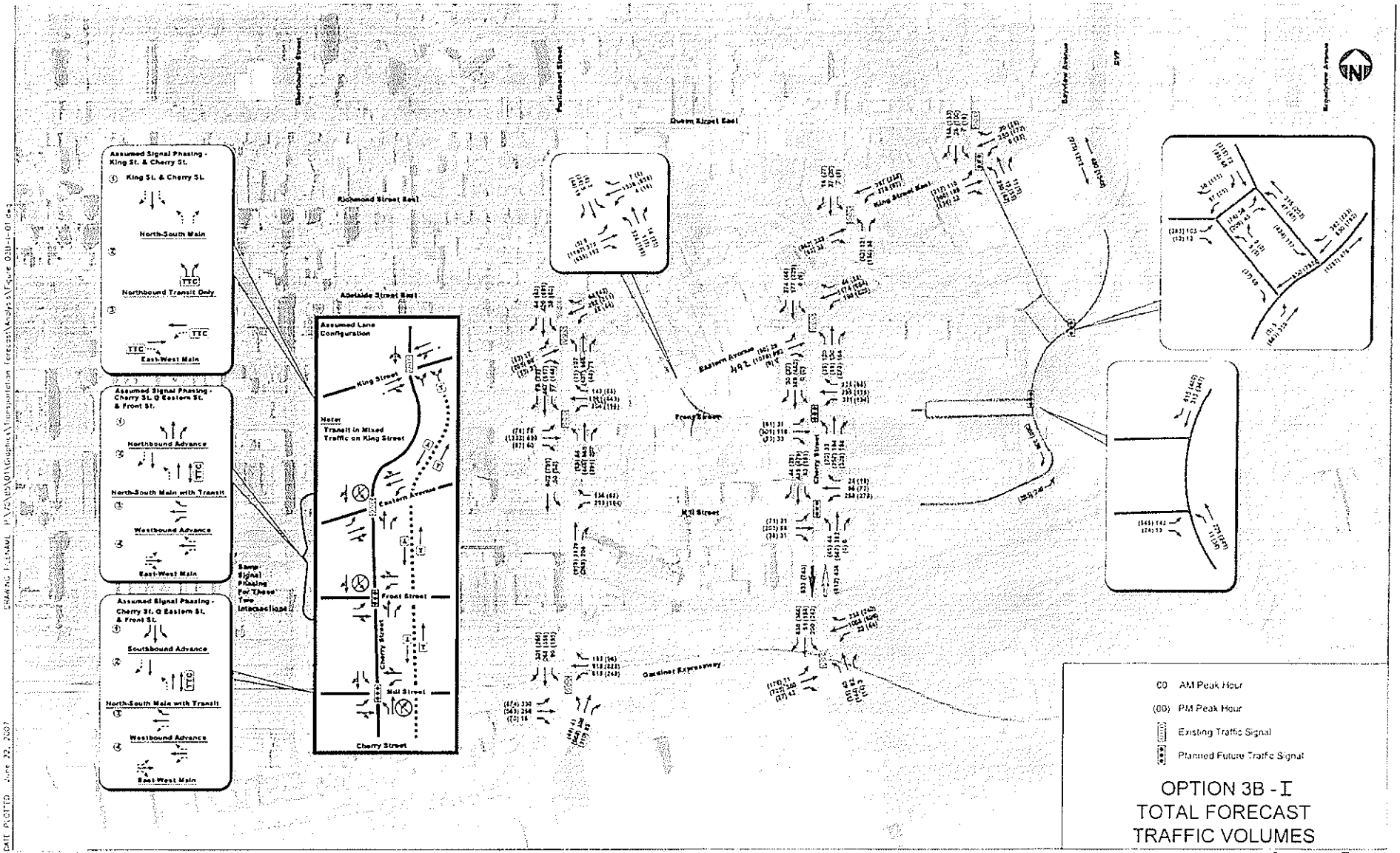
Options	N/S Crossing Distance	Minimum Ped Crossig Time (Sec)*	N/S Advance /NBR/SBR/ N/S BTBL Protected	N/S Main Phase Green	N/S Green Available to Transit	E/W Crossing distance	Minimum Ped Crossig Time (Sec)*	WB Advanced Green	E/W Main Phase Green
AM Peak									
3Bi	23	15.4	6	37	37	27	22.6	6	33
3Bii	23	15.4	6	37	37	27	22.6	6	33
5B	23	15.4	7	35	35	27	22.6	6	33
8	23	15.4	17	25	25	27	22.6	6	33
PM Peak									
3Bi	23	15.4	11	26	26	27	22.6	10	35
3Bii	23	15.4	11	26	26	27	22.6	10	35
5B	23	15.4	8	28	28	27	22.6	10	35
8	23	15.4	22	27	27	27	22.6		35

Cherry Street/King Street

Options	N/S Crossing Distance	Minimum Ped Crossig Time (Sec)*	N/S Advance /NBR/SBR/ N/S BTBL Protected	N/S Main Phase Green	N/S Green Available to Transit**	E/W Crossing distance	Minimum Ped Crossig Time (Sec)*	WB Advanced Green	E/W Main Phase Green
AM Peak									
3Bi				34	10			8	38
3Bii				34	10			8	38
5B				34	10			8	38
8				34	10			8	38
PM Peak									
3Bi				34	10			8	38
3Bii				34	10			8	38
5B				34	10			8	38
8				34	10			8	38

* Ped Crossing Time is based on 1.2 m/s walking speed (based on City look up table)

** Assumed 10 seconds callable phase for transit- calls every other cycle i.e. 5 seconds each cycle



DATE PLOTTED: June 22, 2007

Date of Aerial Photo May 2, 2006

Figure 3B-I

CCG/CALC 2 PERFORMANCE ANALYSIS DATA SUMMARY
FUTURE TOTAL TRAFFIC

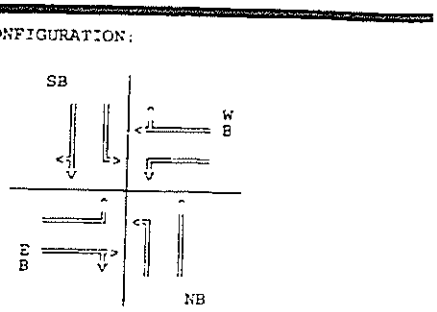
Project : CHERRY ST. REVIEW-JN07
Scenario : WKDAM OP3Bi E.S
Data File: TO-AM3B1.PC2

Printed On: June 28, 2007
Printed At: 2:41 PM

INTERSECTION: CHERRY/MILL

DEMAND VOLUMES:

Vehicles		Volume Adjustments		Pedestrian Volume	Pedestrian Walk Dst/Med Width(m)
83	24	3.0%	3.0%	200	25/0
489	56	3.0%	3.0%		
44	288	3.0%	3.0%		
21	0	3.0%	3.0%	200	16/0
89	392	3.0%	3.0%		
31	44	3.0%	3.0%	200	25/0



SIGNAL PHASING INFORMATION:

ϕ Type	Permitted Moves: SB	WB	NB	EB	Signal Timings: Green	Amber	Red	SAG	Effective Times: Eff. Green	Lost Time	Ped. X+W
1 SB Rst Lft	RTL				6.0	0.0	0.0	3.0	7.0	2.0	0.0
2 N-S Main	RT		TL		44.0	4.0	2.0	0.0	45.0	5.0	20.3
3 WB Advance		RTL			9.0	0.0	0.0	3.0	10.0	2.0	0.0
4 E-W Main		RTL		RTL	23.0	4.0	2.0	0.0	24.0	5.0	27.8 *
Total:					82.0	8.0	4.0	6.0	88.0	12.0	

Methodology: Canadian Capacity Guide, 2nd Edition (1995) (vv)

Approach Specific Adjustments:	SB	WB	NB	EB
Lefts/Cycle on IG (PCU):	0.0	2.0	2.0	2.0
Shared Lefts/Cycle on IG (PCU):	0.0	0.0	0.0	0.0
Rights/Cycle on IG (PCU):	0.0	0.0	0.0	0.0
Progression Regime (1-6):	3	3	3	3
Prot Left Turn Sat'n Adj.:	1.00	1.00	1.00	1.00
Perm Left Turn Sat'n Adj.:	1.00	1.00	1.00	1.00
Right Turn (No Peds) Sat'n Adj.:	0.80	0.80	0.80	0.80
Through Lane Sat'n Adj.:	1.00	1.00	1.00	1.00

Other Settings:	
Through Saturation:	1650 PCU/hour
Rights thru Pedestrians Formula:	Toronto
Pedestrian Walking Speed:	1.2 m/sec.
Min Pedestrian Walk Interval:	7.0 sec.
Delay Evaluation Interval:	60.0 min.
Confidence Level, Max Prob Queue:	95.0 %
Main Phase Grn Share Bal Crit:	2.0 %
Over-Capacity Permissive Left Adj.:	Off

PERFORMANCE RESULTS:

Flow Ratio Table:

ϕ Lane	Clr. Vol.	Sat'n	y	Max. y	Eff. Green	Deg. Sat'n	Ped. Inc.
1 SB TR	113	1617	0.070	✓	7.0	1.000	
1 SB L	85	1650	0.052		7.0	0.740	
2 SB TR	436	1545	0.282	✓	47.0	0.600	
2 NB T	404	1650	0.245		45.0	0.544	
2 NB L	0	462	0.000		45.0	0.000	
3 WB TR	82	1535	0.084		10.0	0.517	
3 WB L	165	1650	0.100	✓	10.0	1.000	
4 WB TR	0	1272	0.000		26.0	0.000	
4 WB L	60	847	0.070		24.0	0.294	
4 EB TR	124	1314	0.094	✓	24.0	0.392	0.154
4 EB L	0	1650	0.000		24.0	0.000	
Total:			0.546				*0.154

Other Measures:

Lane	Total Vol.	Total Cap.	Lane Deg. Satn	Avg. Veh. Delay	Avg. Queue (Cons)	Max. Prob. Queue	Prob. Disch. Ovrld.
SB L	85	116	0.740	86	2	6	21.6%
SB TR	549	839	0.654	20	15	23	2.3%
NB T	404	743	0.544	23	11	18	0.3%
NB L	45	289	0.157	17	1	4	0.0%
WB TR	82	484	0.170	23	2	6	0.0%
WB L	297	440	0.674	37	8	14	7.6%
EB TR	124	315	0.392	36	3	7	0.3%
EB L	22	468	0.046	29	1	2	0.0%
Int'n:	1,608	3,693		29			

NOTE(S):
- Main Phase Green Times have NOT been Balanced.
- Minimum Pedestrian Crossing Requirements have not been met.

SUMMARY of KEY RESULTS:

Cycle Time: 100.0 sec.
Lost Time: 12.0 sec.
Degree of Saturation: 0.621

CCG/CALC 2 PERFORMANCE ANALYSIS DATA SUMMARY
FUTURE TOTAL TRAFFIC

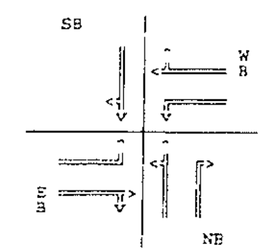
Project	: CHERRY ST. REVIEW-JN07	Page	: 1
Scenario	: WKDAM OP3Bi E.S	Printed On:	June 28, 2007
Data File:	TO-AM3B1.PC2	Printed At:	2:44 PM

INTERSECTION: CHERRY/FRONT

DEMAND VOLUMES:

Vehicles		Volume Adjustments		Pedestrian Volume	Pedestrian Walk Dst/Med Width(m)
0 | 228		3.0% | 3.0%		<———> 200	<———> 25/0
389 | 295		3.0% | 3.0%		|200 |200	|16/0 |16/0
30 | 321		3.0% | 3.0%		200 <———>	25/0 <———>
31 | 198		3.0% | 3.0%			
112 | 194		3.0% | 3.0%			
39 | 33		3.0% | 3.0%			

CONFIGURATION:



SIGNAL PHASING INFORMATION:

φ Type	Permitted Moves: SB	WB	NB	EB	Signal Timings: Green	Amber	Red	SAG	Effective Times: Eff. Green	Lost Time	Ped. X+W
1 N-S Main	RT		RT		12.0	2.0	2.0	0.0	13.0	3.0	20.3 *
2 N-S Main	RT		TL		26.0	4.0	2.0	0.0	27.0	5.0	20.3
3 WB Advance		RTL	R		7.0	0.0	0.0	3.0	8.0	2.0	0.0
4 E-W Main		RTL		RTL	36.0	4.0	2.0	0.0	37.0	5.0	27.8
Total:					81.0	10.0	6.0	3.0	87.0	13.0	

Methodology: Canadian Capacity Guide, 2nd Edition (1995) (vv)

Approach Specific Adjustments:	SB	WB	NB	EB
Lefts/Cycle on IG (PCU):	0.0	2.0	0.0	2.0
Shared Lefts/Cycle on IG (PCU):	0.0	0.0	0.0	0.0
Rights/Cycle on IG (PCU):	0.0	0.0	0.0	0.0
Progression Regime (1-6):	3	3	3	3
Prot Left Turn Sat'n Adj.:	1.00	1.00	1.00	1.00
Perm Left Turn Sat'n Adj.:	1.00	1.00	1.00	1.00
Right Turn (No Peds) Sat'n Adj.:	0.80	0.80	0.80	0.80
Through Lane Sat'n Adj.:	1.00	1.00	1.00	1.00

Other Settings:	
Through Saturation:	1650 PCU/hour
Rights thru Pedestrians Formula:	Toronto
Pedestrian Walking Speed:	1.2 m/sec.
Min Pedestrian Walk Interval:	7.0 sec.
Delay Evaluation Interval:	60.0 min.
Confidence Level, Max Prob Queue:	95.0 %
Main Phase Grn Share Bal Crit:	2.0 %
Over-Capacity Permissive Left Adj.:	Off

PERFORMANCE RESULTS:

Flow Ratio Table:

φ Lane	Clr. Vol.	Sat'n	y	Max. y	Eff. Green	Deg. Sat'n	Ped. Inc.
1 SB TR	140	1556	0.090	✓	13.0	0.694	
1 NB R	98	1320 ~~833~~	~~0.120~~	0.075	13.0	0.847	0.083
2 SB TR	291	1556	0.187	✓	27.0	0.694	
2 NB TL	169	996	0.170		27.0	0.628	
3 WB TR	119	1488	0.080	✓	8.0	1.000	
3 WB L	132	1650	0.080		8.0	1.000	
3 NB R	106	1320	0.080		8.0	1.000	
4 WB TR	420	1199	0.350	✓	39.0	0.898	
4 WB L	127	959	0.132		37.0	0.357	
4 EB TR	156	1349	0.115		37.0	0.312	
4 EB L	0	389	0.000		37.0	0.000	
Total:				0.727			+0.083

Other Measures:

Lane	Total Vol.	Total Cap.	Lane Deg. Satn	Avg. Veh. Delay	Avg. Queue (Cons)	Max. Prob. Queue	Prob. Disch. Ovrld.
SB TR	432	622	0.694	31	12	19	6.3%
NB R	204	277 ~~222~~	~~0.920~~ 0.736	103	6	11	34.0%
NB TL	234	269	0.869	73	6	12	32.6%
WB TR	539	586	0.919	54	15	23	33.2%
WB L	331	559	0.592	25	9	16	1.3%
EB TR	156	499	0.312	24	4	9	0.0%
EB L	32	216	0.148	22	1	3	0.0%
Int'n:	1,926	2,973		48			

NOTE(S):
- Main Phase Green Times have NOT been Balanced.
- Minimum Pedestrian Crossing Requirements have not been met.

SUMMARY of KEY RESULTS:

Cycle Time: 100.0 sec.
Lost Time: 13.0 sec.
Degree of Saturation: 0.836 0.712

* Due to software limitations [illegible] vol [illegible] on East leg [illegible] to NBR [illegible] protected phase [illegible] [illegible] eventually reduces sat flow to 800 [illegible] should be 1320 [illegible] protected [illegible] NB red volume [illegible]

* Please see supplementary analysis [illegible]

CCG/CALC 2 PERFORMANCE ANALYSIS DATA SUMMARY
FUTURE TOTAL TRAFFIC

Project : CHERRY ST. REVIEW-JN07
Scenario : WKDAM OP3Bi E.S
Data File: TO-AM3B1.PC2

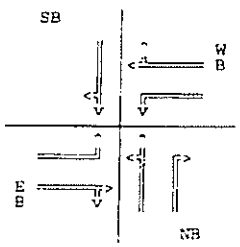
Page : 1
Printed On: June 29, 2007
Printed At: 9:58 AM

INTERSECTION: CHERRY/FRONT

DEMAND VOLUMES:

Vehicles			Volume Adjustments		Pedestrian Volume	Pedestrian Walk Dst/Med Width(m)
	0	228		3.0%	3.0%	200	25/0
389		295	3.0%	3.0%		
30		321	3.0%			
	31	198		3.0%	3.0%	200	0	16/0	16/0
112		194		3.0%	3.0%		
39		33		3.0%	3.0%	200	25/0

CONFIGURATION:



SIGNAL PHASING INFORMATION:

ϕ Type	Permitted Moves: SB	WB	NB	EB	Signal Timings: Green	Amber	Red	SAG	Effective Times: Eff. Green	Lost Time	Ped. X+W	
1 N-S Main	RT		RT		12.0	2.0	2.0	0.0	13.0	3.0	20.3	*
2 N-S Main	RT		TL		26.0	4.0	2.0	0.0	27.0	5.0	20.3	
3 WB Advance		RTL	R		7.0	0.0	0.0	3.0	8.0	2.0	0.0	
4 E-W Main		RTL		RTL	36.0	4.0	2.0	0.0	37.0	5.0	27.8	
Total:					81.0	10.0	6.0	3.0	87.0	13.0		

Methodology: Canadian Capacity Guide, 2nd Edition (1995) (vv)

Approach Specific Adjustments:	SB	WB	NB	EB
Lefts/Cycle on IG (PCU):	0.0	2.0	0.0	2.0
Shared Lefts/Cycle on IG (PCU):	0.0	0.0	0.0	0.0
Rights/Cycle on IG (PCU):	0.0	0.0	0.0	0.0
Progression Regime (1-6):	3	3	3	3
Prot Left Turn Sat'n Adj.:	1.00	1.00	1.00	1.00
Perm Left Turn Sat'n Adj.:	1.00	1.00	1.00	1.00
Right Turn (No Peds) Sat'n Adj.:	0.80	0.80	0.80	0.80
Through Lane Sat'n Adj.:	1.00	1.00	1.00	1.00

Other Settings:	
Through Saturation:	1650 PCU/hour
Rights thru Pedestrians Formula:	Toronto
Pedestrian Walking Speed:	1.2 m/sec.
Min Pedestrian Walk Interval:	7.0 sec.
Delay Evaluation Interval:	60.0 min.
Confidence Level, Max Prob Queue:	95.0 %
Main Phase Grn Share Bal Crit:	2.0 %
Over-Capacity Permissive Left Adj.:	Off

PERFORMANCE RESULTS:

Flow Ratio Table:

ϕ Lane	Clr. Vol.	Sat'n	y	Max. y	Eff. Green	Deg. Sat'n	Ped. Inc.
1 SB TR	240	1556	0.090	✓	13.0	0.694	0.103
1 NB R	98	1320	0.075		13.0	0.573	
2 SB TR	291	1556	0.187	✓	27.0	0.694	
2 NB TL	169	996	0.170		27.0	0.628	
3 WB TR	119	1488	0.080	✓	8.0	1.000	
3 WB L	132	1650	0.080		8.0	1.000	
3 NB R	106	1320	0.080		8.0	1.000	
4 WB TR	420	1199	0.350	✓	39.0	0.898	
4 WB L	127	959	0.132		37.0	0.357	
4 EB TR	156	1349	0.115		37.0	0.312	
4 EB L	0	389	0.000		37.0	0.000	
Total:			0.708				+0.103

Other Measures:

Lane	Total Vol.	Total Cap.	Lane Deg. Satn	Avg. Veh. Delay	Avg. Queue (Cons)	Max. Prob. Queue	Prob. Disch. Ovrld.
SB TR	432	622	0.694	31	12	19	6.3%
NB R	204	277	0.736	54	6	11	12.0%
NB TL	234	269	0.869	73	6	12	32.6%
WB TR	539	586	0.919	54	15	23	33.2%
WB L	331	559	0.592	25	9	16	1.3%
EB TR	156	499	0.312	24	4	9	0.0%
EB L	32	216	0.148	22	1	3	0.0%
Int'n:	1,926	3,029		43			

NOTE(S):
- Main Phase Green Times have NOT been Balanced.
- Minimum Pedestrian Crossing Requirements have not been met.

SUMMARY of KEY RESULTS:

Cycle Time: 100.0 sec.
Lost Time: 13.0 sec.
Degree of Saturation: 0.813

- Supplementary Analysis

CCG/CALC 2 PERFORMANCE ANALYSIS DATA SUMMARY
Future Total Traffic

Project : CHERRY ST. REVIEW-JN07
Scenario : WKDAM OP3Bi E.S
Data File: TO-AM3B1.PC2

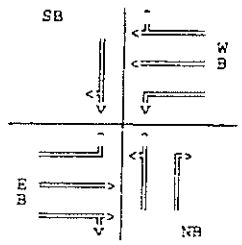
Page : 1
Printed On: Aug. 29, 2007
Printed At: 11:17 AM

INTERSECTION: CHERRY/EASTERN

DEMAND VOLUMES:

Vehicles		Volume Adjustments		Pedestrian Volume	Pedestrian Walk Dst/Med Width(m)
0	44	3.0%	3.0%		
177	1,174	3.0%	3.0%	200	27/0
274	198	3.0%	3.0%		
				200 200	23/0 23/0
29	169	3.0%	3.0%		
492	130	3.0%	3.0%	200	27/0
0	120	3.0%	3.0%		

CONFIGURATION:



SIGNAL PHASING INFORMATION:

ϕ	Type	Permitted Moves: SB	WB	NB	EB	Signal Timings: Green	Amber	Red	SAG	Effective Times: Eff. Green	Lost Time	Ped. X+W
1	NB Advance			RTL		6.0	0.0	0.0	3.0	7.0	2.0	0.0
2	N-S Main	RT		TL		37.0	4.0	2.0	0.0	38.0	5.0	23.2
3	WB Advance		RTL	R		6.0	0.0	0.0	3.0	7.0	2.0	0.0
4	E-W Main		RTL		RTL	33.0	4.0	2.0	0.0	34.0	5.0	26.5
Total:						82.0	8.0	4.0	6.0	88.0	12.0	

Methodology: Canadian Capacity Guide, 2nd Edition (1995) (vv)

Approach Specific Adjustments:	SB	WB	NB	EB
Lefts/Cycle on IG (PCU):	0.0	2.0	2.0	2.0
Shared Lefts/Cycle on IG (PCU):	0.0	0.0	0.0	0.0
Rights/Cycle on IG (PCU):	1.5	0.0	0.0	0.0
Progression Regime (1-6):	3	3	3	3
Prot Left Turn Sat'n Adj.:	1.00	1.00	1.00	1.00
Perm Left Turn Sat'n Adj.:	1.00	1.00	1.00	1.00
Right Turn (No Peds) Sat'n Adj.:	0.80	0.80	0.80	0.80
Through Lane Sat'n Adj.:	1.00	1.00	1.00	1.00

Other Settings:	
Through Saturation:	1650 PCU/hour
Rights thru Pedestrians Formula:	Toronto
Pedestrian Walking Speed:	1.2 m/sec.
Min Pedestrian Walk Interval:	4.0 sec.
Delay Evaluation Interval:	60.0 min.
Confidence Level, Max Prob Queue:	95.0 %
Main Phase Grn Share Bal Crit:	2.0 %
Over-Capacity Permissive Left Adj.:	Off

PERFORMANCE RESULTS:

Flow Ratio Table:

ϕ	Lane	Clr. Vol.	Sat'n	y	Max. y	Eff. Green	Deg. Sat'n	Ped. Inc.
1	NB R	92	1320	0.070	✓	7.0	1.000	
1	NB TL	116	1650	0.070	✓	7.0	1.000	
2	SB TR	411	1117	0.367	✓	38.0	0.967	
2	NB TL	142	642	0.221		38.0	0.582	
3	WB TR	113	1620	0.070	✓	7.0	1.000	
3	WB T	115	1650	0.070		7.0	1.000	
3	WB L	116	1650	0.070		7.0	1.000	
3	NB R	82	1320	0.062		7.0	0.884	
4	WB TR	496	1548	0.321	✓	36.0	0.891	
4	WB T	529	1650	0.321		36.0	0.891	
4	WB L	16	479	0.034		34.0	0.101	
4	EB TR	253	1650	0.154		34.0	0.452	
4	EB T	253	1650	0.154		34.0	0.452	
4	EB L	0	118	0.000		34.0	0.000	
Total:				0.828				+0.000

Other Measures:

Lane	Total Vol.	Total Cap.	Lane Deg. Satn	Avg. Veh. Delay	Avg. Queue (Cons)	Max. Prob. Queue	Prob. Disch. Ovrld.
NB R	174	185	0.942	129	5	10	35.6%
SB TR	465	479	0.971	89	13	20	41.6%
NB TL	258	359	0.726	35	7	13	11.0%
WB TR	610	671	0.909	50	17	25	25.9%
WB T	645	710	0.909	49	18	27	26.2%
WB L	204	350	0.582	30	6	11	3.0%
EB TR	253	561	0.452	28	7	13	0.1%
EB T	253	561	0.452	28	7	13	0.1%
EB L	30	112	0.266	30	1	3	1.0%
Int'n:	2,891	3,987		54			

NOTE(S):

SUMMARY of KEY RESULTS:

Cycle Time: 100.0 sec.
Lost Time: 12.0 sec.
Degree of Saturation: 0.941

CCG/CALC 2 PERFORMANCE ANALYSIS DATA SUMMARY
Future Total Traffic

Project : CHERRY ST. REVIEW-JN07
Scenario : WKDAM OP3Bi E.S
Data File: TO-AM3B1.PC2

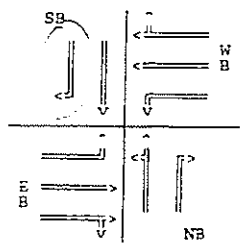
Page : 1
Printed On: Aug. 29, 2007
Printed At: 11:18 AM

INTERSECTION: CHERRY/EASTERN

DEMAND VOLUMES:

Vehicles	Volume Adjustments	Pedestrian Volume	Pedestrian Walk Dst/Med Width(m)
0 | 44	3.0% | 3.0%	<——> 200	<——> 27/0
177 | 1,174	3.0% | 3.0%		
274 | 198	3.0% | 3.0%	|200 |200	|23/0 |23/0
29 | 169	3.0% | 3.0%		
492 | 130	3.0% | 3.0%	<——> 200	<——> 27/0
0 | 120	3.0% | 3.0%		

CONFIGURATION:



SIGNAL PHASING INFORMATION:

φ Type	Permitted Moves: SB	WB	NB	EB	Signal Timings: Green	Amber	Red	SAG	Effective Times: Eff. Green	Lost Time	Ped. X+W
1 NB Advance			RTL		6.0	0.0	0.0	3.0	7.0	2.0	0.0
2 N-S Main	RT		TL		37.0	4.0	2.0	0.0	38.0	5.0	23.2
3 WB Advance		RTL	R		6.0	0.0	0.0	3.0	7.0	2.0	0.0
4 E-W Main		RTL		RTL	33.0	4.0	2.0	0.0	34.0	5.0	26.5
Total:					82.0	8.0	4.0	6.0	88.0	12.0	

Methodology: Canadian Capacity Guide, 2nd Edition (1995) (vv)

Approach Specific Adjustments:

	SB	WB	NB	EB
Lefts/Cycle on IG (PCU):	0.0	2.0	2.0	2.0
Shared Lefts/Cycle on IG (PCU):	0.0	0.0	0.0	0.0
Rights/Cycle on IG (PCU):	1.5	0.0	0.0	0.0
Progression Regime (1-6):	3	3	3	3
Prot Left Turn Sat'n Adj.:	1.00	1.00	1.00	1.00
Perm Left Turn Sat'n Adj.:	1.00	1.00	1.00	1.00
Right Turn (No Peds) Sat'n Adj.:	0.80	0.80	0.80	0.80
Through Lane Sat'n Adj.:	1.00	1.00	1.00	1.00

Other Settings:

Through Saturation:	1650 PCU/hour
Rights thru Pedestrians Formula:	Toronto
Pedestrian Walking Speed:	1.2 m/sec.
Min Pedestrian Walk Interval:	4.0 sec.
Delay Evaluation Interval:	60.0 min.
Confidence Level, Max Prob Queue:	95.0 %
Main Phase Grn Share Bal Crit:	2.0 %
Over-Capacity Permissive Left Adj.:	Off

PERFORMANCE RESULTS:

Flow Ratio Table:

φ Lane	Clr. Vol.	Sat'n	y	Max. y	Eff. Green	Deg. Sat'n	Ped. Inc.
1 NB R	92	1320	0.070	✓	7.0	1.000	
1 NB TL	116	1650	0.070		7.0	1.000	
2 SB R	220	888	0.257	✓	38.0	0.676	
2 SB T	182	1650	0.110		38.0	0.291	
2 NB TL	142	1168	0.122		38.0	0.320	
3 WB TR	113	1620	0.070	✓	7.0	1.000	
3 WB T	115	1650	0.070		7.0	1.000	
3 WB L	116	1650	0.070		7.0	1.000	
3 NB R	82	1320	0.062		7.0	0.884	
4 WB TR	496	1548	0.321	✓	36.0	0.891	
4 WB T	529	1650	0.321		36.0	0.891	
4 WB L	16	479	0.034		34.0	0.101	
4 EB TR	253	1650	0.154		34.0	0.452	
4 EB T	253	1650	0.154		34.0	0.452	
4 EB L	0	118	0.000		34.0	0.000	
Total:			0.718				+0.000

Other Measures:

Lane	Total Vol.	Total Cap.	Lane Deg. Satn	Avg. Veh. Delay	Avg. Queue (Cons)	Max. Prob. Queue	Prob. Disch. Ovrld.
NB R	174	185	0.942	129	5	10	35.5%
SB R	282	391	0.721	38	8	14	10.1%
SB T	182	627	0.291	23	5	10	0.0%
NB TL	258	559	0.460	22	7	13	0.1%
WB TR	610	671	0.909	50	17	25	25.9%
WB T	645	710	0.909	49	18	27	26.2%
WB L	204	350	0.582	30	6	11	3.0%
EB TR	253	561	0.452	28	7	13	0.1%
EB T	253	561	0.452	28	7	13	0.1%
EB L	30	112	0.266	30	1	3	1.0%
Int'n:	2,891	4,727		44			

NOTE(S):
* Main Phase Green Times have NOT been Balanced.

SUMMARY of KEY RESULTS:

Cycle Time: 100.0 sec.
Lost Time: 12.0 sec.
Degree of Saturation: 0.816

CCG/CALC 2 PERFORMANCE ANALYSIS DATA SUMMARY
FUTURE TOTAL TRAFFIC

Project : CHERRY ST. REVIEW-JN07
Scenario : WKDAM OP3Bi E.S
Data File: TO-AM3B1.PC2

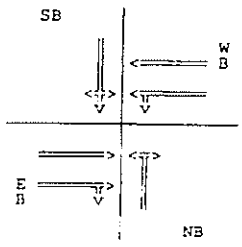
Page : 1
Printed On: June 28, 2007
Printed At: 3:45 PM

INTERSECTION: CHERRY/KING

DEMAND VOLUMES:

Vehicles		Volume Adjustments		Pedestrian Volume		Pedestrian Walk Dst/Med Width(m)	
7	0	29.0%	3.0%				
27	297	3.0%	9.0%	200		8.0/0	
18	278	3.0%	4.0%				
0	98	3.0%	3.0%	200	200	19/0	19/0
288	0	15.0%	3.0%				
33	121	4.0%	3.0%	200		29/0	

CONFIGURATION:



SIGNAL PHASING INFORMATION:

φ Type	Permitted Moves: SB	WB	NB	EB	Signal Timings: Green	Amber	Red	SAG	Effective Times: Eff. Green	Lost Time	Ped. X+W	
1 N-S Main	RTL		RL		34.0	4.0	2.0	0.0	35.0	5.0	0.0	
2 WB Advance		RTL			8.0	0.0	0.0	3.0	9.0	2.0	0.0	
3 E-W Main		RTL		RTL	38.0	4.0	2.0	0.0	39.0	5.0	0.0	
4 Peds Only					3.0	1.0	1.0	0.0	0.0	5.0	31.2	*
Total:					83.0	9.0	5.0	3.0	83.0	17.0		

Methodology: Canadian Capacity Guide, 2nd Edition (1995) (vv)

Approach Specific Adjustments:

	SB	WB	NB	EB
Lefts/Cycle on IG (PCU):	0.0	2.0	0.0	0.0
Shared Lefts/Cycle on IG (PCU):	0.0	0.0	0.0	0.0
Rights/Cycle on IG (PCU):	0.0	0.0	0.0	0.0
Progression Regime (1-6):	3	3	3	3
Prot Left Turn Sat'n Adj.:	1.00	1.00	1.00	1.00
Perm Left Turn Sat'n Adj.:	1.00	1.00	1.00	1.00
Right Turn (No Peds) Sat'n Adj.:	0.80	0.69	0.80	0.65
Through Lane Sat'n Adj.:	1.00	0.86	1.00	0.91

Other Settings:

Through Saturation:	1650 PCU/hour
Rights thru Pedestrians Formula:	Toronto
Pedestrian Walking Speed:	1.2 m/sec.
Min Pedestrian Walk Interval:	7.0 sec.
Delay Evaluation Interval:	60.0 min.
Confidence Level, Max Prob Queue:	95.0 %
Main Phase Grn Share Bal Crit:	2.0 %
Over-Capacity Permissive Left Adj.:	Off

PERFORMANCE RESULTS:

Flow Ratio Table:

φ Lane	Clr. Vol.	Sat'n	y	Max. y	Eff. Green	Deg. Sat'n	Ped. Inc.
1 SB TRL	55	1523	0.036		35.0	0.104	
1 NB RL	226	1335	0.169	✓	35.0	0.483	
2 WB T	128	1419	0.090	✓	9.0	1.000	
2 WB TL	146	1620	0.090		9.0	1.000	
3 WB T	179	1419	0.126		41.0	0.309	
3 WB TL	160	770	0.208	✓	39.0	0.533	
3 EB TR	176	1393	0.126		39.0	0.324	
3 EB T	190	1502	0.126		39.0	0.324	
Total:			0.467				+0.000

Other Measures:

Lane	Total Vol.	Total Cap.	Lane Deg. Satn	Avg. Veh. Delay	Avg. Queue (Cons)	Max. Prob. Queue	Prob. Disch. Ovrld.
SB TRL	55	533	0.104	22	2	4	0.0%
NB RL	226	467	0.483	29	6	12	0.5%
WB T	307	710	0.433	18	9	15	0.0%
WB TL	306	446	0.686	29	8	15	9.1%
EB TR	176	543	0.324	23	5	10	0.0%
EB T	190	586	0.324	23	5	10	0.0%
Int'n:	1,259	3,285		24			

NOTE(S):
- Main Phase Green Times have NOT been Balanced.
- Minimum Pedestrian Crossing Requirements have not been met.

SUMMARY of KEY RESULTS:

Cycle Time: 100.0 sec.
Lost Time: 17.0 sec.
Degree of Saturation: 0.562

CCG/CALC 2 PERFORMANCE ANALYSIS DATA SUMMARY
FUTURE TOTAL TRAFFIC

Project : CHERRY ST. REVIEW-JN07
Scenario : WKDPM OP3Bi E.S.
Data File: TO-PM3B1.PC2

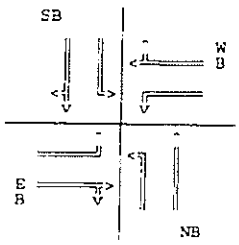
Page : 1
Printed On: June 29, 2007
Printed At: 10:28 AM

INTERSECTION: CHERRY/MILL

DEMAND VOLUMES:

Vehicles		Volume Adjustments		Pedestrian Volume		Pedestrian Walk Dst/Med Width(m)	
151	19	3.0%	3.0%	<——> 200		<——> 25/0	
479	70	3.0%	3.0%				
28	268	3.0%	3.0%				
71	0	3.0%	3.0%	200	200	16/0	16/0
203	567	3.0%	3.0%	<——> 200		<——> 25/0	
36	45	3.0%	3.0%				

CONFIGURATION:



SIGNAL PHASING INFORMATION:

ϕ	Type	Permitted Moves: SB	WB	NB	EB	Signal Timings: Green	Amber	Red	SAG	Effective Times: Eff. Green	Lost Time	Ped. X+W	
1	SB Rgt Lft	RTL				10.0	0.0	0.0	3.0	11.0	2.0	0.0	
2	N-S Main	RT		TL		41.0	4.0	2.0	0.0	42.0	5.0	20.3	
3	WB Advance		RTL			8.0	0.0	0.0	3.0	9.0	2.0	0.0	
4	E-W Main		RTL		RTL	23.0	4.0	2.0	0.0	24.0	5.0	27.8	*
Total:						82.0	8.0	4.0	6.0	86.0	14.0		

Methodology: Canadian Capacity Guide, 2nd Edition (1995) (vv)

Approach Specific Adjustments:	SB	WB	NB	EB
Lefts/Cycle on IG (PCU):	0.0	2.0	2.0	2.0
Shared Lefts/Cycle on IG (PCU):	0.0	0.0	0.0	0.0
Rights/Cycle on IG (PCU):	0.0	0.0	0.0	0.0
Progression Regime (1-6):	3	3	3	3
Prot Left Turn Sat'n Adj.:	1.00	1.00	1.00	1.00
Perm Left Turn Sat'n Adj.:	1.00	1.00	1.00	1.00
Right Turn (No Peds) Sat'n Adj.:	0.80	0.80	0.80	0.80
Through Lane Sat'n Adj.:	1.00	1.00	1.00	1.00

Other Settings:	
Through Saturation:	1650 PCU/hour
Rights thru Pedestrians Formula:	Toronto
Pedestrian Walking Speed:	1.2 m/sec.
Min Pedestrian Walk Interval:	7.0 sec.
Delay Evaluation Interval:	60.0 min.
Confidence Level, Max Prob Queue:	95.0 %
Main Phase Grn Share Bal Crit:	2.0 %
Over-Capacity Permissive Left Adj.:	Off

PERFORMANCE RESULTS:

Flow Ratio Table:

ϕ	Lane	Clr. Vol.	Sat'n	y	Max. y	Eff. Green	Deg. Sat'n	Ped. Inc.
1	SB TR	179	1628	0.110	✓	11.0	1.000	
1	SB L	156	1650	0.094		11.0	0.857	
2	SB TR	343	1577	0.218		44.0	0.495	
2	NB T	584	1650	0.354	✓	42.0	0.843	
2	NB L	0	592	0.000		42.0	0.000	
3	WB TR	92	1566	0.059		9.0	0.650	
3	WB L	149	1650	0.090	✓	9.0	1.000	
4	WB TR	0	1362	0.000		26.0	0.000	
4	WB L	56	418	0.133		24.0	0.553	
4	EB TR	246	1436	0.171	✓	24.0	0.714	0.077
4	EB L	1	1650	0.001		24.0	0.003	
Total:				0.725				+0.077

Other Measures:

Lane	Total Vol.	Total Cap.	Lane Deg. Satn	Avg. Veh. Delay	Avg. Queue (Cons)	Max. Prob. Queue	Prob. Disch. Ovrld.
SB L	156	182	0.857	94	4	9	26.7%
SB TR	522	873	0.598	18	15	22	0.8%
NB T	584	693	0.843	39	16	25	20.4%
NB L	46	321	0.145	19	1	4	0.0%
WB TR	92	495	0.185	23	3	6	0.0%
WB L	276	321	0.860	62	8	14	24.3%
EB TR	246	345	0.714	48	7	12	8.7%
EB L	73	468	0.156	31	2	5	0.0%
Int'n:	1,995	3,696		41			

NOTE(S):
- Main Phase Green Times have NOT been Balanced.
- Minimum Pedestrian Crossing Requirements have not been met.

SUMMARY of KEY RESULTS:

Cycle Time: 100.0 sec.
Lost Time: 14.0 sec.
Degree of Saturation: 0.844

CCG/CALC 2 PERFORMANCE ANALYSIS DATA SUMMARY
Future Total Traffic

Project : CHERRY ST. REVIEW-JN07
Scenario : WKDPM OP3Bi E.S.
Data File: TO-PM3B1.PC2

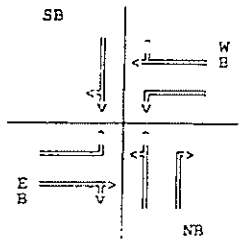
Page : 1
Printed On: Aug. 29, 2007
Printed At: 2:52 PM

INTERSECTION: CHERRY/FRONT

DEMAND VOLUMES:

Vehicles	Volume Adjustments	Pedestrian Volume	Pedestrian Walk Dst/Med Width(m)
0 | 66	3.0% | 3.0%	<——>	<——>
462 | 116	3.0% | 3.0%	200	25/0
37 | 194	3.0% | 3.0%		
61 | 328	3.0% | 3.0%	|200 |200	|16/0 |16/0
491 | 257	3.0% | 3.0%	v v	v v
71 | 20	3.0% | 3.0%	200	25/0
		<——>	<——>

CONFIGURATION:



SIGNAL PHASING INFORMATION:

	¢ Type	Permitted Moves: SB	WB	NB	EB	Signal Timings: Green	Amber	Red	SAG	Effective Times: Eff. Green	Lost Time	Ped. X+W
x	1 SB Advance	RT		1R		18.0	2.0	2.0	0.0	19.0	3.0	0.0
	2 N-S Main	RT		TL		19.0	4.0	2.0	0.0	20.0	5.0	20.3
	3 WB Advance		RTL	R		6.0	0.0	0.0	3.0	7.0	2.0	0.0
	4 E-W Main		RTL		RTL	38.0	4.0	2.0	0.0	39.0	5.0	27.8
	Total:					81.0	10.0	6.0	3.0	85.0	15.0	

Methodology: Canadian Capacity Guide, 2nd Edition (1995) (vv)

Approach Specific Adjustments:	SB	WB	NB	EB
Lefts/Cycle on IG (PCU):	0.0	2.0	0.0	2.0
Shared Lefts/Cycle on IG (PCU):	0.0	0.0	0.0	0.0
Rights/Cycle on IG (PCU):	0.5	0.0	0.0	1.0
Progression Regime (1-6):	3	3	3	3
Prot Left Turn Sat'n Adj.:	1.00	1.00	1.00	1.00
Perm Left Turn Sat'n Adj.:	1.00	1.00	1.00	1.00
Right Turn (No Peds) Sat'n Adj.:	0.80	0.80	0.80	0.80
Through Lane Sat'n Adj.:	1.00	1.00	1.00	1.00

Other Settings:	
Through Saturation:	1650 PCU/hour
Rights thru Pedestrians Formula:	Toronto
Pedestrian Walking Speed:	1.2 m/sec
Min Pedestrian Walk Interval:	7.0 sec.
Delay Evaluation Interval:	60.0 min.
Confidence Level, Max Prob Queue:	95.0 %
Main Phase Grn Share Bal Crit:	2.0 %
Over-Capacity Permissive Left Adj.:	Off

PERFORMANCE RESULTS:

Flow Ratio Table:

¢ Lane	Clr. Vol.	Sat'n	y	Max. y	Eff. Green	Deg. Sat'n	Ped. Inc.
1 SB TR	308	1624	0.190	✓	19.0	1.000	
1 NB R	251	1320	0.190	✓	19.0	1.000	
2 SB TR	187	1650	0.114		23.0	0.494	
2 NB TL	285	1448	0.197	✓	20.0	0.985	
3 WB TR	106	1513	0.070	✓	7.0	1.000	
3 WB L	116	1650	0.070		7.0	1.000	
3 NB R	87	1320	0.066		7.0	0.942	
4 WB TR	82	1260	0.065		41.0	0.158	
4 WB L	12	239	0.052		39.0	0.132	
4 EB TR	543	1559	0.348	✓	39.0	0.893	
4 EB L	0	1279	0.000		39.0	0.000	
Total:			0.805				+0.000

Other Measures:

Lane	Total Vol.	Total Cap.	Lane Deg. Satn	Avg. Veh. Delay	Avg. Queue (Cons)	Max. Prob. Queue	Prob. Disch. Ovrid.
NB R	338	343	0.984	120	9	16	34.0%
SB TR	514	706	0.728	31	14	22	5.6%
NB TL	285	290	0.985	132	8	14	39.7%
WB TR	187	623	0.301	17	5	10	0.0%
WB L	200	281	0.712	37	6	11	11.0%
EB TR	579	644	0.899	51	16	24	26.4%
EB L	63	571	0.110	20	2	5	0.0%
Int'n:	2,166	3,457		63			

NOTE(S):
* Main Phase Green Times have NOT been Balanced.

SUMMARY of KEY RESULTS:

Cycle Time: 100.0 sec.
Lost Time: 15.0 sec.
Degree of Saturation: 0.947

CCG/CALC 2 PERFORMANCE ANALYSIS DATA SUMMARY
FUTURE TOTAL TRAFFIC

Project : CHERRY ST. REVIEW-JN07
Scenario : WKDPM OP3Bi E.S.
Data File: TO-PM3B1.PC2

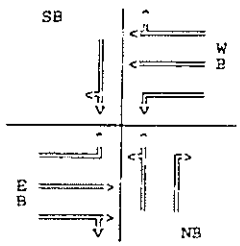
Page : 1
Printed On: June 29, 2007
Printed At: 4:09 PM

INTERSECTION: CHERRY/EASTERN

DEMAND VOLUMES:

Vehicles			Volume Adjustments		Pedestrian Volume	Pedestrian Walk Dst/Med Width(m)
	0	28		3.0%	3.0%	
	225	677		3.0%	3.0%	200 27/0
	46	213		3.0%	3.0%	
	50	273		3.0%	3.0%	200 200 23/0 23/0
	1,075	59		3.0%	3.0%	
	6	39		3.0%	3.0%	200 27/0

CONFIGURATION:



SIGNAL PHASING INFORMATION:

ϕ	Type	Permitted Moves: SB	WB	NB	EB	Signal Timings: Green	Amber	Red	SAG	Effective Times: Eff. Green	Lost Time	Ped. X+W
1	NB Advance			RTL		11.0	0.0	0.0	3.0	12.0	2.0	0.0
2	N-S Main	RT		TL		26.0	4.0	2.0	0.0	27.0	5.0	26.2
3	WB Advance		RTL	R		10.0	0.0	0.0	3.0	11.0	2.0	0.0
4	E-W Main		RTL		RTL	35.0	4.0	2.0	0.0	36.0	5.0	29.5
Total:						82.0	8.0	4.0	6.0	86.0	14.0	

Methodology: Canadian Capacity Guide, 2nd Edition (1995) (vv)

Approach Specific Adjustments:

	SB	WB	NB	EB
Lefts/Cycle on IG (PCU):	2.0	2.0	2.0	2.0
Shared Lefts/Cycle on IG (PCU):	0.0	0.0	0.0	0.0
Rights/Cycle on IG (PCU):	0.0	0.0	0.0	0.0
Progression Regime (1-6):	3	3	3	3
Prot Left Turn Sat'n Adj.:	1.00	1.00	1.00	1.00
Perm Left Turn Sat'n Adj.:	1.00	1.00	1.00	1.00
Right Turn (No Peds) Sat'n Adj.:	0.80	0.80	0.80	0.80
Through Lane Sat'n Adj.:	1.00	1.00	1.00	1.00

Other Settings:

Through Saturation:	1650 PCU/hour
Rights thru Pedestrians Formula:	Toronto
Pedestrian Walking Speed:	1.2 m/sec.
Min Pedestrian Walk Interval:	7.0 sec.
Delay Evaluation Interval:	60.0 min.
Confidence Level, Max Prob Queue:	95.0 %
Main Phase Grn Share Bal Crit:	2.0 %
Over-Capacity Permissive Left Adj.:	Off

PERFORMANCE RESULTS:

Flow Ratio Table:

ϕ	Lane	Clr. Vol.	Sat'n	y	Max. y	Eff. Green	Deg. Sat'n	Ped. Inc.
1	NB R	158	1320	0.120	✓	12.0	1.000	
1	NB TL	101	1650	0.061		12.0	0.510	
2	SB TR	279	1421	0.196	✓	27.0	0.728	0.035
2	NB TL	0	753	0.000		27.0	0.000	
3	WB TR	178	1618	0.110	✓	11.0	1.000	
3	WB T	181	1650	0.110		11.0	1.000	
3	WB L	147	1650	0.089		11.0	0.812	
3	NB R	123	1320	0.093		11.0	0.846	
4	WB TR	177	1540	0.115		38.0	0.303	
4	WB T	190	1650	0.115		38.0	0.303	
4	WB L	0	85	0.000		36.0	0.000	
4	EB TR	554	1634	0.339		36.0	0.942	
4	EB T	559	1650	0.339	✓	36.0	0.942	
4	EB L	0	753	0.000		36.0	0.000	
Total:				0.765				+0.035

Other Measures:

Lane	Total Vol.	Total Cap.	Lane Deg. Satn	Avg. Veh. Delay	Avg. Queue (Cons)	Max. Prob. Queue	Prob. Disch. Ovrld.
NB R	281	304	0.926	91	8	14	38.1%
SB TR	279	384	0.728	45	8	14	9.5%
NB TL	101	401	0.251	22	3	6	0.0%
WB TR	355	763	0.465	19	10	16	0.1%
WB T	371	809	0.459	19	10	17	0.0%
WB L	219	284	0.773	43	6	11	16.3%
EB TR	554	588	0.942	68	15	23	37.4%
EB T	559	594	0.942	67	16	24	38.8%
EB L	52	343	0.150	23	1	4	0.0%
Int'n:	2,772	4,469		50			

NOTE(S):
* Main Phase Green Times have NOT been Balanced.

SUMMARY of KEY RESULTS:

Cycle Time: 100.0 sec.
Lost Time: 14.0 sec.
Degree of Saturation: 0.890

CCG/CALC 2 PERFORMANCE ANALYSIS DATA SUMMARY
FUTURE TOTAL TRAFFIC

Project : CHERRY ST. REVIEW-JN07
Scenario : WKDPM OP3Bi E.S.
Data File: TO-PM3B1.PC2

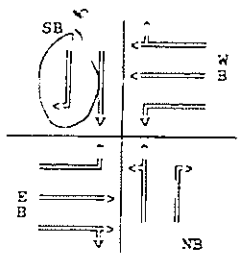
Page : 1
Printed On: June 29, 2007
Printed At: 3:48 PM

INTERSECTION: CHERRY/EASTERN

DEMAND VOLUMES:

Vehicles		Volume Adjustments		Pedestrian Volume	Pedestrian Walk Dst/Med Width(m)
0	28	3.0%	3.0%	200	27/0
225	677	3.0%	3.0%		
46	213	3.0%	3.0%		
50	273	3.0%	3.0%	200 / 200	23/0 / 23/0
1,075	59	3.0%	3.0%		
6	39	3.0%	3.0%	200	27/0

CONFIGURATION:



+ additional SBR lane

SIGNAL PHASING INFORMATION:

ϕ	Type	Permitted Moves: SB	WB	NB	EB	Signal Timings: Green	Amber	Red	SAG	Effective Times: Eff. Green	Lost Time	Ped. X+W
1	NB Advance			RTL		11.0	0.0	0.0	3.0	12.0	2.0	0.0
2	N-S Main	RT		TL		26.0	4.0	2.0	0.0	27.0	5.0	26.2
3	WB Advance		RTL	R		10.0	0.0	0.0	3.0	11.0	2.0	0.0
4	E-W Main		RTL		RTL	35.0	4.0	2.0	0.0	36.0	5.0	29.5
Total:						82.0	8.0	4.0	6.0	86.0	14.0	

Methodology: Canadian Capacity Guide, 2nd Edition (1995) (vv)

Approach Specific Adjustments:

	SB	WB	NB	EB
Lefts/Cycle on IG (PCU):	2.0	2.0	2.0	2.0
Shared Lefts/Cycle on IG (PCU):	0.0	0.0	0.0	0.0
Rights/Cycle on IG (PCU):	0.0	0.0	0.0	0.0
Progression Regime (1-6):	3	3	3	3
Prot Left Turn Sat'n Adj.:	1.00	1.00	1.00	1.00
Perm Left Turn Sat'n Adj.:	1.00	1.00	1.00	1.00
Right Turn (No Peds) Sat'n Adj.:	0.80	0.80	0.80	0.80
Through Lane Sat'n Adj.:	1.00	1.00	1.00	1.00

Other Settings:

Through Saturation:	1650 PCU/hour
Rights thru Pedestrians Formula:	Toronto
Pedestrian Walking Speed:	1.2 m/sec.
Min Pedestrian Walk Interval:	7.0 sec.
Delay Evaluation Interval:	60.0 min.
Confidence Level, Max Prob Queue:	95.0 %
Main Phase Grn Share Bal Crit:	2.0 %
Over-Capacity Permissive Left Adj.:	Off

PERFORMANCE RESULTS:

Flow Ratio Table:

ϕ	Lane	Clr. Vol.	Sat'n	y	Max. y	Eff. Green	Deg. Sat'n	Ped. Inc.
1	NB R	258	1320	0.120	✓	12.0	1.000	
1	NB TL	101	1650	0.061		12.0	0.610	
2	SB R	47	846	0.056		27.0	0.207	
2	SB T	232	1650	0.140	✓	27.0	0.520	0.091
2	NB TL	0	897	0.000		27.0	0.000	
3	WB TR	178	1618	0.110	✓	11.0	1.000	
3	WB T	181	1650	0.110		11.0	1.000	
3	WB L	147	1650	0.089		11.0	0.812	
3	NB R	123	1320	0.093		11.0	0.846	
4	WB TR	177	1540	0.115		38.0	0.303	
4	WB T	190	1650	0.115		38.0	0.303	
4	WB L	0	85	0.000		36.0	0.000	
4	EB TR	554	1634	0.339		36.0	0.942	
4	EB T	559	1650	0.339	✓	36.0	0.942	
4	EB L	0	753	0.000		36.0	0.000	
Total:				0.709				+0.091

Other Measures:

Lane	Total Vol.	Total Cap.	Lane Deg. Satn	Avg. Veh. Delay	Avg. Queue (Cons)	Max. Prob. Queue	Prob. Disch. Ovrld.
NB R	281	304	0.926	91	8	14	38.1%
SB R	47	229	0.207	30	1	4	0.0%
SB T	232	446	0.520	35	6	12	1.5%
NB TL	101	440	0.229	22	3	6	0.0%
WB TR	355	763	0.465	19	10	16	0.1%
WB T	371	809	0.459	19	10	17	0.0%
WB L	219	284	0.773	43	6	11	16.3%
EB TR	554	588	0.942	68	15	23	37.4%
EB T	559	594	0.942	67	16	24	38.8%
EB L	52	343	0.150	23	1	4	0.0%
Int'n:	2,772	4,799		49			

NOTE(S):
- Main Phase Green Times have NOT been Balanced.

SUMMARY of KEY RESULTS:

Cycle Time: 100.0 sec.
Lost Time: 14.0 sec.
Degree of Saturation: 0.825

CCG/CALC 2 PERFORMANCE ANALYSIS DATA SUMMARY
FUTURE TOTAL TRAFFIC

Project : CHERRY ST. REVIEW-JN07
Scenario : WKDPM OP3Bi E.S.
Data File: TO-PM3B1.PC2

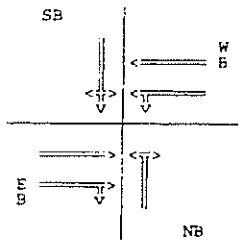
Page : 1
Printed On: June 29, 2007
Printed At: 2:06 PM

INTERSECTION: CHERRY/KING

DEMAND VOLUMES:

Vehicles		Volume Adjustments		Pedestrian Volume		Pedestrian Walk Dst/Med Width(m)	
9	0	29.0%	3.0%	200		8.0/0	
20	258	3.0%	9.0%				
27	87	3.0%	4.0%	200	200	19/0	19/0
0	136	3.0%	3.0%				
528	0	15.0%	3.0%	200		29/0	
62	62	4.0%	3.0%				

CONFIGURATION:



SIGNAL PHASING INFORMATION:

¢ Type	Permitted Moves: SB	WB	NB	EB	Signal Timings: Green	Amber	Red	SAG	Effective Times: Eff. Green	Lost Time	Ped. X+W	
1 N-S Main	RTL		RL		34.0	4.0	2.0	0.0	35.0	5.0	0.0	
2 WB Advance		RTL			8.0	0.0	0.0	3.0	9.0	2.0	0.0	
3 E-W Main		RTL		RTL	38.0	4.0	2.0	0.0	39.0	5.0	0.0	
4 Peds Only					3.0	1.0	1.0	0.0	0.0	5.0	31.2	*
Total:					83.0	9.0	5.0	3.0	83.0	17.0		

Methodology: Canadian Capacity Guide, 2nd Edition (1995) (vv)

Approach Specific Adjustments:	SB	WB	NB	EB
Lefts/Cycle on IG (PCU):	0.0	2.0	0.0	0.0
Shared Lefts/Cycle on IG (PCU):	0.0	0.0	0.0	0.0
Rights/Cycle on IG (PCU):	0.0	0.0	0.0	0.0
Progression Regime (1-6):	3	3	3	3
Prot Left Turn Sat'n Adj.:	1.00	1.00	1.00	1.00
Perm Left Turn Sat'n Adj.:	1.00	1.00	1.00	1.00
Right Turn (No Peds) Sat'n Adj.:	0.80	0.69	0.80	0.65
Through Lane Sat'n Adj.:	1.00	0.86	1.00	0.91

Other Settings:	
Through Saturation:	1650 PCU/hour
Rights thru Pedestrians Formula:	Toronto
Pedestrian Walking Speed:	1.2 m/sec.
Min Pedestrian Walk Interval:	7.0 sec.
Delay Evaluation Interval:	60.0 min.
Confidence Level, Max Prob Queue:	95.0 %
Main Phase Grn Share Bal Crit:	2.0 %
Over-Capacity Permissive Left Adj.:	Off

PERFORMANCE RESULTS:

Flow Ratio Table:

¢ Lane	Clr. Vol.	Sat'n	y	Max. y	Eff. Green	Deg. Sat'n	Ped. Inc.
2 SB TRL	60	1479	0.041		35.0	0.116	
1 NB RL	204	1322	0.154	√	35.0	0.441	
2 WB T	128	1419	0.090	√	9.0	1.000	
2 WB TL	137	1519	0.090		9.0	1.000	
3 WB T	81	1419	0.057		41.0	0.139	
3 WB TL	26	389	0.067		39.0	0.172	
3 EB TR	323	1390	0.232	√	39.0	0.596	
3 EB T	349	1502	0.232		39.0	0.596	
Total:			0.477				+0.000

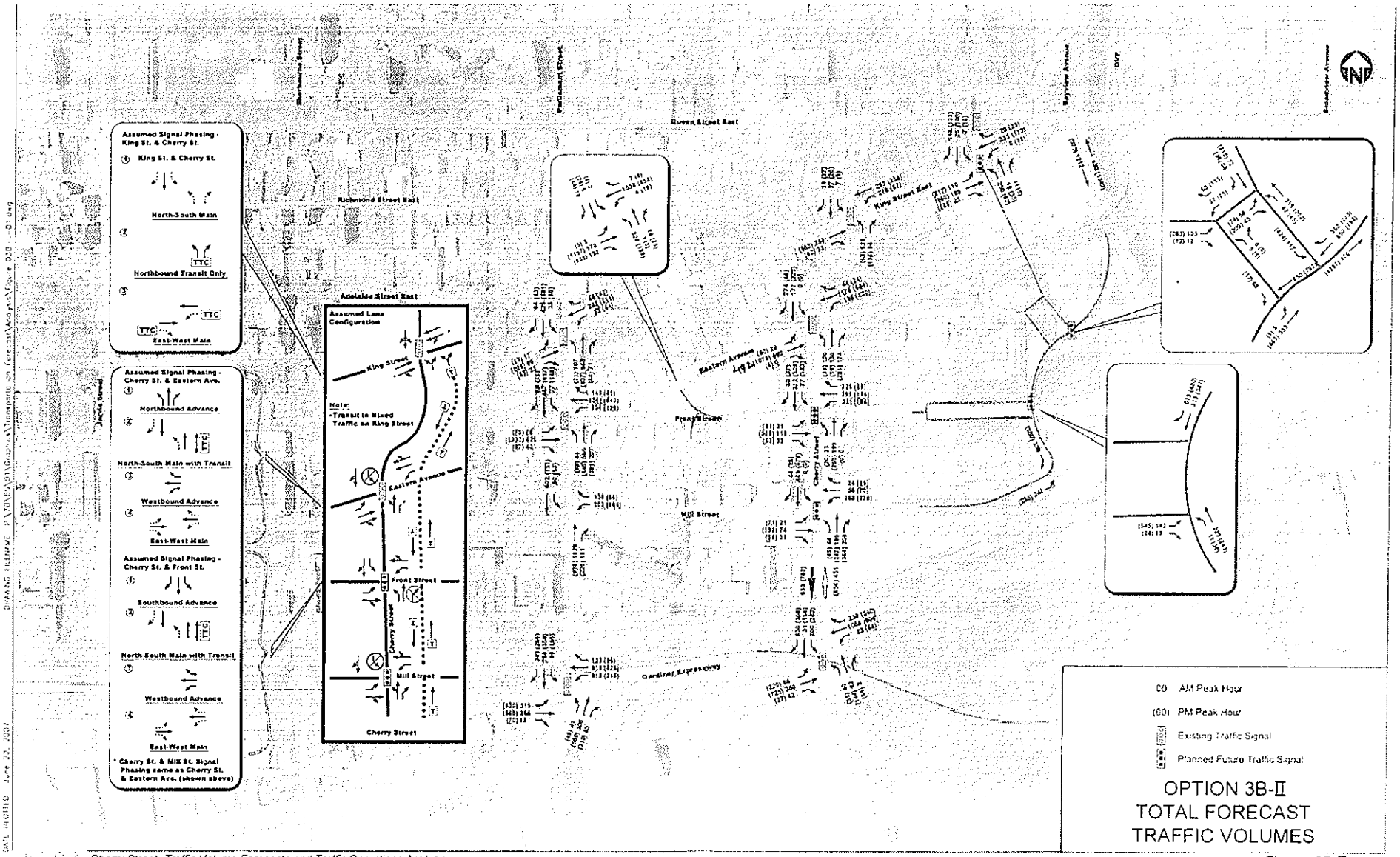
Other Measures:

Lane	Total Vol.	Total Cap.	Lane Deg. Satn	Avg. Veh. Delay	Avg. Queue (Cons)	Max. Prob. Queue	Prob. Disch. Ovrld.
SB TRL	60	518	0.116	22	2	5	0.0%
NB RL	204	463	0.441	28	6	11	0.2%
WB T	209	710	0.294	16	6	11	0.0%
WB TL	163	288	0.565	27	5	9	4.1%
EB TR	323	542	0.596	29	9	15	2.1%
EB T	349	586	0.596	29	10	16	2.1%
Int'n:	1,307	3,106		26			

NOTE(S):
- Main Phase Green Times have NOT been Balanced.
- Minimum Pedestrian Crossing Requirements have not been met.

SUMMARY of KEY RESULTS:

Cycle Time: 100.0 sec.
Lost Time: 17.0 sec.
Degree of Saturation: 0.574



Date of Aerial Photo May 2, 2006

Figure 3B-II

CCG/CALC 2 PERFORMANCE ANALYSIS DATA SUMMARY
FUTURE TOTAL TRAFFIC

Project : CHERRY ST. REVIEW-JN07
Scenario : WKDAM OP3Bii E.S.
Data File: TO-AM3B2.PC2

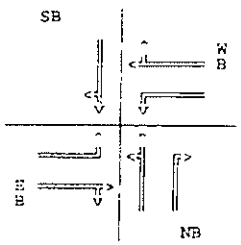
Page : 1
Printed On: June 28, 2007
Printed At: 5:07 PM

INTERSECTION: CHERRY/MILL

DEMAND VOLUMES:

Vehicles		Volume Adjustments		Pedestrian Volume	Pedestrian Walk Dst/Med Width(m)
0	24	3.0%	3.0%		
489	56	3.0%	3.0%	200	25/0
44	288	3.0%	3.0%		
21	199	3.0%	3.0%	200	16/0
74	208	3.0%	3.0%		
31	44	3.0%	3.0%	200	25/0

CONFIGURATION:



SIGNAL PHASING INFORMATION:

ϕ	Type	Permitted Moves: SB	WB	NB	EB	Signal Timings: Green	Amber	Red	SAG	Effective Times: Eff. Green	Lost Time	Ped. X+W	
1	NB Advance			RTL		9.0	0.0	0.0	3.0	10.0	2.0	0.0	
2	N-S Main	RT		TL		41.0	4.0	2.0	0.0	42.0	5.0	20.3	
3	WB Advance		RTL	R		9.0	0.0	0.0	3.0	10.0	2.0	0.0	
4	E-W Main		RTL		RTL	23.0	4.0	2.0	0.0	24.0	5.0	27.8	*
Total:						82.0	8.0	4.0	6.0	86.0	14.0		

Methodology: Canadian Capacity Guide, 2nd Edition (1995) (vv)

Approach Specific Adjustments:	SB	WB	NB	EB
Lefts/Cycle on IG (PCU):	2.0	2.0	2.0	2.0
Shared Lefts/Cycle on IG (PCU):	0.0	0.0	0.0	0.0
Rights/Cycle on IG (PCU):	0.0	0.0	0.0	0.0
Progression Regime (1-6):	3	3	3	3
Prot Left Turn Sat'n Adj.:	1.00	1.00	1.00	1.00
Perm Left Turn Sat'n Adj.:	1.00	1.00	1.00	1.00
Right Turn (No Peds) Sat'n Adj.:	0.80	0.80	0.80	0.80
Through Lane Sat'n Adj.:	1.00	1.00	1.00	1.00

Other Settings:	
Through Saturation:	1650 PCU/hour
Rights thru Pedestrians Formula:	Toronto
Pedestrian Walking Speed:	1.2 m/sec.
Min Pedestrian Walk Interval:	7.0 sec.
Delay Evaluation Interval:	60.0 min.
Confidence Level, Max Prob Queue:	95.0 %
Main Phase Grn Share Bal Crit:	2.0 %
Over-Capacity Permissive Left Adj :	Off

PERFORMANCE RESULTS:

Flow Ratio Table:

ϕ	Lane	Clr. Vol.	Sat'n	y	Max. y	Eff. Green	Deg. Sat'n	Ped. Inc.
1	NB R	132	1320	0.100	✓	10.0	1.000	
1	NB TL	165	1650	0.100		10.0	1.000	
2	SB TR	549	1543	0.356	✓	42.0	0.847	
2	NB TL	95	879	0.108		42.0	0.256	
3	WB TR	82	1635	0.050		10.0	0.537	
3	WB L	165	1650	0.100	✓	10.0	1.000	
3	NB R	73	1320	0.055		10.0	0.553	
4	WB TR	0	1272	0.000		26.0	0.000	
4	WB L	60	922	0.065		24.0	0.270	
4	EB TR	108	1276	0.085	✓	24.0	0.353	0.164
4	EB L	0	1650	0.000		24.0	0.000	
Total:				0.640				+0.164

Other Measures:

Lane	Total Vol.	Total Cap.	Lane Deg. Satn	Avg. Veh. Delay	Avg. Queue (Cons)	Max. Prob. Queue	Prob. Disch. Ovrld.
NB R	205	264	0.776	60	6	11	21.5%
SB TR	549	648	0.847	41	15	23	19.9%
NB TL	260	534	0.486	19	7	13	0.3%
WB TR	82	484	0.170	23	2	6	0.0%
WB L	297	468	0.647	35	8	14	4.2%
EB TR	108	306	0.353	35	3	7	0.1%
EB L	22	468	0.046	29	1	2	0.0%
Int'n:	1,522	3,163		37			

NOTE(S):
* Main Phase Green Times have NOT been Balanced.
* Minimum Pedestrian Crossing Requirements have not been met.

SUMMARY of KEY RESULTS:

Cycle Time: 100.0 sec.
Lost Time: 14.0 sec.
Degree of Saturation: 0.745

CCG/CALC 2 PERFORMANCE ANALYSIS DATA SUMMARY
FUTURE TOTAL TRAFFIC

Project : CHERRY ST. REVIEW-JN07
Scenario : WKDAM OP3Bii E.S.
Data File: TO-AM3B2.PC2

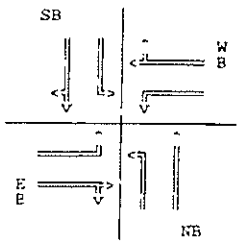
Page : 1
Printed On: June 28, 2007
Printed At: 5:08 PM

INTERSECTION: CHERRY/FRONT

DEMAND VOLUMES:

Vehicles		Volume Adjustments		Pedestrian Volume		Pedestrian Walk Dst/Med Width(m)	
77	228	3.0%	3.0%				
312	295	3.0%	3.0%	200		25/0	
30	321	3.0%	3.0%				
31	0	3.0%	3.0%	200	200	16/0	16/0
118	199	3.0%	3.0%				
33	33	3.0%	3.0%	200		25/0	

CONFIGURATION:



SIGNAL PHASING INFORMATION:

ϕ Type	Permitted Moves: SB	WB	NB	EB	Signal Timings: Green	Amber	Red	SAG	Effective Times: Eff. Green	Lost Time	Ped. X+W
1 SB Rgt Lft	RTL				6.0	0.0	0.0	3.0	7.0	2.0	0.0
2 N-S Main	RT		TL		33.0	4.0	2.0	0.0	34.0	6.0	20.3
3 WB Advance		RTL	R		7.0	0.0	0.0	3.0	8.0	2.0	0.0
4 E-W Main		RTL		RTL	36.0	4.0	2.0	0.0	37.0	5.0	27.6
Total:					82.0	8.0	4.0	6.0	90.0	10.0	

Methodology: Canadian Capacity Guide, 2nd Edition (1995) (vv)

Approach Specific Adjustments:	SB	WB	NB	EB
Lefts/Cycle on IG (PCU):	0.0	2.0	0.0	2.0
Shared Lefts/Cycle on IG (PCU):	0.0	0.0	0.0	0.0
Rights/Cycle on IG (PCU):	0.0	0.0	0.0	0.0
Progression Regime (1-6):	3	3	3	3
Prot Left Turn Sat'n Adj.:	1.00	1.00	1.00	1.00
Perm Left Turn Sat'n Adj.:	1.00	1.00	1.00	1.00
Right Turn (No Peds) Sat'n Adj.:	0.80	0.80	0.80	0.80
Through Lane Sat'n Adj.:	1.00	1.00	1.00	1.00

Other Settings:	
Through Saturation:	1650 PCU/hour
Rights thru Pedestrians Formula:	Toronto
Pedestrian Walking Speed:	1.2 m/sec.
Min Pedestrian Walk Interval:	7.0 sec.
Delay Evaluation Interval:	60.0 min.
Confidence Level, Max Prob Queue:	95.0 %
Main Phase Grn Share Bal Crit:	2.0 %
Over-Capacity Permissive Left Adj.:	Off

PERFORMANCE RESULTS:

Flow Ratio Table:

ϕ Lane	Clr. Vol.	Sat'n	y	Max. y	Eff. Green	Deg. Sat'n	Ped. Inc.
1 SB TR	113	1615	0.070	✓	7.0	1.000	
1 SB L	79	1650	0.048		7.0	0.687	
2 SB TR	239	1531	0.156	✓	36.0	0.434	0.017
2 NB T	205	1650	0.124		34.0	0.365	
2 NB L	34	693	0.049		34.0	0.144	
3 WB TR	319	1488	0.080	✓	8.0	1.000	
3 WB L	132	1650	0.080	✓	8.0	1.000	
4 WB TR	420	1199	0.350	✓	39.0	0.898	
4 WB L	127	959	0.132		37.0	0.357	
4 EB TR	156	1388	0.112		37.0	0.303	
4 EB L	0	389	0.000		37.0	0.000	
Total:			0.656				+0.017

Other Measures:

Lane	Total Vol.	Total Cap.	Lane Deg. Satn	Avg. Veh. Delay	Avg. Queue (Cons)	Max. Prob. Queue	Prob. Disch. Ovrld.
SB L	79	116	0.687	78	2	5	18.1%
SB TR	352	664	0.530	24	10	16	0.6%
NB T	205	561	0.365	27	6	11	0.0%
NB L	34	236	0.144	24	1	3	0.0%
WB TR	539	586	0.919	54	15	23	33.2%
WB L	331	559	0.592	25	9	16	1.3%
EB TR	156	514	0.303	24	4	9	0.0%
EB L	32	216	0.148	22	1	3	0.0%
Int'n:	1,727	3,451		36			

NOTE(S):
* Main Phase Green Times have NOT been Balanced.

SUMMARY of KEY RESULTS:

Cycle Time: 100.0 sec.
Lost Time: 10.0 sec.
Degree of Saturation: 0.729

CCG/CALC 2 PERFORMANCE ANALYSIS DATA SUMMARY
Future Total Traffic

Project : CHERRY ST. REVIEW-JN07
Scenario : WKDAM OP3Bii E.S.
Data File: TO-AM3B2.PC2

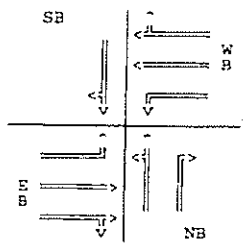
Page : 1
Printed On: Aug. 29, 2007
Printed At: 11:38 AM

INTERSECTION: CHERRY/EASTERN

DEMAND VOLUMES:

Vehicles	Volume Adjustments	Pedestrian Volume	Pedestrian Walk Dst/Med Width(m)
0 | 44	3.0% | 3.0%	<——> 200	<——> 27/0
177 | 1,174	3.0% | 3.0%		
274 | 198	3.0% | 3.0%		
29 | 174	3.0% | 3.0%	^ |200 v	^ |23/0 v
492 | 130	3.0% | 3.0%	^ |200 v	^ |23/0 v
0 | 120	3.0% | 3.0%	<——> 200	<——> 27/0

CONFIGURATION:



SIGNAL PHASING INFORMATION:

ϕ Type	Permitted Moves: SB	WB	NB	EB	Signal Timings: Green	Amber	Red	SAG	Effective Times: Eff. Green	Lost Time	Ped. X+W
1 NB Advance			RTL		6.0	0.0	0.0	3.0	7.0	2.0	0.0
2 N-S Main	RT		TL		37.0	4.0	2.0	0.0	38.0	5.0	26.2
3 WB Advance		RTL	R		6.0	0.0	0.0	3.0	7.0	2.0	0.0
4 E-W Main		RTL		RTL	33.0	4.0	2.0	0.0	34.0	5.0	29.5
Total:					82.0	8.0	4.0	6.0	88.0	12.0	

Methodology: Canadian Capacity Guide, 2nd Edition (1995) (vv)

Approach Specific Adjustments:

	SB	WB	NB	EB
Lefts/Cycle on IG (PCU):	2.0	2.0	2.0	2.0
Shared Lefts/Cycle on IG (PCU):	0.0	0.0	0.0	0.0
Rights/Cycle on IG (PCU):	1.5	0.0	0.0	0.0
Progression Regime (1-6):	3	3	3	3
Prot Left Turn Sat'n Adj.:	1.00	1.00	1.00	1.00
Perm Left Turn Sat'n Adj.:	1.00	1.00	1.00	1.00
Right Turn (No Peds) Sat'n Adj.:	0.80	0.80	0.80	0.80
Through Lane Sat'n Adj.:	1.00	1.00	1.00	1.00

Other Settings:

Through Saturation:	1650 PCU/hour
Rights thru Pedestrians Formula:	Toronto
Pedestrian Walking Speed:	1.2 m/sec.
Min Pedestrian Walk Interval:	7.0 sec.
Delay Evaluation Interval:	60.0 min.
Confidence Level, Max Prob Queue:	95.0 %
Main Phase Grn Share Bal Crit:	2.0 %
Over-Capacity Permissive Left Adj.:	Off

PERFORMANCE RESULTS:

Flow Ratio Table:

ϕ Lane	Clr. Vol.	Sat'n	y	Max. y	Eff. Green	Deg. Sat'n	Ped. Inc.
1 NB R	92	1320	0.070	✓	7.0	1.000	
1 NB TL	116	1650	0.070		7.0	1.000	
2 SB TR	411	1117	0.367	✓	38.0	0.967	
2 NB TL	142	642	0.221		38.0	0.582	
3 WB TR	113	1620	0.070	✓	7.0	1.000	
3 WB T	116	1650	0.070		7.0	1.000	
3 WB L	116	1650	0.070		7.0	1.000	
3 NB R	87	1320	0.066		7.0	0.940	
4 WB TR	496	1548	0.321	✓	36.0	0.891	
4 WB T	529	1650	0.321		36.0	0.891	
4 WB L	16	479	0.034		34.0	0.101	
4 EB TR	253	1650	0.154		34.0	0.452	
4 EB T	253	1650	0.154		34.0	0.452	
4 EB L	0	118	0.000		34.0	0.000	
Total:			0.828				+0.000

Other Measures:

Lane	Total Vol	Total Cap.	Lane Deg. Satn	Avg. Veh. Delay	Avg. Queue (Cons)	Max. Prob. Queue	Prob. Disch. Ovrld.
NB R	179	185	0.970	149	5	10	38.0%
SB TR	465	479	0.971	69	13	20	41.6%
NB TL	258	359	0.726	35	7	13	11.0%
WB TR	610	671	0.909	50	17	25	25.9%
WB T	645	710	0.909	49	18	27	26.2%
WB L	204	350	0.582	30	6	11	3.0%
EB TR	253	561	0.452	28	7	13	0.1%
EB T	253	561	0.452	28	7	13	0.1%
EB L	30	112	0.266	30	1	3	1.0%
Int'n:	2,896	3,987		55			

NOTE(S):

SUMMARY of KEY RESULTS:

Cycle Time: 100.0 sec.
Lost Time: 12.0 sec.
Degree of Saturation: 0.941

CCG/CALC 2 PERFORMANCE ANALYSIS DATA SUMMARY
Future Total Traffic

Project : CHERRY ST. REVIEW-JN07
Scenario : WKDAM OP3Bii E.S.
Data File: TO-AM3B2.PC2

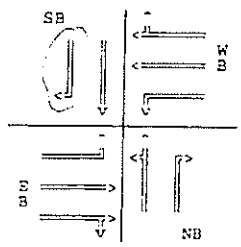
Page : 1
Printed On: Aug. 29, 2007
Printed At: 11:40 AM

INTERSECTION: CHERRY/EASTERN

DEMAND VOLUMES:

Vehicles		Volume Adjustments		Pedestrian Volume		Pedestrian Walk Dst/Med Width(m)	
0	44	3.0%	3.0%				
177	1,174	3.0%	3.0%	200		27/0	
274	198	3.0%	3.0%				
29	174	3.0%	3.0%	200	200	23/0	23/0
492	130	3.0%	3.0%				
0	120	3.0%	3.0%	200		27/0	

CONFIGURATION:



SIGNAL PHASING INFORMATION:

φ Type	Permitted Moves: SB	WB	NB	EB	Signal Timings: Green	Amber	Red	SAG	Effective Times: Eff. Green	Lost Time	Ped. X+W
1 NB Advance			RTL		6.0	0.0	0.0	3.0	7.0	2.0	0.0
2 N-S Main	RT		TL		37.0	4.0	2.0	0.0	38.0	5.0	26.2
3 WB Advance		RTL	R		6.0	0.0	0.0	3.0	7.0	2.0	0.0
4 E-W Main		RTL		RTL	33.0	4.0	2.0	0.0	34.0	5.0	29.5
Total:					82.0	8.0	4.0	6.0	88.0	12.0	

Methodology: Canadian Capacity Guide, 2nd Edition (1995) (vv)

Approach Specific Adjustments:

	SB	WB	NB	EB
Lefts/Cycle on IG (PCU):	2.0	2.0	2.0	2.0
Shared Lefts/Cycle on IG (PCU):	0.0	0.0	0.0	0.0
Rights/Cycle on IG (PCU):	1.5	0.0	0.0	0.0
Progression Regime (1-6):	3	3	3	3
Prot Left Turn Sat'n Adj.:	1.00	1.00	1.00	1.00
Perm Left Turn Sat'n Adj.:	1.00	1.00	1.00	1.00
Right Turn (No Peds) Sat'n Adj.:	0.80	0.80	0.80	0.80
Through Lane Sat'n Adj.:	1.00	1.00	1.00	1.00

Other Settings:

Through Saturation:	1650 PCU/hour
Rights thru Pedestrians Formula:	Toronto
Pedestrian Walking Speed:	1.2 m/sec.
Min Pedestrian Walk Interval:	7.0 sec.
Delay Evaluation Interval:	60.0 min.
Confidence Level, Max Prob Queue:	95.0 %
Main Phase Grn Share Bal Crit:	2.0 %
Over-Capacity Permissive Left Adj.:	Off

PERFORMANCE RESULTS:

Flow Ratio Table:

φ Lane	Cir. Vol.	Sat'n	y	Max. y	Eff. Green	Deg. Sat'n	Ped. Inc.
1 NB R	92	1320	0.070	✓	7.0	1.000	
1 NB TL	116	1650	0.070		7.0	1.000	
2 SB R	228	888	0.257	✓	38.0	0.676	
2 SB T	182	1650	0.110		38.0	0.291	
2 NB TL	142	1168	0.122		38.0	0.320	
3 WB TR	333	2620	0.070	✓	7.0	1.000	
3 WB T	115	1650	0.070		7.0	1.000	
3 WB L	116	1650	0.070		7.0	1.000	
3 NB R	87	1320	0.066		7.0	0.940	
4 WB TR	456	1548	0.321	✓	36.0	0.891	
4 WB T	529	1650	0.321		36.0	0.891	
4 WB L	16	479	0.034		34.0	0.101	
4 EB TR	253	1650	0.154		34.0	0.452	
4 SB T	253	1650	0.154		34.0	0.452	
4 EB L	0	118	0.000		34.0	0.000	
Total:			0.718				+0.000

Other Measures:

Lane	Total Vol.	Total Cap.	Lane Deg. Satn	Avg. Veh. Delay	Avg. Queue (Cons)	Max. Prob. Queue	Prob. Disch. Ovrld.
NB R	179	185	0.970	149	5	10	38.0%
SB R	282	391	0.721	38	8	14	10.1%
SB T	182	627	0.291	23	5	10	0.0%
NB TL	258	559	0.460	22	7	13	0.1%
WB TR	610	671	0.909	50	17	25	25.9%
WB T	645	710	0.909	49	18	27	26.2%
WB L	204	350	0.582	30	6	11	3.0%
EB TR	253	561	0.452	28	7	13	0.1%
EB T	253	561	0.452	28	7	13	0.1%
EB L	30	112	0.266	30	1	3	1.0%
Int'n:	2,896	4,727		45			

NOTE(S):
- Main Phase Green Times have NOT been Balanced.

SUMMARY of KEY RESULTS:

Cycle Time: 100.0 sec.
Lost Time: 12.0 sec.
Degree of Saturation: 0.816

CCG/CALC 2 PERFORMANCE ANALYSIS DATA SUMMARY
FUTURE TOTAL TRAFFIC

Project : CHERRY ST. REVIEW-JN07
Scenario : WKDAM OP3Bii E.S.
Data File: TO-AM3B2.PC2

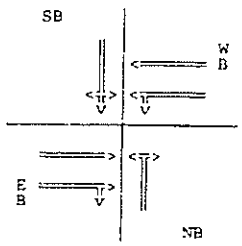
Page : 1
Printed On: June 28, 2007
Printed At: 5:12 PM

INTERSECTION: CHERRY/KING

DEMAND VOLUMES:

Vehicles		Volume Adjustments		Pedestrian Volume		Pedestrian Walk Dst/Med Width(m)	
7	0	29.0%	3.0%				
27	297	3.0%	9.0%	200		8.0/0	
18	276	3.0%	4.0%				
0	98	3.0%	3.0%	200	200	19/0	19/0
288	0	15.0%	3.0%				
33	121	4.0%	3.0%	200		29/0	

CONFIGURATION:



SIGNAL PHASING INFORMATION:

ϕ	Type	Permitted Moves: SB	WB	NB	EB	Signal Timings: Green	Amber	Red	SAG	Effective Times: Eff. Green	Lost Time	Ped. X+W	
1	N-S Main	RTL		RL		34.0	4.0	2.0	0.0	35.0	5.0	0.0	
2	WB Advance		RTL			8.0	0.0	0.0	3.0	9.0	2.0	0.0	
3	E-W Main		RTL		RTL	38.0	4.0	2.0	0.0	39.0	5.0	0.0	
4	Peds Only					3.0	1.0	1.0	0.0	0.0	5.0	31.2	*
Total:						83.0	9.0	5.0	3.0	83.0	17.0		

Methodology: Canadian Capacity Guide, 2nd Edition (1995) (vv)

Approach Specific Adjustments:

	SB	WB	NB	EB
Lefts/Cycle on IG (PCU):	0.0	2.0	0.0	0.0
Shared Lefts/Cycle on IG (PCU):	0.0	0.0	0.0	0.0
Rights/Cycle on IG (PCU):	0.0	0.0	0.0	0.0
Progression Regime (1-6):	3	3	3	3
Prot Left Turn Sat'n Adj.:	1.00	1.00	1.00	1.00
Perm Left Turn Sat'n Adj.:	1.00	1.00	1.00	1.00
Right Turn (No Peds) Sat'n Adj.:	0.80	0.69	0.80	0.65
Through Lane Sat'n Adj.:	1.00	0.86	1.00	0.91

Other Settings:

Through Saturation:	1650 PCU/hour
Rights thru Pedestrians Formula:	Toronto
Pedestrian Walking Speed:	1.2 m/sec.
Min Pedestrian Walk Interval:	7.0 sec.
Delay Evaluation Interval:	60.0 min.
Confidence Level, Max Prob Queue:	95.0 %
Main Phase Grn Share Bal Crit:	2.0 %
Over-Capacity Permissive Left Adj.:	Off

PERFORMANCE RESULTS:

Flow Ratio Table:

ϕ	Lane	Clr. Vol.	Sat'n	y	Max. y	Eff. Green	Deg. Sat'n	Ped. Inc.
1	SB TRL	55	1523	0.036		35.0	0.104	
1	NB RL	226	1335	0.169	√	35.0	0.483	
2	WB T	128	1419	0.090		9.0	1.000	
2	WB TL	146	1619	0.090	√	9.0	1.000	
3	WB T	178	1419	0.126		42.0	0.307	
3	WB TL	159	770	0.206	√	39.0	0.528	
3	SB TR	176	1393	0.126		39.0	0.324	
3	EB T	190	1502	0.126		39.0	0.324	
Total:				0.465				+0.000

Other Measures:

Lane	Total Vol.	Total Cap.	Lane Deg. Satn	Avg. Veh. Delay	Avg. Queue (Cons)	Max. Prob. Queue	Prob. Disch. Ovrld.
SB TRL	55	533	0.104	22	2	4	0.0%
NB RL	226	467	0.483	29	6	12	0.5%
WB T	307	710	0.432	18	9	15	0.0%
WB TL	304	446	0.682	29	8	15	6.8%
EB TR	176	543	0.324	23	5	10	0.0%
EB T	190	586	0.324	23	5	10	0.0%
Int'n:	1,257	3,285		24			

NOTE(S):
* Main Phase Green Times have NOT been Balanced.
* Minimum Pedestrian Crossing Requirements have not been met.

SUMMARY of KEY RESULTS:

Cycle Time: 100.0 sec.
Lost Time: 17.0 sec.
Degree of Saturation: 0.560

CCG/CALC 2 PERFORMANCE ANALYSIS DATA SUMMARY
FUTURE TOTAL TRAFFIC

Project : CHERRY ST. REVIEW-JN07
Scenario : WKDPM OP3Bii E.S.
Data File: TO-PM3B2.PC2

Page : 1
Printed On: June 29, 2007
Printed At: 10:40 AM

INTERSECTION: CHERRY/MILL

DEMAND VOLUMES:

Vehicles

```
    0 | 19
  479 | 70
   28 | 268
------+------
   71 |  364
  159 | 247
   36 | 45
```

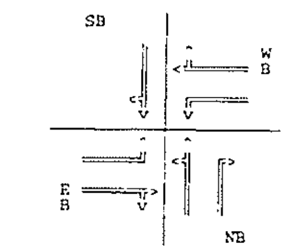
Volume Adjustments

```
   3.0% | 3.0%
  3.0%  | 3.0%
 3.0%   | 3.0%
--------+--------
   3.0% |  3.0%
   3.0% | 3.0%
   3.0% | 3.0%
```

Pedestrian Volume: 200 (top), 200 (left), 200 (right, circled), 200 (bottom)

Pedestrian Walk Dst/Med Width(m): 25/0 (top), 16/0 (left), 16/0 (right), 25/0 (bottom)

CONFIGURATION:



SIGNAL PHASING INFORMATION:

ϕ Type	Permitted Moves: SB	WB	NB	EB	Signal Timings: Green	Amber	Red	SAG	Effective Times: Eff. Green	Lost Time	Ped. X+W
1 N-S Main	RT		RTL		22.0	2.0	2.0	0.0	23.0	3.0	20.3
2 N-S Main	RT		TL		28.0	4.0	2.0	0.0	29.0	5.0	20.3
3 WB Advance		RTL	R		8.0	0.0	0.0	3.0	9.0	2.0	0.0
4 E-W Main		RTL		RTL	23.0	4.0	2.0	0.0	24.0	5.0	27.8 *
Total:					81.0	10.0	6.0	3.0	85.0	15.0	

Methodology: Canadian Capacity Guide, 2nd Edition (1995) (vv)

Approach Specific Adjustments:	SB	WB	NB	EB
Lefts/Cycle on IG (PCU):	2.0	2.0	2.0	2.0
Shared Lefts/Cycle on IG (PCU):	0.0	0.0	0.0	0.0
Rights/Cycle on IG (PCU):	0.0	0.0	0.0	0.0
Progression Regime (1-6):	3	3	3	3
Prot Left Turn Sat'n Adj.:	1.00	1.00	1.00	1.00
Perm Left Turn Sat'n Adj.:	1.00	1.00	1.00	1.00
Right Turn (No Peds) Sat'n Adj.:	0.80	0.80	0.80	0.80
Through Lane Sat'n Adj.:	1.00	1.00	1.00	1.00

Other Settings:

Setting	Value
Through Saturation:	1650 PCU/hour
Rights thru Pedestrians Formula:	Toronto
Pedestrian Walking Speed:	1.2 m/sec.
Min Pedestrian Walk Interval:	7.0 sec.
Delay Evaluation Interval:	60.0 min.
Confidence Level, Max Prob Queue:	95.0 %
Main Phase Grn Share Bal Crit:	2.0 %
Over-Capacity Permissive Left Adj.:	Off

PERFORMANCE RESULTS:

Flow Ratio Table:

ϕ Lane	Clr. Vol.	Sat'n	y	Max. y	Eff. Green	Deg. Sat'n	Ped. Inc.
1 SB TR	231	1580	0.146		23.0	0.636	
1 NB R	256	~~2560~~ 1320 (915)	~~0.280~~	✓ 0.194	23.0	1.216	
1 NB TL	133	1150	0.116		23.0	0.503	
2 SB TR	291	1580	0.184	✓	29.0	0.636	
2 NB TL	168	1150	0.146		29.0	0.503	
3 WB TR	92	1566	0.059		9.0	0.650	
3 WB L	149	1650	0.090	✓	9.0	1.000	
3 NB R	119	1320	0.090		9.0	1.000	
4 WB TR	0	1362	0.000		26.0	0.000	
4 WB L	56	547	0.102		24.0	0.423	
4 EB TR	201	1395	0.144	✓	24.0	0.600	0.104
4 EB L	1	1650	0.001		24.0	0.003	
Total:				~~0.496~~ 0.612			+0.104

Other Measures:

Lane	Total Vol.	Total Cap.	Lane Deg. Satn	Avg. Veh. Delay	Avg. Queue (Cons)	Max. Prob. Queue	Prob. Disch. Ovrld.
SB TR	522	822	0.636 0.998	21	15	22	1.4%
NB R	375	329	1.138*	322	na	56	59.3%
NB TL	301	598	0.503	19	8	14	0.3%
WB TR	92	495	0.185	23	3	6	0.0%
WB L	276	352	0.785	48	8	14	15.3%
EB TR	201	335	0.600	42	6	11	5.8%
EB L	73	468	0.156	31	2	5	0.0%
Int'n:	1,840	3,398		89			

NOTE(S):
- Main Phase Green Times have NOT been Balanced.
- Minimum Pedestrian Crossing Requirements have not been met.
- One or more lanes is oversaturated.

SUMMARY of KEY RESULTS:

Cycle Time: 100.0 sec.
Lost Time: 15.0 sec.
Degree of Saturation: ~~0.821~~ 0.720

- Due to software limitations ped volume has been removed to obtain [illegible]

CCG/CALC 2 PERFORMANCE ANALYSIS DATA SUMMARY
FUTURE TOTAL TRAFFIC

Project : CHERRY ST. REVIEW-JN07
Scenario : WKDPM OP3Bii E.S.
Data File: TO-PM3B2.PC2

Page : 1
Printed On: June 29, 2007
Printed At: 10:29 AM

INTERSECTION: CHERRY/MILL

DEMAND VOLUMES:

Vehicles

0	19
479	70
28	268
71	364
159	247
36	45

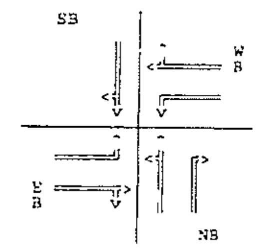
Volume Adjustments

3.0%	3.0%
3.0%	3.0%
3.0%	3.0%
3.0%	3.0%
3.0%	3.0%
3.0%	3.0%

Pedestrian Volume: 200 (top), 200 (left), 0 (circled), 200 (bottom)

Pedestrian Walk Dst/Med Width(m): 25/0 (top), 16/0 (left), 16/0 (right), 25/0 (bottom)

CONFIGURATION:



SIGNAL PHASING INFORMATION:

φ Type	Permitted Moves: SB	WB	NB	EB	Signal Timings: Green	Amber	Red	SAG	Effective Times: Eff. Green	Lost Time	Ped. X+W
1 N-S Main	RT		RTL		22.0	2.0	2.0	0.0	23.0	3.0	20.3
2 N-S Main	RT		TL		28.0	4.0	2.0	0.0	29.0	5.0	20.3
3 WB Advance		RTL	R		8.0	0.0	0.0	3.0	9.0	2.0	0.0
4 E-W Main		RTL		RTL	23.0	4.0	2.0	0.0	24.0	5.0	27.8 *
Total:					81.0	10.0	6.0	3.0	85.0	15.0	

Methodology: Canadian Capacity Guide, 2nd Edition (1995) (vv)

Approach Specific Adjustments:	SB	WB	NB	EB
Lefts/Cycle on IG (PCU):	2.0	2.0	2.0	2.0
Shared Lefts/Cycle on IG (PCU):	0.0	0.0	0.0	0.0
Rights/Cycle on IG (PCU):	0.0	0.0	0.0	0.0
Progression Regime (1-6):	3	3	3	3
Prot Left Turn Sat'n Adj.:	1.00	1.00	1.00	1.00
Perm Left Turn Sat'n Adj.:	1.00	1.00	1.00	1.00
Right Turn (No Peds) Sat'n Adj.:	0.80	0.80	0.80	0.80
Through Lane Sat'n Adj.:	1.00	1.00	1.00	1.00

Other Settings:

Through Saturation:	1650 PCU/hour
Rights thru Pedestrians Formula:	Toronto
Pedestrian Walking Speed:	1.2 m/sec.
Min Pedestrian Walk Interval:	7.0 sec.
Delay Evaluation Interval:	60.0 min.
Confidence Level, Max Prob Queue:	95.0 %
Main Phase Grn Share Bal Crit:	2.0 %
Over-Capacity Permissive Left Adj.:	Off

PERFORMANCE RESULTS:

Flow Ratio Table:

φ Lane	Clr. Vol.	Sat'n	y	Max. y	Eff. Green	Deg. Sat'n	Ped. Inc.
1 SB TR	231	1580	0.146		23.0	0.636	
1 NB R	256	1320	0.194	√	23.0	0.844	
1 NB TL	133	1150	0.116		23.0	0.503	
2 SB TR	291	1580	0.184	√	29.0	0.636	
2 NB TL	168	1150	0.146		29.0	0.503	
3 WB TR	9%	1566	0.059		9.0	0.650	
3 WB L	149	1650	0.090	√	9.0	1.000	
3 NB R	119	1320	0.090		9.0	1.000	
4 WB TR	0	1362	0.000		26.0	0.000	
4 WB L	56	547	0.102		24.0	0.423	
4 EB TR	201	1395	0.144	√	24.0	0.600	0.104
4 EB L	I	1650	0.001		24.0	0.003	
Total:				0.612			+0.104

Other Measures:

Lane	Total Vol.	Total Cap.	Lane Deg. Satn	Avg. Veh. Delay	Avg. Queue (Cons)	Max. Prob. Queue	Prob. Disch. Ovrld.
SB TR	522	822	0.636	21	15	22	1.4%
NB R	375	422	0.888	62	10	17	24.9%
NB TL	301	598	0.503	19	8	14	0.3%
WB TR	92	495	0.185	23	3	6	0.0%
WB L	276	352	0.785	48	8	14	15.3%
EB TR	201	335	0.600	42	6	11	5.8%
EB L	73	468	0.156	31	2	5	0.0%
Int'n:	1,840	3,491		36			

NOTE(S):
- Main Phase Green Times have NOT been Balanced.
- Minimum Pedestrian Crossing Requirements have not been met.

SUMMARY of KEY RESULTS:

Cycle Time: 100.0 sec.
Lost Time: 15.0 sec.
Degree of Saturation: 0.720

– Supplementary Analysis

* Due to software [illegible] volume [illegible] This reflects [illegible] is [illegible] volume than [illegible] NBR [illegible] phase [illegible] of 915 [illegible] 1200.)

– This [illegible] volume [illegible] in N-S main phase (phase 3)

CCG/CALC 2 PERFORMANCE ANALYSIS DATA SUMMARY
Future Total Traffic

Project : CHERRY ST. REVIEW-JN07
Scenario : WKDPM OP3Bii E.S.
Data File: TO-PM3B2.PC2

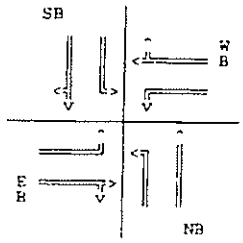
Page : 1
Printed On: Aug. 29, 2007
Printed At: 2:55 PM

INTERSECTION: CHERRY/FRONT

DEMAND VOLUMES:

Vehicles		Volume Adjustments		Pedestrian Volume	Pedestrian Walk Dst/Med Width(m)
133	66	3.0%	3.0%		
329	116	3.0%	3.0%	200	25/0
37	194	3.0%	3.0%		
61	0	3.0%	3.0%	200	16/0
509	265	3.0%	3.0%	200	25/0
53	20	3.0%	3.0%		

CONFIGURATION:



SIGNAL PHASING INFORMATION:

ϕ	Type	Permitted Moves: SB	WB	NB	EB	Signal Timings: Green	Amber	Red	SAG	Effective Times: Eff. Green	Lost Time	Ped. X+W
1	SB Rst Lft	RTL				8.0	0.0	0.0	3.0	9.0	2.0	0.0
2	N-S Main	RT		TL		30.0	4.0	2.0	0.0	31.0	5.0	20.3
3	WB Advance		RTL			6.0	0.0	0.0	3.0	7.0	2.0	0.0
4	E-W Main		RTL		RTL	38.0	4.0	2.0	0.0	39.0	5.0	27.8
Total:						82.0	8.0	4.0	6.0	86.0	14.0	

Methodology: Canadian Capacity Guide, 2nd Edition (1995) (vv)

Approach Specific Adjustments:

	SB	WB	NB	EB
Lefts/Cycle on IG (PCU):	0.0	2.0	0.0	2.0
Shared Lefts/Cycle on IG (PCU):	0.0	0.0	0.0	0.0
Rights/Cycle on IG (PCU):	0.0	0.0	0.0	0.0
Progression Regime (1-6):	3	3	3	3
Prot Left Turn Sat'n Adj.:	1.00	1.00	1.00	1.00
Perm Left Turn Sat'n Adj.:	1.00	1.00	1.00	1.00
Right Turn (No Peds) Sat'n Adj.:	0.80	0.80	0.80	0.80
Through Lane Sat'n Adj.:	1.00	1.00	1.00	1.00

Other Settings:

Through Saturation:	1650 PCU/hour
Rights thru Pedestrians Formula:	Toronto
Pedestrian Walking Speed:	1.2 m/sec.
Min Pedestrian Walk Interval:	7.0 sec.
Delay Evaluation Interval:	60.0 min.
Confidence Level, Max Prob Queue:	95.0 %
Main Phase Grn Share Bal Crit:	2.0 %
Over-Capacity Permissive Left Adj.:	Off

PERFORMANCE RESULTS:

Flow Ratio Table:

ϕ	Lane	Clr. Vol.	Sat'n	y	Max. y	Eff. Green	Deg. Sat'n	Ped. Inc.
1	SB TR	145	1609	0.090	✓	9.0	1.000	
1	SB L	137	1650	0.083		9.0	0.922	
2	SB TR	232	1511	0.154		33.0	0.465	
2	NB T	273	1650	0.165	✓	31.0	0.534	0.008
2	NB L	21	657	0.031		31.0	0.101	
3	WB TR	106	1513	0.070	✓	7.0	1.000	
3	WB L	116	1650	0.070		7.0	1.000	
4	WB TR	82	1260	0.065		41.0	0.158	
4	WB L	32	205	0.060		39.0	0.154	
4	EB TR	579	1527	0.379	✓	39.0	0.972	
4	EB L	0	1279	0.000		39.0	0.000	
Total:				0.704				+0.008

Other Measures:

Lane	Total Vol.	Total Cap.	Lane Deg. Satn	Avg. Veh. Delay	Avg. Queue (Cons)	Max. Prob. Queue	Prob. Disch. Ovrld.
SB L	137	149	0.922	133	4	8	33.3%
SB TR	377	644	0.586	26	10	17	1.1%
NB T	279	512	0.534	33	8	13	1.1%
NB L	21	204	0.101	26	1	2	0.0%
WB TR	187	623	0.301	17	5	10	0.0%
WB L	200	267	0.747	41	6	11	19.7%
EB TR	579	596	0.972	82	16	24	34.8%
EB L	63	571	0.110	20	2	5	0.0%
Int'n:	1,836	3,564		53			

NOTE(S):
* Main Phase Green Times have NOT been Balanced.

SUMMARY of KEY RESULTS:

Cycle Time: 100.0 sec.
Lost Time: 14.0 sec.
Degree of Saturation: 0.819

CCG/CALC 2 PERFORMANCE ANALYSIS DATA SUMMARY
Future Total Traffic

Project : CHERRY ST. REVIEW-JN07
Scenario : WKDPM OP3Bii E.S.
Data File: TO-PM3B2.PC2

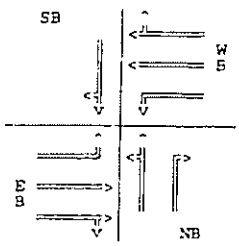
Page : 1
Printed On: Aug. 29, 2007
Printed At: 11:42 AM

INTERSECTION: CHERRY/EASTERN

DEMAND VOLUMES:

Vehicles		Volume Adjustments		Pedestrian Volume	Pedestrian Walk Dst/Med Width(m)
0	28	3.0%	3.0%		
225	677	3.0%	3.0%	200	27/0
46	213	3.0%	3.0%		
50	281	3.0%	3.0%	200 200	23/0 23/0
1,075	59	3.0%	3.0%	200	27/0
6	39	3.0%	3.0%		

CONFIGURATION:



SIGNAL PHASING INFORMATION:

¢ Type	Permitted Moves: SB	WB	NB	EB	Signal Timings: Green	Amber	Red	SAG	Effective Times: Eff. Green	Lost Time	Ped. X+W
1 NB Advance			RTL		11.0	0.0	0.0	3.0	12.0	2.0	0.0
2 N-S Main	RT		TL		26.0	4.0	2.0	0.0	27.0	5.0	26.2
3 WB Advance		RTL	R		10.0	0.0	0.0	3.0	11.0	2.0	0.0
4 E-W Main		RTL		RTL	35.0	4.0	2.0	0.0	36.0	5.0	29.5
Total:					82.0	8.0	4.0	6.0	86.0	14.0	

Methodology: Canadian Capacity Guide, 2nd Edition (1995) (vv)

Approach Specific Adjustments:	SB	WB	NB	EB
Lefts/Cycle on IG (PCU):	2.0	2.0	2.0	2.0
Shared Lefts/Cycle on IG (PCU):	0.0	0.0	0.0	0.0
Rights/Cycle on IG (PCU):	1.5	0.0	0.0	0.0
Progression Regime (1-6):	3	3	3	3
Prot Left Turn Sat'n Adj.:	1.00	1.00	1.00	1.00
Perm Left Turn Sat'n Adj.:	1.00	1.00	1.00	1.00
Right Turn (No Peds) Sat'n Adj.:	0.80	0.80	0.80	0.80
Through Lane Sat'n Adj.:	1.00	1.00	1.00	1.00

Other Settings:	
Through Saturation:	1650 PCU/hour
Rights thru Pedestrians Formula:	Toronto
Pedestrian Walking Speed:	1.2 m/sec.
Min Pedestrian Walk Interval:	7.0 sec.
Delay Evaluation Interval:	60.0 min.
Confidence Level, Max Prob Queue:	95.0 %
Main Phase Grn Share Bal Crit:	2.0 %
Over-Capacity Permissive Left Adj.:	Off

PERFORMANCE RESULTS:

Flow Ratio Table:

¢ Lane	Clr. Vol.	Sat'n	y	Max. y	Eff. Green	Deg. Sat'n	Ped. Inc.
1 NB R	158	1320	0.120	✓	12.0	1.000	
1 NB TL	101	1650	0.061		12.0	0.510	
2 SB TR	232	1650	0.140	✓	27.0	0.520	0.091
2 NB TL	0	897	0.000		27.0	0.000	
3 WB TR	178	1618	0.110	✓	11.0	1.000	
3 WB T	181	1650	0.110		11.0	1.000	
3 WB L	147	1650	0.089		11.0	0.812	
3 NB R	131	1320	0.099		11.0	0.902	
4 WB TR	177	1540	0.115		38.0	0.303	
4 WB T	190	1650	0.115		38.0	0.303	
4 WB L	0	85	0.000		36.0	0.000	
4 EB TR	554	1634	0.339		36.0	0.942	
4 EB T	559	1650	0.339	✓	36.0	0.942	
4 EB L	0	753	0.000		36.0	0.000	
Total:			0.709				+0.091

Other Measures:

Lane	Total Vol.	Total Cap.	Lane Deg. Satn	Avg. Veh. Delay	Avg. Queue (Cons)	Max. Prob. Queue	Prob. Disch. Ovrld.
NB R	289	304	0.953	105	8	14	41.3%
SB TR	279	500	0.559	36	8	14	1.3%
NB TL	101	440	0.229	22	3	6	0.0%
WB TR	355	763	0.465	19	10	16	0.1%
WB T	371	809	0.459	19	10	17	0.0%
WB L	219	284	0.773	43	6	11	16.3%
EB TR	554	588	0.942	68	15	23	37.4%
EB T	559	594	0.942	67	16	24	38.8%
EB L	52	343	0.150	23	1	4	0.0%
Int'n:	2,780	4,624		51			

NOTE(S):
- Main Phase Green Times have NOT been Balanced.

SUMMARY of KEY RESULTS:

Cycle Time: 100.0 sec.
Lost Time: 14.0 sec.
Degree of Saturation: 0.825

CCG/CALC 2 PERFORMANCE ANALYSIS DATA SUMMARY
Future Total Traffic

Project : CHERRY ST. REVIEW-JN07
Scenario : WKDPM OP3Bii E.S.
Data File: TO-PM3B2.PC2

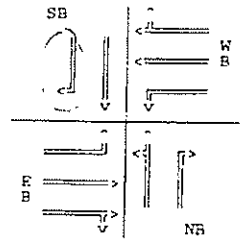
Page : 1
Printed On: Aug. 29, 2007
Printed At: 11:43 AM

INTERSECTION: CHERRY/EASTERN

DEMAND VOLUMES:

Vehicles		Volume Adjustments		Pedestrian Volume	Pedestrian Walk Dst/Med Width(m)
0	28	3.0%	3.0%		
225	677	3.0%	3.0%	200	27/0
46	213	3.0%	3.0%		
50	281	3.0%	3.0%	200 / 200	23/0 / 23/0
1,075	59	3.0%	3.0%	200	27/0
6	39	3.0%	3.0%		

CONFIGURATION:



SIGNAL PHASING INFORMATION:

φ	Type	Permitted Moves: SB	WB	NB	SB	Signal Timings: Green	Amber	Red	SAG	Effective Times: Eff. Green	Lost Time	Ped. X+W
1	NB Advance			RTL		11.0	0.0	0.0	3.0	12.0	2.0	0.0
2	N-S Main	RT		TL		26.0	4.0	2.0	0.0	27.0	5.0	26.2
3	WB Advance		RTL	R		10.0	0.0	0.0	3.0	11.0	2.0	0.0
4	E-W Main		RTL		RTL	35.0	4.0	2.0	0.0	36.0	5.0	29.5
Total:						82.0	8.0	4.0	6.0	86.0	14.0	

Methodology: Canadian Capacity Guide, 2nd Edition (1995) (vv)

Approach Specific Adjustments:

	SB	WB	NB	EB
Lefts/Cycle on IG (PCU):	2.0	2.0	2.0	2.0
Shared Lefts/Cycle on IG (PCU):	0.0	0.0	0.0	0.0
Rights/Cycle on IG (PCU):	1.5	0.0	0.0	0.0
Progression Regime (1.6):	3	3	3	3
Prot Left Turn Sat'n Adj.:	1.00	1.00	1.00	1.00
Perm Left Turn Sat'n Adj.:	1.00	1.00	1.00	1.00
Right Turn (No Peds) Sat'n Adj.:	0.80	0.80	0.80	0.80
Through Lane Sat'n Adj.:	1.00	1.00	1.00	1.00

Other Settings:

Through Saturation:	1650 PCU/hour
Rights thru Pedestrians Formula:	Toronto
Pedestrian Walking Speed:	1.2 m/sec.
Min Pedestrian Walk Interval:	7.0 sec.
Delay Evaluation Interval:	60.0 min.
Confidence Level, Max Prob Queue:	95.0 %
Main Phase Grn Share Bal Crit:	2.0 %
Over-Capacity Permissive Left Adj.:	Off

PERFORMANCE RESULTS:

Flow Ratio Table:

φ	Lane	Clr. Vol.	Sat'n	y	Max. y	Eff. Green	Deg. Sat'n	Ped. Inc.
1	NB R	158	1320	0.120	✓	12.0	1.000	
1	NB TL	101	1650	0.061		12.0	0.510	
2	SB R	0	846	0.000		27.0	0.000	
2	SB T	232	1650	0.140	✓	27.0	0.520	0.091
2	NB TL	0	897	0.000		27.0	0.000	
3	WB TR	178	1618	0.110	✓	11.0	1.000	
3	WB T	181	1650	0.110		11.0	1.000	
3	WB L	147	1650	0.089		11.0	0.812	
3	NB R	131	1320	0.099		11.0	0.902	
4	WB TR	177	1540	0.115		38.0	0.303	
4	WB T	190	1650	0.115		38.0	0.303	
4	WB L	0	85	0.000		36.0	0.000	
4	EB TR	554	1634	0.339		36.0	0.942	
4	EB T	559	1650	0.339	✓	36.0	0.942	
4	EB L	0	753	0.000		36.0	0.000	
Total:				0.709				+0.091

Other Measures:

Lane	Total Vol.	Total Cap.	Lane Deg. Satn	Avg. Veh. Delay	Avg. Queue (Cons)	Max. Prob. Queue	Prob. Disch. Ovrld.
NB R	289	304	0.953	105	8	14	41.3%
SB R	47	283	0.168	29	1	4	0.0%
SB T	232	446	0.520	35	6	12	1.5%
NB TL	101	440	0.229	22	3	6	0.0%
WB TR	355	763	0.465	19	10	16	0.1%
WB T	171	809	0.459	19	10	17	0.0%
WB L	219	284	0.773	43	6	11	16.3%
EB TR	554	588	0.942	68	16	23	37.4%
EB T	559	594	0.942	67	16	24	38.8%
EB L	52	343	0.150	23	1	4	0.0%
Int'n:	2,780	4,853		51			

NOTE(S):
- Main Phase Green Times have NOT been Balanced.

SUMMARY of KEY RESULTS:

Cycle Time: 100.0 sec.
Lost Time: 14.0 sec.
Degree of Saturation: 0.825

CCG/CALC 2 PERFORMANCE ANALYSIS DATA SUMMARY
FUTURE TOTAL TRAFFIC

Project : CHERRY ST. REVIEW-JN07
Scenario : WKDPM OP3Bii E.S.
Data File: TO-PM3B2.PC2

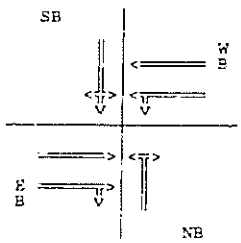
Page : 1
Printed On: June 28, 2007
Printed At: 5:44 PM

INTERSECTION: CHERRY/KING

DEMAND VOLUMES:

Vehicles		Volume Adjustments		Pedestrian Volume	Pedestrian Walk Dst/Med Width(m)
9	0	29.0%	3.0%	200	8.0/0
20	258	3.0%	9.0%		
27	87	3.0%	4.0%		
0	136	3.0%	3.0%	200 / 200	19/0 / 19/0
562	0	15.0%	3.0%		
62	62	4.0%	3.0%	200	29/0

CONFIGURATION:



SIGNAL PHASING INFORMATION:

ϕ Type	Permitted Moves: SB	WB	NB	EB	Signal Timings: Green	Amber	Red	SAG	Effective Times: Eff. Green	Lost Time	Ped. X+W	
1 N-S Main	RTL		RL		34.0	4.0	2.0	0.0	35.0	5.0	0.0	
2 WB Advance		RTL			8.0	0.0	0.0	3.0	9.0	2.0	0.0	
3 E-W Main		RTL		RTL	38.0	4.0	2.0	0.0	39.0	5.0	0.0	
4 Peds Only					3.0	1.0	1.0	0.0	0.0	5.0	31.2	*
Total:					83.0	9.0	5.0	3.0	83.0	17.0		

Methodology: Canadian Capacity Guide, 2nd Edition (1995) (vv)

Approach Specific Adjustments:	SB	WB	NB	EB
Lefts/Cycle on IG (PCU):	0.0	2.0	0.0	0.0
Shared Lefts/Cycle on IG (PCU):	0.0	0.0	0.0	0.0
Rights/Cycle on IG (PCU):	0.0	0.0	0.0	0.0
Progression Regime (1-6):	3	3	3	3
Prot Left Turn Sat'n Adj.:	1.00	1.00	1.00	1.00
Perm Left Turn Sat'n Adj.:	1.00	1.00	1.00	1.00
Right Turn (No Peds) Sat'n Adj.:	0.80	0.69	0.80	0.65
Through Lane Sat'n Adj.:	1.00	0.86	1.00	0.91

Other Settings:	
Through Saturation:	1650 PCU/hour
Rights thru Pedestrians Formula:	Toronto
Pedestrian Walking Speed:	1.2 m/sec.
Min Pedestrian Walk Interval:	7.0 sec.
Delay Evaluation Interval:	60.0 min.
Confidence Level, Max Prob Queue:	95.0 %
Main Phase Grn Share Bal Crit:	2.0 %
Over Capacity Permissive Left Adj.:	Off

PERFORMANCE RESULTS:

Flow Ratio Table:

ϕ Lane	Clr. Vol.	Sat'n	y	Max. y	Eff. Green	Deg. Sat'n	Ped. Inc.
1 SB TRL	60	1479	0.041		35.0	0.116	
1 NB RL	204	1322	0.154	✓	35.0	0.441	
2 WB T	128	1419	0.090	✓	9.0	1.000	
2 WB TL	137	1519	0.090		9.0	1.000	
3 WB T	82	2419	0.097		41.0	0.139	
3 WB TL	26	354	0.074		39.0	0.189	
3 EB TR	342	1396	0.245	✓	39.0	0.629	
3 EB T	368	1502	0.245		39.0	0.629	
Total:			0.490				+0.000

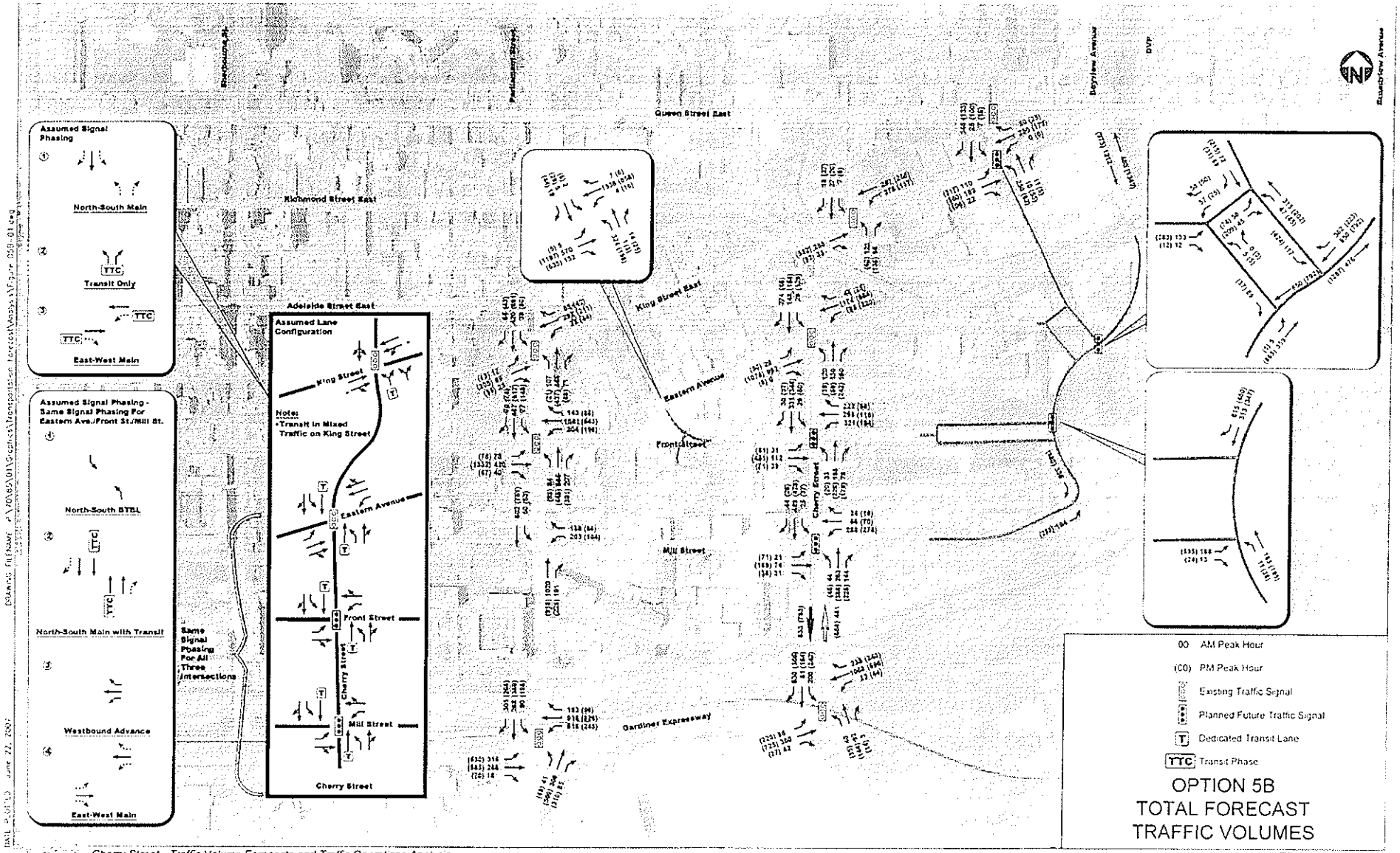
Other Measures:

Lane	Total Vol.	Total Cap.	Lane Deg. Satn	Avg. Veh. Delay	Avg. Queue (Cons)	Max. Prob. Queue	Prob. Disch. Ovrld.
SB TRL	60	518	0.116	22	2	5	0.0%
NB RL	204	463	0.441	28	6	11	0.2%
WB T	209	710	0.294	16	6	11	0.0%
WB TL	163	275	0.592	28	5	9	4.1%
EB TR	342	545	0.629	30	10	16	3.4%
EB T	368	586	0.629	30	10	17	3.2%
Int'n:	1,346	3,095		27			

NOTE(S):
- Main Phase Green Times have NOT been Balanced.
- Minimum Pedestrian Crossing Requirements have not been met.

SUMMARY of KEY RESULTS:

Cycle Time: 100.0 sec.
Lost Time: 17.0 sec.
Degree of Saturation: 0.590


Assumed Signal Phasing
North-South Main
Transit Only
East-West Main
Assumed Signal Phasing - Same Signal Phasing For Eastern Ave./Front St./Mill St.
North-South BTBL
North-South Main with Transit
Westbound Advance
East-West Main
Same Signal Phasing For All Three Intersections
Assumed Lane Configuration
Note:
•Transit in Mixed Traffic on King Street
King Street
Eastern Avenue
Front Street
Mill Street
Cherry Street
Richmond Street East
Adelaide Street East
King Street East
Queen Street East
Parliament Street
Berkeley St.
Front Street
Cherry Street
Mill Street
Gardiner Expressway
Don Valley Parkway
Bayview Avenue
Broadview Avenue
00 AM Peak Hour
(00) PM Peak Hour
Existing Traffic Signal
Planned Future Traffic Signal
Dedicated Transit Lane
TTC Transit Phase
OPTION 5B
TOTAL FORECAST
TRAFFIC VOLUMES

CCG/CALC 2 PERFORMANCE ANALYSIS DATA SUMMARY
FUTURE TOTAL TRAFFIC

Project : CHERRY ST. REVIEW-JN07
Scenario : WKDAY AM OP5B CTR
Data File: TO-AM5B.PC2

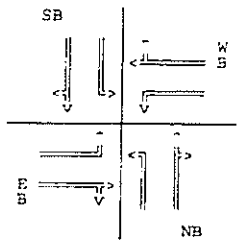
Page : 1
Printed On: June 28, 2007
Printed At: 4:02 PM

INTERSECTION: CHERRY/MILL

DEMAND VOLUMES:

Vehicles		Volume Adjustments		Pedestrian Volume		Pedestrian Walk Dst/Med Width(m)	
25	24	3.0%	3.0%	<——>		<——>	
489	56	3.0%	3.0%	200		25/0	
44	288	3.0%	3.0%	^	^	^	^
				200	200	16/0	16/0
21	144	3.0%	3.0%	V	V	V	V
74	263	3.0%	3.0%	200		25/0	
31	44	3.0%	3.0%	<——>		<——>	

CONFIGURATION:



SIGNAL PHASING INFORMATION:

ϕ	Type	Permitted Moves: SB	WB	NB	EB	Signal Timings: Green	Amber	Red	SAG	Effective Times: Eff. Green	Lost Time	Ped. X+W
1	NS BTBL Rst	L		L		6.0	2.0	2.0	0.0	7.0	3.0	0.0
2	N-S Main	RT		RT		43.0	4.0	2.0	0.0	44.0	5.0	17.3
3	WB Advance		RTL			9.0	0.0	0.0	3.0	10.0	2.0	0.0
4	E-W Main		RTL		RTL	23.0	4.0	2.0	0.0	24.0	5.0	24.8
Total:						81.0	10.0	6.0	3.0	85.0	15.0	

Methodology: Canadian Capacity Guide, 2nd Edition (1995) (vv)

Approach Specific Adjustments:

	SB	WB	NB	EB
Lefts/Cycle on IG (PCU):	2.0	2.0	2.0	2.0
Shared Lefts/Cycle on IG (PCU):	0.0	0.0	0.0	0.0
Rights/Cycle on IG (PCU):	0.0	0.0	0.0	0.0
Progression Regime (1-6):	3	3	3	3
Prot Left Turn Sat'n Adj.:	1.00	1.00	1.00	1.00
Perm Left Turn Sat'n Adj.:	1.00	1.00	1.00	1.00
Right Turn (No Peds) Sat'n Adj.:	0.80	0.80	0.80	0.80
Through Lane Sat'n Adj.:	1.00	1.00	1.00	1.00

Other Settings:

Through Saturation:	1650 PCU/hour
Rights thru Pedestrians Formula:	Toronto
Pedestrian Walking Speed:	1.2 m/sec.
Min Pedestrian Walk Interval:	4.0 sec.
Delay Evaluation Interval:	60.0 min.
Confidence Level, Max Prob Queue:	95.0 %
Main Phase Grn Share Bal Crit:	2.0 %
Over-Capacity Permissive Left Adj.:	Off

PERFORMANCE RESULTS:

Flow Ratio Table:

ϕ	Lane	Clr. Vol.	Sat'n	y	Max. y	Eff. Green	Deg. Sat'n	Ped. Inc.
1	SB L	26	1650	0.016		7.0	0.223	
1	NB L	45	1650	0.027	✓	7.0	0.392	
2	SB TR	549	1544	0.356	✓	44.0	0.808	
2	NB TR	419	1276	0.329		44.0	0.747	
3	WB TR	82	1535	0.054		10.0	0.537	
3	WB L	165	1650	0.100	✓	10.0	1.000	
4	WB TR	0	1272	0.000		26.0	0.000	
4	WB L	60	922	0.065		24.0	0.270	
4	EB TR	108	1276	0.085	✓	24.0	0.353	0.134
4	EB L	0	1650	0.000		24.0	0.000	
Total:				0.568				+0.134

Other Measures:

Lane	Total Vol.	Total Cap.	Lane Deg. Satn	Avg. Veh. Delay	Avg. Queue (Cons)	Max. Prob. Queue	Prob. Disch. Ovrld.
SB L	26	116	0.223	48	1	3	0.6%
NB L	45	116	0.392	54	1	4	3.9%
SB TR	549	679	0.808	35	15	23	13.9%
NB TR	419	561	0.747	33	12	19	8.3%
WB TR	82	484	0.170	23	2	6	0.0%
WB L	297	458	0.647	35	8	14	4.2%
EB TR	108	306	0.353	35	3	7	0.1%
EB L	32	468	0.046	29	1	2	0.0%
Int'n:	1,548	3,188		34			

NOTE(S):
- Main Phase Green Times have NOT been Balanced.

SUMMARY of KEY RESULTS:

Cycle Time: 100.0 sec.
Lost Time: 15.0 sec.
Degree of Saturation: 0.668

CCG/CALC 2 PERFORMANCE ANALYSIS DATA SUMMARY
FUTURE TOTAL TRAFFIC

Project : CHERRY ST. REVIEW-JN07
Scenario : WKDAY AM OP5B CTR
Data File: TO-AM5B.PC2

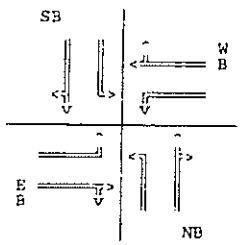
Page : 1
Printed On: June 28, 2007
Printed At: 4:03 PM

INTERSECTION: CHERRY/FRONT

DEMAND VOLUMES:

Vehicles		Volume Adjustments		Pedestrian Volume	Pedestrian Walk Dst/Med Width(m)
29	228	3.0%	3.0%		
331	295	3.0%	3.0%	200	25/0
30	321	3.0%	3.0%		
39	78	3.0%	3.0%	200 / 200	16/0 / 16/0
128	185	3.0%	3.0%		
44	33	3.0%	3.0%	200	25/0

CONFIGURATION:



SIGNAL PHASING INFORMATION:

ϕ	Type	Permitted Moves: SB	WB	NB	EB	Signal Timings: Green	Amber	Red	SAG	Effective Times: Eff. Green	Lost Time	Ped. X-W
1	NS BTRL Rst	L		L		6.0	2.0	2.0	0.0	7.0	3.0	0.0
2	N-S Main	RT		RT		32.0	4.0	2.0	0.0	33.0	5.0	20.3
3	WB Advance		RTL			7.0	0.0	0.0	3.0	8.0	2.0	0.0
4	E-W Main		RTL		RTL	36.0	4.0	2.0	0.0	37.0	5.0	27.8
Total:						81.0	10.0	6.0	3.0	87.0	13.0	

Methodology: Canadian Capacity Guide, 2nd Edition (1995) (vv)

Approach Specific Adjustments:	SB	WB	NB	EB
Lefts/Cycle on IG (PCU):	2.0	2.0	2.0	2.0
Shared Lefts/Cycle on IG (PCU):	0.0	0.0	0.0	0.0
Rights/Cycle on IG (PCU):	0.0	0.0	0.0	0.0
Progression Regime (1-6):	3	3	3	3
Prot Left Turn Sat'n Adj.:	1.00	1.00	1.00	1.00
Perm Left Turn Sat'n Adj.:	1.00	1.00	1.00	1.00
Right Turn (No Peds) Sat'n Adj.:	0.80	0.80	0.80	0.80
Through Lane Sat'n Adj.:	1.00	1.00	1.00	1.00

Other Settings:	
Through Saturation:	1650 PCU/hour
Rights thru Pedestrians Formula:	Toronto
Pedestrian Walking Speed:	1.2 m/sec.
Min Pedestrian Walk Interval:	7.0 sec.
Delay Evaluation Interval:	60.0 min.
Confidence Level, Max Prob Queue:	95.0 %
Main Phase Grn Share Bal Crit:	2.0 %
Over-Capacity Permissive Left Adj.:	Off

PERFORMANCE RESULTS:

Flow Ratio Table:

ϕ	Lane	Clr. Vol.	Sat'n	y	Max. y	Eff. Green	Deg. Sat'n	Ped. Inc.
1	SB L	30	1650	0.018		7.0	0.259	
1	NB L	34	1650	0.021	✓	7.0	0.294	
2	SB TR	372	1536	0.242	✓	33.0	0.733	
2	NB TR	271	1305	0.208		33.0	0.629	
3	WB TR	119	1488	0.080	✓	8.0	1.000	
3	WB L	132	1650	0.080		8.0	1.000	
4	WB TR	420	1199	0.350	✓	39.0	0.898	
4	WB L	127	888	0.143		37.0	0.385	
4	EB TR	177	1351	0.131		37.0	0.354	
4	EB L	0	389	0.000		37.0	0.000	
Total:					0.693			+0.000

Other Measures:

Lane	Total Vol.	Total Cap.	Lane Deg. Satn	Avg. Veh. Delay	Avg. Queue (Cons)	Max. Prob. Queue	Prob. Disch. Ovrld.
SB L	30	116	0.259	49	1	3	1.0%
NB L	34	116	0.294	51	1	3	1.6%
SB TR	372	507	0.733	39	10	17	10.2%
NB TR	271	431	0.629	35	8	13	4.4%
WB TR	539	586	0.919	54	15	23	31.2%
WB L	331	533	0.621	26	8	16	2.6%
EB TR	177	500	0.354	25	5	10	0.0%
EB L	40	216	0.186	23	1	4	0.0%
Int'n:	1,793	3,004		39			

NOTE(S):
* Main Phase Green Times have NOT been Balanced.

SUMMARY of KEY RESULTS:

Cycle Time: 100.0 sec.
Lost Time: 13.0 sec.
Degree of Saturation: 0.796

CCG/CALC 2 PERFORMANCE ANALYSIS DATA SUMMARY
Future Total Traffic

Project : CHERRY ST. REVIEW-JN07
Scenario : WKDAY AM OP5B CTR
Data File: TO-AM5B.PC2

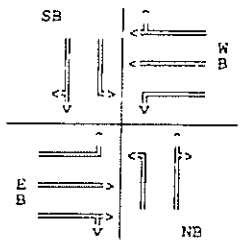
Page : 1
Printed On: Aug. 29, 2007
Printed At: 2:09 PM

INTERSECTION: CHERRY/EASTERN

DEMAND VOLUMES:

Vehicles		Volume Adjustments		Pedestrian Volume		Pedestrian Walk Dst/Med Width(m)	
29	44	3.0%	3.0%				
148	1,174	3.0%	3.0%	200		27/0	
274	198	3.0%	3.0%	200	200	23/0	23/0
29	160	3.0%	3.0%				
492	130	3.0%	3.0%	200		27/0	
0	120	3.0%	3.0%				

CONFIGURATION:



SIGNAL PHASING INFORMATION:

¢	Type	Permitted Moves: SB	WB	NB	EB	Signal Timings: Green	Amber	Red	SAG	Effective Times: Eff. Green	Lost Time	Ped. X+W
1	NS RTBL Rst	L		L		7.0	2.0	2.0	0.0	8.0	3.0	0.0
2	N-S Main	RT		RT		35.0	4.0	2.0	0.0	36.0	5.0	26.2
3	WB Advance		RTL			6.0	0.0	0.0	3.0	7.0	2.0	0.0
4	E-W Main		RTL		RTL	33.0	4.0	2.0	0.0	34.0	5.0	29.5
Total:						81.0	10.0	6.0	3.0	87.0	13.0	

Methodology: Canadian Capacity Guide, 2nd Edition (1995) (vv)

Approach Specific Adjustments:

	SB	WB	NB	EB
Lefts/Cycle on IG (PCU):	2.0	2.0	2.0	2.0
Shared Lefts/Cycle on IG (PCU):	0.0	0.0	0.0	0.0
Rights/Cycle on IG (PCU):	1.5	0.0	1.0	0.0
Progression Regime (1-6):	3	3	3	3
Prot Left Turn Sat'n Adj.:	1.00	1.00	1.00	1.00
Perm Left Turn Sat'n Adj.:	1.00	1.00	1.00	1.00
Right Turn (No Peds) Sat'n Adj.:	0.80	0.80	0.80	0.80
Through Lane Sat'n Adj.:	1.00	1.00	1.00	1.00

Other Settings:

Through Saturation:	1650 PCU/hour
Rights thru Pedestrians Formula:	Toronto
Pedestrian Walking Speed:	1.2 m/sec.
Min Pedestrian Walk Interval:	7.0 sec.
Delay Evaluation Interval:	60.0 min.
Confidence Level, Max Prob Queue:	95.0 %
Main Phase Grn Share Bal Crit:	2.0 %
Over-Capacity Permissive Left Adj.:	Off

PERFORMANCE RESULTS:

Flow Ratio Table:

¢	Lane	Clr. Vol.	Sat'n	y	Max. y	Eff. Green	Deg. Sat'n	Ped. Inc.
1	SB L	30	1650	0.018		8.0	0.226	
1	NB L	124	1650	0.075	✓	8.0	0.936	
2	SB TR	379	1086	0.349	✓	36.0	0.969	
2	NB TR	263	1157	0.227		36.0	0.631	
3	WB TR	113	1620	0.070	✓	7.0	1.000	
3	WB T	115	1650	0.070		7.0	1.000	
3	WB L	116	1650	0.070		7.0	1.000	
4	WB TR	496	1548	0.321	✓	36.0	0.891	
4	WB T	529	1650	0.321		36.0	0.891	
4	WB L	16	479	0.034		34.0	0.101	
4	EB TR	253	1650	0.154		34.0	0.452	
4	EB T	253	1650	0.154		34.0	0.452	
4	EB L	0	118	0.000		34.0	0.000	
Total:				0.815				+0.000

Other Measures:

Lane	Total Vol.	Total Cap.	Lane Deg. Satn	Avg. Veh. Delay	Avg. Queue (Cons)	Max. Prob. Queue	Prob. Disch. Ovrld.
SB L	30	132	0.226	47	1	3	0.2%
NB L	124	132	0.936	151	3	7	26.2%
SB TR	435	447	0.973	95	12	19	43.2%
NB TR	299	452	0.660	35	8	14	4.4%
WB TR	610	671	0.909	50	17	25	25.9%
WB T	645	710	0.909	49	18	27	26.2%
WB L	204	350	0.582	30	6	11	3.0%
EB TR	253	561	0.452	28	7	13	0.1%
EB T	253	561	0.452	28	7	13	0.1%
EB L	30	112	0.266	30	1	3	1.0%
Int'n:	2,882	4,128		54			

NOTE(S):

SUMMARY of KEY RESULTS:

Cycle Time: 100.0 sec.
Lost Time: 13.0 sec.
Degree of Saturation: 0.936

CCG/CALC 2 PERFORMANCE ANALYSIS DATA SUMMARY
FUTURE TOTAL TRAFFIC

Project : CHERRY ST. REVIEW-JN07
Scenario : WKDAY AM OP5B CTR
Data File: TO-AM5B.PC2

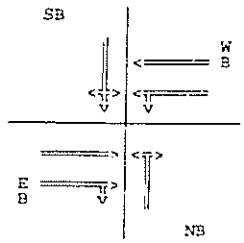
Page : 1
Printed On: June 29, 2007
Printed At: 10:19 AM

INTERSECTION: CHERRY/KING

DEMAND VOLUMES:

Vehicles		Volume Adjustments		Pedestrian Volume	Pedestrian Walk Dst/Med Width(m)
7	0	29.0%	3.0%	200	8.0/0
27	297	3.0%	9.0%		
18	276	3.0%	4.0%		
0	98	3.0%	3.0%	200 / 200	19/0 / 19/0
288	0	15.0%	3.0%		
33	121	4.0%	3.0%	200	29/0

CONFIGURATION:



SIGNAL PHASING INFORMATION:

	Permitted Moves:				Signal Timings:				Effective Times:		
ϕ Type	SB	WB	NB	EB	Green	Amber	Red	SAG	Eff. Green	Lost Time	Ped. X+W
1 N-S Main	RTL		RL		34.0	4.0	2.0	0.0	35.0	5.0	0.0
2 WB Advance		RTL			8.0	0.0	0.0	3.0	9.0	2.0	0.0
3 E-W Main		RTL		RTL	38.0	4.0	2.0	0.0	39.0	5.0	0.0
4 Peds Only					3.0	1.0	1.0	0.0	0.0	5.0	31.2 *
Total:					83.0	9.0	5.0	3.0	83.0	17.0	

Methodology: Canadian Capacity Guide, 2nd Edition (1995) (vv)

Approach Specific Adjustments:

	SB	WB	NB	EB
Lefts/Cycle on IG (PCU):	0.0	2.0	0.0	0.0
Shared Lefts/Cycle on IG (PCU):	0.0	0.0	0.0	0.0
Rights/Cycle on IG (PCU):	0.0	0.0	2.0	0.0
Progression Regime (1-6):	3	3	3	3
Prot Left Turn Sat'n Adj.:	1.00	1.00	1.00	1.00
Perm Left Turn Sat'n Adj.:	1.00	1.00	1.00	1.00
Right Turn (No Peds) Sat'n Adj.:	0.80	0.70	0.80	0.66
Through Lane Sat'n Adj.:	1.00	0.87	1.00	0.92

Other Settings:

Through Saturation:	1650 PCU/hour
Rights thru Pedestrians Formula:	Toronto
Pedestrian Walking Speed:	1.2 m/sec.
Min Pedestrian Walk Interval:	7.0 sec.
Delay Evaluation Interval:	60.0 min.
Confidence Level, Max Prob Queue:	95.0 %
Main Phase Grn Share Bal Crit:	2.0 %
Over-Capacity Permissive Left Adj.:	Off

PERFORMANCE RESULTS:

Flow Ratio Table:

ϕ Lane	Clr. Vol.	Sat'n	y	Max. y	Eff. Green	Deg. Sat'n	Ped. Inc.
1 SB TRL	55	1523	0.036		35.0	0.104	
1 NB RL	154	1343	0.114	√	35.0	0.327	
2 WB T	129	1436	0.090	√	9.0	1.000	
2 WB TL	146	1622	0.090		9.0	1.000	
3 WB T	178	1436	0.124		41.0	0.302	
3 WB TL	158	770	0.205	√	39.0	0.525	
3 EB TR	176	1410	0.125		39.0	0.320	
3 EB T	190	1518	0.125		39.0	0.320	
Total:				0.409			+0.000

Other Measures:

Lane	Total Vol.	Total Cap.	Lane Deg. Satn	Avg. Veh. Delay	Avg. Queue (Cons)	Max. Prob. Queue	Prob. Disch. Ovrld.
SB TRL	55	533	0.104	22	2	4	0.0%
NB RL	226	542	0.416	27	6	12	0.1%
WB T	307	718	0.428	18	9	15	0.0%
WB TL	304	446	0.680	29	8	15	8.7%
EB TR	176	550	0.320	23	5	10	0.0%
EB T	190	592	0.320	23	5	10	0.0%
Int'n:	1,257	3,381		24			

NOTE(S):
- Main Phase Green Times have NOT been Balanced.
- Minimum Pedestrian Crossing Requirements have not been met.

SUMMARY of KEY RESULTS:

Cycle Time: 100.0 sec.
Lost Time: 17.0 sec.
Degree of Saturation: 0.493

CCG/CALC 2 PERFORMANCE ANALYSIS DATA SUMMARY
FUTURE TOTAL TRAFFIC

Project : CHERRY ST. REVIEW-JN07
Scenario : WKDAY PM OP5B CTR
Data File: TO-PM5B.PC2

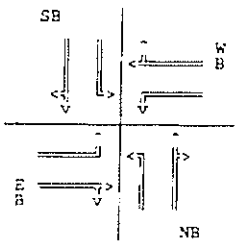
Page : 1
Printed On: June 29, 2007
Printed At: 10:22 AM

INTERSECTION: CHERRY/MILL

DEMAND VOLUMES:

Vehicles		Volume Adjustments		Pedestrian Volume	Pedestrian Walk Dst/Med Width(m)
37	19	3.0%	3.0%	<——> 200	<——> 25/0
479	70	3.0%	3.0%		
28	268	3.0%	3.0%		
71	225	3.0%	3.0%	200 200	16/0 16/0
159	386	3.0%	3.0%		
36	45	3.0%	3.0%	<——> 200	<——> 25/0

CONFIGURATION:



SIGNAL PHASING INFORMATION:

	Permitted Moves:				Signal Timings:				Effective Times:			
ϕ Type	SB	WB	NB	EB	Green	Amber	Red	SAG	Eff. Green	Lost Time	Ped. X+W	
1 NS BTBL Rst	L		L		6.0	2.0	2.0	0.0	7.0	5.0	0.0	
2 N-S Main	RT		RT		44.0	4.0	2.0	0.0	45.0	5.0	20.3	
3 WB Advance		RTL			8.0	0.0	0.0	3.0	9.0	2.0	0.0	
4 E-W Main		RTL		RTL	23.0	4.0	2.0	0.0	24.0	5.0	27.8	*
Total:					81.0	10.0	6.0	3.0	85.0	15.0		

Methodology: Canadian Capacity Guide, 2nd Edition (1995) (vv)

Approach Specific Adjustments:	SB	WB	NB	EB
Lefts/Cycle on IG (PCU):	2.0	2.0	2.0	2.0
Shared Lefts/Cycle on IG (PCU):	0.0	0.0	0.0	0.0
Rights/Cycle on IG (PCU):	0.0	0.0	1.5	0.0
Progression Regime (1-6):	3	3	3	3
Prot Left Turn Sat'n Adj.:	1.00	1.00	1.00	1.00
Perm Left Turn Sat'n Adj.:	1.00	1.00	1.00	1.00
Right Turn (No Peds) Sat'n Adj.:	0.80	0.80	0.80	0.80
Through Lane Sat'n Adj.:	1.00	1.00	1.00	1.00

Other Settings:	
Through Saturation:	1650 PCU/hour
Rights thru Pedestrians Formula:	Toronto
Pedestrian Walking Speed:	1.2 m/sec.
Min Pedestrian Walk Interval:	7.0 sec.
Delay Evaluation Interval:	60.0 min.
Confidence Level, Max Prob Queue:	95.0 %
Main Phase Grn Share Bal Crit:	2.0 %
Over-Capacity Permissive Left Adj.:	Off

PERFORMANCE RESULTS:

Flow Ratio Table:

ϕ Lane	Clr. Vol.	Sat'n	y	Max. y	Eff. Green	Deg. Sat'n	Ped. Inc.
1 SB L	38	1650	0.023		7.0	0.330	
1 NB L	46	1650	0.028	✓	7.0	0.401	
2 SB TR	522	1578	0.331		45.0	0.735	
2 NB TR	575	1315	0.438	✓	45.0	0.972	
3 WB TR	92	1566	0.059		9.0	0.650	
3 WB L	149	1650	0.090	✓	9.0	1.000	
4 WB TR	0	1362	0.000		26.0	0.000	
4 WB L	56	547	0.102		24.0	0.423	
4 EB TR	201	1395	0.144	✓	24.0	0.600	0.104
4 EB L	1	1650	0.001		24.0	0.003	
Total:			0.700				+0.104

Other Measures:

Lane	Total Vol.	Total Cap.	Lane Deg. Satn	Avg. Veh. Delay	Avg. Queue (Cons)	Max. Prob. Queue	Prob. Disch. Ovrld.
SB L	38	116	0.330	52	1	3	2.3%
NB L	46	116	0.401	55	1	4	4.2%
SB TR	522	710	0.735	30	15	22	6.4%
NB TR	629	646	0.975	78	17	26	38.9%
WB TR	92	495	0.185	23	3	6	0.0%
WB L	276	352	0.785	48	8	14	15.3%
EB TR	201	335	0.600	42	6	11	5.8%
EB L	73	468	0.156	31	2	5	0.0%
Int'n:	1,876	3,236		51			

NOTE(S):
- Main Phase Green Times have NOT been Balanced.
- Minimum Pedestrian Crossing Requirements have not been met.

SUMMARY of KEY RESULTS:

Cycle Time: 100.0 sec.
Lost Time: 15.0 sec.
Degree of Saturation: 0.823

CCG/CALC 2 PERFORMANCE ANALYSIS DATA SUMMARY
Future Total Traffic

Project : CHERRY ST. REVIEW-JN07
Scenario : WKDAY PM OP5B CTR
Data File: TO-PM5B.PC2

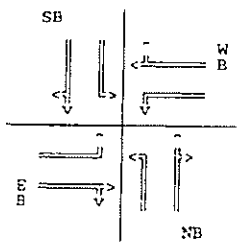
Page : 1
Printed On: Aug. 29, 2007
Printed At: 2:38 PM

INTERSECTION: CHERRY/FRONT

DEMAND VOLUMES:

Vehicles		Volume Adjustments		Pedestrian Volume		Pedestrian Walk Dst/Med Width(m)	
50	66	3.0%	3.0%				
348	116	3.0%	3.0%	200		25/0	
37	194	3.0%	3.0%				
				200	200	16/0	16/0
61	178	3.0%	3.0%				
491	226	3.0%	3.0%	200		25/0	
71	20	3.0%	3.0%				

CONFIGURATION:



SIGNAL PHASING INFORMATION:

φ Type	Permitted Moves: SB	WB	NB	EB	Signal Timings: Green	Amber	Red	SAG	Effective Times: Eff. Green	Lost Time	Ped. X+W
1 NS BTBL Rst	L		L		6.0	2.0	2.0	0.0	7.0	3.0	0.0
2 N-S Main	RT		RT		31.0	4.0	2.0	0.0	32.0	5.0	20.3
3 WB Advance		RTL			6.0	0.0	0.0	3.0	7.0	2.0	0.0
4 E-W Main		RTL		RTL	38.0	4.0	2.0	0.0	39.0	5.0	27.8
Total:					81.0	10.0	6.0	3.0	85.0	15.0	

Methodology: Canadian Capacity Guide, 2nd Edition (1995) (vv)

Approach Specific Adjustments:	SB	WB	NB	EB
Lefts/Cycle on IG (PCU):	2.0	2.0	2.0	2.0
Shared Lefts/Cycle on IG (PCU):	0.0	0.0	0.0	0.0
Rights/Cycle on IG (PCU):	0.0	0.0	1.0	0.5
Progression Regime (1-6):	3	3	3	3
Prot Left Turn Sat'n Adj.:	1.00	1.00	1.00	1.00
Perm Left Turn Sat'n Adj.:	1.00	1.00	1.00	1.00
Right Turn (No Peds) Sat'n Adj.:	0.80	0.80	0.80	0.80
Through Lane Sat'n Adj.:	1.00	1.00	1.00	1.00

Other Settings:	
Through Saturation:	1650 PCU/hour
Rights thru Pedestrians Formula:	Toronto
Pedestrian Walking Speed:	1.2 m/sec.
Min Pedestrian Walk Interval:	7.0 sec.
Delay Evaluation Interval:	60.0 min.
Confidence Level, Max Prob Queue:	95.0 %
Main Phase Grn Share Bal Crit:	2.0 %
Over-Capacity Permissive Left Adj.:	Off

PERFORMANCE RESULTS:

Flow Ratio Table:

φ Lane	Clr. Vol.	Sat'n	y	Max. y	Eff. Green	Deg. Sat'n	Ped. Inc.
1 SB L	52	1650	0.031	✓	7.0	0.446	
1 NB L	21	1650	0.012		7.0	0.178	
2 SB TR	397	1519	0.261		32.0	0.816	
2 NB TR	380	1224	0.311	✓	32.0	0.971	
3 WB TR	106	1513	0.070	✓	7.0	1.000	
3 WB L	116	1650	0.070		7.0	1.000	
4 WB TR	82	1260	0.065		41.0	0.158	
4 WB L	12	222	0.056		39.0	0.143	
4 EB TR	561	1522	0.368	✓	39.0	0.945	
4 EB L	0	1279	0.000		39.0	0.000	
Total:			0.780				+0.000

Other Measures:

Lane	Total Vol.	Total Cap.	Lane Deg. Satn	Avg. Veh. Delay	Avg. Queue (Cons)	Max. Prob. Queue	Prob. Disch. Ovrld.
SB L	52	116	0.446	57	1	4	5.7%
NB L	21	116	0.178	47	1	2	0.3%
SB TR	397	486	0.816	47	11	18	14.7%
NB TR	416	428	0.973	99	12	19	37.4%
WB TR	187	623	0.301	17	5	10	0.0%
WB L	200	274	0.730	39	6	11	11.0%
EB TR	579	612	0.946	67	16	24	34.8%
EB L	63	571	0.110	20	2	5	0.0%
Int'n:	1,914	3,224		60			

NOTE(S):

SUMMARY of KEY RESULTS:

Cycle Time: 100.0 sec.
Lost Time: 15.0 sec.
Degree of Saturation: 0.918

CCG/CALC 2 PERFORMANCE ANALYSIS DATA SUMMARY
FUTURE TOTAL TRAFFIC

Project : CHERRY ST. REVIEW-JN07
Scenario : WKDAY PM OP5B CTR
Data File: TO-PM5B.PC2

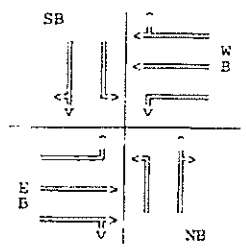
Printed On: June 29, 2007
Printed At: 3:51 PM

INTERSECTION: CHERRY/EASTERN

DEMAND VOLUMES:

Vehicles		Volume Adjustments		Pedestrian Volume	Pedestrian Walk Dst/Med Width(m)
129	28	3.0%	3.0%	200	27/0
154	677	3.0%	3.0%		
46	213	3.0%	3.0%	200 200	23/0 23/0
50	242	3.0%	3.0%		
1,075	59	3.0%	3.0%	200	27/0
6	39	3.0%	3.0%		

CONFIGURATION:



SIGNAL PHASING INFORMATION:

ϕ Type	Permitted Moves: SB	WB	NB	EB	Signal Timings: Green	Amber	Red	SAG	Effective Times: Eff. Green	Lost Time	Ped. X+W
1 NS BTBL Rst	L		L		8.0	2.0	2.0	0.0	9.0	3.0	0.0
2 N-S Main	RT		RT		28.0	4.0	2.0	0.0	29.0	5.0	26.2
3 WB Advance		RTL			10.0	0.0	0.0	3.0	11.0	2.0	0.0
4 E-W Main		RTL		RTL	35.0	4.0	2.0	0.0	36.0	5.0	29.5
Total:					81.0	10.0	6.0	3.0	85.0	15.0	

Methodology: Canadian Capacity Guide, 2nd Edition (1995) (vv)

Approach Specific Adjustments:	SB	WB	NB	EB
Lefts/Cycle on IG (PCU):	2.0	2.0	2.0	2.0
Shared Lefts/Cycle on IG (PCU):	0.0	0.0	0.0	0.0
Rights/Cycle on IG (PCU):	0.0	0.0	1.0	0.0
Progression Regime (1-6):	3	3	3	3
Prot Left Turn Sat'n Adj.:	1.00	1.00	1.00	1.00
Perm Left Turn Sat'n Adj.:	1.00	1.00	1.00	1.00
Right Turn (No Peds) Sat'n Adj.:	0.80	0.80	0.80	0.80
Through Lane Sat'n Adj.:	1.00	1.00	1.00	1.00

Other Settings:	
Through Saturation:	1650 PCU/hour
Rights thru Pedestrians Formula:	Toronto
Pedestrian Walking Speed:	1.2 m/sec.
Min Pedestrian Walk Interval:	7.0 sec.
Delay Evaluation Interval:	60.0 min.
Confidence Level, Max Prob Queue:	95.0 %
Main Phase Grn Share Bal Crit:	2.0 %
Over-Capacity Permissive Left Adj.:	Off

PERFORMANCE RESULTS:

Flow Ratio Table:

ϕ Lane	Clr. Vol.	Sat'n	y	Max. y	Eff. Green	Deg. Sat'n	Ped. Inc.
1 SB L	133	1650	0.081	✓	9.0	0.895	
1 NB L	40	1650	0.024		9.0	0.271	
2 SB TR	206	1360	0.151		29.0	0.522	
2 NB TR	274	959	0.286	✓	29.0	0.986	
3 WB TR	178	1618	0.110	✓	11.0	1.000	
3 WB T	181	1650	0.110		11.0	1.000	
3 WB L	147	1650	0.089		11.0	0.812	
4 WB TR	177	1540	0.115		38.0	0.303	
4 WB T	190	1650	0.115		38.0	0.303	
4 WB L	0	85	0.000		36.0	0.000	
4 EB TR	554	1634	0.339		36.0	0.942	
4 EB T	559	1650	0.339	✓	36.0	0.942	
4 EB L	0	753	0.000		36.0	0.000	
Total:			0.825				+0.000

Other Measures:

Lane	Total Vol.	Total Cap.	Lane Deg. Satn	Avg. Veh. Delay	Avg. Queue (Cons)	Max. Prob. Queue	Prob. Disch. Ovrld.
SB L	133	149	0.895	129	4	8	31.1%
NB L	40	149	0.271	47	1	4	0.6%
SB TR	206	394	0.522	35	6	11	1.5%
NB TR	310	314	0.987	126	9	15	36.2%
WB TR	355	763	0.465	19	10	16	0.1%
WB T	371	809	0.459	19	10	17	0.0%
WB L	219	284	0.773	43	6	11	16.3%
EB TR	554	588	0.942	68	15	23	37.4%
EB T	559	594	0.942	67	16	24	38.8%
EB L	52	343	0.150	23	1	4	0.0%
Int'n:	2,600	4,386		58			

NOTE(S):

SUMMARY of KEY RESULTS:

Cycle Time: 100.0 sec.
Lost Time: 15.0 sec.
Degree of Saturation: 0.959

CCG/CALC 2 PERFORMANCE ANALYSIS DATA SUMMARY
FUTURE TOTAL TRAFFIC

Project : CHERRY ST. REVIEW-JN07
Scenario : WKDAYPAM OP5B CTR
Data File: TO-PM5B.PC2

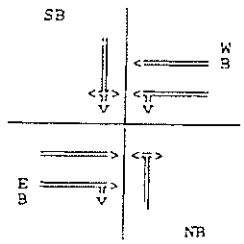
Page : 1
Printed On: June 29, 2007
Printed At: 2:05 PM

INTERSECTION: CHERRY/KING

DEMAND VOLUMES:

Vehicles		Volume Adjustments		Pedestrian Volume	Pedestrian Walk Dst/Med Width(m)
9	0	29.0%	3.0%	200	8.0/0
20	258	3.0%	9.0%		
27	122	3.0%	4.0%		
0	136	3.0%	3.0%	200 / 200	19/0 / 19/0
498	0	15.0%	3.0%		
92	62	4.0%	3.0%	200	29/0

CONFIGURATION:



SIGNAL PHASING INFORMATION:

ϕ	Type	Permitted Moves: SB	WB	NB	EB	Signal Timings: Green	Amber	Red	SAG	Effective Times: Eff. Green	Lost Time	Ped. X+W
1	N-S Main	RTL		RL		34.0	4.0	2.0	0.0	35.0	5.0	0.0
2	WB Advance		RTL			8.0	0.0	0.0	3.0	9.0	2.0	0.0
3	E-W Main		RTL		RTL	38.0	4.0	2.0	0.0	39.0	5.0	0.0
4	Peds Only					3.0	1.0	1.0	0.0	0.0	5.0	32.2 *
Total:						83.0	9.0	5.0	3.0	83.0	17.0	

Methodology: Canadian Capacity Guide, 2nd Edition (1995) (vv)

Approach Specific Adjustments:	SB	WB	NB	EB
Lefts/Cycle on IG (PCU):	0.0	2.0	0.0	0.0
Shared Lefts/Cycle on IG (PCU):	0.0	0.0	0.0	0.0
Rights/Cycle on IG (PCU):	0.0	0.0	2.0	0.0
Progression Regime (1-6):	3	3	3	3
Prot Left Turn Sat'n Adj.:	1.00	1.00	1.00	1.00
Perm Left Turn Sat'n Adj.:	1.00	1.00	1.00	1.00
Right Turn (No Peds) Sat'n Adj.:	0.80	0.70	0.80	0.66
Through Lane Sat'n Adj.:	1.00	0.87	1.00	0.92

Other Settings:	
Through Saturation:	1650 PCU/hour
Rights thru Pedestrians Formula:	Toronto
Pedestrian Walking Speed:	1.2 m/sec.
Min Pedestrian Walk Interval:	7.0 sec.
Delay Evaluation Interval:	60.0 min.
Confidence Level, Max Prob Queue:	95.0 %
Main Phase Grn Share Bal Crit:	2.0 %
Over-Capacity Permissive Left Adj.:	Off

PERFORMANCE RESULTS:

Flow Ratio Table:

ϕ	Lane	Clr. Vol.	Sat'n	y	Max. y	Eff. Green	Deg. Sat'n	Ped. Inc.
1	SB TRL	60	1479	0.041		35.0	0.116	
1	NB RL	132	1323	0.100	√	35.0	0.285	
2	WB T	129	1436	0.090	√	9.0	1.000	
2	WB TL	140	1556	0.090		9.0	1.000	
3	WB T	96	1436	0.067		41.0	0.163	
3	WB TL	43	392	0.110		39.0	0.283	
3	EB TR	315	1356	0.233		39.0	0.596	
3	EB T	353	1518	0.233	√	39.0	0.596	
Total:				0.422				+0.000

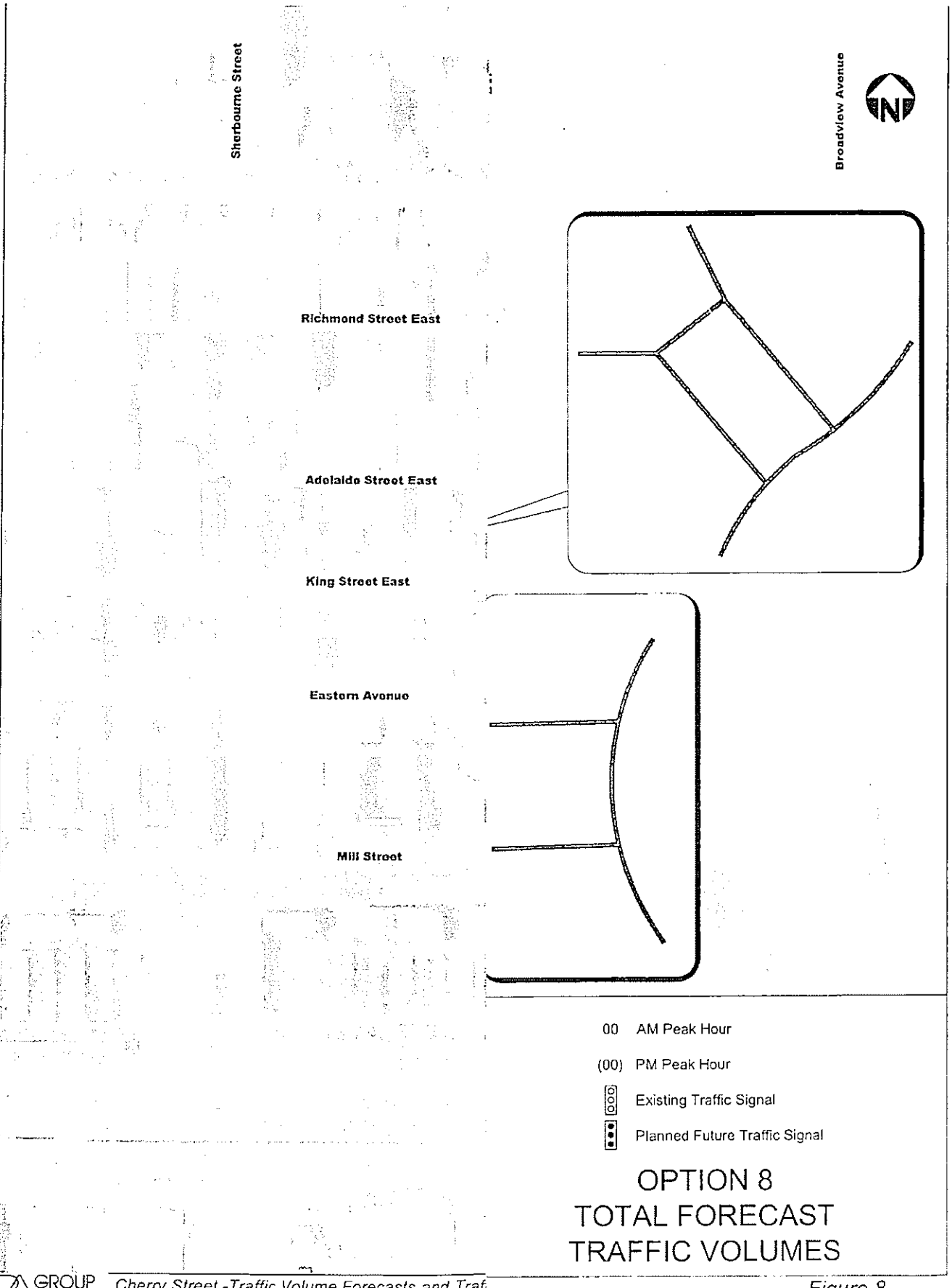
Other Measures:

Lane	Total Vol.	Total Cap.	Lane Deg. Satn	Avg. Veh. Delay	Avg. Queue (Cons)	Max. Prob. Queue	Prob. Disch. Ovrld.
SB TRL	60	518	0.116	22	2	5	0.0%
NB RL	204	535	0.381	26	6	11	0.0%
WB T	225	718	0.313	16	6	12	0.0%
WB TL	183	293	0.626	29	5	10	7.4%
EB TR	315	529	0.596	29	9	15	1.8%
EB T	353	592	0.596	29	10	16	2.3%
Int'n:	1,340	3,184		26			

NOTE(S):
- Main Phase Green Times have NOT been Balanced.
- Minimum Pedestrian Crossing Requirements have not been met.

SUMMARY of KEY RESULTS:

Cycle Time: 100.0 sec.
Lost Time: 17.0 sec.
Degree of Saturation: 0.509



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DATE PLOTTED: June 22, 2007

CCG/CALC 2 PERFORMANCE ANALYSIS DATA SUMMARY
FUTURE TOTAL TRAFFIC

Project : CHERRY ST. REVIEW-JN07
Scenario : WKDAY AM PH OP8
Data File: TO-AM8.PC2

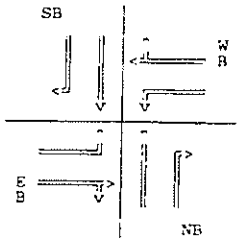
Page : 1
Printed On: June 29, 2007
Printed At: 11:02 AM

INTERSECTION: CHERRY/MILL

DEMAND VOLUMES:

Vehicles		Volume Adjustments		Pedestrian Volume	Pedestrian Walk Dst/Med Width(m)
0	24	3.0%	3.0%		
489	56	3.0%	3.0%	200	25/0
62	288	3.0%	3.0%		
21	202	3.0%	3.0%	200 200	16/0 16/0
80	236	3.0%	3.0%		
31	0	3.0%	3.0%	200	25/0

CONFIGURATION:



SIGNAL PHASING INFORMATION:

ϕ Type	Permitted Moves: SB	WB	NB	SB	Signal Timings: Green	Amber	Red	SAG	Effective Times: Eff. Green	Lost Time	Ped. X+W
1 WB Rst Rt	R	L	R		20.0	2.0	2.0	0.0	21.0	3.0	0.0
2 N-S Main	T		T		41.0	4.0	2.0	0.0	42.0	5.0	17.3
3 E-W Main		RTL		RTL	23.0	4.0	2.0	0.0	24.0	5.0	24.8
Total:					84.0	10.0	6.0	0.0	87.0	13.0	

Methodology: Canadian Capacity Guide, 2nd Edition (1995) (vv)

Approach Specific Adjustments:

	SB	WB	NB	EB
Lefts/Cycle on IG (PCU):	2.0	2.0	2.0	2.0
Shared Lefts/Cycle on IG (PCU):	0.0	0.0	0.0	0.0
Rights/Cycle on IG (PCU):	0.0	0.0	0.0	0.0
Progression Regime (1-6):	3	3	3	3
Prot Left Turn Sat'n Adj.:	1.00	1.00	1.00	1.00
Perm Left Turn Sat'n Adj.:	1.00	1.00	1.00	1.00
Right Turn (No Peds) Sat'n Adj.:	0.80	0.80	0.80	0.80
Through Lane Sat'n Adj.:	1.00	1.00	1.00	1.00

Other Settings:

Through Saturation:	1650 PCU/hour
Rights thru Pedestrians Formula:	Toronto
Pedestrian Walking Speed:	1.2 m/sec.
Min Pedestrian Walk Interval:	4.0 sec.
Delay Evaluation Interval:	60.0 min.
Confidence Level, Max Prob Queue:	95.0 %
Main Phase Grn Share Bal Crit:	2.0 %
Over-Capacity Permissive Left Adj.:	Off

PERFORMANCE RESULTS:

Flow Ratio Table:

ϕ	Lane	Clr. Vol.	Sat'n	y	Max. y	Eff. Green	Deg. Sat'n	Ped. Inc.
1	SB R	64	1320	0.048		21.0	0.230	
1	WB L	225	1650	0.136		21.0	0.648	
1	NB R	208	1330	0.156	✓	21.0	0.751	
2	SB T	504	1650	0.305	✓	42.0	0.727	
2	NB T	243	1650	0.147		42.0	0.351	
3	WB TR	82	1272	0.065		24.0	0.270	
3	WB L	0	891	0.000		24.0	0.000	
3	EB TR	114	1292	0.088	✓	24.0	0.369	0.130
3	EB L	0	1061	0.000		24.0	0.000	
Total:				0.551				+0.130

Other Measures:

Lane	Total Vol.	Total Cap.	Lane Deg. Satn	Avg. Veh. Delay	Avg. Queue (Cons)	Max. Prob. Queue	Prob. Disch. Ovrld.
SB R	64	277	0.230	35	2	5	0.0%
NB R	208	277	0.751	56	6	11	13.1%
SB T	504	693	0.727	31	14	22	7.6%
NB T	243	693	0.351	21	7	12	0.0%
WB TR	82	305	0.270	33	2	6	0.1%
WB L	297	632	0.469	22	8	14	0.1%
EB TR	114	310	0.369	35	3	7	0.2%
EB L	22	327	0.066	30	1	2	0.0%
Int'n:	1,534	3,515		32			

NOTE(S):
- Main Phase Green Times have NOT been Balanced.

SUMMARY of KEY RESULTS:

Cycle Time: 100.0 sec.
Lost Time: 13.0 sec.
Degree of Saturation: 0.634

CCG/CALC 2 PERFORMANCE ANALYSIS DATA SUMMARY
FUTURE TOTAL TRAFFIC

Project : CHERRY ST. REVIEW-JN07
Scenario : WKDAY AM PH OP8
Data File: TO-AM8.PC2

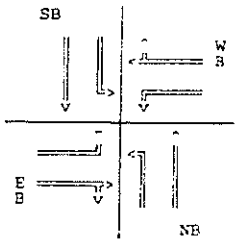
Page : 1
Printed On: June 29, 2007
Printed At: 8:56 AM

INTERSECTION: CHERRY/FRONT

DEMAND VOLUMES:

Vehicles		Volume Adjustments		Pedestrian Volume	Pedestrian Walk Dst/Med Width(m)
77	108	3.0%	3.0%	<——> 200	<——> 25/0
330	415	3.0%	3.0%		
0	321	3.0%	3.0%		
31	0	3.0%	3.0%	200 / 200	16/0 / 16/0
118	199	3.0%	3.0%		
33	70	3.0%	3.0%	<——> 200	<——> 25/0

CONFIGURATION:



SIGNAL PHASING INFORMATION:

ϕ Type	Permitted Moves: SB	WB	NB	EB	Signal Timings: Green	Amber	Red	SAG	Effective Times: Eff. Green	Lost Time	Ped. X+W
1 NS RTBL Rst	L		L		7.0	2.0	2.0	0.0	8.0	3.0	3.0
2 N-S Main	T		T		31.0	4.0	2.0	0.0	32.0	5.0	20.3
3 WB Advance		RTL			7.0	0.0	0.0	3.0	8.0	2.0	0.0
4 E-W Main		RTL		RTL	36.0	4.0	2.0	0.0	37.0	5.0	27.8
Total:					81.0	10.0	6.0	3.0	85.0	15.0	

Methodology: Canadian Capacity Guide, 2nd Edition (1995) (vv)

Approach Specific Adjustments:	SB	WB	NB	EB
Lefts/Cycle on IG (PCU):	2.0	2.0	2.0	2.0
Shared Lefts/Cycle on IG (PCU):	0.0	0.0	0.0	0.0
Rights/Cycle on IG (PCU):	0.0	0.0	0.0	0.0
Progression Regime (1-6):	3	3	3	3
Prot Left Turn Sat'n Adj.:	1.00	1.00	1.00	1.00
Perm Left Turn Sat'n Adj.:	1.00	1.00	1.00	1.00
Right Turn (No Peds) Sat'n Adj.:	0.80	0.80	0.80	0.80
Through Lane Sat'n Adj.:	1.00	1.00	1.00	1.00

Other Settings:	
Through Saturation:	1650 PCU/hour
Rights thru Pedestrians Formula:	Toronto
Pedestrian Walking Speed:	1.2 m/sec.
Min Pedestrian Walk Interval:	4.0 sec.
Delay Evaluation Interval:	60.0 min.
Confidence Level, Max Prob Queue:	95.0 %
Main Phase Grn Share Bal Crit:	2.0 %
Over-Capacity Permissive Left Adj.:	Off

PERFORMANCE RESULTS:

Flow Ratio Table:

ϕ Lane	Clr. Vol.	Sat'n	y	Max. y	Eff. Green	Deg. Sat'n	Ped. Inc.
1 SB L	79	1650	0.048	✓	8.0	0.601	
1 NB L	72	1650	0.044	✓	8.0	0.546	
2 SB T	340	1650	0.206	✓	32.0	0.644	
2 NB T	205	1650	0.124	✓	32.0	0.388	
3 WB TR	126	1569	0.080	✓	8.0	1.000	
3 WB L	132	1650	0.080	✓	8.0	1.000	
4 WB TR	413	1400	0.295	✓	39.0	0.757	
4 WB L	127	959	0.132		37.0	0.357	
4 EB TR	156	1388	0.112		37.0	0.303	
4 EB L	0	398	0.000		37.0	0.000	
Total:			0.629				+0.000

Other Measures:

Lane	Total Vol.	Total Cap.	Lane Deg. Satn	Avg. Veh. Delay	Avg. Queue (Cons)	Max. Prob. Queue	Prob. Disch. Ovrld.
SB L	79	132	0.601	64	2	5	7.3%
NB L	72	132	0.546	60	2	5	5.3%
SB T	340	528	0.644	36	9	16	3.2%
NB T	205	528	0.388	29	6	11	0.0%
WB TR	539	672	0.802	35	15	23	12.3%
WB L	331	559	0.592	25	9	16	1.3%
EB TR	156	514	0.303	24	4	9	0.0%
EB L	32	219	0.146	22	1	3	0.0%
Int'n:	1,753	3,283		33			

NOTE(S):
- Main Phase Green Times have NOT been Balanced.

SUMMARY of KEY RESULTS:

Cycle Time: 100.0 sec.
Lost Time: 15.0 sec.
Degree of Saturation: 0.740

CCG/CALC 2 PERFORMANCE ANALYSIS DATA SUMMARY
Future Total Traffic

Project	: CHERRY ST. REVIEW-JN07	Page	: 1
Scenario	: WKDAY AM PH OP8	Printed On:	Aug. 29, 2007
Data File:	TO-AM8.PC2	Printed At:	2:13 PM

INTERSECTION: CHERRY/EASTERN

DEMAND VOLUMES:

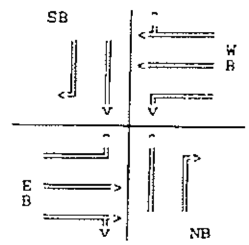
Vehicles: 0 | 44; 177 | 1,186; 274 | 186; 29 | 174; 495 | 130; 0 | 0

Volume Adjustments: 3.0% | 3.0%; 3.0% | 3.0%; 3.0% | 3.0%; 3.0% | 3.0%; 3.0% | 3.0%; 3.0% | 3.0%

Pedestrian Volume: 200; 200; 200; 200

Pedestrian Walk Dst/Med Width(m): 27/0; 23/0; 23/0; 27/0

CONFIGURATION:



SIGNAL PHASING INFORMATION:

ϕ Type	Permitted Moves: SB	WB	NB	EB	Signal Timings: Green	Amber	Red	SAG	Effective Times: Eff. Green	Lost Time	Ped. X+W
1 ~~WB Advance~~ F 5 R T S	R	L	R		17.0	2.0	2.0	0.0	18.0	3.0	0.0
2 N-S Main	T		T		25.0	4.0	2.0	0.0	26.0	5.0	26.2
3 WB Advance		RTL			6.0	0.0	0.0	3.0	7.0	2.0	0.0
4 E-W Main		RTL		RTL	33.0	4.0	2.0	0.0	34.0	5.0	29.5
Total:					81.0	10.0	6.0	3.0	87.0	13.0	

Methodology: Canadian Capacity Guide, 2nd Edition (1995) (vv)

Approach Specific Adjustments:	SB	WB	NB	EB
Lefts/Cycle on IG (PCU):	2.0	2.0	2.0	2.0
Shared Lefts/Cycle on IG (PCU):	0.0	0.0	0.0	0.0
Rights/Cycle on IG (PCU):	1.5	0.5	0.0	0.0
Progression Regime (1-6):	3	3	3	3
Prot Left Turn Sat'n Adj.:	1.00	1.00	1.00	1.00
Perm Left Turn Sat'n Adj.:	1.00	1.00	1.00	1.00
Right Turn (No Peds) Sat'n Adj.:	0.80	0.80	0.80	0.80
Through Lane Sat'n Adj.:	1.00	1.00	1.00	1.00

Other Settings:	
Through Saturation:	1650 PCU/hour
Rights thru Pedestrians Formula:	Toronto
Pedestrian Walking Speed:	1.2 m/sec.
Min Pedestrian Walk Interval:	7.0 sec.
Delay Evaluation Interval:	60.0 min.
Confidence Level, Max Prob Queue:	95.0 %
Main Phase Grn Share Bal Crit:	2.0 %
Over Capacity Permissive Left Adj.:	Off

PERFORMANCE RESULTS:

Flow Ratio Table:

ϕ Lane	Clr. Vol.	Sat'n	y	Max. y	Eff. Green	Deg. Sat'n	Ped. Inc.
1 SB R	238	1320	0.180	✓	18.0	1.000	
1 WB L	120	1650	0.072		18.0	0.403	
1 NB R	179	1320	0.136		18.0	0.754	
2 SB T	182	1650	0.110	✓	26.0	0.425	0.121
2 NB T	134	1650	0.081		26.0	0.312	
3 WB TR	113	1621	0.070		7.0	1.000	
3 WB T	116	1650	0.070	✓	7.0	1.000	
3 WB L	0	1650	0.000		7.0	0.000	
4 WB TR	502	1596	0.314		36.0	0.873	
4 WB T	518	1650	0.314	✓	35.0	0.873	
4 WB L	0	475	0.000		34.0	0.000	
4 EB TR	255	1650	0.155		34.0	0.454	
4 EB T	255	1650	0.155		34.0	0.454	
4 EB L	0	121	0.000		34.0	0.000	
Total:				0.675			+0.121

Other Measures:

Lane	Total Vol.	Total Cap.	Lane Deg. Sat'n	Avg. Veh. Delay	Avg. Queue (Cons)	Max. Prob. Queue	Prob. Disch. Ovrld.
SB R	282 (238)	29? (238)	1.000* 0.97	158	na	7	34.2%
NB R	179	238	0.754	61	5	10	13.1%
SB T	182	429	0.425	34	5	10	0.2%
NB T	134	429	0.312	32	4	8	0.0%
WB TR	633	706	0.896	46	18	26	23.7%
WB T	634	710	0.893	46	18	26	23.9%
WB L	192	646	0.297	11	5	10	0.0%
EB TR	255	561	0.454	28	7	13	0.1%
EB T	255	561	0.454	28	7	13	0.1%
EB L	30	113	0.264	30	1	3	1.0%
Int'n:	2,731	4,630		49			

NOTE(S):
- Main Phase Green Times have NOT been Balanced.
- One or more lanes is oversaturated.

SUMMARY of KEY RESULTS:

Cycle Time: 100.0 sec.
Lost Time: 13.0 sec.
Degree of Saturation: 0.776

* Due to software limitation, Right on intergreen is not added in total capacity. See attached sheet for supplementary analysis

CCG/CALC 2 PERFORMANCE ANALYSIS DATA SUMMARY
Future Total Traffic

Project : CHERRY ST. REVIEW-JN07
Scenario : WKDAY AM PH OP8
Data File: TO-AM8.PC2

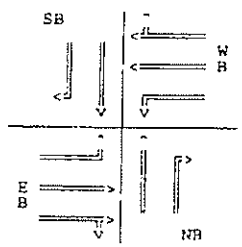
Page : 1
Printed On: Aug. 29, 2007
Printed At: 2:25 PM

INTERSECTION: CHERRY/EASTERN

DEMAND VOLUMES:

Vehicles		Volume Adjustments		Pedestrian Volume	Pedestrian Walk Dst/Med Width(m)
0	44	3.0%	3.0%	200	27/0
177	1,186	3.0%	3.0%		
274	186	3.0%	3.0%	0	0 23/0 23/0
29	174	3.0%	3.0%		
495	130	3.0%	3.0%	200	27/0
0	0	3.0%	3.0%		

CONFIGURATION:



SIGNAL PHASING INFORMATION:

φ Type	Permitted Moves: SB	WB	NB	EB	Signal Timings: Green	Amber	Red	SAG	Effective Times: Eff. Green	Lost Time	Ped. X+W	
1 Rights Only	R		R		17.0	2.0	2.0	0.0	18.0	3.0	29.5	*
2 N-S Main	T		T		25.0	4.0	2.0	0.0	26.0	5.0	26.2	
3 WB Advance		RTL			6.0	0.0	0.0	3.0	7.0	2.0	0.0	
4 E-W Main		RTL		RTL	33.0	4.0	2.0	0.0	34.0	5.0	29.5	
Total:					81.0	10.0	6.0	3.0	87.0	13.0		

Methodology: Canadian Capacity Guide, 2nd Edition (1995) (vv)

Approach Specific Adjustments:	SB	WB	NB	EB
Lefts/Cycle on IG (PCU):	2.0	2.0	2.0	2.0
Shared Lefts/Cycle on IG (PCU):	0.0	0.0	0.0	0.0
Rights/Cycle on IG (PCU):	1.5	0.5	0.0	0.0
Progression Regime (1-6):	3	3	3	3
Prot Left Turn Sat'n Adj.:	1.00	1.00	1.00	1.00
Perm Left Turn Sat'n Adj.:	1.00	1.00	1.00	1.00
Right Turn (No Peds) Sat'n Adj.:	0.80	0.80	0.80	0.80
Through Lane Sat'n Adj.:	1.00	1.00	1.00	1.00

Other Settings:

Through Saturation:	1650 PCU/hour
Rights thru Pedestrians Formula:	Toronto
Pedestrian Walking Speed:	1.2 m/sec.
Min Pedestrian Walk Interval:	7.0 sec.
Delay Evaluation Interval:	60.0 min.
Confidence Level, Max Prob Queue:	95.0 %
Main Phase Grn Share Bal Crit:	2.0 %
Over-Capacity Permissive Left Adj.:	Off

PERFORMANCE RESULTS:

Flow Ratio Table:

φ Lane	Clr. Vol.	Sat'n	y	Max. y	Eff. Green	Deg. Sat'n	Ped. Inc.
1 SB R	220	1320	0.173	✓	18.0	0.961	0.332
1 NB R	179	1320	0.136		18.0	0.754	
2 SB T	182	1650	0.110	✓	26.0	0.425	0.121
2 NB T	134	1650	0.081		26.0	0.312	
3 WB TR	113	1621	0.070		7.0	1.000	
3 WB T	116	1650	0.070	✓	7.0	1.000	
3 WB L	116	1650	0.070		7.0	1.000	
4 WB TR	502	1601	0.314		36.0	0.871	
4 WB T	518	1650	0.314	✓	36.0	0.871	
4 WB L	4	475	0.009		34.0	0.025	
4 EB TR	255	1650	0.155		34.0	0.454	
4 EB T	255	1650	0.155		34.0	0.454	
4 EB L	0	121	0.000		34.0	0.000	
Total:			0.667				+0.233

Other Measures:

Lane	Total Vol.	Total Cap.	Lane Deg. Satn	Avg. Veh. Delay	Avg. Queue (Cons)	Max. Prob. Queue	Prob. Disch. Ovrld.
SB R	282	292	0.968	119	8	14	38.5%
NB R	179	238	0.754	61	5	10	13.1%
SB T	182	429	0.425	34	5	10	0.2%
NB T	134	429	0.312	32	4	8	0.0%
WB TR	634	708	0.895	46	18	26	23.8%
WB T	633	710	0.892	46	18	26	23.7%
WB L	192	349	0.549	29	5	10	2.1%
EB TR	255	561	0.454	28	7	13	0.1%
EB T	255	561	0.454	28	7	13	0.1%
EB L	30	113	0.264	30	1	3	1.0%
Int'n:	2,776	4,389		48			

NOTE(S):
- Main Phase Green Times have NOT been Balanced.
- Minimum Pedestrian Crossing Requirements have not been met.

SUMMARY of KEY RESULTS:

Cycle Time: 100.0 sec.
Lost Time: 13.0 sec.
Degree of Saturation: 0.767

* Sensitivity Analysis

CCG/CALC 2 PERFORMANCE ANALYSIS DATA SUMMARY
FUTURE TOTAL TRAFFIC

Project : CHERRY ST. REVIEW-JN07
Scenario : WKDAY AM PH OP8
Data File: TO-AM8.PC2

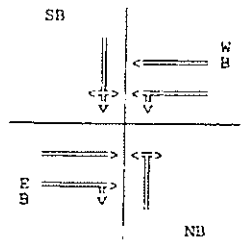
Page : 1
Printed On: June 29, 2007
Printed At: 10:30 AM

INTERSECTION: CHERRY/KING

DEMAND VOLUMES:

Vehicles		Volume Adjustments		Pedestrian Volume	Pedestrian Walk Dst/Med Width(m)
7	0	29.0%	3.0%		
27	297	3.0%	9.0%	200	8.0/0
18	276	3.0%	4.0%		
0	98	3.0%	3.0%	200 / 200	19/0 / 19/0
290	0	15.0%	3.0%		
33	121	4.0%	3.0%	200	29/0

CONFIGURATION:



SIGNAL PHASING INFORMATION:

φ Type	Permitted Moves: SB	WB	NB	EB	Signal Timings: Green	Amber	Red	SAG	Effective Times: Eff. Green	Lost Time	Ped. X+W	
1 N-S Main	RTL		RL		34.0	4.0	2.0	0.0	35.0	5.0	0.0	
2 WB Advance		RTL			8.0	0.0	0.0	3.0	9.0	2.0	0.0	
3 E-W Main		RTL		RTL	38.0	4.0	2.0	0.0	39.0	5.0	0.0	
4 Peds Only					3.0	1.0	1.0	0.0	0.0	5.0	31.2	*
Total:					83.0	9.0	5.0	3.0	83.0	17.0		

Methodology: Canadian Capacity Guide, 2nd Edition (1995) (vv)

Approach Specific Adjustments:	SB	WB	NB	EB
Lefts/Cycle on IG (PCU):	0.0	2.0	0.0	0.0
Shared Lefts/Cycle on IG (PCU):	0.0	0.0	0.0	0.0
Rights/Cycle on IG (PCU):	0.0	0.0	0.0	0.0
Progression Regime (1-6):	3	3	3	3
Prot Left Turn Sat'n Adj.:	1.00	1.00	1.00	1.00
Perm Left Turn Sat'n Adj.:	1.00	1.00	1.00	1.00
Right Turn (No Peds) Sat'n Adj.:	0.80	0.70	0.80	0.66
Through Lane Sat'n Adj.:	1.00	0.87	1.00	0.92

Other Settings:	
Through Saturation:	1650 PCU/hour
Rights thru Pedestrians Formula:	Toronto
Pedestrian Walking Speed:	1.2 m/sec.
Min Pedestrian Walk Interval:	7.0 sec.
Delay Evaluation Interval:	60.0 min.
Confidence Level, Max Prob Queue:	95.0 %
Main Phase Grn Share Bal Crit:	2.0 %
Over-Capacity Permissive Left Adj.:	Off

PERFORMANCE RESULTS:

Flow Ratio Table:

φ Lane	Clr. Vol.	Sat'n	y	Max. y	Eff. Green	Deg. Sat'n	Ped. Inc.
1 SB TRL	55	1523	0.036		35.0	0.304	
1 NB RL	226	1335	0.169	✓	35.0	0.483	
2 WB T	129	1436	0.090	✓	9.0	1.000	
2 WB TL	146	1622	0.090		9.0	1.000	
3 WB T	178	1436	0.124		41.0	0.302	
3 WB TL	158	767	0.206	✓	39.0	0.528	
3 EB TR	177	1410	0.126		39.0	0.322	
3 EB T	191	1518	0.126		39.0	0.322	
Total:			0.465				+0.000

Other Measures:

Lane	Total Vol.	Total Cap.	Lane Deg. Satn	Avg. Veh. Delay	Avg. Queue (Cons)	Max. Prob. Queue	Prob. Disch. Ovrld.
SB TRL	55	533	0.104	22	2	4	0.0%
NB RL	226	467	0.483	29	6	12	0.5%
WB T	307	718	0.428	18	9	19	0.0%
WB TL	304	445	0.683	29	8	15	8.7%
EB TR	177	550	0.322	23	5	10	0.0%
EB T	191	592	0.322	23	5	10	0.0%
Int'n:	1,260	3,305		24			

NOTE(S):
- Main Phase Green Times have NOT been Balanced.
- Minimum Pedestrian Crossing Requirements have not been met.

SUMMARY of KEY RESULTS:

Cycle Time: 100.0 sec.
Lost Time: 17.0 sec.
Degree of Saturation: 0.560

CCG/CALC 2 PERFORMANCE ANALYSIS DATA SUMMARY
FUTURE TOTAL TRAFFIC

Project : CHERRY ST. REVIEW-JN07
Scenario : WKDAY PM PH OP8
Data File: TO-PM8.PC2

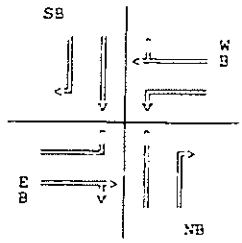
Page : 1
Printed On: June 29, 2007
Printed At: 11:00 AM

INTERSECTION: CHERRY/MILL

DEMAND VOLUMES:

Vehicles		Volume Adjustments		Pedestrian Volume	Pedestrian Walk Dst/Med Width(m)
0	19	3.0%	3.0%		
479	70	3.0%	3.0%	200	25/0
44	268	3.0%	3.0%		
71	345	3.0%	3.0%	200 / 200	16/0 / 16/0
178	272	3.0%	3.0%		
36	0	3.0%	3.0%	200	25/0

CONFIGURATION:



SIGNAL PHASING INFORMATION:

ϕ	Type	Permitted Moves: SB	WB	NB	EB	Signal Timings: Green	Amber	Red	SAG	Effective Times: Eff. Green	Lost Time	Ped. X+W
1	WB Rst Rt	R	L	R		28.0	2.0	2.0	0.0	29.0	3.0	0.0
2	N-S Main	T		T		33.0	4.0	2.0	0.0	34.0	5.0	17.3
3	E-W Main		RTL		RTL	23.0	4.0	2.0	0.0	24.0	5.0	24.8
Total:						84.0	10.0	6.0	0.0	87.0	13.0	

Methodology: Canadian Capacity Guide, 2nd Edition (1995) (vv)

Approach Specific Adjustments:

	SB	WB	NB	EB
Lefts/Cycle on IG (PCU):	2.0	2.0	2.0	2.0
Shared Lefts/Cycle on IG (PCU):	0.0	0.0	0.0	0.0
Rights/Cycle on IG (PCU):	0.0	0.0	0.0	0.0
Progression Regime (1-6):	3	3	3	3
Prot Left Turn Sat'n Adj.:	1.00	1.00	1.00	1.00
Perm Left Turn Sat'n Adj.:	1.00	1.00	1.00	1.00
Right Turn (No Peds) Sat'n Adj.:	0.80	0.80	0.80	0.80
Through Lane Sat'n Adj.:	1.00	1.00	1.00	1.00

Other Settings:

Through Saturation:	1650 PCU/hour
Rights thru Pedestrians Formula:	Toronto
Pedestrian Walking Speed:	1.2 m/sec.
Min Pedestrian Walk Interval:	4.0 sec.
Delay Evaluation Interval:	60.0 min.
Confidence Level, Max Prob Queue:	95.0 %
Main Phase Grn Share Bal Crit:	2.0 %
Over-Capacity Permissive Left Adj.:	Off

PERFORMANCE RESULTS:

Flow Ratio Table:

ϕ	Lane	Clr. Vol.	Sat'n	y	Max. y	Eff. Green	Deg. Sat'n	Ped. Inc.
1	SB R	45	1320	0.034		29.0	0.118	
2	WB L	204	1650	0.124		29.0	0.426	
1	NB R	355	1320	0.269	√	29.0	0.928	
2	SB T	493	1650	0.299	√	34.0	0.879	
2	NB T	280	1650	0.170		34.0	0.499	
3	WB TR	92	1362	0.067		24.0	0.280	
3	WB L	0	488	0.000		24.0	0.000	
3	EB TR	220	1414	0.156	√	24.0	0.649	0.062
3	EB L	1	1809	0.001		24.0	0.005	
Total:				0.724				+0.062

Other Measures:

Lane	Total Vol.	Total Cap.	Lane Deg. Satn	Avg. Veh. Delay	Avg. Queue (Cons)	Max. Prob. Queue	Prob. Disch. Ovrld.
SB R	45	383	0.118	27	1	4	0.0%
NB R	355	383	0.928	80	10	16	28.9%
SB T	493	561	0.879	52	14	21	21.9%
NB T	280	561	0.499	29	8	14	0.3%
WB TR	92	327	0.280	33	3	6	0.0%
WB L	276	668	0.414	16	8	14	0.0%
EB TR	220	339	0.649	44	5	11	9.3%
EB L	73	314	0.233	32	2	5	0.0%
Int'n:	1,835	3,535		45			

NOTE(S):
* Main Phase Green Times have NOT been Balanced.

SUMMARY of KEY RESULTS:

Cycle Time: 100.0 sec.
Lost Time: 13.0 sec.
Degree of Saturation: 0.832

CCG/CALC 2 PERFORMANCE ANALYSIS DATA SUMMARY
FUTURE TOTAL TRAFFIC

Project : CHERRY ST. REVIEW-JN07
Scenario : WKDAY PM PH OP8
Data File: TO-PM8.PC2

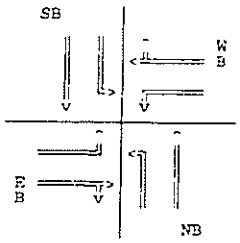
Page : 1
Printed On: June 29, 2007
Printed At: 11:02 AM

INTERSECTION: CHERRY/FRONT

DEMAND VOLUMES:

Vehicles		Volume Adjustments		Pedestrian Volume	Pedestrian Walk Dst/Med Width(m)
133	27	3.0%	3.0%		
345	155	3.0%	3.0%	200	25/0
0	194	3.0%	3.0%		
61	0	3.0%	3.0%	200	16/0
509	265	3.0%	3.0%		
53	45	3.0%	3.0%	200	25/0

CONFIGURATION:



SIGNAL PHASING INFORMATION:

ϕ Type	Permitted Moves: SB	WB	NB	EB	Signal Timings: Green	Amber	Red	SAG	Effective Times: Eff. Green	Lost Time	Ped. X+W
1 NS BTBL Rst	L		L		8.0	2.0	2.0	0.0	9.0	3.0	0.0
2 N-S Main	T		T		29.0	4.0	2.0	0.0	30.0	5.0	17.3
3 WB Advance		RTL			6.0	0.0	0.0	3.0	7.0	2.0	0.0
4 E-W Main		RTL		RTL	38.0	4.0	2.0	0.0	39.0	5.0	24.8
Total:					81.0	10.0	6.0	3.0	85.0	15.0	

Methodology: Canadian Capacity Guide, 2nd Edition (1995) (vv)

Approach Specific Adjustments:	SB	WB	NB	EB
Lefts/Cycle on IG (PCU):	2.0	2.0	2.0	2.0
Shared Lefts/Cycle on IG (PCU):	0.0	0.0	0.0	0.0
Rights/Cycle on IG (PCU):	0.0	0.0	0.0	0.0
Progression Regime (1-6):	3	3	3	3
Prot Left Turn Sat'n Adj.:	1.00	1.00	1.00	1.00
Perm Left Turn Sat'n Adj.:	1.00	1.00	1.00	1.00
Right Turn (No Peds) Sat'n Adj.:	0.80	0.80	0.80	0.80
Through Lane Sat'n Adj.:	1.00	1.00	1.00	1.00

Other Settings:	
Through Saturation:	1650 PCU/hour
Rights thru Pedestrians Formula:	Toronto
Pedestrian Walking Speed:	1.2 m/sec.
Min Pedestrian Walk Interval:	4.0 sec.
Delay Evaluation Interval:	60.0 min.
Confidence Level, Max Prob Queue:	95.0 %
Main Phase Grn Share Bal Crit:	2.0 %
Over-Capacity Permissive Left Adj.:	Off

PERFORMANCE RESULTS:

Flow Ratio Table:

ϕ Lane	Clr. Vol.	Sat'n	y	Max. y	Eff. Green	Deg. Sat'n	Ped. Inc.
1 SB L	137	1650	0.083	✓	9.0	0.922	
1 NB L	46	1650	0.028		9.0	0.312	
2 SB T	355	1650	0.215	✓	30.0	0.718	
2 NB T	273	1650	0.165		30.0	0.551	
3 WB TR	111	1591	0.070	✓	7.0	1.000	
3 WB L	116	1650	0.070		7.0	1.000	
4 WB TR	76	1465	0.052		41.0	0.127	
4 WB L	12	205	0.060		39.0	0.154	
4 EB TR	579	1527	0.379	✓	39.0	0.972	
4 EB L	0	1302	0.000		39.0	0.000	
Total:			0.747				0.000

Other Measures:

Lane	Total Vol.	Total Cap.	Lane Deg. Satn	Avg. Veh. Delay	Avg. Queue (Cons)	Max. Prob. Queue	Prob. Disch. Ovrld.
SB L	137	149	0.922	133	4	8	33.3%
NB L	46	149	0.312	48	1	4	1.0%
SB T	355	495	0.718	40	10	16	7.7%
NB T	273	495	0.551	34	8	13	1.1%
WB TR	187	712	0.263	16	5	10	0.0%
WB L	200	267	0.747	41	6	11	19.7%
EB TR	579	596	0.972	82	16	24	34.8%
EB L	63	580	0.108	20	2	5	0.0%
Int'n:	1,841	3,442		56			

NOTE(S):
- Main Phase Green Times have NOT been Balanced.

SUMMARY of KEY RESULTS:

Cycle Time: 100.0 sec.
Lost Time: 15.0 sec.
Degree of Saturation: 0.879

CCG/CALC 2 PERFORMANCE ANALYSIS DATA SUMMARY
FUTURE TOTAL TRAFFIC

Project : CHERRY ST. REVIEW-JN07
Scenario : WKDAY PM PH OP8
Data File: TO-PM8.PC2

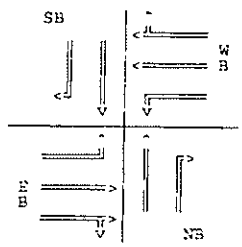
Page : 1
Printed On: June 29, 2007
Printed At: 11:01 AM

INTERSECTION: CHERRY/EASTERN

DEMAND VOLUMES:

Vehicles			Volume Adjustments		Pedestrian Volume		Pedestrian Walk Dst/Med Width(m)	
0	28		3.0%	3.0%				
225	704		3.0%	3.0%	200		27/0	
46	186		3.0%	3.0%				
50		281	3.0%	3.0%	200	200	23/0	23/0
1,075		59	3.0%	3.0%				
6	0		3.0%	3.0%	200		27/0	

CONFIGURATION:



SIGNAL PHASING INFORMATION:

ϕ	Type	Permitted Moves: SB	WB	NB	EB	Signal Timings: Green	Amber	Red	SAG	Effective Times: Eff. Green	Lost Time	Ped. X+W
1	WB Rst Rt	R	L	R		22.0	2.0	2.0	0.0	23.0	3.0	0.0
2	N-S Main	T		T		27.0	4.0	2.0	0.0	28.0	5.0	23.2
3	E-W Main		RTL		RTL	35.0	4.0	2.0	0.0	36.0	5.0	26.5
Total:						84.0	10.0	6.0	0.0	87.0	13.0	

Methodology: Canadian Capacity Guide, 2nd Edition (1995) (vv)

Approach Specific Adjustments:	SB	WB	NB	EB
Lefts/Cycle on IG (PCU):	2.0	2.0	2.0	2.0
Shared Lefts/Cycle on IG (PCU):	0.0	0.0	0.0	0.0
Rights/Cycle on IG (PCU):	0.0	0.0	0.0	0.0
Progression Regime (1-6):	3	3	3	3
Prot Left Turn Sat'n Adj.:	1.00	1.00	1.00	1.00
Perm Left Turn Sat'n Adj.:	1.00	1.00	1.00	1.00
Right Turn (No Peds) Sat'n Adj.:	0.80	0.80	0.80	0.80
Through Lane Sat'n Adj.:	1.00	1.00	1.00	1.00

Other Settings:	
Through Saturation:	1650 PCU/hour
Rights thru Pedestrians Formula:	Toronto
Pedestrian Walking Speed:	1.2 m/sec.
Min Pedestrian Walk Interval:	4.0 sec.
Delay Evaluation Interval:	60.0 min.
Confidence Level, Max Prob Queue:	95.0 %
Main Phase Grn Share Bal Crit:	2.0 %
Over-Capacity Permissive Left Adj.:	Off

PERFORMANCE RESULTS:

Flow Ratio Table:

ϕ	Lane	Clr. Vol.	Sat'n	y	Max. y	Eff. Green	Deg. Sat'n	Ped. Inc.
1	SB R	47	1320	0.036		23.0	0.156	
1	WB L	120	1650	0.072	✓	23.0	0.315	
1	NB R	289	1320	0.219	✓	23.0	0.953	
2	SB T	232	1650	0.140	✓	28.0	0.502	0.061
2	NB T	61	1650	0.037		28.0	0.132	
3	WB TR	364	1544	0.236		36.0	0.656	
3	WB T	390	1650	0.236		36.0	0.656	
3	WB L	0	85	0.000		36.0	0.000	
3	EB TR	554	1634	0.339	✓	36.0	0.942	
3	EB T	559	1650	0.339	✓	36.0	0.942	
3	EB L	0	273	0.000		36.0	0.000	
Total:				0.699				+0.061

Other Measures:

Lane	Total Vol.	Total Cap.	Lane Deg. Satn	Avg. Veh. Delay	Avg. Queue (Cons)	Max. Prob. Queue	Prob. Disch. Ovrld.
SB R	47	304	0.156	32	1	4	0.0%
NB R	289	304	0.953	105	8	14	41.3%
SB T	232	462	0.502	34	6	12	0.7%
NB T	61	462	0.132	26	2	5	0.0%
WB TR	364	556	0.656	33	10	17	5.3%
WB T	390	594	0.656	33	11	18	5.0%
WB L	292	482	0.398	13	5	10	0.1%
EB TR	554	588	0.942	68	16	23	37.4%
EB T	559	594	0.942	67	16	24	38.8%
EB L	52	170	0.302	28	1	4	0.4%
Int'n:	2,740	4,515		53			

NOTE(S):
* Main Phase Green Times have NOT been Balanced.

SUMMARY of KEY RESULTS:

Cycle Time: 100.0 sec.
Lost Time: 13.0 sec.
Degree of Saturation: 0.803

CCG/CALC 2 PERFORMANCE ANALYSIS DATA SUMMARY
FUTURE TOTAL TRAFFIC

Project : CHERRY ST. REVIEW-JN07
Scenario : WKDAY PM PH OP8
Data File: TO-PM8.PC2

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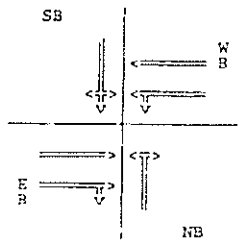
Printed At: 10:31 AM

INTERSECTION: CHERRY/KING

DEMAND VOLUMES:

Vehicles	Volume Adjustments	Pedestrian Volume	Pedestrian Walk Dst/Med Width(m)
9 | 0 20 | 258 27 | 87	29.0% | 3.0% 3.0% | 9.0% 3.0% | 4.0%	<——> 200	<——> 8.0/0
0 | 136 528 | 0 62 | 62	3.0% | 3.0% 15.0% | 3.0% 4.0% | 3.0%	|200 |200 v v <——> 200	|19/0 |19/0 v v <——> 29/0

CONFIGURATION:



SIGNAL PHASING INFORMATION:

¢ Type	Permitted Moves: SB	WB	NB	EB	Signal Timings: Green	Amber	Red	SAG	Effective Times: Eff. Green	Lost Time	Ped. X+W	
1 N-S Main	RTL		RL		34.0	4.0	2.0	0.0	35.0	5.0	0.0	
2 WB Advance		RTL			8.0	0.0	0.0	3.0	9.0	2.0	0.0	
3 E-W Main		RTL		RTL	38.0	4.0	2.0	0.0	39.0	5.0	0.0	
4 Peds Only					3.0	1.0	1.0	0.0	0.0	5.0	31.2	*
Total:					83.0	9.0	5.0	3.0	83.0	17.0		

Methodology: Canadian Capacity Guide, 2nd Edition (1995) (vv)

Approach Specific Adjustments:	SB	WB	NB	EB
Lefts/Cycle on IG (PCU):	0.0	2.0	0.0	0.0
Shared Lefts/Cycle on IG (PCU):	0.0	0.0	0.0	0.0
Rights/Cycle on IG (PCU):	0.0	0.0	0.0	0.0
Progression Regime (1-6):	3	3	3	3
Prot Left Turn Sat'n Adj.:	1.00	1.00	1.00	1.00
Perm Left Turn Sat'n Adj.:	1.00	1.00	1.00	1.00
Right Turn (No Peds) Sat'n Adj.:	0.80	0.70	0.80	0.66
Through Lane Sat'n Adj.:	1.00	0.87	1.00	0.92

Other Settings:	
Through Saturation:	1650 PCU/hour
Rights thru Pedestrians Formula:	Toronto
Pedestrian Walking Speed:	1.2 m/sec.
Min Pedestrian Walk Interval:	7.0 sec.
Delay Evaluation Interval:	60.0 min.
Confidence Level, Max Prob Queue:	95.0 %
Main Phase Grn Share Bal Crit:	2.0 %
Over-Capacity Permissive Left Adj.:	Off

PERFORMANCE RESULTS:

Flow Ratio Table:

¢ Lane	Clr. Vol.	Sat'n	y	Max. y	Eff. Green	Deg. Sat'n	Ped. Inc.
1 SB TRL	60	1479	0.041		35.0	0.116	
1 NB RL	204	1322	0.154	✓	35.0	0.441	
2 WB T	129	1436	0.090	✓	9.0	1.000	
2 WB TL	138	1529	0.090		9.0	1.000	
3 WB T	79	1436	0.055		41.0	0.135	
3 WB TL	26	389	0.066		39.0	0.168	
3 EB TR	323	1407	0.230	✓	39.0	0.589	
3 EB T	349	1518	0.230		39.0	0.589	
Total:			0.474				+0.000

Other Measures:

Lane	Total Vol.	Total Cap.	Lane Deg. Satn	Avg. Veh. Delay	Avg. Queue (Cons)	Max. Prob. Queue	Prob. Disch. Ovrld.
SB TRL	60	518	0.116	22	2	5	0.0%
NB RL	204	463	0.441	28	6	11	0.2%
WB T	209	718	0.291	16	6	11	0.0%
WB TL	163	289	0.564	27	5	9	4.2%
EB TR	323	549	0.589	29	9	16	2.2%
EB T	349	592	0.589	28	10	16	2.1%
Int'n:	1,307	3,128		26			

NOTE(S):
* Main Phase Green Times have NOT been Balanced.
* Minimum Pedestrian Crossing Requirements have not been met.

SUMMARY of KEY RESULTS:

Cycle Time: 100.0 sec.
Lost Time: 17.0 sec.
Degree of Saturation: 0.571