Report Prepared for
Victoria Planning Authority

11 April 2022

Preston Market Precinct – Traffic Modelling Report

Network Capacity Assessment

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1 Introduction:

1.1.1 A draft Structure Plan ("Preston Market SP") for the Preston Market Precinct was prepared by the Victorian Planning Authority (VPA) in May 2021. It provides the framework to guide future growth within the precinct having regard to the strategic location within the Preston High Street Activity Centre. It also seeks to capture opportunities to redevelop and enhance the precinct arising from the removal of rail level crossings at Cramer Street and Murray Road.

1.1.2 The Preston Market SP was accompanied by a draft Development Contributions Plan (DCP). The DCP identified four intersection improvements and three pedestrian crossing treatments (two at the rear of High Street and one on Cramer Street) as being required to support the redevelopment.

1.1.3 The public consultation version of the Preston Market SP was supported by a Traffic and Transport Assessment prepared by Cardno dated June 2021. Amongst other matters, this assessment considered traffic impacts of development scenarios for the precinct based on an assumption that redevelopment would be predicated on a constrained provision of car parking designed to support sustainable transport objectives.

1.1.4 Following consideration of submissions received to the public consultation version of the Preston Market SP and supporting documentation (including the Cardno report), the VPA is seeking to apply a Parking Overlay to the Precinct. The justification for that is outlined in a separate Ratio report[1].

1.1.5 The parking supply rates recommended for inclusion in the Parking Overlay differ from what was assumed in the Cardno report. As there is a direct link between parking supply and traffic generation, the traffic impacts of the redevelopment are likely to differ from the previous assessment.

1.1.6 Ratio Consultants have therefore been commissioned by the VPA to re-examine the impacts of the redevelopment on the surrounding transport network, having regard for parking supply rates proposed in the Parking Overlay.

1.1.7 The report that follows presents:

- An overview of the site location and its transport access.
- The relevant parts of the proposed Preston Market SP, DCP and development yields.
- Existing traffic volumes, sourced from previous studies.
- An assessment of future traffic generation and distribution of this traffic to the surrounding network.
- An assessment of the ability of the existing and planned future network to accommodate the additional traffic movements.
- Recommendations regarding changes to the Preston Market SP/DCP that are required to support the redevelopment, from a transportation perspective.

1.1.8 In preparing this report Ratio Consultants have relied on published empirical data sources and the traffic volume data collected for previous studies completed by others[2]. These sources are cited in Section 7.

[1] Preston Market Precinct – Parking Overlay, Assessment of Car Parking Provision Rates, Ratio Consultants for Victorian Planning Authority, Draft 11 April 2022.

[2] Covid19 disruptions have precluded the undertaking of more recent and representative field surveys.

2.1 Site Location and Surroundings

2.1.1 The Preston Market Precinct ('the precinct') is located in the Preston Major Activity Centre (MAC), approximately 10km north of the Melbourne Central Business District (CBD).

2.1.2 The precinct occupies an area of approximately 5.1ha including two sites to the west of the railway line fronting St Georges Road and the Preston Market site to the east of the railway line as shown in Figure 2.1.

Figure 2.1: Market Precinct

Source: Landchecker (Image Date 22/01/22)

2.1.3 The overall market precinct is bounded by Murray Road to the north, the back of the High Street shops to the east, Cramer Street to the south, and St Georges Road to the west. Mary Street, Mary Lane and the Mernda railway line run through the precinct on a north-south alignment.

2.2 Existing Market

2.2.1 The market precinct includes an Aldi supermarket and Centrelink office. The market itself accommodates over 100 specialty traders with a range of retail offerings.

2.2.2 At the time of writing this report, the market was open from Wednesday to Sunday between 8am and 3pm, with an extension to 6pm on Fridays. Indicative existing floor areas are shown in Table 2.1 below.

Table 2.1: Existing Floor Areas *(Source:VPA)*

Land Use	Indicative Size (sqm)
Retail (Supermarket)	1,275
Retail (Speciality)	2,814
Market	7,011
Office	2,150
Total	**13,250 sqm**

2.3 Transport Access

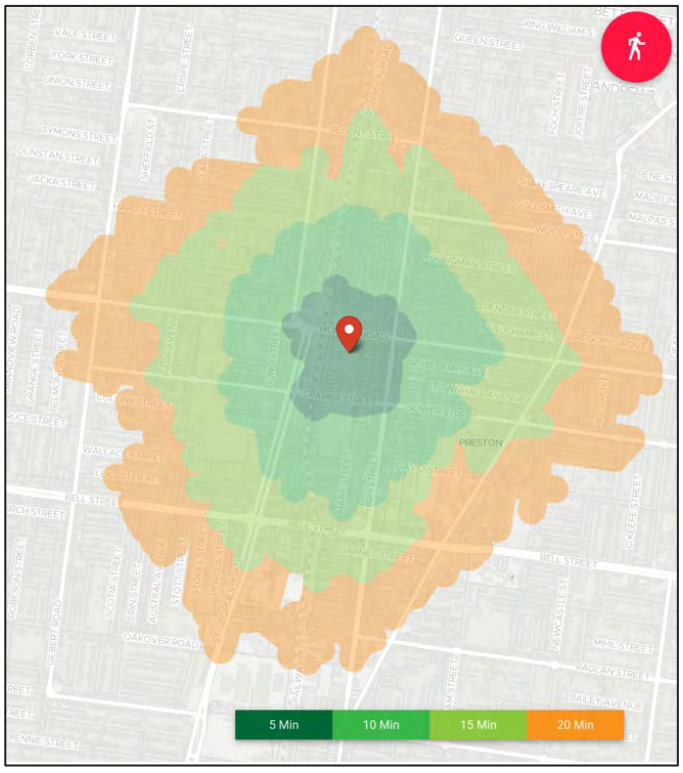
2.3.1 Preston Station, on the Mernda line, is located on the market carpark's western boundary, with direct pedestrian access through the carpark.

2.3.2 Bus services run along Murray Road and High Street. Trams operate in the wider area, along Plenty Road to the east and Gilbert Road to the west. These tram stops are approximately 900m and 1.2km from the centre of the market, respectively. This is a walk of 12-15 minutes at average walking speed.

2.3.3 The market precinct is within the Principal Public Transport Network (PPTN), which is incorporated into the Darebin Planning Scheme under Clause 72.04.

2.3.4 The market precinct's 20-minute walking catchment, which is shown as Figure 2.2 below, includes residential areas of Preston, the High Street and Plenty Road commercial corridors, Darebin's civic buildings, Preston High School and Melbourne Polytechnic.

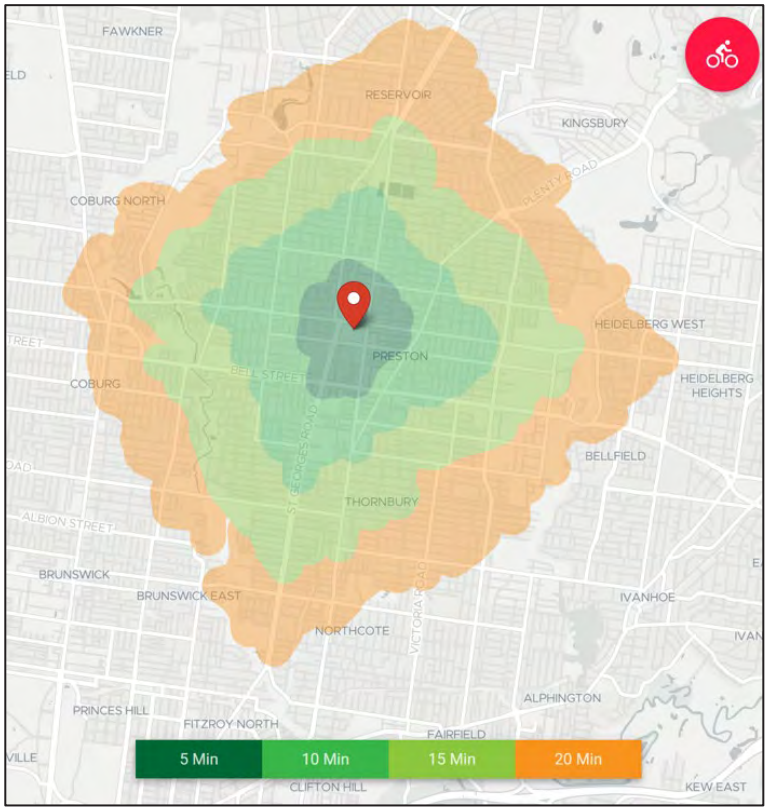
Figure 2.2: Walking Catchment



Source: Targomo Demo

2.3.5 The 20-minute cycle catchment extends into Reservoir in the north, Heidelberg Heights in the East, Northcote in the south and Coburg to the west. It also includes the St Georges Road Shared Path (also known as the Northern Pipe Trail). The cycling catchment is shown as Figure 2.3 below.

Figure 2.3: Cycling Catchment



Source: Targomo Demo

2.3.6 Murray Road and St Georges Road are arterial corridors managed by the Department of Transport (DoT). High Street, Cramer Street and Mary Street are managed by Council.

2.4 Parking Supply

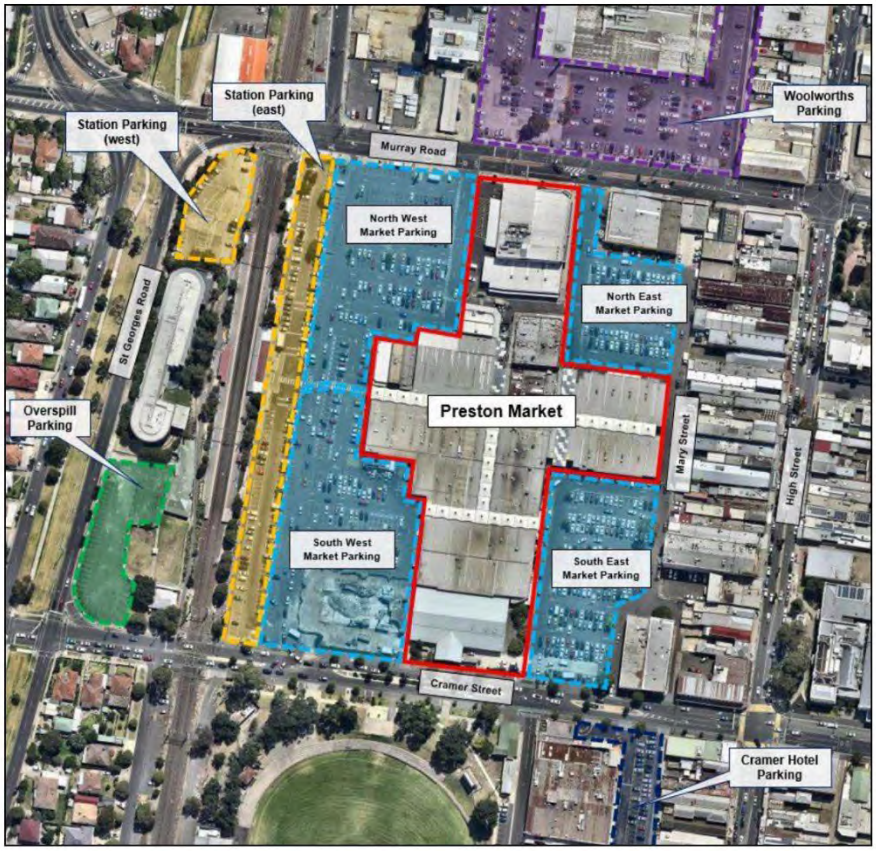
2.4.1 According to studies completed by Cardno (2018) the market has a total of 810 parking spaces[3]. The allocation of these spaces is:

- 679 general spaces;
- 25 accessible spaces (DDA);
- 44 spaces for parents with prams
- 44 spaces for seniors; and
- 18 loading zones.

2.4.2 These parking spaces are provided across four existing market precincts, as shown in blue on Figure 2.4.

[3] Table 4-3, Page 15, Cardno 2018 Report

Figure 2.4: Existing Parking Supply Areas (Cardno 2018)



Source: Reproduced from Cardno 2018 Report, Figure 4-7

2.4.3 There is an existing Section 173 Agreement in place that requires ongoing provision of car parking serving the market to be retained at least 763 spaces.

2.5 Existing Travel Mode[4]

2.5.1 Of all trips made to and from the market and the High Street shops (which are in the same Census area unit):

- 74% are made by car;
- 8% are made on public transport;
- 18% are made on foot; and
- A negligible percentage are made by bike.

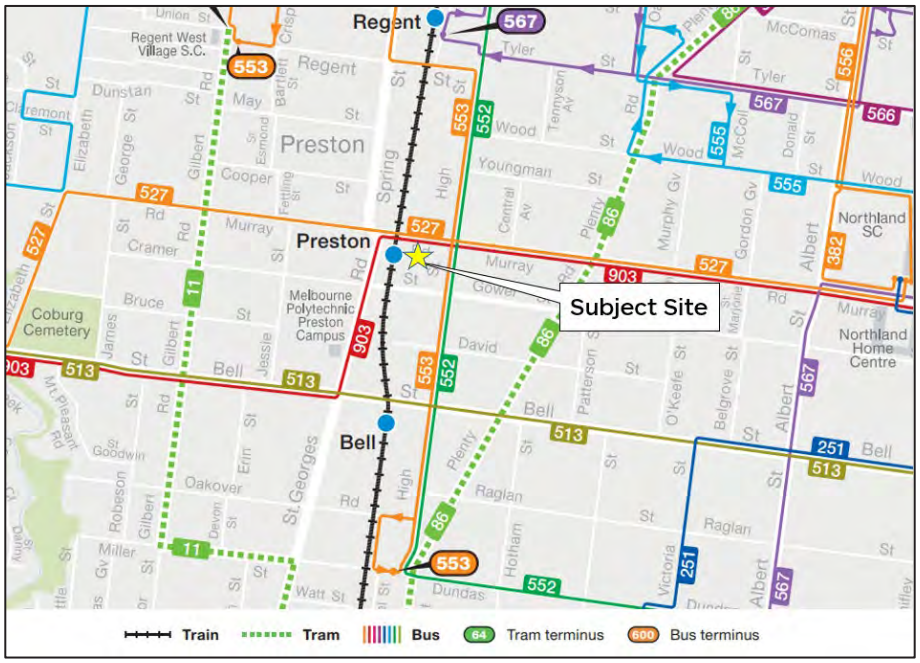
2.5.2 The data shows that travel to Preston Market is currently predominantly car based, which reflects the existing regional catchment of the Market.

[4] Data in this section comes from Section 3.5 of the Movement and Place Consulting Report, 2021,

2.6 Public Transport Network

2.6.1 The public transport network in the vicinity of the site is shown as Figure 2.5. Table 2.2 summarises the available services and their typical frequencies.

Figure 2.5: Existing Public Transport Network



Source: PTV

Table 2.2: Summary of Public Transport Services

Service	Route No's	Route	Nearest Stop	Typical Frequency (each way)
Train	Mernda Line		Preston Station (<100m)	7-20 minutes on weekdays 20-30 minutes on weekends
Tram	11	West Preston to Victoria Harbour Docklands	Murray Road/Gilbert Road (1.1km)	7-12 minutes on weekdays 15-20 minutes on weeknights 12-20 minutes on weekends
	86	Bundoora RMIT to Waterfront Docklands	Murray Road Stop 49 (Murray Road/Plenty Road) (900m)	6-12 minutes on weekdays 15-20 minutes on weeknights 10-20 minutes on weekends
Bus	527	Gowrie – Northland via Murray Road	Preston Station/Murray Road (<100m)	18-30 minutes on weekdays

Service	Route No's	Route	Nearest Stop	Typical Frequency (each way)
				20-60 minutes on weekends
	553	Preston-West Preston via Reservoir	All Saints Church, High Street and Cramer Street/High Street (300m)	30 minutes on weekdays 60 minutes on weeknights 30-60 minutes on weekends
	552	North East Reservoir – Northcote Plaza via High Street	All Saints Church, High Street and Cramer Street/High Street (300m)	15-40 minutes on weekdays 15-45 minutes on weekends
	903	Altona-Mordialloc SMARTBUS	Preston Station/Murray Road (<100m)	20-30 minutes on weekdays and weekends

2.7 Committed Network Changes

2.7.1 At the time of writing this report, the Level Crossing Removal Authority (LXRA) was in the process of redeveloping Preston Station and elevating the Mernda rail line over both Murray Road and Cramer Street, as well as Bell Street to the south.

2.7.2 These works, which will remove the existing at-grade road crossings at all three locations, are expected to be complete in late 2022.

3.1 Draft Preston Market SP (May 2021)

3.1.1 The future vision for the precinct, as set out in the draft Preston Market SP is:

> *"The Preston Market Precinct is a thriving place with a fresh food market at its core, complemented by housing, office and retail jobs, community services, and vibrant and accessible public spaces. Continuing its role as the gateway to Preston, the precinct welcomes a diverse community from the local area and across Melbourne."*

3.1.2 The vision is supported by five principles and their objectives. These principles, and objectives (if any) that relate to transport and parking are as follows:

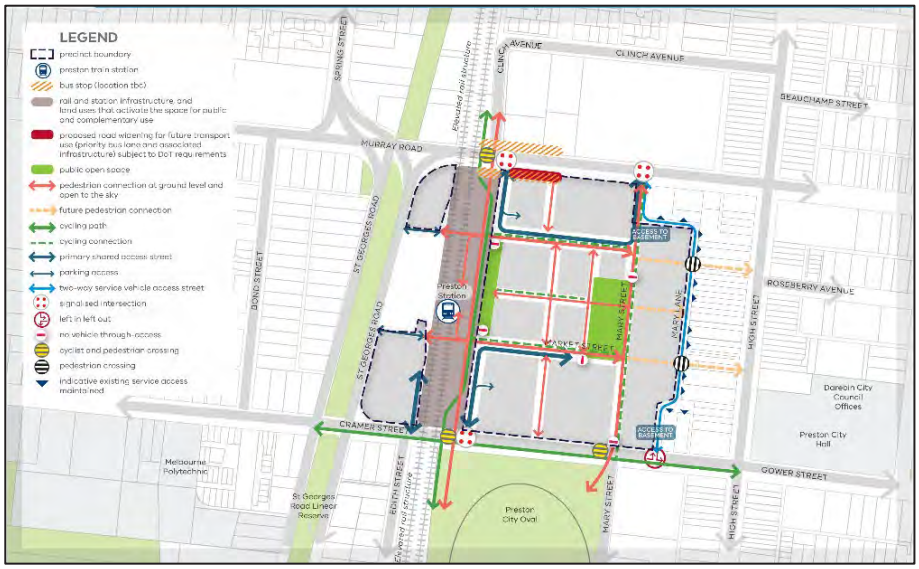
- **A thriving fresh food market.**
- **A diversity of land uses and vibrant amenity**
  - Objective 7: Deliver publicly accessible spaces that are safe, comfortable and accessible to all through the arrangement of land uses and the provision of key connections.
- **Culturally diverse character and adaptable community spaces.**
- **A sustainable, liveable and accessible precinct.**
  - Objective 16 : Support integration of the Preston Market Precinct with the Preston Station and High Street through improved connectivity, the logical arrangement of land uses and appropriate interface treatments.
  - Objective 17: Encourage a modal shift to public and active transport, prioritising walking, cycling and public transport – in that order.
- **Flexible and efficient parking and access.**
  - Objective 19: Ensure adequate carparking for the market and other non-residential uses is provided during and after redevelopment, including the provision of adaptable, flexible and future-proofed carparking arrangements.
  - Objective 20: Encourage loading, servicing and car parking areas to be located away from ground level, prominent pedestrian areas or areas that are visible from the public realm.

3.1.3 Section 6 of the Draft SP sets out the Framework Plan and supporting strategies to guide the development of the precinct and ensure the vision and objectives are realised, under the following headings:

- Land Use
- Built form and design,
- Access movement and car parking.

3.1.4 Figure 6 of the SP illustrates the Access Movement and Car Parking Plan for the Precinct, reproduced as Figure 3.1.

Figure 3.1: Access, Movement and Car Parking Plan



Source: VPA

3.1.5 The Access, Movement and Car Parking Plan seeks to reflect many of the precinct objectives including to:

- Encourage a modal shift to public and active transport, prioritising walking, cycling and public transport in that order; and
- Ensure adequate car parking for the market and other non-residential uses is provided during and after redevelopment, including the provision of adaptable, flexible and future-proof car parking arrangements.

3.1.6 The Access, Movement and Car Parking Plan also seeks to consolidate access to the market precinct, with smaller number of higher standard intersections. Along Murray Road, the market precinct has four existing access points. This is proposed to reduce to two. Along Cramer Street the five existing access points would also be consolidated into two. These changes are detailed further in the next section.

3.1.7 Key access, movement and car parking elements are illustrated in Figure 6 of the SP, including the following strategies with respect to parking and transport.

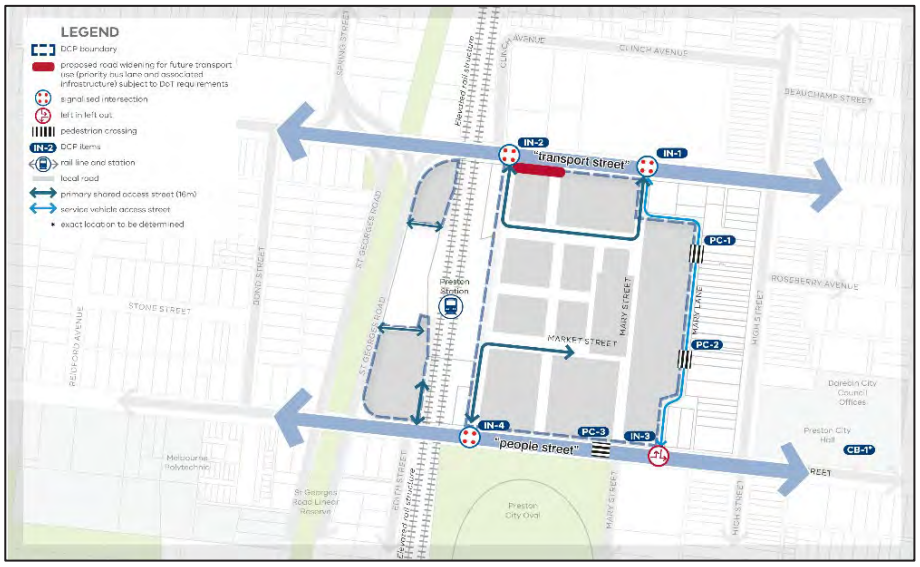
Table 3.1: Preston Market PSP Car Parking Provision Stategies

Strategy	Description
A22	In response to the precincts excellent access to the Principal Public Transport Network and walking and cycling paths, require future car parking to be provided at a rate that discourages private car use to avoid congestion and encourage alternate transport options
A23	The provision of car parking offered within the precinct for non-market uses should be consistent with Column B of Clause 52.05
A26	Maintain at least the same number of parking spaces as currently provided for the existing market

3.2 Draft DCP Transport Items

3.2.1 The draft DCP identifies four intersection projects and three pedestrian crossings as being necessary to support the redevelopment of the market precinct. The locations of these are shown as Figure 3.2 and descriptions are provided in Table 3.2.

Figure 3.2: DCP Transport Items



Source: VPA

Table 3.2: DCP Items and Descriptions (DCP Version 3/5/21)

DCP ID	Concept Designs for DCP Costing Purposes
IN-1	**Mary Street/ Murray Road signalised T-intersection** –a signalised T-intersection with pedestrian crossings. Modifications to kerbs, drainage pits, signage and power poles and new line marking including pedestrian crossings (one with a raised threshold treatment).
IN-2	**Clinch Avenue/ Murray Road signalised cross intersection** –a signalised cross-intersection with pedestrian crossings. Tree removal, modifications to kerb, drainage pits, signage and power poles and new line marking including pedestrian crossings (one with a raised threshold treatment). Land for a proposed road widening for future transport use (priority bus lane and associated infrastructure) subject to DoT requirements is also included.
IN-3	**Mary Street/ Cramer Street unsignalised T-intersection** – an unsignalised T-intersection with raised pedestrian threshold treatment. Tree removal, landscaping, modifications to kerb, drainage pits, signage and power poles, new line marking (including a cycle lane).
IN-4	**Cramer St signalised T-intersection (western end near rail line)** - a signalised T-intersection to provide access between Cramer Street and the precinct and a separate pedestrian crossing to Preston Oval. Tree removal, modifications to kerb, drainage pits, signage and power poles, new line marking (including cycle lanes), provision for pedestrian crossings at the intersection (including a raised threshold treatment) and

	a separate pedestrian crossing west of the intersection along the new railway reserve shared path.
PC-1	**Mary Street (rear of High Street shops) Pedestrian crossing** – a raised pedestrian zebra crossing. New raised crossing pavement, new kerb, two bollards, removal of existing pole signage, line marking, signage and regrading of existing footpath to match height of new raised crossing.
PC-2	**Mary Street (rear of High Street shops) Pedestrian crossing** –a raised pedestrian zebra crossing. Raised pavement, new kerb, line marking, signage, modifications to existing drainage pits and regrading of existing footpath to match height of new raised crossing.
PC-3	**Cramer Street (between Preston City Oval and Preston Market Precinct -** a raised pedestrian zebra crossing. Raised pavement, new kerb, line marking, signage, modifications to existing drainage pits and regrading of existing footpath to match height of new raised crossing.

3.2.2 Concept functional design plans prepared by Cardno are included as Appendix C. These items are included in the DCP as concept level designs for costing purposes. Final designs would be developed and approved at permit application stage.

3.3 Development Yields

3.3.1 It is understood that, following consideration of submissions to the public consultation version of the Preston Market SP, that the development yields set out in Table 3.3 are being considered within a revised scenario for the market precinct.

Table 3.3: Preston Market SP – Proposed Development Yield

Land Use	Existing	Proposed	Change
Dwellings 1 bedroom 2 bedroom 3 bedroom Total	-	 410 units 645 units 117 units 1172 units	+1,172 units
Office	2,150 sqm glfa	5,088 sqm glfa	+2,938 sqm glfa
Market	7,011 sqm glfa	10,163 sqm glfa	+3,152 sqm glfa
Retail	4,089 sqm glfa	27,604 sqm glfa	+23,515 sqm glfa

4.1 Modelling Approach

4.1.1 SIDRA Network models were built using relevant provided and publicly available data of the Murray Street and Cramer Street corridors to the north and south of Preston Market.

4.1.2 It is noted that no site-specific signal operation data (phase timings from SCATS) was available for this assessment.

4.1.3 The assessment was conducted using SIDRA Network (Version 9) software. The assessed time periods were:

- Weekday morning (AM) peak 8:00am to 9:00am
- Weekday (Friday) evening (PM) peak 5:15pm to 6:15pm
- Saturday peak 12:15pm to 1:15pm

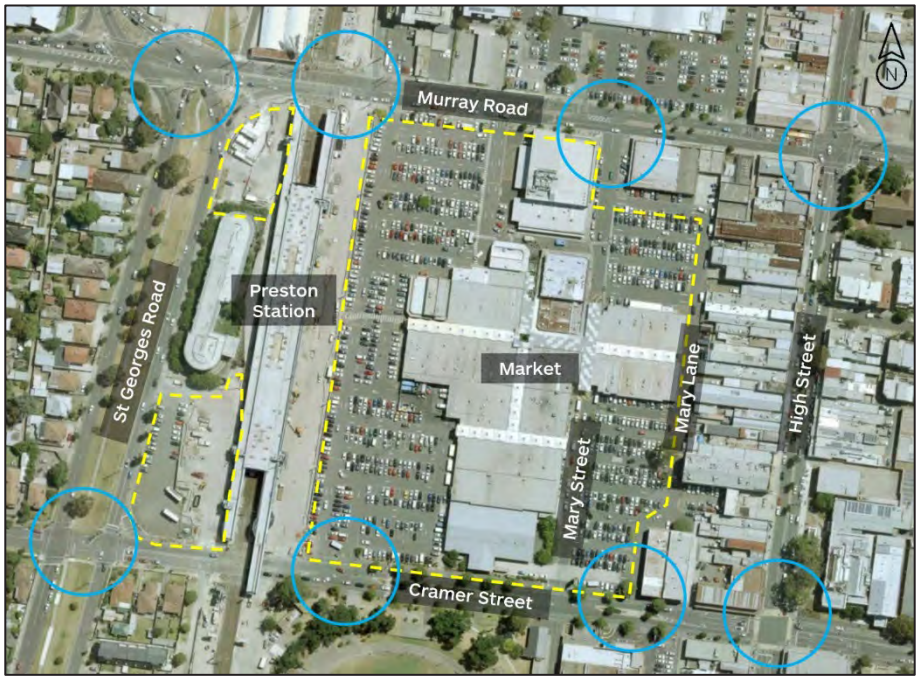
4.1.4 These peak hours were adopted directly from the Trafficworks analysis (described later in Section 4.2), which identified them as the relevant peaks from the two or three-hour survey periods on each day (7-9am and 4-7pm on weekdays and 11:00-2:00pm on Saturday).

4.1.5 The PM peak scenario represents a specific day since the market closes at 3pm on all weekdays except Friday, when it closes at 6pm.

4.1.6 The study area is shown as Figure 4.1 and includes the following intersections:

- St Georges Road/Murray Road
- Murray Road/Clinch Avenue
- Murray Road/Mary Street
- High Street/Murray Road
- St Georges Road/Cramer Street
- Cramer Street/New Market Access
- Cramer Street/Market Left In
- High Street/Cramer Street

Figure 4.1: Modelled Intersections



Source: Aerial Source Landchecker

4.1.7 Two network models were assessed which were separated based on their locality north and south of the market precinct.

4.1.8 2020 was adopted as the base year, with future assessments combining 2020 volumes and proposed post-development market precinct volumes.

4.1.9 All scenarios assume that the level crossing removal works on Cramer Street and Murray Road are complete.

4.2 Base Traffic Conditions

4.2.1 Existing intersection turning movements were taken from a study completed for Council by Trafficworks in 2020. These counts were obtained on Thursday[5] 6 February (7am to 9am and 4pm to 7pm) and Saturday 8 February (11am to 2pm), 2020.

4.2.2 The Murray Road/High Street and Cramer Street/High Street intersections were not included in this survey. Ratio therefore extracted detector volumes from the DoT SCATS system for the same survey days and times. Some manual rebalancing was undertaken to align the flows between intersections.

4.2.3 Existing turning movements are summarised in **Appendix A** for the weekday morning (AM), weekday evening (PM) and Saturday midday (SAT) peak hours.

[5] The market is currently open from 8am to 3pm on a Thursday. The Trafficworks report states that at the time of these surveys, the market was open until 6pm on a Thursday.

4.2.4 The existing trip generation of the eastern precinct can be assessed by summing the turning movements at the six existing access points. Table 4.1 presents the AM, PM and Saturday peak hour totals. These have also been equated to trips per parking space, assuming the eastern precinct had its current number of parking spaces (810) at the time of these surveys.

Table 4.1: Existing Market Traffic Generation (Based on Trafficworks 2020 Surveys)

Scenario	Volume (vph)	Trips per Space
Weekday AM	809	1.0
Weekday PM	1,010	1.2
Saturday	2,178	2.7

4.2.5 As a comparison, a study completed by GTA for Preston Market Developments Pty Ltd collected the same data in December 2013. The trip generation totals and the rates per space for what was then a total of 942-946 parking spaces are summarised in Table 4.2.

Table 4.2: Existing Market Traffic Generation (Based on GTA 2013 Surveys)

Scenario	Volume (vph)	Trips per Space
Weekday AM	1,170	1.2
Weekday PM	1,572	1.7
Saturday	2,073	2.2

4.2.6 The existing traffic volumes generated by the eastern precinct are summarised in **Appendix A.** These have distributed through the modelled network (to the external intersections) in proportion to existing turning movements through those intersections.

4.3 Future Trip Generation

4.3.1 The trip generation of the redeveloped market has been assessed using rates of vehicle movement per parking space. Parking supply in the precinct is proposed to be managed through a Parking Overlay. Table 4.3 presents the proposed maximum parking rates, and the total spaces possible for each land use.

Table 4.3: Recommended Parking Overlay Rates (Maximums)

Land Use	Projected Yield	Maximum Rates	
		Rate	Spaces
Dwellings			
1 bedroom	410 units	0.5/unit	205
2 bedroom	645 units	0.8/unit	516
3 bedroom	117 units	1.0/unit	117
Office	5,088 sqm	1.0 per 100 sqm	51
Market[6]	10.163 sqm	3.5 per 100 sqm	355
Non-Market Retail	27,604 sqm	3.5 per 100 sqm	966
TOTAL	**-**	**-**	**2,210**

4.3.2 Residential units have been assessed as generating:

— 0.15 trips/space during the AM peak;
— 0.12 trips/space during the PM peak; and
— 0.15 trips/space during the Saturday peak

4.3.3 These rates were informed by the widely used Guide to Traffic Generating Developments published by Roads and Maritime Services (RMS) New South Wales[7]. Survey data collected for a range of residential developments over six storeys in height and with good access to public transport identified average trip rates of 0.15 and 0.12 movements per space in the AM and PM, respectively. No Saturday data was provided so the AM peak rate was applied to it.

4.3.4 Office activities have been modelled as generating:

— 0.5 trips/space during the AM peak;
— 0.5 trips/space during the PM peak; and
— 0 trips/space during the Saturday peak

4.3.5 These rates are based on the assumption that on average, half of the total office parking supply will be used (experience an arrival or a departure) during the modelled one-hour peak weekday periods. There is not expected to be any material level of activity at the office activities at the weekend. These assumptions are consistent with those in the previous Cardno assessment (2021).

4.3.6 Market activities have been modelled as generating:

— 1.0 trips/space during the AM peak;
— 1.5 trips/space during the PM peak; and

[7] Technical Direction TDT 2013/04A August to 2013a

— 2.0 trips/space during the Saturday peak

4.3.7 These rates are within or below the ranges that were surveyed previously and were presented above in Table 4.1 and Table 4.2. This allows for a degree of suppression in the turnover of parking spaces, which could be generated by a reduction in demand for private car travel and/or an increase in typical length of stay, with the expanded retail offering and diversity of land uses.

4.3.8 The degree of suppression is moderate compared with the existing level of activity. The assumed AM rate of 1.0 trips/space is at the low end of the surveyed range of 1.0 to 1.2 trips/space.

4.3.9 The PM rate of 1.5 trips/space is within the surveyed range of 1.2 to 1.7 trips/space. It represents suppression of approximately 12% compared to the top of this range.

4.3.10 The Saturday rate of 2.0 trips/space is below the range of 2.2 to 2.7 trips/space. This represents suppression of 10-25%.

4.3.11 Non-market retail activities have been modelled as generating:

— 1.0 trips/space during the AM peak;
— 1.5 trips/space during the PM peak; and
— 1.5 trips/space during the Saturday peak

4.3.12 These rates are broadly consistent with the market activity other than being assumed to be less intense at the weekend. This is reasonable given that non-market retail activities are likely to have longer trading periods compared to the more limited operating hours of the market activity.

4.3.13 The adopted trip generation rates and resulting total vehicle movements for each time period are summarised in Table 4.4. Rates per dwelling are also presented for the residential component in Table 4.5.

Table 4.4: Trip Generation Assessment (rates per space)

Land use	Spaces	AM		PM		SAT	
		Rate	Trips	Rate	Trips	Rate	Trips
Residential	839	0.15	126	0.12	101	0.15	126
Office	51	0.5	25	0.5	25	0	0
Market	355	1	355	1.5	534	2	711
Non-Market Retail	966	1	966	1.5	1,449	1.5	1,449
Total	2,210	-	1,473	-	2,109	-	2,286

Table 4.5: Residential Trip Generation Assessment (rates per dwelling)

Land use	Dwellings	AM		PM		SAT	
		Rate	Trips	Rate	Trips	Rate	Trips
Residential	1,172	0.11	126	0.09	101	0.11	126

4.3.14 In total, the precinct is expected to generate 1,473 vph, 2,109 vph and 2,286 vph during the AM, PM and Saturday peaks respectively. Compared to the most recent survey of the existing level of activity presented earlier in Table 4.1, these are increases of 82%, 109% and 5%.

4.3.15 The trip generation of the office, market and non-market retail components is also summarised on a GLFA basis in Table 4.6. This table includes a comparison to empirical data for shopping centres, published by the Roads and Traffic Authority (RTA) NSW.

Table 4.6: Trip Generation Assessment (rates per 100 sqm GLFA)

Land use	GLFA (sqm)	AM		PM		SAT	
		Rate	Trips	Rate	Trips	Rate	Trips
Office	5.088	0.50	25	0.50	25	-	-
Market	10,163	3.50	355	5.25	534	7.00	711
Non-Market Retail	27,604	3.50	966	5.25	1,449	5.25	1,449
Combined Market and Non-Market Retail	37,767	3.50	1,322	5.25	1,983	5.72	2,161
RTA Comparison Data for Shopping Centres[8]							
Average	-	1.55	-	3.30	-	4.61	
Min	-	0.98	-	1.95	-	2.97	
Max	-	2.42	-	5.49	-	6.93	

4.3.16 The GLFA based trip rates that emerge from the assessment for the AM, PM and SAT scenarios are 3.5 vph/100 sqm, 5.25/100 sqm and 5.72/100 sqm, respectively. All rates are above the average published in the RTA study for metropolitan shopping centres.

4.3.17 This confirms that the trip totals represent a reasonable basis for the assessment of a proposed redevelopment of this scale.

[8] Table 3.11 (Metropolitan Centres). Trip Generation and Parking Demand Surveys of Shopping Centres, Analysis Report, September 2011, Roads and Traffic Authority

4.3.18 It should be noted in regard to the PM peak period that this occurs only once a week, since Friday is the only day that the market is open after 3pm, when other traffic volumes on the network are typically higher. The more regular AM peak (which the market contributes to on five days out of seven), which does align with the network peak, has a lower level of activity.

4.3.19 For the purpose of assisting with understanding relative traffic demand by land use, Table 4.7 presents the average trip rates and total trips across the weekday AM and PM periods.

Table 4.7: Trip Generation Summary (AM and PM Average)

Land use	Dwellings or Area (GLFA)	Parking		Trip Rates (per space)			Trips	Trip Rate (per dwelling or 100 sqm GLFA)
		Rate	Spaces	AM	PM	Average		
Residential	1,172	0.7	821	0.15	0.12	0.135	111	0.1
Non-Market Retail	27,604	3.5	966	1.0	1.0	966	966	3.5
Office	5.088	1.0	51	0.5	0.5	25	25	0.5
Market	10,163	3.5	355	1.0	1.5	445	444	4.4

4.3.20 The assumed inbound and outbound splits by activity type and time period are shown in Table 4.8.

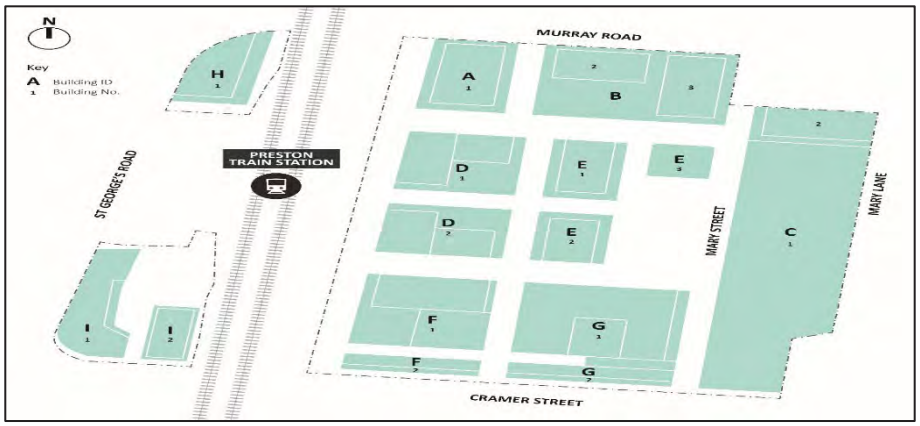
Table 4.8: Inbound/Outbound Splits

Land use	AM		PM		SAT	
	In	Out	In	Out	In	Out
Residential	20%	80%	70%	30%	50%	50%
Office	100%	0%	0%	100%	-	-
Market	70%	30%	40%	60%	50%	50%
Non-Market Retail	70%	30%	40%	60%	50%	50%

4.4 Trip Distribution

4.4.1 The internal distribution to the various access points was developed by breaking the precinct into the sub-areas noted A to G on Figure 4.2.

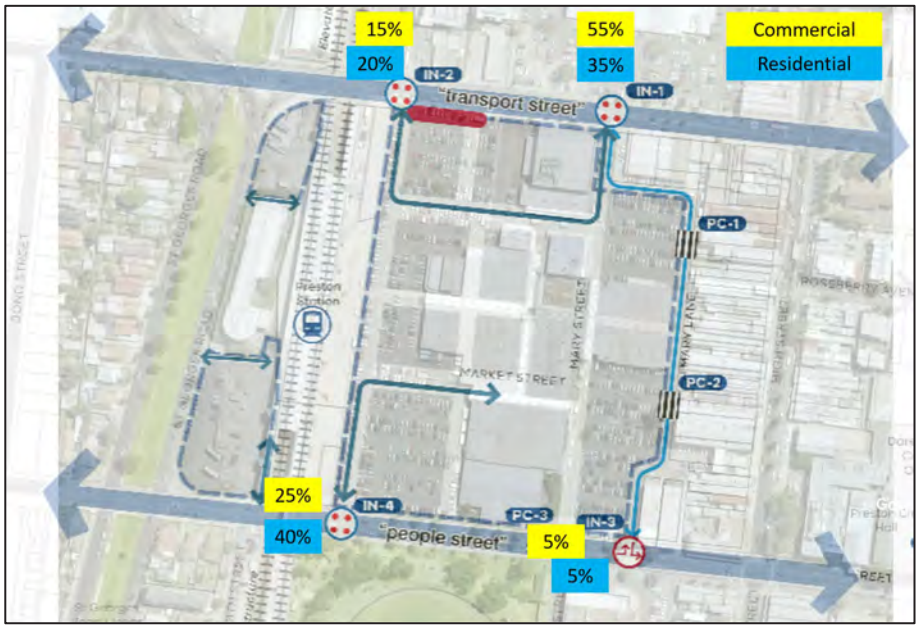
Figure 4.2: Precinct Sub-Areas



Source: VPA

4.4.2 Inbound and outbound movements generated by each sub-area were the allocated to the most appropriate access points, considering where each building is likely to be accessed from. The resultant distribution of residential and commercial movements across the four access points (IN01 to IN04 from the DCP) is shown as Figure 4.3.

Figure 4.3: Distribution to Access Points



Source: Plan from VPA over Landchecker Aerial Base

4.4.3 Overall, the distribution results in 45% of residential trips and 65% of commercial trip (equating to 69% of the combined total trips) using the Murray Road corridor, and the remainder using Cramer Street.

4.4.4 Turning movements at the access points were distributed to the wider network using different external distributions for commercial and

residential activities, located east and west of the railway line. These distributions are shown as Figure 4.4 and Figure 4.5 below.

Figure 4.4: External Distribution (Eastern)

Source: Landchecker

Figure 4.5: External Distribution (Western)

Source: Landchecker

4.4.5 The distribution of residential movements has a slight dominance to the south, reflecting the likely travel patterns for home-based trips to and from a suburb located to the north of Melbourne's CBD.

4.4.6 The commercial distribution slightly favours movement to and from the north, representing both the market's regional catchment and the location of the precinct relative to other similar opportunities in broader Melbourne.

4.4.7 The modelled future development volumes (which include the existing activities), and the combined total volumes on the network are shown in **Appendix B**.

4.5 Other Background Growth

4.5.1 No other background growth was applied beyond the new trips generated by the precinct redevelopment. This is based on the finding by Cardno (2018 Report, Section 5.2.1) that the network saw minimal traffic growth between 2011 and 2016.

4.6 Future Network

4.6.1 The future network model used the existing road layout and adopted the proposed market intersection forms from the DCP. These are described below.

4.6.2 Future market intersection designs have been generated based on Trafficworks SIDRA modelling layouts in conjunction with the DCP intersection descriptions and plans in Appendix C.

Murray Road

4.6.3 St Georges Road / Murray Road is modelled under existing conditions with the level crossing removed to replicate future conditions.

4.6.4 Clinch Avenue / Murray Road (IN-2) is modelled as a signalised cross intersection with pedestrian crossings.

4.6.5 Mary Street / Murray Road (IN-1) is modelled as a signalised T-Intersection with pedestrian crossings.

4.6.6 High Street / Murray Road is modelled under existing conditions, taking into account clearways and on-street parking permissions.

Cramer Street

4.6.7 St Georges Road / Cramer Street is modelled under existing conditions with the level crossing removed to replicate future conditions.

4.6.8 Market Western Access / Cramer Street (IN-4) is modelled as a signalised T-Intersection with pedestrian crossings.

4.6.9 Mary Street / Cramer Street (IN-3) is modelled as a unsignalised left-in left-out T-Intersection with pedestrian treatments.

4.6.10 High Street / Cramer Street is modelled under existing conditions, taking into account clearways and on-street parking permissions.

5.1 General

5.1.1 This section presents summary results by time period. Detailed SIDRA outputs are included in Appendix D.

5.1.2 The section focuses on the following performance indicators:

— Degree of saturation (DOS), which is a ratio of the volume carried by an intersection, relative to its capacity. Target DOS in urban areas is typically 0.85-0.90 or below.

— Average delay (seconds/vehicle) for the intersection. For signalised intersections this is based on the average for all movements through the intersection. At priority-controlled intersections it is based on the average delay for the worst on a minor leg of the intersection.

— Level of service (LOS), which is a qualitative descriptor of the performance of an intersection, as experienced by its users. For vehicle drivers moving through intersections this is a scale of LOS A (excellent) to LOS F (poor), based on average delay. The criteria differ for signalised and unsignalised intersections, as per Table 5.1.

Table 5.1: LOS Criteria (SIDRA User Guide, Table 5.14.1)

LOS	Signals (Average Delay, seconds/vehicle)	Priority Control (Average Delay, seconds/vehicle)
A	< 10s	< 10s
B	10 – 20s	10 – 15s
C	20 – 30s	15-25s
D	35- 55s	25-35s
E	55 – 80s	35-50s
F	>80s	> 50s

5.2 AM Peak

5.2.1 Table 5.2 presents the AM results for the existing and post-development scenarios. LOS performance is also summarised on Figure 5.1 and Figure 5.2 for the existing and post-development scenarios respectively.

Table 5.2: AM Model Results

Intersection	Existing			Post-Development		
	DOS	Delay (s/veh)	LOS	DOS	Delay (s/veh)	LOS
St Georges / Murray	0.850	38.0	D	0.870	31.9	C
Murray / Clinch	0.156	32.5	D	0.611	27.0	C
Murray/Market Western Access	0.172	23.9	C	-	-	-
Murray / Mary	0.180	44.0	E	0.470	22.7	C
High / Murray	0.755	18.7	B	0.852	35.5	D
St Georges / Cramer	0.890	33.2	C	0.892	38.2	D
Cramer / Market Western Access	0.268	25.4	D	0.587	13.8	B
Cramer/Mary	0.279	34.3	D	0.334	8.1	A
Cramer / Left In	0.510	10.6	B	-	-	-
High / Cramer	0.874	35.9	D	0.839	32.8	C

Figure 5.1: AM LOS Summary (Existing)

Source: Landchecker

Figure 5.2: AM LOS Summary (Post-Development)

Source: Landchecker

5.2.2 During the AM peak there some improvement in LOS around the network because of the removal of priority-controlled intersections. Intersections generally see higher DOS values but all remain below 0.900 (90% capacity).

5.3 PM Peak

5.3.1 Table 5.3 presents the PM results for the existing and post-development scenarios. LOS performance is also summarised on Figure 5.3 and Figure 5.4 for the existing and post-development scenarios respectively.

Table 5.3: PM Model Results

Intersection	Existing			Post-Development		
	DOS	Delay (s/veh)	LOS	DOS	Delay (s/veh)	LOS
St Georges / Murray	1.003	69.7	E	1.107	96.0	F
Murray / Clinch	0.410	65.2	F	0.989	61.3	E
Murray/Market Western Access	0.650	86.6	F	-	-	
Murray / Mary	0.490	31.9	D	0.837	33.2	D
High / Murray	0.734	17.8	B	0.828	39.6	D
St Georges / Cramer	0.813	28.8	C	0.925	44.2	D
Cramer / Market Western Access	0.330	28.0	D	0.889	19.7	B
Cramer/Mary	0.610	59.3	F	0.401	8.3	A
Cramer / Left In	0.258	10.8	B	-	-	-
High / Cramer	0.886	35.0	C	0.876	37.8	D

Figure 5.3: PM LOS Summary (Existing)

Source: Landchecker

Figure 5.4: PM LOS Summary (Post-Development)

Source: Landchecker

5.3.2 During the existing PM peak the St Georges Road/Murray Road intersection is already operating in an oversaturated condition (DOS>1.0) and it continues to do so in the post-development scenario.

5.3.3 Intersections around the precinct generally see increases in saturation level. There are some improvements to LOS as a result of changes in intersection form (signalisation) and also the expected redistribution of traffic around the precinct.

5.4 SAT Peak

5.4.1 Table 5.4Table 5.3 presents the PM results for the existing and post-development scenarios. LOS performance is also summarised on Figure 5.5 and Figure 5.6 for the existing and post-development scenarios respectively.

Table 5.4: SAT Model Results

Intersection	Existing			Post-Development		
	DOS	Delay (s/veh)	LOS	DOS	Delay (s/veh)	LOS
St Georges / Murray	0.883	44.3	D	0.897	39.8	D
Murray / Clinch	0.812	54.6	F	0.820	34.6	C
Murray/Market Western Access	0.907	119.6	F	-	-	-
Murray / Mary	0.402	25.5	D	0.875	32.0	C
High / Murray	0.746	18.0	B	0.981	47.5	D
St Georges / Cramer	0.880	41.3	D	0.874	46.9	D
Cramer / Market Western Access	0.652	38.8	E	0.920	18.9	B
Cramer/Mary	0.792	79.0	F	0.243	7.3	A
Cramer / Left In	0.395	11	B	-	-	-
High / Cramer	0.854	30.8	C	0.828	31.3	C

Figure 5.5: SAT LOS Summary (Existing)

Source: Landchecker

Figure 5.6: SAT LOS Summary (Post-Development)

Source: Landchecker

5.4.2 During the existing SAT peak several of the market access are already operating at LOS E and LOS F. This improves when the DCP improvements are introduced. Each of the new access points can operate at LOS D or better.

5.4.3 Intersections around the precinct generally see increases in saturation level but also maintain LOS D or better.

6 Conclusions:

6.1 Conclusions

6.1.1 The analysis confirms that individually and collectively, the conceptual intersection designs in the DCP can accommodate the expected level of demand generated by the market precinct.

6.1.2 There are some instances, particularly in the PM and SAT peaks, when delays on some turning movements reach LOS E and LOS F. The future transport network has internal connectivity and circulations so in practice, some of this demand may be redistributed so that all access points reach a level of equilibrium.

6.1.3 Increasing saturation in urban networks can also lead to peak spreading, where peak periods become less pronounced, and users adapt to travelling at different times of the day.

6.1.4 With or without the proposed redevelopment of the market, the St Georges Road corridor is operating at or near its capacity, most obviously in the evening peak hour. The proposed redevelopment of the market precinct would increase traffic volumes through this intersection by around 9%.

6.1.5 Overall, no changes have been identified as being necessary at the new intersections proposed in the DCP, noting that these are subject to further design and approvals at permit application stage.

7 References:

7.1.1 The following reports were relied upon in the preparation of this report:

Preston Market Studies

— Murray Street and Cramer Street Level Crossing Removal, Traffic Analysis Report (Addendum), Trafficworks for Darebin City Council, Draft Report 26/03/2020.
— Existing Conditions Assessment, Preston Market, Prepared for Victorian Planning Authority, 3 May 2018. Cardno.
— Preston Market Traffic and Transport Assessment, Prepared for Victorian Planning Authority, 10 June 2021. Cardno.
— Preston Market Precinct, Development Contributions Plan Consultation, May 2021 (Draft to be finalized).
— Assessing the Transport Impacts of VPA's Draft Preston Market PSP, Prepared for the City of Darebin, 15 July 2021. Movement and Place Consulting.
— Preston Market, Amendment to Preston Market Incorporated Plan, Transport Impact Assessment, Prepared for Preston Market Developments Pty Ltd, 3 June 2014, GTA Consultants.
— Draft Preston Market Precinct Structure Plan, May 2021, Victoria Planning Authority.

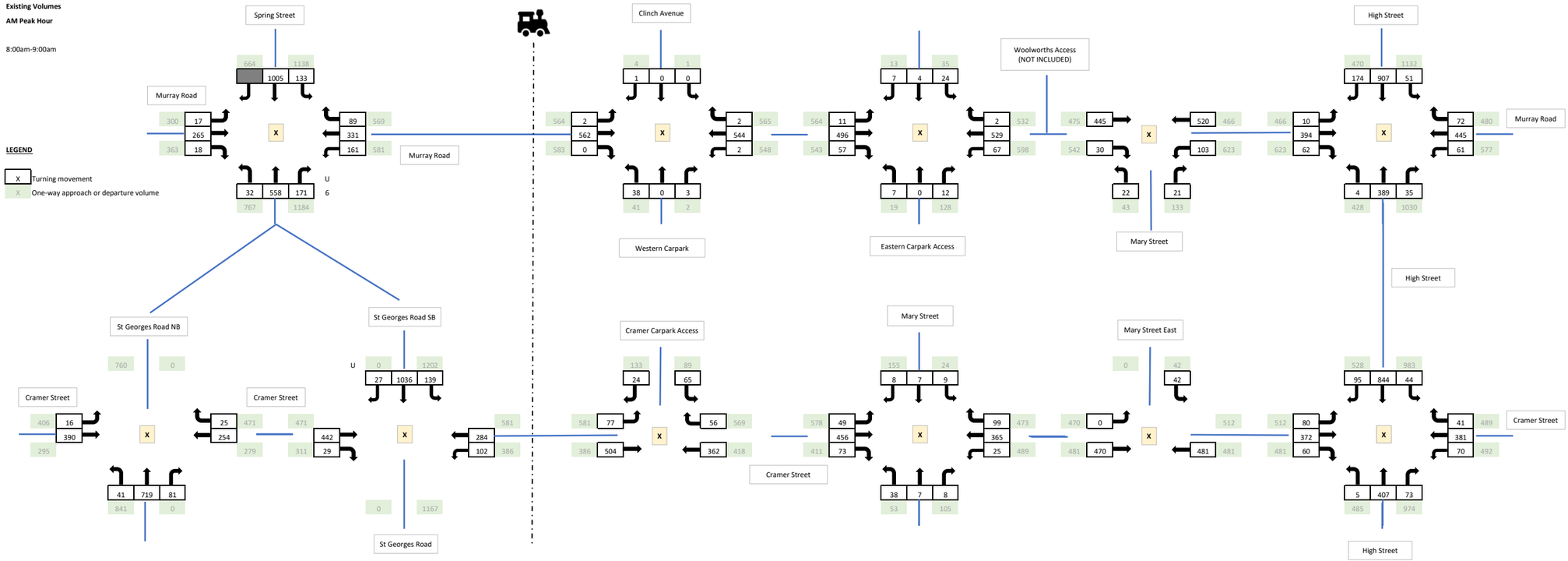
Other Studies

— Trip Generation and Parking Demand Surveys of Shopping Centres, prepared for Roads and Traffic Authority (now Roads and Maritime Services, RMS), Halcrow, September 2011.

Appendix: A Existing Traffic Volumes:

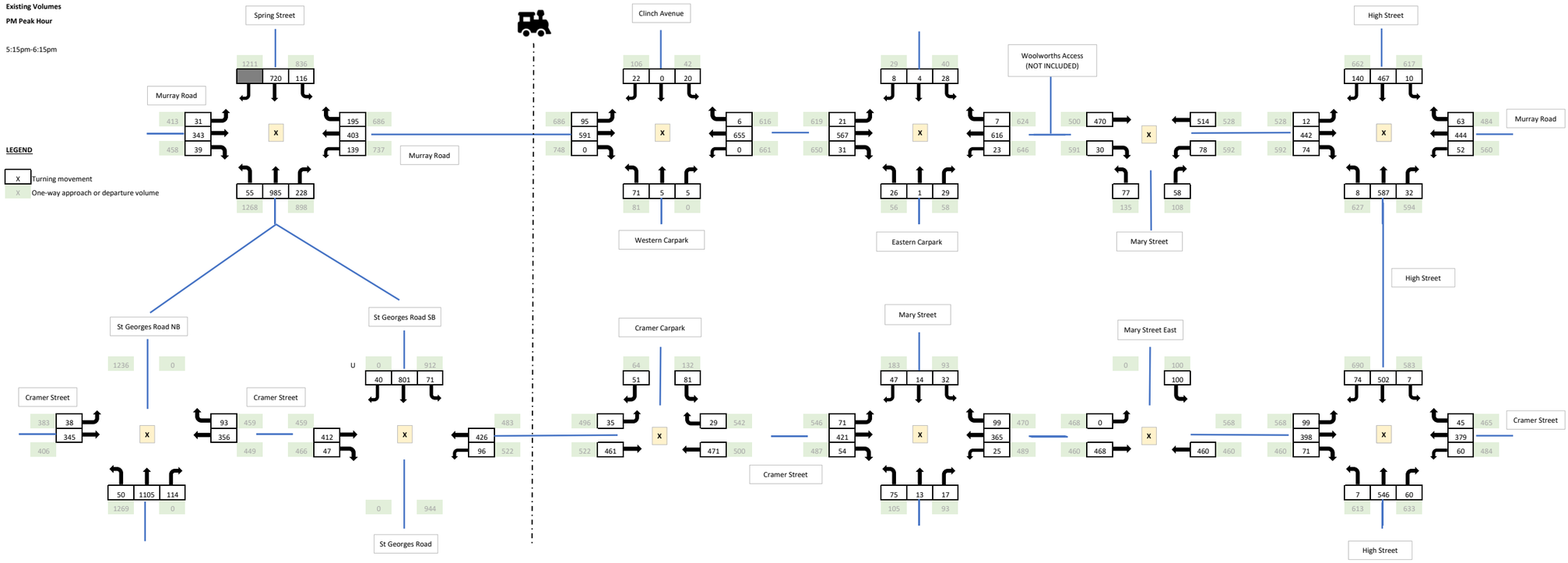
Existing Volumes
AM Peak Hour

8:00am-9:00am



Existing Volumes
PM Peak Hour

5:15pm-6:15pm



Existing Volumes

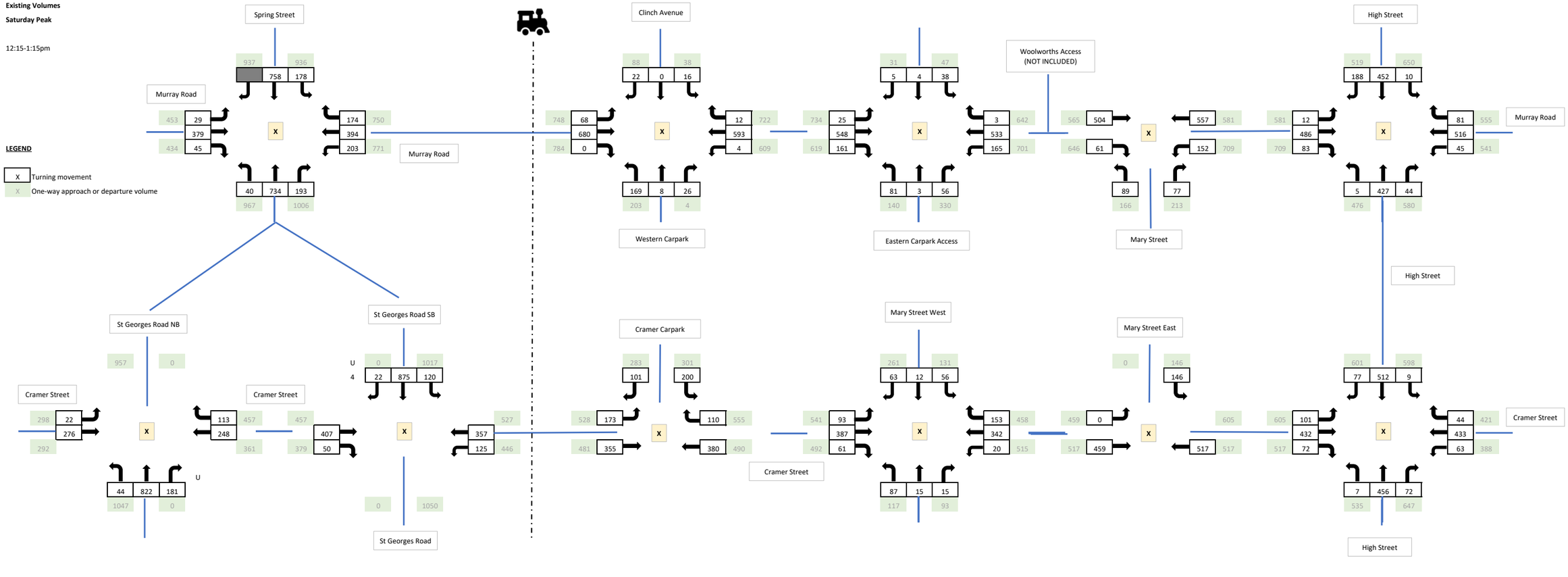
Saturday Peak

12:15-1:15pm

LEGEND

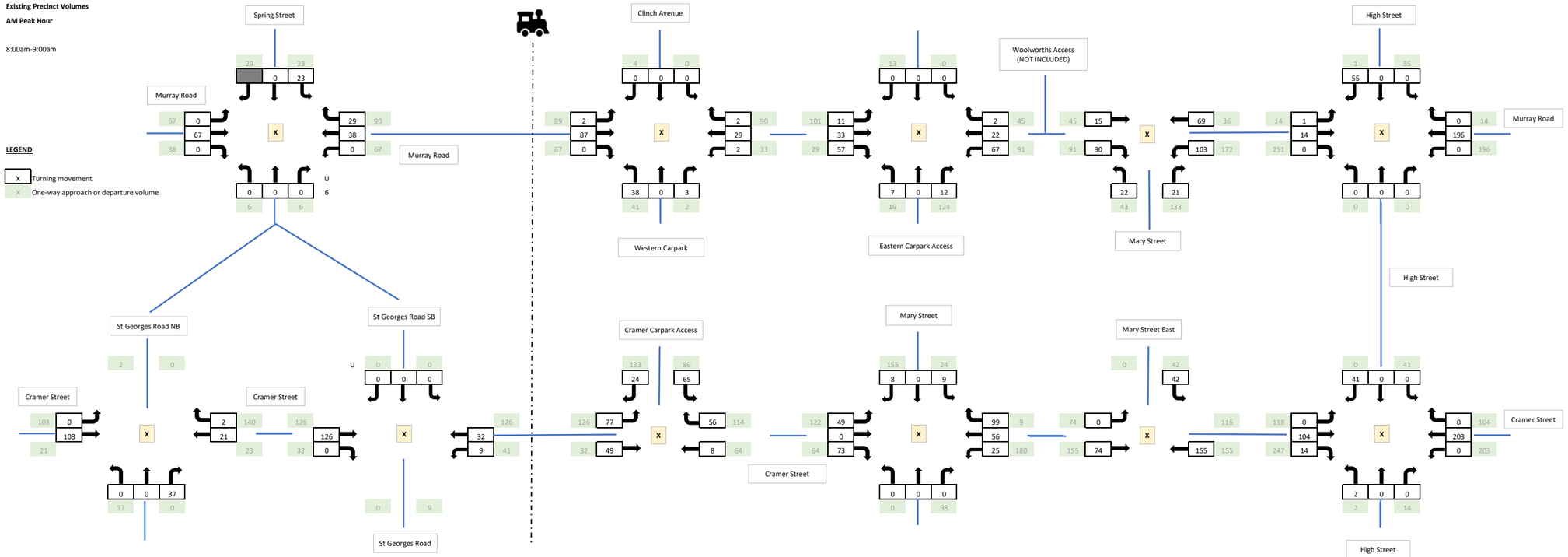
X Turning movement

X One-way approach or departure volume



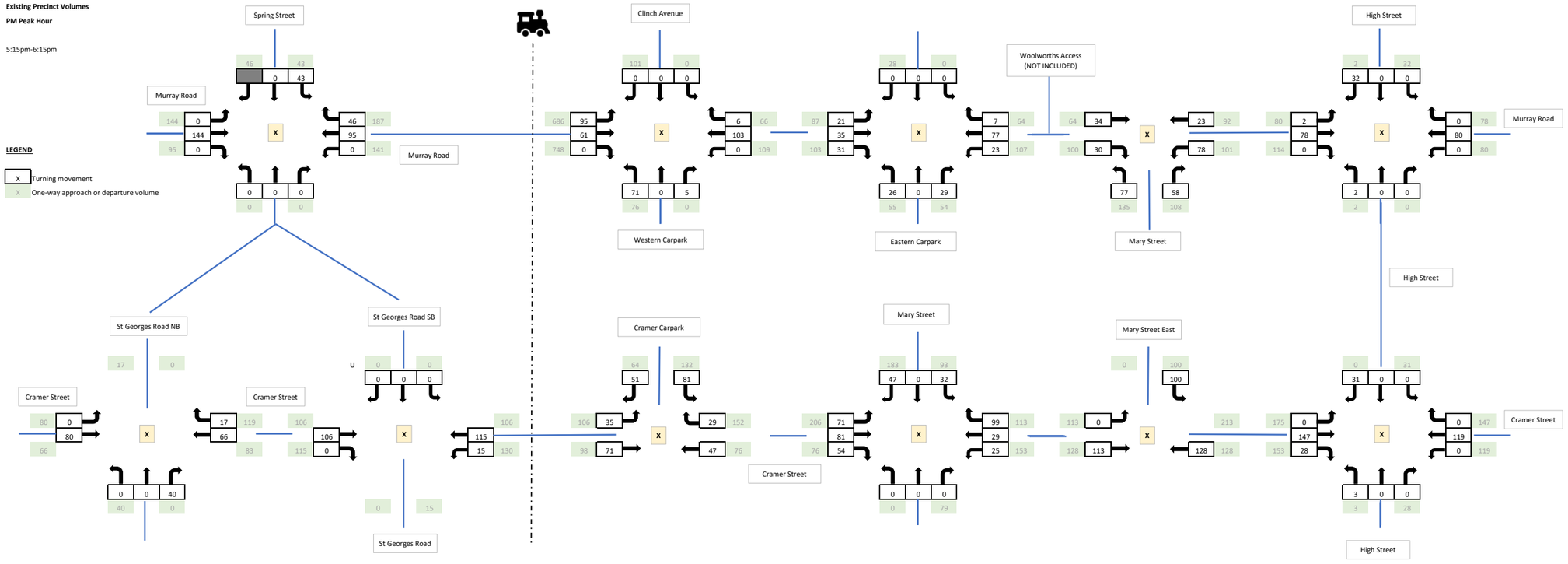
Existing Precinct Volumes
AM Peak Hour

8:00am-9:00am



Existing Precinct Volumes
PM Peak Hour

5:15pm-6:15pm



Existing Precinct Volumes

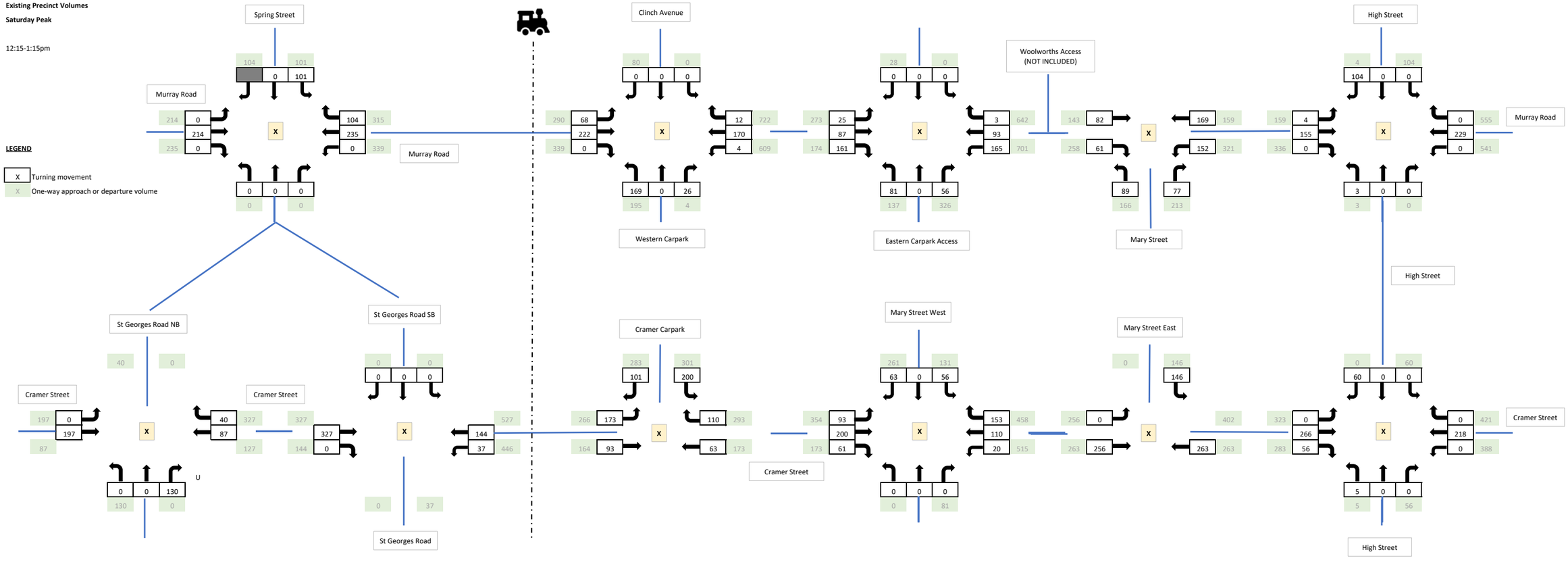
Saturday Peak

12:15-1:15pm

LEGEND

X Turning movement

X One-way approach or departure volume

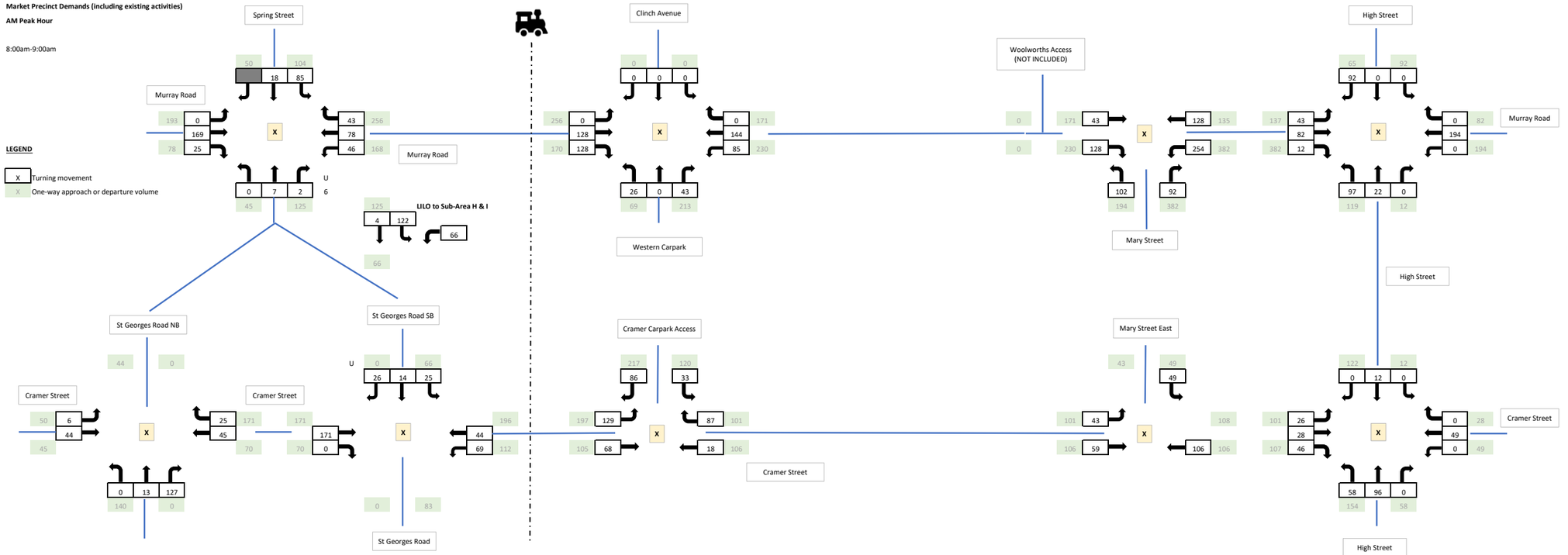


Appendix B: Post-Development Traffic Volumes:

Market Precinct Demands (including existing activities)

AM Peak Hour

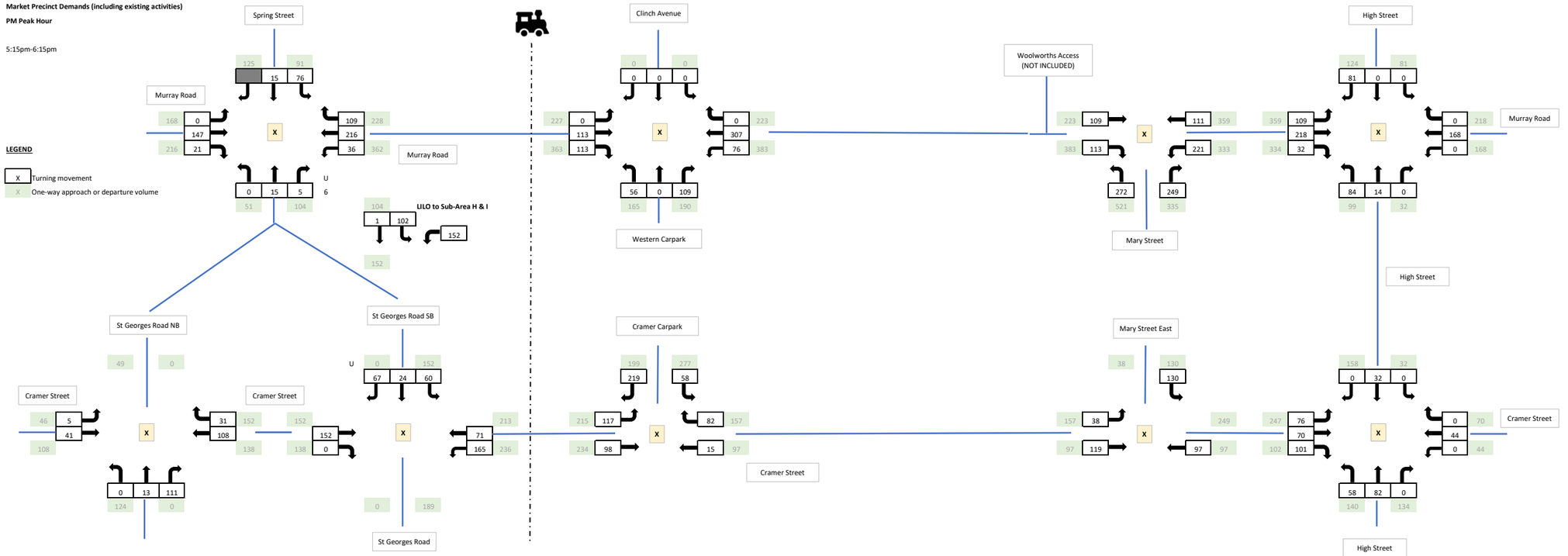
8:00am-9:00am



Market Precinct Demands (including existing activities)

PM Peak Hour

5:15pm-6:15pm



Market Precinct Demands (including existing activities)

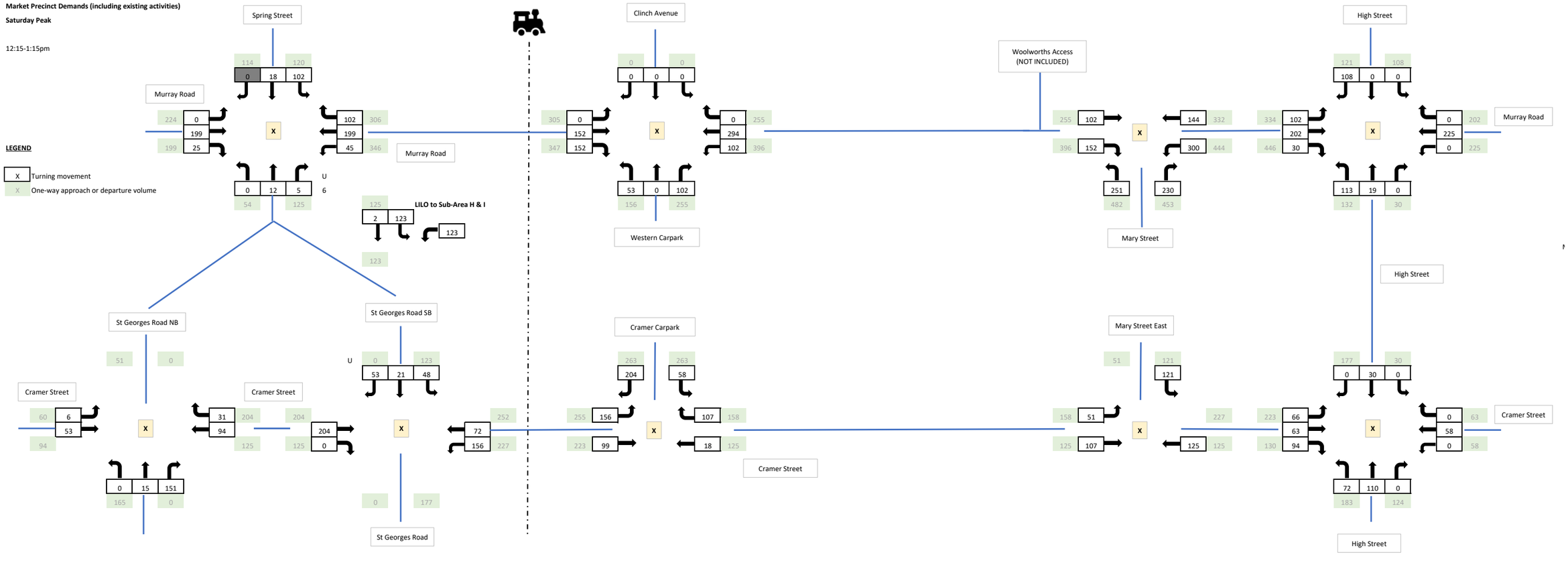
Saturday Peak

12:15-1:15pm

LEGEND

X Turning movement

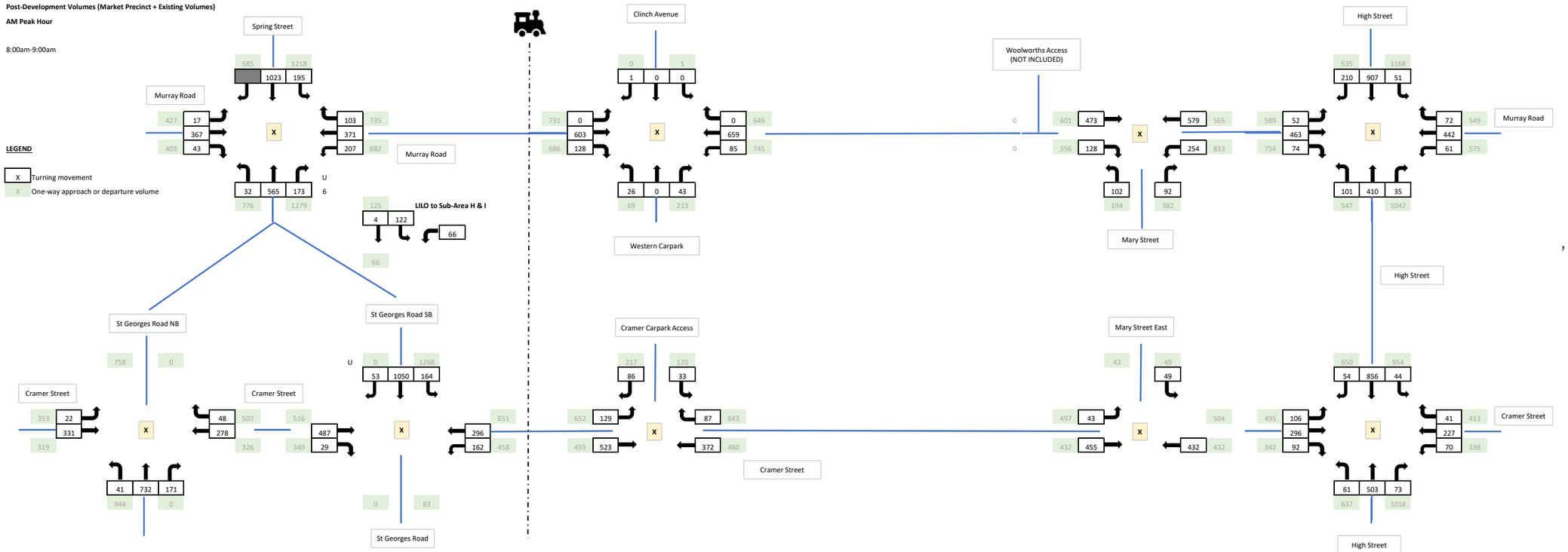
X One-way approach or departure volume



Post-Development Volumes (Market Precinct + Existing Volumes)

AM Peak Hour

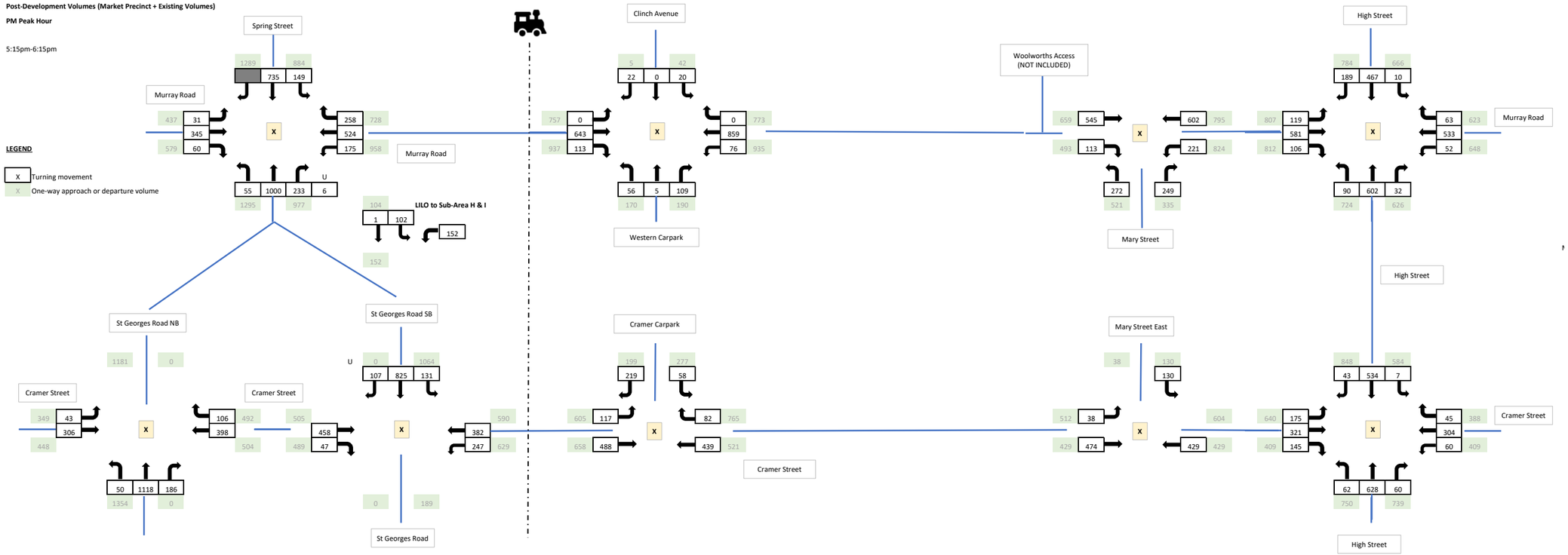
8:00am-9:00am



Post-Development Volumes (Market Precinct + Existing Volumes)

PM Peak Hour

5:15pm-6:15pm



Post-Development Volumes (Market Precinct + Existing Volumes)

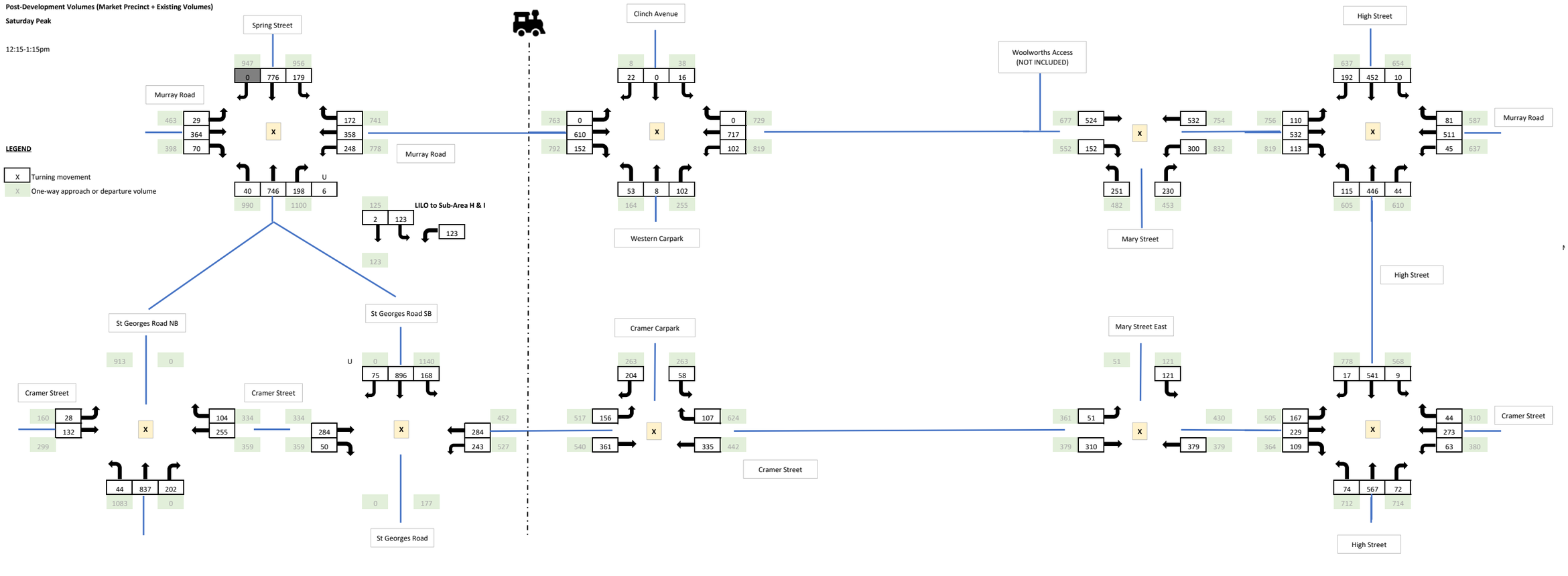
Saturday Peak

12:15-1:15pm

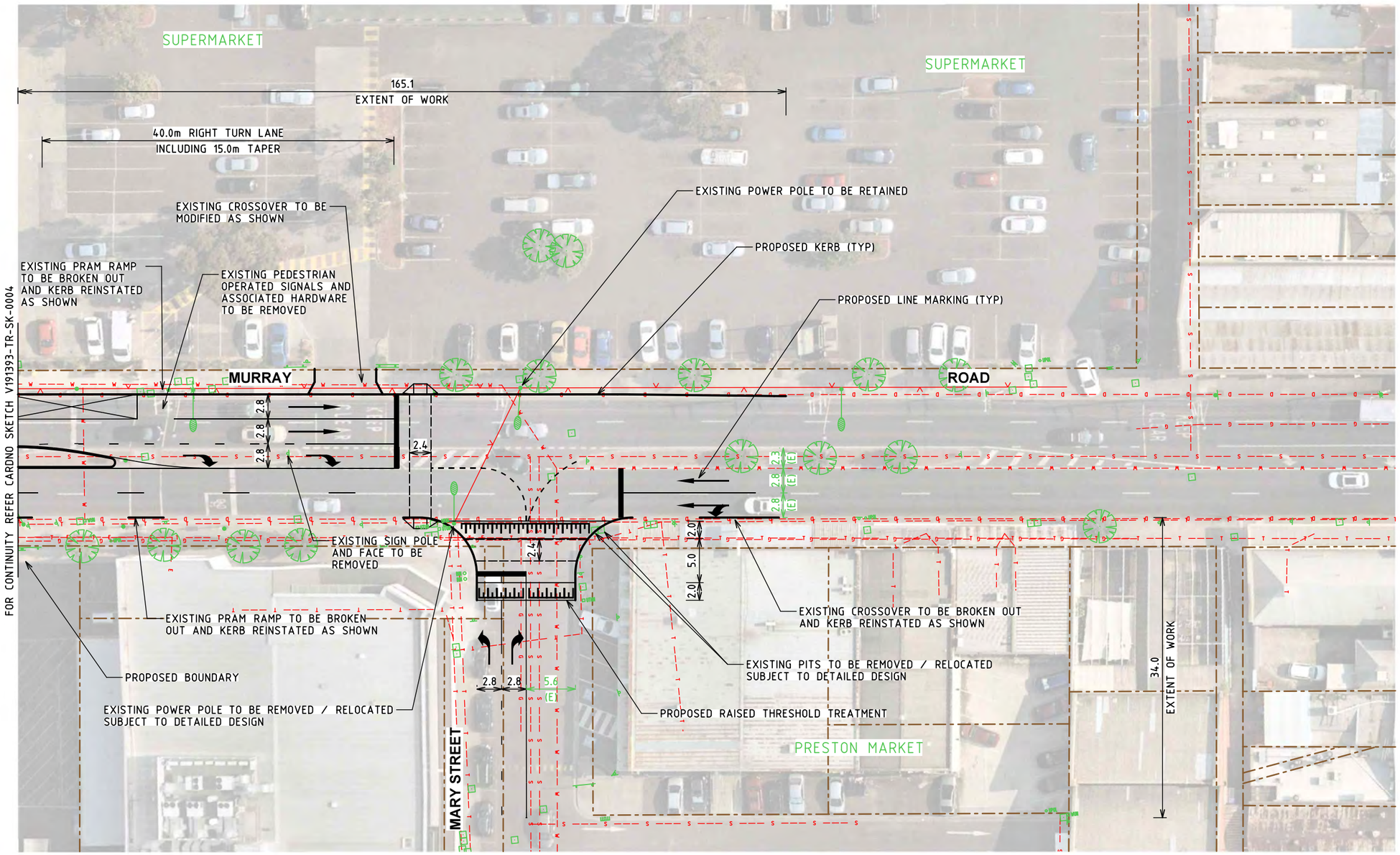
LEGEND

X Turning movement

X One-way approach or departure volume



Appendix C: DCP Functional Concept Plans:



MELWAY MAP REF 18 F12

NOTE:

1. LOCATION OF TREES AND ALL ABOVE GROUND INFRASTRUCTURE IS INDICATIVE ONLY.

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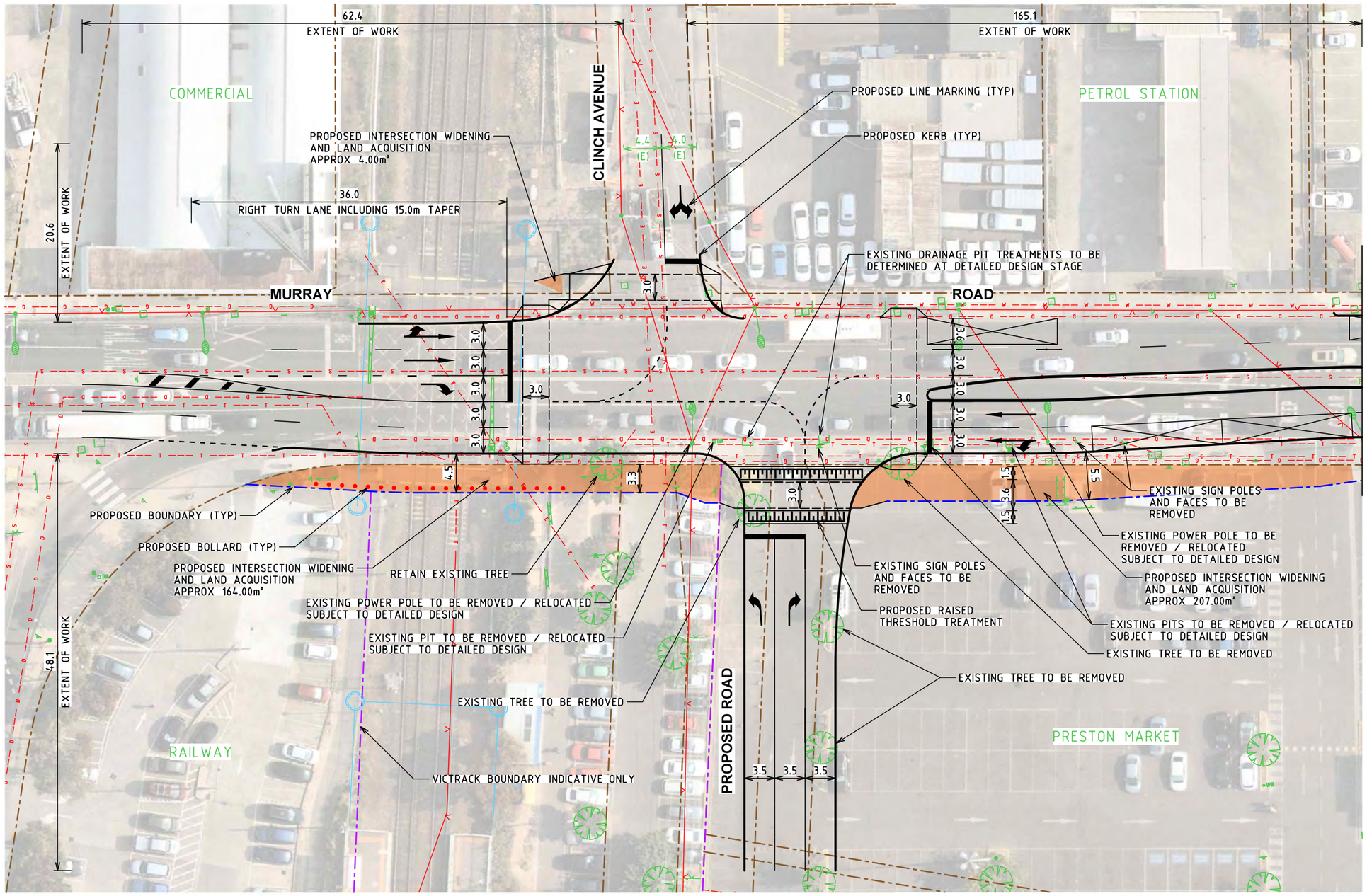
VICTORIAN PLANNING AUTHORITY
VPA PRESTON MARKET PRECINCT
MURRAY ROAD / MARY STREET, PRESTON
SIGNALISED T - INTERSECTION
CONCEPT FUNCTIONAL DESIGN PLAN

Drawn/Check	Date	Scale	Size
NB / SGM	21.01.2020	1:500	A3

Drawing Number	Revision
V191393-TR-SK-0003	4



FOR CONTINUITY REFER CARDNO SKETCH V191393-TR-SK-0003

N

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MURRAY ROAD / CLINCH AVENUE, PRESTON
SIGNALISED CROSS - INTERSECTION
CONCEPT FUNCTIONAL DESIGN PLAN

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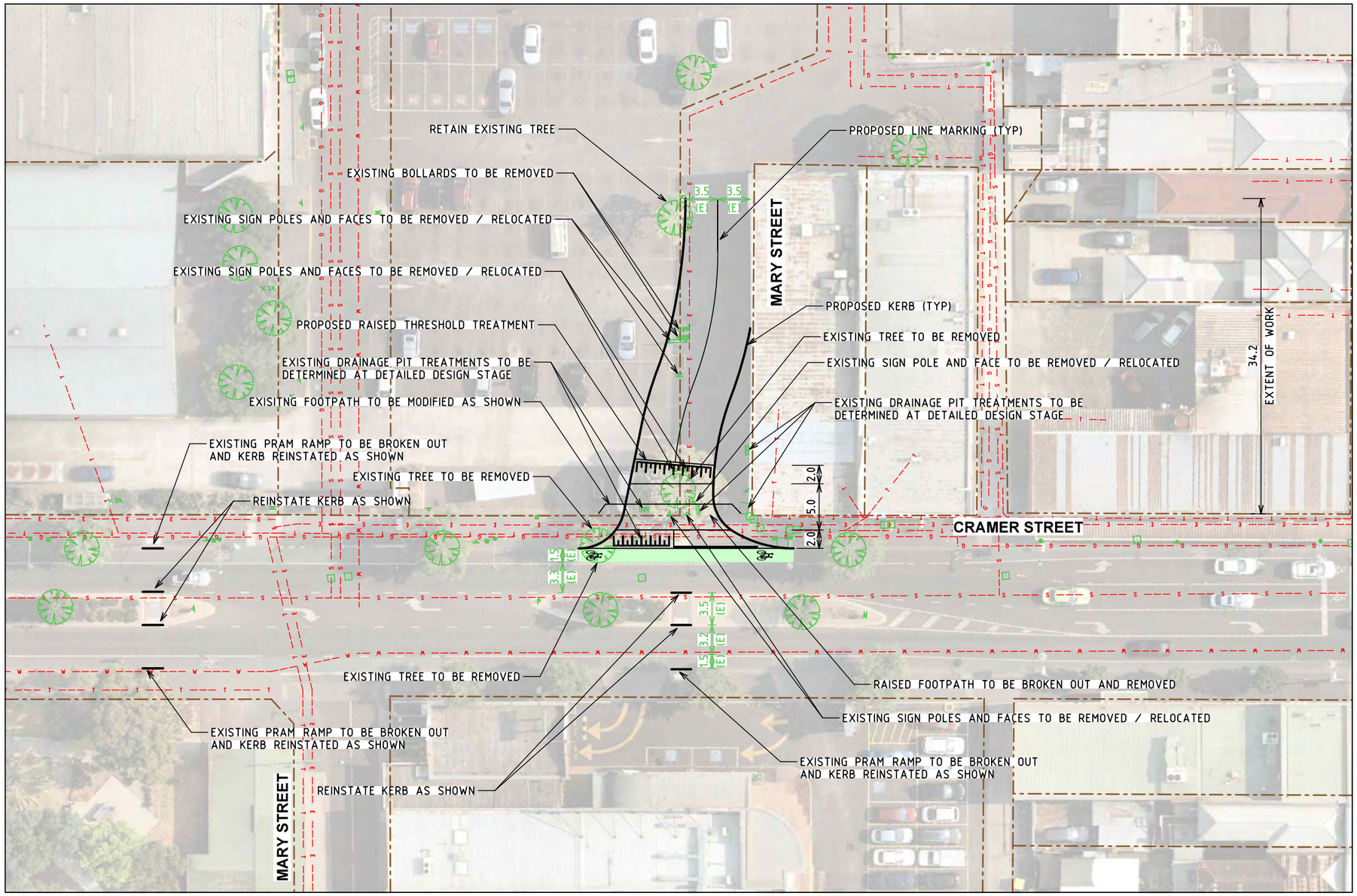

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CRAMER STREET / MARY STREET, PRESTON
UNSIGNALISED T- INTERSECTION
CONCEPT FUNCTIONAL DESIGN PLAN

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Drawing Number	Revision
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DATE PLOTTED: 02/28/20 16:34:07 BY: User:nitin.batra

85.9
EXTENT OF WORK

51.8
EXTENT OF WORK

VICTRACK BOUNDARY INDICATIVE ONLY

COMMERCIAL

PRESTON MARKET

3.0 3.0

PROPOSED KERB (TYP)

PROPOSED LINE MARKING (TYP)

PROPOSED ROAD

45.4
EXTENT OF WORK

EXISTING PITS TO BE REMOVED / RELOCATED
SUBJECT TO DETAILED DESIGN

RETAIN EXISTING TREE

EXISTING POWER POLE TO BE REMOVED / RELOCATED
SUBJECT TO DETAILED DESIGN

PROPOSED RAISED THRESHOLD TREATMENT (TYP)

RETAIN EXISTING TREE

EXISTING CROSSOVER TO BE BROKEN OUT
AND KERB REINSTATED AS SHOWN

EXISTING PRAM RAMP TO BE BROKEN
OUT AND KERB REINSTATED AS SHOWN

CRAMER STREET

35.0
LANE MERGE LENGTH

4.0

2.5

1.5 3.1 1.5

1.5 4.0 3.1

2.4

3.0 3.0

1.5 3.0 (E)

1.5 3.2 (E)

3.6 (E)

1.5 3.2 (E)

2.0 5.0 2.0

EDITH STREET

KEEP CLEAR

EXISTING DRAINAGE PIT TREATMENT TO BE
DETERMINED AT DETAILED DESIGN STAGE

EXISTING PITS TO BE REMOVED / RELOCATED
SUBJECT TO DETAILED DESIGN

EXISTING PRAM RAMP TO BE BROKEN
OUT AND KERB REINSTATED AS SHOWN

EXISTING DRAINAGE PIT TREATMENTS TO BE
DETERMINED AT DETAILED DESIGN STAGE

EXISTING PRAM RAMP TO BE BROKEN
OUT AND KERB REINSTATED AS SHOWN

1.5 3.1 1.5

40.0
RIGHT TURNING LANE INCLUDING 15.0m TAPER

NOTE:

1. LOCATION OF TREES AND ALL ABOVE GROUND INFRASTRUCTURE IS INDICATIVE ONLY.

N

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VPA PRESTON MARKET PRECINCT
CRAMER STREET / PROPOSED ROAD, PRESTON
SIGNALISED T- INTERSECTION / PED CROSSING
CONCEPT FUNCTIONAL DESIGN PLAN

Drawn/Check	Date	Scale	Size
NB / SGM	21.01.2020	1:500	A3

Drawing Number	Revision
V191393-TR-SK-0007	4

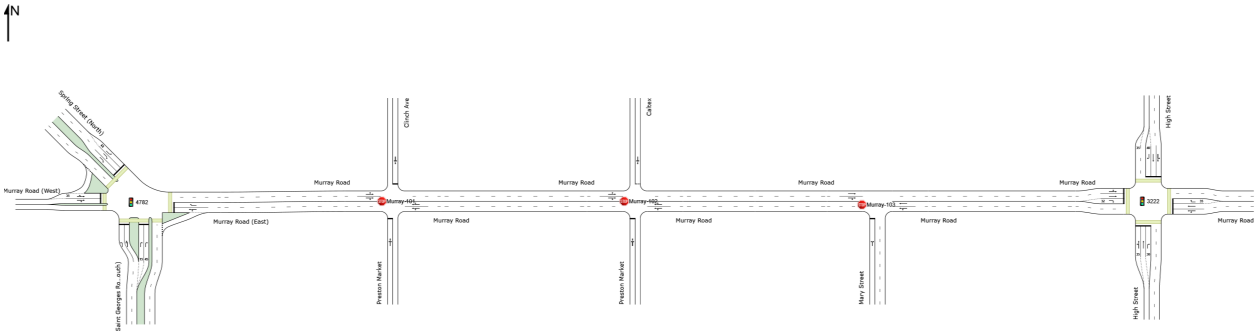
Appendix D: SIDRA Outputs:

NETWORK LAYOUT

Network: N101 [AM _ Exisitng _ Murray Corridor _ Ratio (Network Folder: Existing)]

New Network
Network Category: (None)

Layout pictures are schematic functional drawings reflecting input data. They are not design drawings.



SITES IN NETWORK		
Site ID	**CCG ID**	**Site Name**
4782	NA	St Georges Road / Spring Street / Murray Road
Murray-101	NA	Murray Road / Clinch Ave / Preston Market
Murray-102	NA	Murray Road / Preston Market / Caltex
Murray-103	NA	Murray Road / Mary Street
3222	NA	High Street / Murray Road

MOVEMENT SUMMARY

Site: 4782 [St Georges Road / Spring Street / Murray Road (Site Folder: AM _ Existing _ Murray Corridor _ Ratio)]

Network: N101 [AM _ Exisitng _ Murray Corridor _ Ratio (Network Folder: Existing)]

New Site
Site Category: (None)
Signals - EQUISAT (Fixed-Time/SCATS) Isolated Cycle Time = 120 seconds (Site User-Given Cycle Time)

Vehicle Movement Performance

Mov ID	Turn	DEMAND FLOWS [Total veh/h	HV] %	ARRIVAL FLOWS [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	AVERAGE BACK OF QUEUE [Veh. veh	Dist] m	Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed km/h
South: Saint Georges Road (South)														
1	L2	34	3.0	34	3.0	0.036	20.5	LOS C	0.6	4.2	0.51	0.67	0.51	40.3
1a	L1	587	3.0	587	3.0	0.680	26.1	LOS C	14.7	105.2	0.76	0.80	0.76	37.7
3	R2	180	3.0	180	3.0	* 0.858	74.5	LOS E	4.7	33.7	1.00	0.94	1.43	10.4
Approach		801	3.0	801	3.0	0.858	36.7	LOS D	14.7	105.2	0.80	0.82	0.90	30.6
East: Murray Road (East)														
4	L2	169	3.0	169	3.0	0.731	40.3	LOS D	10.4	75.0	0.92	0.88	0.92	21.0
5	T1	348	3.0	348	3.0	* 0.731	35.3	LOS D	10.4	75.0	0.92	0.88	0.92	29.6
6a	R1	94	3.0	94	3.0	0.429	58.4	LOS E	3.2	23.1	0.97	0.77	0.97	22.5
Approach		612	3.0	612	3.0	0.731	40.2	LOS D	10.4	75.0	0.92	0.86	0.92	26.2
NorthWest: Spring Street (North)														
27a	L1	140	3.0	140	3.0	0.147	13.8	LOS B	1.7	12.2	0.56	0.70	0.56	41.4
29a	R1	1058	3.0	1058	3.0	* 0.770	38.4	LOS D	17.7	127.3	0.91	0.86	0.93	32.2
Approach		1198	3.0	1198	3.0	0.770	35.6	LOS D	17.7	127.3	0.87	0.84	0.89	32.8
West: Murray Road (West)														
10b	L3	18	3.0	18	3.0	0.405	53.6	LOS D	5.0	35.9	0.90	0.78	0.90	33.7
11	T1	279	3.0	279	3.0	0.405	45.5	LOS D	5.0	35.9	0.91	0.76	0.91	24.3
12	R2	19	3.0	19	3.0	0.405	49.6	LOS D	4.7	33.6	0.91	0.75	0.91	29.9
Approach		316	3.0	316	3.0	0.405	46.2	LOS D	5.0	35.9	0.91	0.76	0.91	25.4
All Vehicles		2926	3.0	2926	3.0	0.858	38.0	LOS D	17.7	127.3	0.87	0.83	0.90	30.1

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Network Data dialog (Network tab).
Vehicle movement LOS values are based on average delay per movement.
Intersection and Approach LOS values are based on average delay for all vehicle movements.
Delay Model: SIDRA Standard (Geometric Delay is included).
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

* Critical Movement (Signal Timing)

Pedestrian Movement Performance

Mov ID	Crossing	Dem. Flow ped/h	Aver. Delay sec	Level of Service	AVERAGE BACK OF QUEUE [Ped ped	Dist] m	Prop. Que	Effective Stop Rate	Travel Time sec	Travel Dist. m	Aver. Speed m/sec
South: Saint Georges Road (South)											
P11	Stage 1	53	32.3	LOS D	0.1	0.1	0.73	0.73	63.3	40.2	0.64
P12	Stage 2	53	25.4	LOS C	0.1	0.1	0.65	0.65	46.6	27.6	0.59
East: Murray Road (East)											
P2	Full	53	28.8	LOS C	0.1	0.1	0.69	0.69	55.8	35.2	0.63
NorthWest: Spring Street (North)											

P7 Full	53	54.3	LOS E	0.2	0.2	0.95	0.95	223.9	220.5	0.98
West: Murray Road (West)										
P41 Stage 1	53	8.5	LOS A	0.1	0.1	0.38	0.38	29.7	27.6	0.93
P42 Stage 2	53	7.7	LOS A	0.1	0.1	0.36	0.36	26.4	24.3	0.92
All Pedestrians	316	26.2	LOS C	0.2	0.2	0.63	0.63	74.3	62.6	0.84

Level of Service (LOS) Method: SIDRA Pedestrian LOS Method (Based on Average Delay)
Pedestrian movement LOS values are based on average delay per pedestrian movement.
Intersection LOS value for Pedestrians is based on average delay for all pedestrian movements.

MOVEMENT SUMMARY

Site: Murray-101 [Murray Road / Clinch Ave / Preston Market (Site Folder: AM _ Existing _ Murray Corridor _ Ratio)]

Network: N101 [AM _ Exisitng _ Murray Corridor _ Ratio (Network Folder: Existing)]

New Site
Site Category: (None)
Stop (Two-Way)

Vehicle Movement Performance

Mov ID	Turn	DEMAND FLOWS [Total veh/h	HV] %	ARRIVAL FLOWS [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	AVERAGE BACK OF QUEUE [Veh. veh	Dist] m	Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed km/h
South: Preston Market														
1	L2	40	0.0	40	0.0	0.138	9.6	LOS A	0.6	4.1	0.46	0.90	0.46	44.6
2	T1	1	0.0	1	0.0	0.138	27.9	LOS D	0.6	4.1	0.46	0.90	0.46	49.9
3	R2	3	0.0	3	0.0	0.138	32.5	LOS D	0.6	4.1	0.46	0.90	0.46	44.6
Approach		44	0.0	44	0.0	0.138	11.6	LOS B	0.6	4.1	0.46	0.90	0.46	44.8
East: Murray Road														
4	L2	2	0.0	2	0.0	0.151	5.0	LOS A	4.2	30.4	0.00	0.00	0.00	57.1
5	T1	573	3.0	573	3.0	0.151	0.0	LOS A	4.2	30.4	0.01	0.00	0.01	59.2
6	R2	2	0.0	2	0.0	0.151	7.7	LOS A	0.0	0.1	0.01	0.00	0.01	56.6
Approach		577	3.0	577	3.0	0.151	0.1	NA	4.2	30.4	0.01	0.00	0.01	59.1
North: Clinch Ave														
7	L2	1	0.0	1	0.0	0.014	9.4	LOS A	0.0	0.1	0.67	0.88	0.67	35.5
8	T1	1	0.0	1	0.0	0.014	26.2	LOS D	0.0	0.1	0.67	0.88	0.67	43.6
9	R2	1	0.0	1	0.0	0.014	32.5	LOS D	0.0	0.1	0.67	0.88	0.67	35.5
Approach		3	0.0	3	0.0	0.014	22.7	LOS C	0.0	0.1	0.67	0.88	0.67	39.1
West: Murray Road														
10	L2	2	0.0	2	0.0	0.156	5.0	LOS A	0.0	0.0	0.00	0.00	0.00	57.1
11	T1	592	3.0	592	3.0	0.156	0.0	LOS A	0.0	0.0	0.00	0.00	0.00	59.4
12	R2	1	0.0	1	0.0	0.156	8.4	LOS A	0.0	0.0	0.01	0.00	0.01	56.7
Approach		595	3.0	595	3.0	0.156	0.0	NA	0.0	0.0	0.00	0.00	0.00	59.3
All Vehicles		1219	2.9	1219	2.9	0.156	0.5	NA	4.2	30.4	0.02	0.04	0.02	55.5

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Network Data dialog (Network tab).
Vehicle movement LOS values are based on average delay per movement.
Minor Road Approach LOS values are based on average delay for all vehicle movements.
NA: Intersection LOS and Major Road Approach LOS values are Not Applicable for two-way sign control since the average delay is not a good LOS measure due to zero delays associated with major road movements.
Delay Model: SIDRA Standard (Geometric Delay is included).
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

MOVEMENT SUMMARY

Site: Murray-103 [Murray Road / Mary Street (Site Folder: AM _ Existing _ Murray Corridor _ Ratio)]

Network: N101 [AM _ Exisitng _ Murray Corridor _ Ratio (Network Folder: Existing)]

New Site
Site Category: (None)
Stop (Two-Way)

Vehicle Movement Performance

Mov ID	Turn	DEMAND FLOWS [Total veh/h	HV] %	ARRIVAL FLOWS [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	AVERAGE BACK OF QUEUE [Veh. veh	Dist] m	Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed km/h
South: Mary Street														
1	L2	23	0.0	23	0.0	0.123	9.1	LOS A	0.2	1.2	0.49	0.90	0.49	40.1
3	R2	22	0.0	22	0.0	0.123	23.9	LOS C	0.2	1.2	0.49	0.90	0.49	40.1
Approach		45	0.0	45	0.0	0.123	16.3	LOS C	0.2	1.2	0.49	0.90	0.49	40.1
East: Murray Road														
4	L2	108	0.0	108	0.0	0.172	5.5	LOS A	0.0	0.0	0.00	0.20	0.00	54.6
5	T1	547	3.0	547	3.0	0.172	0.0	LOS A	0.0	0.0	0.00	0.08	0.00	54.0
Approach		656	2.5	656	2.5	0.172	0.9	NA	0.0	0.0	0.00	0.10	0.00	54.3
West: Murray Road														
11	T1	468	3.0	468	3.0	0.141	0.4	LOS A	0.2	1.3	0.09	0.04	0.09	51.1
12	R2	32	0.0	32	0.0	0.141	7.4	LOS A	0.2	1.3	0.21	0.09	0.21	54.0
Approach		500	2.8	500	2.8	0.141	0.8	NA	0.2	1.3	0.10	0.04	0.10	52.1
All Vehicles		1201	2.5	1201	2.5	0.172	1.5	NA	0.2	1.3	0.06	0.10	0.06	51.7

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Network Data dialog (Network tab).
Vehicle movement LOS values are based on average delay per movement.
Minor Road Approach LOS values are based on average delay for all vehicle movements.
NA: Intersection LOS and Major Road Approach LOS values are Not Applicable for two-way sign control since the average delay is not a good LOS measure due to zero delays associated with major road movements.
Delay Model: SIDRA Standard (Geometric Delay is included).
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

MOVEMENT SUMMARY

Site: Murray-102 [Murray Road / Preston Market / Caltex (Site Folder: AM _ Existing _ Murray Corridor _ Ratio)]

Network: N101 [AM _ Exisitng _ Murray Corridor _ Ratio (Network Folder: Existing)]

New Site
Site Category: (None)
Stop (Two-Way)

Vehicle Movement Performance

Mov ID	Turn	DEMAND FLOWS [Total veh/h	HV] %	ARRIVAL FLOWS [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	AVERAGE BACK OF QUEUE [Veh. veh	Dist] m	Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed km/h
South: Preston Market														
1	L2	7	0.0	7	0.0	0.142	9.2	LOS A	0.2	1.2	0.77	0.92	0.77	30.5
2	T1	1	0.0	1	0.0	0.142	35.4	LOS E	0.2	1.2	0.77	0.92	0.77	39.5
3	R2	13	0.0	13	0.0	0.142	44.0	LOS E	0.2	1.2	0.77	0.92	0.77	30.5
Approach		21	0.0	21	0.0	0.142	31.4	LOS D	0.2	1.2	0.77	0.92	0.77	31.2
East: Murray Road														
4	L2	71	0.0	71	0.0	0.166	4.3	LOS A	0.0	0.0	0.00	0.13	0.00	55.6
5	T1	557	3.0	557	3.0	0.166	0.0	LOS A	0.0	0.1	0.01	0.06	0.01	53.8
6	R2	2	0.0	2	0.0	0.166	7.5	LOS A	0.0	0.1	0.01	0.00	0.01	56.5
Approach		629	2.7	629	2.7	0.166	0.5	NA	0.0	0.1	0.01	0.07	0.01	54.7
North: Caltex														
7	L2	25	0.0	25	0.0	0.104	7.0	LOS A	0.1	1.0	0.60	0.73	0.60	41.1
8	T1	4	0.0	4	0.0	0.104	27.2	LOS D	0.1	1.0	0.60	0.73	0.60	47.9
9	R2	7	0.0	7	0.0	0.104	31.6	LOS D	0.1	1.0	0.60	0.73	0.60	41.1
Approach		37	0.0	37	0.0	0.104	14.2	LOS B	0.1	1.0	0.60	0.73	0.60	42.3
West: Murray Road														
10	L2	12	0.0	12	0.0	0.180	5.0	LOS A	0.0	0.0	0.00	0.02	0.00	56.9
11	T1	522	3.0	522	3.0	0.180	0.7	LOS A	0.3	2.5	0.13	0.08	0.13	47.0
12	R2	60	0.0	60	0.0	0.180	8.8	LOS A	0.3	2.5	0.36	0.18	0.36	51.8
Approach		594	2.6	594	2.6	0.180	1.6	NA	0.3	2.5	0.15	0.09	0.15	49.6
All Vehicles		1281	2.5	1281	2.5	0.180	1.9	NA	0.3	2.5	0.10	0.11	0.10	48.9

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Network Data dialog (Network tab).
Vehicle movement LOS values are based on average delay per movement.
Minor Road Approach LOS values are based on average delay for all vehicle movements.
NA: Intersection LOS and Major Road Approach LOS values are Not Applicable for two-way sign control since the average delay is not a good LOS measure due to zero delays associated with major road movements.
Delay Model: SIDRA Standard (Geometric Delay is included).
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

MOVEMENT SUMMARY

Site: 3222 [High Street / Murray Road (Site Folder: AM _ Existing _ Murray Corridor _ Ratio)]

Network: N101 [AM _ Exisitng _ Murray Corridor _ Ratio (Network Folder: Existing)]

New Site
Site Category: (None)
Signals - EQUISAT (Fixed-Time/SCATS) Isolated Cycle Time = 50 seconds (Site Practical Cycle Time)

Vehicle Movement Performance

Mov ID	Turn	DEMAND FLOWS [Total veh/h	HV] %	ARRIVAL FLOWS [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	AVERAGE BACK OF QUEUE [Veh. veh	Dist] m	Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed km/h
South: High Street														
1	L2	4	3.0	4	3.0	0.131	17.4	LOS B	0.9	6.6	0.70	0.56	0.70	43.3
2	T1	409	3.0	409	3.0	0.470	13.4	LOS B	3.8	27.5	0.79	0.66	0.79	49.3
3	R2	37	3.0	37	3.0	0.204	28.0	LOS C	0.5	3.8	0.92	0.73	0.92	40.5
Approach		451	3.0	451	3.0	0.470	14.7	LOS B	3.8	27.5	0.80	0.67	0.80	48.4
East: Murray Road														
4	L2	64	3.0	64	3.0	0.736	30.5	LOS C	3.6	25.7	1.00	0.91	1.22	41.0
5	T1	383	3.0	383	3.0	* 0.736	24.9	LOS C	3.6	26.1	1.00	0.91	1.22	33.0
6	R2	76	3.0	76	3.0	0.312	27.2	LOS C	1.1	7.8	0.92	0.75	0.92	40.8
Approach		523	3.0	523	3.0	0.736	25.9	LOS C	3.6	26.1	0.99	0.89	1.18	35.9
North: High Street														
7	L2	54	3.0	54	3.0	0.755	23.4	LOS C	7.6	54.7	0.94	0.90	1.07	45.1
8	T1	955	3.0	955	3.0	* 0.755	17.8	LOS B	7.6	54.7	0.93	0.89	1.06	46.3
9	R2	183	3.0	183	3.0	0.597	25.6	LOS C	2.7	19.1	0.94	0.83	1.00	32.9
Approach		1192	3.0	1192	3.0	0.755	19.2	LOS B	7.6	54.7	0.93	0.88	1.05	44.7
West: Murray Road														
10	L2	11	3.0	11	3.0	0.290	17.5	LOS B	2.3	16.5	0.72	0.60	0.72	44.2
11	T1	433	3.0	433	3.0	0.290	11.2	LOS B	2.3	16.5	0.72	0.60	0.72	46.0
12	R2	65	3.0	65	3.0	* 0.299	29.0	LOS C	1.0	6.9	0.95	0.74	0.95	32.9
Approach		508	3.0	508	3.0	0.299	13.6	LOS B	2.3	16.5	0.75	0.62	0.75	43.7
All Vehicles		2674	3.0	2674	3.0	0.755	18.7	LOS B	7.6	54.7	0.89	0.80	0.98	43.6

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Network Data dialog (Network tab).
Vehicle movement LOS values are based on average delay per movement.
Intersection and Approach LOS values are based on average delay for all vehicle movements.
Delay Model: SIDRA Standard (Geometric Delay is included).
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

* Critical Movement (Signal Timing)

Pedestrian Movement Performance

Mov ID	Crossing	Dem. Flow ped/h	Aver. Delay sec	Level of Service	AVERAGE BACK OF QUEUE [Ped ped	Dist] m	Prop. Que	Effective Stop Rate	Travel Time sec	Travel Dist. m	Aver. Speed m/sec
South: High Street											
P1	Full	53	19.4	LOS B	0.1	0.1	0.88	0.88	187.5	218.5	1.17
East: Murray Road											
P2	Full	53	19.4	LOS B	0.1	0.1	0.88	0.88	187.5	218.5	1.17
North: High Street											

P3 Full	53	19.4	LOS B	0.1	0.1	0.88	0.88	187.5	218.5	1.17
West: Murray Road										
P4 Full	53	19.4	LOS B	0.1	0.1	0.88	0.88	187.5	218.5	1.17
All Pedestrians	211	19.4	LOS B	0.1	0.1	0.88	0.88	187.5	218.5	1.17

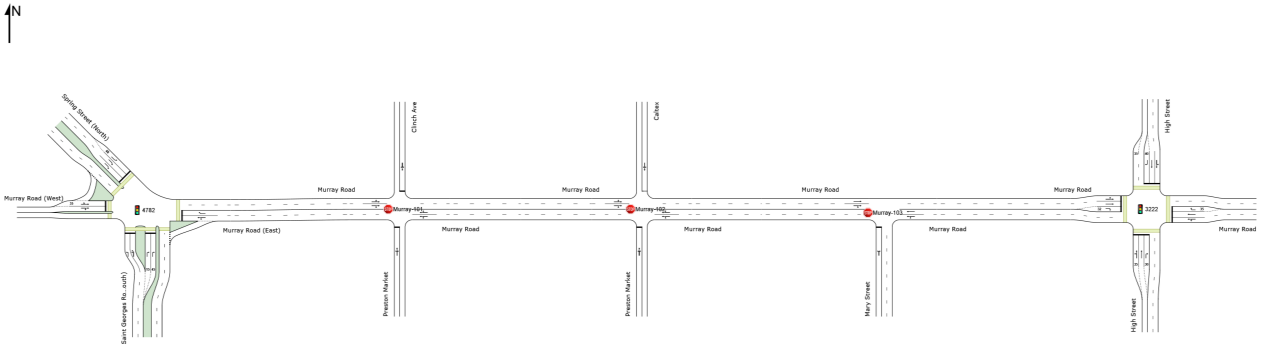
Level of Service (LOS) Method: SIDRA Pedestrian LOS Method (Based on Average Delay)
Pedestrian movement LOS values are based on average delay per pedestrian movement.
Intersection LOS value for Pedestrians is based on average delay for all pedestrian movements.

NETWORK LAYOUT

Network: N101 [PM _ Existing _ Murray Corridor _ Ratio (Network Folder: Existing)]

New Network
Network Category: (None)

Layout pictures are schematic functional drawings reflecting input data. They are not design drawings.



SITES IN NETWORK		
Site ID	**CCG ID**	**Site Name**
4782	NA	St Georges Road / Spring Street / Murray Road
Murray-101	NA	Murray Road / Clinch Ave / Preston Market
Murray-102	NA	Murray Road / Preston Market / Caltex
Murray-103	NA	Murray Road / Mary Street
3222	NA	High Street / Murray Road

MOVEMENT SUMMARY

Site: 4782 [St Georges Road / Spring Street / Murray Road (Site Folder: PM _ Existing _ Murray Corridor _ Ratio)]

Network: N101 [PM _ Existing _ Murray Corridor _ Ratio (Network Folder: Existing)]

New Site
Site Category: (None)
Signals - EQUISAT (Fixed-Time/SCATS) Isolated Cycle Time = 120 seconds (Site User-Given Cycle Time)

Vehicle Movement Performance

Mov ID	Turn	DEMAND FLOWS [Total veh/h	HV] %	ARRIVAL FLOWS [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	AVERAGE BACK OF QUEUE [Veh. veh	Dist] m	Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed km/h
South: Saint Georges Road (South)														
1	L2	58	3.0	58	3.0	0.054	16.4	LOS B	0.9	6.1	0.44	0.67	0.44	42.9
1a	L1	1037	3.0	1037	3.0	* 1.003	84.4	LOS F	56.8	408.2	1.00	1.17	1.44	20.9
3	R2	240	3.0	240	3.0	0.503	56.8	LOS E	4.6	33.3	0.96	0.79	0.96	13.0
Approach		1335	3.0	1335	3.0	1.003	76.5	LOS E	56.8	408.2	0.97	1.08	1.31	20.6
East: Murray Road (East)														
4	L2	146	3.0	146	3.0	0.983	91.4	LOS F	10.4	75.0	1.00	1.26	1.48	11.3
5	T1	424	3.0	424	3.0	* 0.983	86.4	LOS F	10.4	75.0	1.00	1.26	1.48	17.4
6a	R1	205	3.0	205	3.0	0.940	81.2	LOS F	9.0	64.8	1.00	1.09	1.51	18.2
Approach		776	3.0	776	3.0	0.983	86.0	LOS F	10.4	75.0	1.00	1.21	1.49	16.6
NorthWest: Spring Street (North)														
27a	L1	112	3.0	112	3.0	0.117	13.0	LOS B	1.1	7.9	0.55	0.69	0.55	42.1
29a	R1	758	3.0	758	3.0	0.536	34.1	LOS C	10.8	77.5	0.82	0.80	0.82	33.9
Approach		869	3.0	869	3.0	0.536	31.4	LOS C	10.8	77.5	0.78	0.78	0.78	34.5
West: Murray Road (West)														
10b	L3	33	3.0	33	3.0	0.955	113.2	LOS F	14.3	102.4	1.00	1.21	1.53	21.8
11	T1	351	3.0	351	3.0	0.955	98.6	LOS F	14.3	102.4	1.00	1.18	1.57	14.4
12	R2	41	3.0	41	3.0	0.955	90.1	LOS F	7.7	55.5	1.00	1.13	1.63	20.7
Approach		424	3.0	424	3.0	0.955	98.9	LOS F	14.3	102.4	1.00	1.18	1.57	15.7
All Vehicles		3404	3.0	3404	3.0	1.003	69.9	LOS E	56.8	408.2	0.93	1.05	1.25	21.3

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Network Data dialog (Network tab).
Vehicle movement LOS values are based on average delay per movement.
Intersection and Approach LOS values are based on average delay for all vehicle movements.
Delay Model: SIDRA Standard (Geometric Delay is included).
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

* Critical Movement (Signal Timing)

Pedestrian Movement Performance

Mov ID	Crossing	Dem. Flow ped/h	Aver. Delay sec	Level of Service	AVERAGE BACK OF QUEUE [Ped ped	Dist] m	Prop. Que	Effective Stop Rate	Travel Time sec	Travel Dist. m	Aver. Speed m/sec
South: Saint Georges Road (South)											
P11	Stage 1	53	39.3	LOS D	0.1	0.1	0.81	0.81	70.2	40.2	0.57
P12	Stage 2	53	31.6	LOS D	0.1	0.1	0.73	0.73	52.8	27.6	0.52
East: Murray Road (East)											
P2	Full	53	28.8	LOS C	0.1	0.1	0.69	0.69	55.8	35.2	0.63
NorthWest: Spring Street (North)											

P7 Full	53	54.3	LOS E	0.2	0.2	0.95	0.95	223.9	220.5	0.98
West: Murray Road (West)										
P41 Stage 1	53	12.2	LOS B	0.1	0.1	0.45	0.45	33.4	27.6	0.83
P42 Stage 2	53	11.3	LOS B	0.1	0.1	0.43	0.43	30.0	24.3	0.81
All Pedestrians	316	29.6	LOS C	0.2	0.2	0.68	0.68	77.7	62.6	0.81

Level of Service (LOS) Method: SIDRA Pedestrian LOS Method (Based on Average Delay)
Pedestrian movement LOS values are based on average delay per pedestrian movement.
Intersection LOS value for Pedestrians is based on average delay for all pedestrian movements.

MOVEMENT SUMMARY

Site: Murray-101 [Murray Road / Clinch Ave / Preston Market (Site Folder: PM _ Existing _ Murray Corridor _ Ratio)]

Network: N101 [PM _ Existing _ Murray Corridor _ Ratio (Network Folder: Existing)]

New Site
Site Category: (None)
Stop (Two-Way)

Vehicle Movement Performance

Mov ID	Turn	DEMAND FLOWS [Total veh/h	HV] %	ARRIVAL FLOWS [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	AVERAGE BACK OF QUEUE [Veh. veh	Dist] m	Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed km/h
South: Preston Market														
1	L2	75	0.0	75	0.0	0.375	13.0	LOS B	2.7	18.9	0.61	1.05	0.77	39.6
2	T1	5	0.0	5	0.0	0.375	44.4	LOS E	2.7	18.9	0.61	1.05	0.77	46.5
3	R2	5	0.0	5	0.0	0.375	50.3	LOS F	2.7	18.9	0.61	1.05	0.77	39.6
Approach		85	0.0	85	0.0	0.375	17.2	LOS C	2.7	18.9	0.61	1.05	0.77	40.3
East: Murray Road														
4	L2	1	0.0	1	0.0	0.225	5.0	LOS A	10.4	75.0	0.00	0.00	0.00	57.1
5	T1	689	3.0	689	3.0	0.225	0.1	LOS A	10.4	75.0	0.02	0.01	0.02	58.2
6	R2	6	0.0	6	0.0	0.225	8.5	LOS A	0.0	0.3	0.04	0.01	0.04	56.2
Approach		697	3.0	697	3.0	0.225	0.2	NA	10.4	75.0	0.02	0.01	0.02	58.1
North: Clinch Ave														
7	L2	21	0.0	21	0.0	0.410	19.4	LOS C	0.5	3.4	0.73	0.97	0.95	25.4
8	T1	1	0.0	1	0.0	0.410	48.9	LOS E	0.5	3.4	0.73	0.97	0.95	34.9
9	R2	23	0.0	23	0.0	0.410	65.2	LOS F	0.5	3.4	0.73	0.97	0.95	25.4
Approach		45	0.0	45	0.0	0.410	43.5	LOS E	0.5	3.4	0.73	0.97	0.95	25.7
West: Murray Road														
10	L2	100	0.0	100	0.0	0.190	5.0	LOS A	0.0	0.0	0.00	0.16	0.00	55.1
11	T1	622	3.0	622	3.0	0.190	0.0	LOS A	0.0	0.1	0.00	0.07	0.00	53.5
12	R2	1	0.0	1	0.0	0.190	9.9	LOS A	0.0	0.1	0.01	0.00	0.01	56.7
Approach		723	2.6	723	2.6	0.190	0.7	NA	0.0	0.1	0.00	0.08	0.00	54.3
All Vehicles		1551	2.5	1551	2.5	0.410	2.6	NA	10.4	75.0	0.06	0.13	0.08	46.9

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Network Data dialog (Network tab).
Vehicle movement LOS values are based on average delay per movement.
Minor Road Approach LOS values are based on average delay for all vehicle movements.
NA: Intersection LOS and Major Road Approach LOS values are Not Applicable for two-way sign control since the average delay is not a good LOS measure due to zero delays associated with major road movements.
Delay Model: SIDRA Standard (Geometric Delay is included).
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

MOVEMENT SUMMARY

Site: Murray-102 [Murray Road / Preston Market / Caltex (Site Folder: PM _ Existing _ Murray Corridor _ Ratio)]

Network: N101 [PM _ Existing _ Murray Corridor _ Ratio (Network Folder: Existing)]

New Site
Site Category: (None)
Stop (Two-Way)

Vehicle Movement Performance

Mov ID	Turn	DEMAND FLOWS [Total veh/h	HV] %	ARRIVAL FLOWS [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	AVERAGE BACK OF QUEUE [Veh. veh	Dist] m	Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed km/h
South: Preston Market														
1	L2	27	0.0	27	0.0	0.650	37.9	LOS E	0.8	5.5	0.83	1.15	1.40	19.9
2	T1	1	0.0	1	0.0	0.650	74.4	LOS F	0.8	5.5	0.83	1.15	1.40	29.3
3	R2	31	0.0	31	0.0	0.650	86.6	LOS F	0.8	5.5	0.83	1.15	1.40	19.9
Approach		59	0.0	59	0.0	0.650	63.8	LOS F	0.8	5.5	0.83	1.15	1.40	20.1
East: Murray Road														
4	L2	24	0.0	24	0.0	0.181	4.3	LOS A	4.5	32.1	0.00	0.04	0.00	56.6
5	T1	648	3.0	648	3.0	0.181	0.1	LOS A	4.5	32.1	0.02	0.03	0.02	55.5
6	R2	7	0.0	7	0.0	0.181	8.3	LOS A	0.1	0.4	0.04	0.01	0.04	56.1
Approach		680	2.9	680	2.9	0.181	0.3	NA	4.5	32.1	0.02	0.03	0.02	55.8
North: Caltex														
7	L2	29	0.0	29	0.0	0.145	7.0	LOS A	0.2	1.3	0.64	0.75	0.64	38.9
8	T1	4	0.0	4	0.0	0.145	32.7	LOS D	0.2	1.3	0.64	0.75	0.64	46.4
9	R2	8	0.0	8	0.0	0.145	42.7	LOS E	0.2	1.3	0.64	0.75	0.64	38.9
Approach		42	0.0	42	0.0	0.145	16.7	LOS C	0.2	1.3	0.64	0.75	0.64	40.1
West: Murray Road														
10	L2	22	0.0	22	0.0	0.185	5.0	LOS A	0.0	0.0	0.00	0.04	0.00	56.7
11	T1	597	3.0	597	3.0	0.185	0.5	LOS A	0.2	1.7	0.09	0.05	0.09	49.7
12	R2	33	0.0	33	0.0	0.185	9.4	LOS A	0.2	1.7	0.20	0.07	0.20	53.9
Approach		652	2.7	652	2.7	0.185	1.1	NA	0.2	1.7	0.09	0.05	0.09	51.6
All Vehicles		1433	2.6	1433	2.6	0.650	3.8	NA	4.5	32.1	0.10	0.11	0.13	41.3

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Network Data dialog (Network tab).
Vehicle movement LOS values are based on average delay per movement.
Minor Road Approach LOS values are based on average delay for all vehicle movements.
NA: Intersection LOS and Major Road Approach LOS values are Not Applicable for two-way sign control since the average delay is not a good LOS measure due to zero delays associated with major road movements.
Delay Model: SIDRA Standard (Geometric Delay is included).
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

MOVEMENT SUMMARY

Site: Murray-103 [Murray Road / Mary Street (Site Folder: PM _ Existing _ Murray Corridor _ Ratio)]

Network: N101 [PM _ Existing _ Murray Corridor _ Ratio (Network Folder: Existing)]

New Site
Site Category: (None)
Stop (Two-Way)

Vehicle Movement Performance

Mov ID	Turn	DEMAND FLOWS [Total veh/h	HV] %	ARRIVAL FLOWS [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	AVERAGE BACK OF QUEUE [Veh. veh	Dist] m	Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed km/h
South: Mary Street														
1	L2	81	0.0	81	0.0	0.492	13.7	LOS B	0.8	5.9	0.47	0.99	0.72	36.1
3	R2	61	0.0	61	0.0	0.492	31.9	LOS D	0.8	5.9	0.47	0.99	0.72	36.1
Approach		142	0.0	142	0.0	0.492	21.5	LOS C	0.8	5.9	0.47	0.99	0.72	36.1
East: Murray Road														
4	L2	82	0.0	82	0.0	0.192	5.5	LOS A	0.0	0.0	0.00	0.19	0.00	54.7
5	T1	541	3.0	541	3.0	0.192	0.0	LOS A	0.0	0.0	0.00	0.06	0.00	55.2
Approach		623	2.6	623	2.6	0.192	0.7	NA	0.0	0.0	0.00	0.08	0.00	55.0
West: Murray Road														
11	T1	495	3.0	495	3.0	0.148	0.3	LOS A	0.2	1.4	0.09	0.04	0.09	51.5
12	R2	32	0.0	32	0.0	0.148	7.4	LOS A	0.2	1.4	0.20	0.08	0.20	54.2
Approach		526	2.8	526	2.8	0.148	0.8	NA	0.2	1.4	0.09	0.04	0.09	52.4
All Vehicles		1292	2.4	1292	2.4	0.492	3.0	NA	0.8	5.9	0.09	0.16	0.12	46.9

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Network Data dialog (Network tab).
Vehicle movement LOS values are based on average delay per movement.
Minor Road Approach LOS values are based on average delay for all vehicle movements.
NA: Intersection LOS and Major Road Approach LOS values are Not Applicable for two-way sign control since the average delay is not a good LOS measure due to zero delays associated with major road movements.
Delay Model: SIDRA Standard (Geometric Delay is included).
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

MOVEMENT SUMMARY

Site: 3222 [High Street / Murray Road (Site Folder: PM _ Existing _ Murray Corridor _ Ratio)]

Network: N101 [PM _ Existing _ Murray Corridor _ Ratio (Network Folder: Existing)]

New Site
Site Category: (None)
Signals - EQUISAT (Fixed-Time/SCATS) Isolated Cycle Time = 50 seconds (Site Practical Cycle Time)

Vehicle Movement Performance

Mov ID	Turn	DEMAND FLOWS [Total veh/h	HV] %	ARRIVAL FLOWS [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	AVERAGE BACK OF QUEUE [Veh. veh	Dist] m	Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed km/h
South: High Street														
1	L2	8	3.0	8	3.0	0.205	17.7	LOS B	1.5	10.7	0.73	0.60	0.73	42.8
2	T1	618	3.0	618	3.0	0.734	16.2	LOS B	6.9	49.4	0.87	0.80	0.96	47.5
3	R2	34	3.0	34	3.0	0.106	21.6	LOS C	0.4	2.9	0.79	0.71	0.79	43.6
Approach		660	3.0	660	3.0	0.734	16.5	LOS B	6.9	49.4	0.87	0.79	0.95	47.3
East: Murray Road														
4	L2	55	3.0	55	3.0	0.694	29.7	LOS C	3.3	23.7	0.99	0.88	1.16	41.4
5	T1	367	3.0	367	3.0	* 0.694	24.1	LOS C	3.3	24.0	0.99	0.88	1.16	33.5
6	R2	66	3.0	66	3.0	0.282	27.1	LOS C	0.9	6.8	0.92	0.75	0.92	40.9
Approach		488	3.0	488	3.0	0.694	25.1	LOS C	3.3	24.0	0.98	0.86	1.12	36.1
North: High Street														
7	L2	11	3.0	11	3.0	0.365	18.6	LOS B	2.8	20.4	0.78	0.66	0.78	48.1
8	T1	492	3.0	492	3.0	0.365	13.0	LOS B	2.8	20.4	0.78	0.65	0.78	49.4
9	R2	147	3.0	147	3.0	* 0.696	30.7	LOS C	2.4	17.2	0.99	0.89	1.22	30.2
Approach		649	3.0	649	3.0	0.696	17.1	LOS B	2.8	20.4	0.83	0.71	0.88	45.6
West: Murray Road														
10	L2	13	3.0	13	3.0	0.344	18.3	LOS B	2.8	20.1	0.74	0.63	0.74	43.9
11	T1	514	3.0	514	3.0	0.344	11.5	LOS B	2.8	20.1	0.74	0.62	0.74	45.7
12	R2	78	3.0	78	3.0	* 0.357	29.2	LOS C	1.2	8.3	0.96	0.75	0.96	32.8
Approach		604	3.0	604	3.0	0.357	13.9	LOS B	2.8	20.1	0.77	0.64	0.77	43.5
All Vehicles		2402	3.0	2402	3.0	0.734	17.8	LOS B	6.9	49.4	0.86	0.74	0.92	43.9

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Network Data dialog (Network tab).
Vehicle movement LOS values are based on average delay per movement.
Intersection and Approach LOS values are based on average delay for all vehicle movements.
Delay Model: SIDRA Standard (Geometric Delay is included).
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

* Critical Movement (Signal Timing)

Pedestrian Movement Performance

Mov ID	Crossing	Dem. Flow ped/h	Aver. Delay sec	Level of Service	AVERAGE BACK OF QUEUE [Ped ped	Dist] m	Prop. Que	Effective Stop Rate	Travel Time sec	Travel Dist. m	Aver. Speed m/sec
South: High Street											
P1	Full	53	19.4	LOS B	0.1	0.1	0.88	0.88	187.5	218.5	1.17
East: Murray Road											
P2	Full	53	19.4	LOS B	0.1	0.1	0.88	0.88	187.5	218.5	1.17
North: High Street											

P3 Full	53	19.4	LOS B	0.1	0.1	0.88	0.88	187.5	218.5	1.17
West: Murray Road										
P4 Full	53	19.4	LOS B	0.1	0.1	0.88	0.88	187.5	218.5	1.17
All Pedestrians	211	19.4	LOS B	0.1	0.1	0.88	0.88	187.5	218.5	1.17

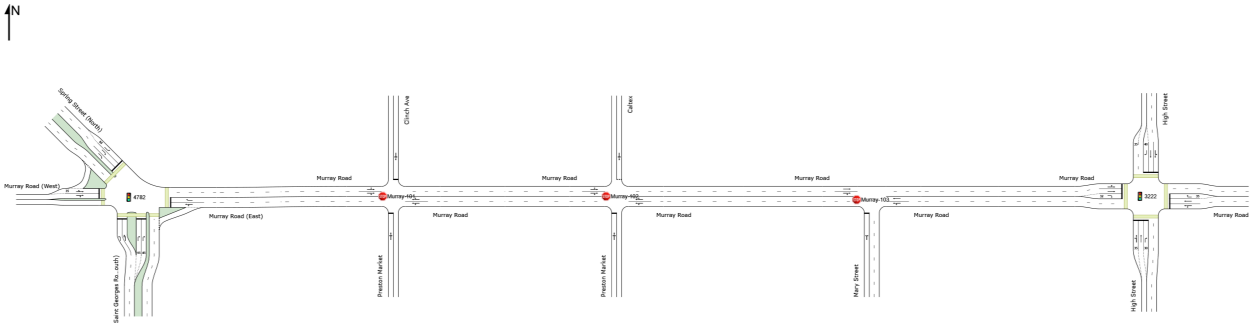
Level of Service (LOS) Method: SIDRA Pedestrian LOS Method (Based on Average Delay)
Pedestrian movement LOS values are based on average delay per pedestrian movement.
Intersection LOS value for Pedestrians is based on average delay for all pedestrian movements.

NETWORK LAYOUT

Network: N101 [SAT _ Existing _ Murray Corridor _ Ratio (Network Folder: Existing)]

New Network
Network Category: (None)

Layout pictures are schematic functional drawings reflecting input data. They are not design drawings.



SITES IN NETWORK		
Site ID	**CCG ID**	**Site Name**
4782	NA	St Georges Road / Spring Street / Murray Road
Murray-101	NA	Murray Road / Clinch Ave / Preston Market
Murray-102	NA	Murray Road / Preston Market / Caltex
Murray-103	NA	Murray Road / Mary Street
3222	NA	High Street / Murray Road

MOVEMENT SUMMARY

Site: 4782 [St Georges Road / Spring Street / Murray Road (Site Folder: SAT _ Existing _ Murray Corridor _ Ratio)]

Network: N101 [SAT _ Existing _ Murray Corridor _ Ratio (Network Folder: Existing)]

New Site
Site Category: (None)
Signals - EQUISAT (Fixed-Time/SCATS) Isolated Cycle Time = 120 seconds (Site User-Given Cycle Time)

Vehicle Movement Performance

Mov ID	Turn	DEMAND FLOWS [Total veh/h	HV] %	ARRIVAL FLOWS [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	AVERAGE BACK OF QUEUE [Veh. veh	Dist] m	Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed km/h
South: Saint Georges Road (South)														
1	L2	42	3.0	42	3.0	0.046	21.2	LOS C	0.7	5.3	0.53	0.68	0.53	39.9
1a	L1	773	3.0	773	3.0	* 0.883	40.5	LOS D	26.7	191.9	0.91	0.93	1.02	31.5
3	R2	203	3.0	203	3.0	0.579	62.1	LOS E	4.0	29.1	0.99	0.79	1.00	12.1
Approach		1018	3.0	1018	3.0	0.883	44.0	LOS D	26.7	191.9	0.91	0.89	1.00	28.2
East: Murray Road (East)														
4	L2	214	3.0	214	3.0	0.867	49.4	LOS D	10.4	75.0	0.99	1.01	1.11	18.2
5	T1	415	3.0	415	3.0	* 0.867	44.4	LOS D	10.4	75.0	0.99	1.01	1.11	26.3
6a	R1	183	3.0	183	3.0	0.734	60.9	LOS E	6.7	47.9	1.00	0.87	1.10	21.9
Approach		812	3.0	812	3.0	0.867	49.5	LOS D	10.4	75.0	0.99	0.98	1.11	23.3
NorthWest: Spring Street (North)														
27a	L1	187	3.0	187	3.0	0.207	14.6	LOS B	2.3	16.4	0.61	0.72	0.61	40.6
29a	R1	798	3.0	798	3.0	0.656	39.0	LOS D	13.0	93.1	0.89	0.83	0.89	32.0
Approach		985	3.0	985	3.0	0.656	34.4	LOS C	13.0	93.1	0.83	0.81	0.83	33.0
West: Murray Road (West)														
10b	L3	31	3.0	31	3.0	0.728	66.8	LOS E	9.8	70.3	0.99	0.91	1.03	30.1
11	T1	399	3.0	399	3.0	0.728	56.3	LOS E	9.8	70.3	0.98	0.89	1.04	21.3
12	R2	47	3.0	47	3.0	0.728	55.2	LOS E	6.5	47.0	0.96	0.85	1.05	28.0
Approach		477	3.0	477	3.0	0.728	56.9	LOS E	9.8	70.3	0.98	0.89	1.04	22.7
All Vehicles		3292	3.0	3292	3.0	0.883	44.3	LOS D	26.7	191.9	0.92	0.89	0.98	27.5

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Network Data dialog (Network tab).
Vehicle movement LOS values are based on average delay per movement.
Intersection and Approach LOS values are based on average delay for all vehicle movements.
Delay Model: SIDRA Standard (Geometric Delay is included).
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

* Critical Movement (Signal Timing)

Pedestrian Movement Performance

Mov ID	Crossing	Dem. Flow ped/h	Aver. Delay sec	Level of Service	AVERAGE BACK OF QUEUE [Ped ped	Dist] m	Prop. Que	Effective Stop Rate	Travel Time sec	Travel Dist. m	Aver. Speed m/sec
South: Saint Georges Road (South)											
P11	Stage 1	53	31.6	LOS D	0.1	0.1	0.73	0.73	62.5	40.2	0.64
P12	Stage 2	53	24.8	LOS C	0.1	0.1	0.64	0.64	46.0	27.6	0.60
East: Murray Road (East)											
P2	Full	53	32.3	LOS D	0.1	0.1	0.73	0.73	59.4	35.2	0.59
NorthWest: Spring Street (North)											

P7 Full	53	54.3	LOS E	0.2	0.2	0.95	0.95	223.9	220.5	0.98
West: Murray Road (West)										
P41 Stage 1	53	10.9	LOS B	0.1	0.1	0.43	0.43	32.1	27.6	0.86
P42 Stage 2	53	10.0	LOS B	0.1	0.1	0.41	0.41	28.7	24.3	0.85
All Pedestrians	316	27.3	LOS C	0.2	0.2	0.65	0.65	75.4	62.6	0.83

Level of Service (LOS) Method: SIDRA Pedestrian LOS Method (Based on Average Delay)
Pedestrian movement LOS values are based on average delay per pedestrian movement.
Intersection LOS value for Pedestrians is based on average delay for all pedestrian movements.

MOVEMENT SUMMARY

Site: Murray-101 [Murray Road / Clinch Ave / Preston Market (Site Folder: SAT _ Existing _ Murray Corridor _ Ratio)]

Network: N101 [SAT _ Existing _ Murray Corridor _ Ratio (Network Folder: Existing)]

New Site
Site Category: (None)
Stop (Two-Way)

Vehicle Movement Performance

Mov ID	Turn	DEMAND FLOWS [Total veh/h	HV] %	ARRIVAL FLOWS [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	AVERAGE BACK OF QUEUE [Veh. veh	Dist] m	Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed km/h
South: Preston Market														
1	L2	178	0.0	178	0.0	0.812	26.9	LOS D	4.2	29.4	0.61	1.43	1.80	30.5
2	T1	8	0.0	8	0.0	0.812	54.6	LOS F	4.2	29.4	0.61	1.43	1.80	39.5
3	R2	27	0.0	27	0.0	0.812	52.4	LOS F	4.2	29.4	0.61	1.43	1.80	30.5
Approach		214	0.0	214	0.0	0.812	31.3	LOS D	4.2	29.4	0.61	1.43	1.80	31.0
East: Murray Road														
4	L2	4	0.0	4	0.0	0.181	5.0	LOS A	8.0	57.8	0.00	0.01	0.00	57.1
5	T1	624	3.0	624	3.0	0.181	0.2	LOS A	8.0	57.8	0.04	0.02	0.04	55.7
6	R2	13	0.0	13	0.0	0.181	9.1	LOS A	0.1	0.7	0.08	0.03	0.08	55.6
Approach		641	2.9	641	2.9	0.181	0.4	NA	8.0	57.8	0.04	0.02	0.04	55.8
North: Clinch Ave														
7	L2	17	0.0	17	0.0	0.248	11.5	LOS B	0.3	2.2	0.74	0.94	0.81	31.2
8	T1	1	0.0	1	0.0	0.248	33.0	LOS D	0.3	2.2	0.74	0.94	0.81	40.1
9	R2	23	0.0	23	0.0	0.248	43.2	LOS E	0.3	2.2	0.74	0.94	0.81	31.2
Approach		41	0.0	41	0.0	0.248	29.9	LOS D	0.3	2.2	0.74	0.94	0.81	31.6
West: Murray Road														
10	L2	72	0.0	72	0.0	0.207	5.0	LOS A	0.0	0.0	0.00	0.11	0.00	55.8
11	T1	716	3.0	716	3.0	0.207	0.0	LOS A	0.0	0.0	0.00	0.05	0.00	55.2
12	R2	1	0.0	1	0.0	0.207	9.2	LOS A	0.0	0.0	0.01	0.00	0.01	56.7
Approach		788	2.7	788	2.7	0.207	0.5	NA	0.0	0.0	0.00	0.05	0.00	55.4
All Vehicles		1684	2.4	1684	2.4	0.812	5.1	NA	8.0	57.8	0.11	0.24	0.26	41.0

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Network Data dialog (Network tab).
Vehicle movement LOS values are based on average delay per movement.
Minor Road Approach LOS values are based on average delay for all vehicle movements.
NA: Intersection LOS and Major Road Approach LOS values are Not Applicable for two-way sign control since the average delay is not a good LOS measure due to zero delays associated with major road movements.
Delay Model: SIDRA Standard (Geometric Delay is included).
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

MOVEMENT SUMMARY

Site: Murray-102 [Murray Road / Preston Market / Caltex (Site Folder: SAT _ Existing _ Murray Corridor _ Ratio)]

Network: N101 [SAT _ Existing _ Murray Corridor _ Ratio (Network Folder: Existing)]

New Site
Site Category: (None)
Stop (Two-Way)

Vehicle Movement Performance

Mov ID	Turn	DEMAND FLOWS [Total veh/h	HV] %	ARRIVAL FLOWS [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	AVERAGE BACK OF QUEUE [Veh. veh	Dist] m	Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed km/h
South: Preston Market														
1	L2	85	0.0	85	0.0	0.907	74.1	LOS F	3.2	22.3	0.65	1.55	2.61	15.1
2	T1	3	0.0	3	0.0	0.907	118.7	LOS F	3.2	22.3	0.65	1.55	2.61	23.6
3	R2	59	0.0	59	0.0	0.907	119.6	LOS F	3.2	22.3	0.65	1.55	2.61	15.1
Approach		147	0.0	147	0.0	0.907	93.3	LOS F	3.2	22.3	0.65	1.55	2.61	15.3
East: Murray Road														
4	L2	174	0.0	174	0.0	0.210	4.3	LOS A	0.0	0.0	0.00	0.29	0.00	53.7
5	T1	561	3.0	561	3.0	0.210	0.1	LOS A	0.0	0.2	0.01	0.09	0.01	50.8
6	R2	3	0.0	3	0.0	0.210	8.6	LOS A	0.0	0.2	0.02	0.00	0.02	56.5
Approach		738	2.3	738	2.3	0.210	1.1	NA	0.0	0.2	0.01	0.14	0.01	52.9
North: Caltex														
7	L2	40	0.0	40	0.0	0.130	8.3	LOS A	0.2	1.2	0.64	0.80	0.64	41.8
8	T1	4	0.0	4	0.0	0.130	37.0	LOS E	0.2	1.2	0.64	0.80	0.64	48.4
9	R2	5	0.0	5	0.0	0.130	34.2	LOS D	0.2	1.2	0.64	0.80	0.64	41.8
Approach		49	0.0	49	0.0	0.130	13.5	LOS B	0.2	1.2	0.64	0.80	0.64	42.7
West: Murray Road														
10	L2	26	0.0	26	0.0	0.287	5.0	LOS A	0.0	0.0	0.00	0.03	0.00	56.7
11	T1	577	3.0	577	3.0	0.287	0.5	LOS A	0.6	4.5	0.06	0.09	0.07	49.3
12	R2	169	0.0	169	0.0	0.287	10.4	LOS B	0.6	4.5	0.65	0.68	0.75	45.6
Approach		773	2.2	773	2.2	0.287	2.8	NA	0.6	4.5	0.19	0.22	0.22	47.5
All Vehicles		1707	2.0	1707	2.0	0.907	10.2	NA	3.2	22.3	0.16	0.31	0.35	34.7

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Network Data dialog (Network tab).
Vehicle movement LOS values are based on average delay per movement.
Minor Road Approach LOS values are based on average delay for all vehicle movements.
NA: Intersection LOS and Major Road Approach LOS values are Not Applicable for two-way sign control since the average delay is not a good LOS measure due to zero delays associated with major road movements.
Delay Model: SIDRA Standard (Geometric Delay is included).
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

MOVEMENT SUMMARY

Site: Murray-103 [Murray Road / Mary Street (Site Folder: SAT _ Existing _ Murray Corridor _ Ratio)]

Network: N101 [SAT _ Existing _ Murray Corridor _ Ratio (Network Folder: Existing)]

New Site
Site Category: (None)
Stop (Two-Way)

Vehicle Movement Performance

Mov ID	Turn	DEMAND FLOWS [Total veh/h	HV] %	ARRIVAL FLOWS [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	AVERAGE BACK OF QUEUE [Veh. veh	Dist] m	Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed km/h
South: Mary Street														
1	L2	94	0.0	94	0.0	0.402	11.2	LOS B	0.8	5.8	0.49	0.97	0.68	38.9
3	R2	81	0.0	81	0.0	0.402	25.5	LOS D	0.8	5.8	0.49	0.97	0.68	38.9
Approach		175	0.0	175	0.0	0.402	17.9	LOS C	0.8	5.8	0.49	0.97	0.68	38.9
East: Murray Road														
4	L2	160	0.0	160	0.0	0.196	5.5	LOS A	0.0	0.0	0.00	0.26	0.00	53.9
5	T1	586	3.0	586	3.0	0.196	0.0	LOS A	0.0	0.0	0.00	0.09	0.00	53.1
Approach		746	2.4	746	2.4	0.196	1.2	NA	0.0	0.0	0.00	0.13	0.00	53.6
West: Murray Road														
11	T1	531	3.0	531	3.0	0.179	0.7	LOS A	0.4	2.8	0.14	0.07	0.14	46.4
12	R2	64	0.0	64	0.0	0.179	8.2	LOS A	0.4	2.8	0.39	0.19	0.39	51.6
Approach		595	2.7	595	2.7	0.179	1.5	NA	0.4	2.8	0.17	0.08	0.17	48.8
All Vehicles		1516	2.2	1516	2.2	0.402	3.2	NA	0.8	5.8	0.12	0.21	0.14	47.6

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Network Data dialog (Network tab).
Vehicle movement LOS values are based on average delay per movement.
Minor Road Approach LOS values are based on average delay for all vehicle movements.
NA: Intersection LOS and Major Road Approach LOS values are Not Applicable for two-way sign control since the average delay is not a good LOS measure due to zero delays associated with major road movements.
Delay Model: SIDRA Standard (Geometric Delay is included).
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

MOVEMENT SUMMARY

Site: 3222 [High Street / Murray Road (Site Folder: SAT _ Existing _ Murray Corridor _ Ratio)]

Network: N101 [SAT _ Existing _ Murray Corridor _ Ratio (Network Folder: Existing)]

New Site
Site Category: (None)
Signals - EQUISAT (Fixed-Time/SCATS) Isolated Cycle Time = 50 seconds (Site Practical Cycle Time)

Vehicle Movement Performance

Mov ID	Turn	DEMAND FLOWS [Total veh/h	HV] %	ARRIVAL FLOWS [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	AVERAGE BACK OF QUEUE [Veh. veh	Dist] m	Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed km/h
South: High Street														
1	L2	5	3.0	5	3.0	0.153	18.2	LOS B	1.1	7.6	0.73	0.58	0.73	42.4
2	T1	449	3.0	449	3.0	0.547	14.6	LOS B	4.5	32.0	0.83	0.70	0.83	48.5
3	R2	46	3.0	46	3.0	0.152	22.7	LOS C	0.6	4.2	0.82	0.72	0.82	43.0
Approach		501	3.0	501	3.0	0.547	15.4	LOS B	4.5	32.0	0.83	0.70	0.83	47.9
East: Murray Road														
4	L2	47	3.0	47	3.0	0.707	29.0	LOS C	3.8	27.1	0.99	0.89	1.15	41.9
5	T1	437	3.0	437	3.0	* 0.707	23.4	LOS C	3.8	27.3	0.99	0.89	1.15	34.0
6	R2	85	3.0	85	3.0	0.342	26.4	LOS C	1.2	8.6	0.91	0.76	0.91	41.2
Approach		569	3.0	569	3.0	0.707	24.3	LOS C	3.8	27.3	0.98	0.87	1.12	36.4
North: High Street														
7	L2	11	3.0	11	3.0	0.374	19.4	LOS B	2.8	20.3	0.80	0.67	0.80	47.6
8	T1	476	3.0	476	3.0	0.374	13.8	LOS B	2.8	20.3	0.80	0.67	0.80	48.9
9	R2	198	3.0	198	3.0	* 0.746	30.3	LOS C	3.3	23.4	0.99	0.93	1.27	30.4
Approach		684	3.0	684	3.0	0.746	18.7	LOS B	3.3	23.4	0.86	0.74	0.94	44.2
West: Murray Road														
10	L2	13	3.0	13	3.0	0.337	17.2	LOS B	2.8	20.0	0.72	0.61	0.72	44.6
11	T1	527	3.0	527	3.0	0.337	10.8	LOS B	2.8	20.0	0.72	0.61	0.72	46.4
12	R2	87	3.0	87	3.0	* 0.400	29.4	LOS C	1.3	9.4	0.96	0.76	0.96	32.7
Approach		627	3.0	627	3.0	0.400	13.5	LOS B	2.8	20.0	0.75	0.63	0.75	43.8
All Vehicles		2382	3.0	2382	3.0	0.746	18.0	LOS B	4.5	32.0	0.85	0.73	0.91	43.2

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Network Data dialog (Network tab).
Vehicle movement LOS values are based on average delay per movement.
Intersection and Approach LOS values are based on average delay for all vehicle movements.
Delay Model: SIDRA Standard (Geometric Delay is included).
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

* Critical Movement (Signal Timing)

Pedestrian Movement Performance

Mov ID	Crossing	Dem. Flow ped/h	Aver. Delay sec	Level of Service	AVERAGE BACK OF QUEUE [Ped ped	Dist] m	Prop. Que	Effective Stop Rate	Travel Time sec	Travel Dist. m	Aver. Speed m/sec
South: High Street											
P1	Full	53	19.4	LOS B	0.1	0.1	0.88	0.88	187.5	218.5	1.17
East: Murray Road											
P2	Full	53	19.4	LOS B	0.1	0.1	0.88	0.88	187.5	218.5	1.17
North: High Street											

P3 Full	53	19.4	LOS B	0.1	0.1	0.88	0.88	187.5	218.5	1.17
West: Murray Road										
P4 Full	53	19.4	LOS B	0.1	0.1	0.88	0.88	187.5	218.5	1.17
All Pedestrians	211	19.4	LOS B	0.1	0.1	0.88	0.88	187.5	218.5	1.17

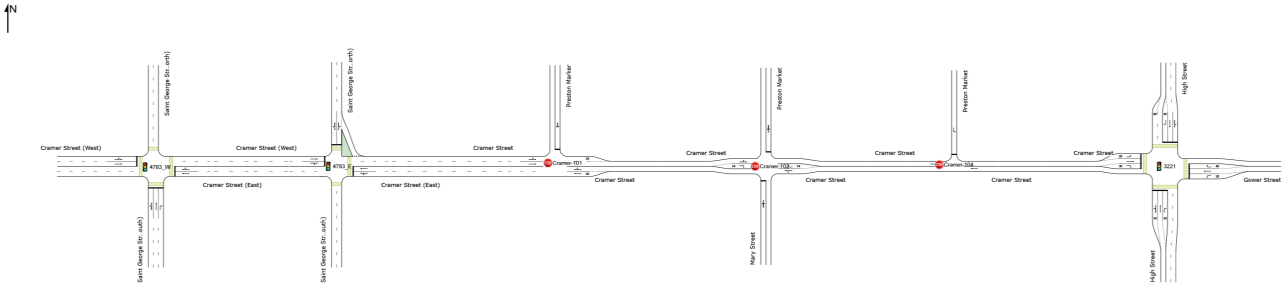
Level of Service (LOS) Method: SIDRA Pedestrian LOS Method (Based on Average Delay)
Pedestrian movement LOS values are based on average delay per pedestrian movement.
Intersection LOS value for Pedestrians is based on average delay for all pedestrian movements.

NETWORK LAYOUT

Network: N101 [AM _ Existing _ Cramer Corridor _ Ratio (Network Folder: Existing)]

New Network
Network Category: (None)

Layout pictures are schematic functional drawings reflecting input data. They are not design drawings.



SITES IN NETWORK		
Site ID	**CCG ID**	**Site Name**
4783_W	CCG1	Saint George Street/ Cramer Street West
4783_E	CCG1	Saint George Street/ Cramer Street East
Cramer-101	NA	Cramer Street / Preston Marker
Cramer-102	NA	Cramer Street / Mary Street / Preston Market
Cramer-104	NA	Cramer Street / Preston Market Left-in / Left-out
3221	NA	High Street / Cramer Street / Gower Street

CCG MOVEMENT SUMMARY

Common Control Group: CCG1 [Saint George Street]

Network: N101 [AM _ Existing _ Cramer Corridor _ Ratio (Network Folder: Existing)]

EQUISAT (Fixed-Time/SCATS) Isolated Cycle Time = 100 seconds (CCG Practical Cycle Time)

Vehicle Movement Performance (CCG)

Mov ID	Turn	DEMAND FLOWS [Total veh/h	HV] %	ARRIVAL FLOWS [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	AVERAGE BACK OF QUEUE [Veh. veh	Dist] m	Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed km/h
Site: 4783_W [Saint George Street/ Cramer Street West]														
South: Saint George Street (South)														
1	L2	43	3.0	43	3.0	0.388	19.8	LOS B	6.9	49.3	0.62	0.57	0.62	45.7
2	T1	757	3.0	757	3.0	0.388	14.2	LOS B	6.9	49.5	0.62	0.56	0.62	45.5
3	R2	85	3.0	85	3.0	0.174	18.2	LOS B	1.3	9.4	0.54	0.72	0.54	37.7
Approach		885	3.0	885	3.0	0.388	14.9	LOS B	6.9	49.5	0.62	0.57	0.62	44.9
East: Cramer Street (East)														
5	T1	267	3.0	267	3.0	0.331	9.9	LOS A	1.1	8.0	0.36	0.30	0.36	42.1
6	R2	26	3.0	26	3.0	* 0.331	20.1	LOS C	1.1	8.0	0.66	0.56	0.66	25.6
Approach		294	3.0	294	3.0	0.331	10.8	LOS B	1.1	8.0	0.39	0.33	0.39	40.4
West: Cramer Street (West)														
10	L2	17	3.0	17	3.0	0.913	70.3	LOS E	7.8	55.8	1.00	1.12	1.55	21.5
11	T1	375	3.0	375	3.0	* 0.913	65.0	LOS E	7.8	55.8	1.00	1.12	1.55	15.6
Approach		392	3.0	392	3.0	0.913	65.2	LOS E	7.8	55.8	1.00	1.12	1.55	15.9
All Vehicles		1571	3.0	1571	3.0	0.913	26.7	LOS C	7.8	55.8	0.67	0.66	0.81	34.1
Site: 4783_E [Saint George Street/ Cramer Street East]														
East: Cramer Street (East)														
4	L2	74	3.0	74	3.0	0.351	32.2	LOS C	5.0	36.2	0.80	0.71	0.80	33.2
5	T1	265	3.0	265	3.0	0.351	27.0	LOS C	5.0	36.2	0.79	0.69	0.79	12.7
Approach		339	3.0	339	3.0	0.351	28.1	LOS C	5.0	36.2	0.79	0.69	0.79	19.8
North: Saint George Street (North)														
7	L2	146	3.0	146	3.0	0.890	47.8	LOS D	21.4	153.8	1.00	1.05	1.20	16.0
8	T1	1091	3.0	1091	3.0	* 0.890	42.8	LOS D	21.4	153.8	1.00	1.06	1.21	30.7
9	R2	28	3.0	28	3.0	0.890	48.9	LOS D	20.8	149.2	1.00	1.06	1.21	15.9
Approach		1265	3.0	1265	3.0	0.890	43.6	LOS D	21.4	153.8	1.00	1.06	1.21	29.3
West: Cramer Street (West)														
11	T1	429	3.0	429	3.0	* 0.391	8.2	LOS A	1.1	8.0	0.43	0.37	0.43	6.9
12	R2	31	3.0	31	3.0	0.391	13.4	LOS B	1.1	8.0	0.58	0.51	0.58	41.3
Approach		460	3.0	460	3.0	0.391	8.6	LOS A	1.1	8.0	0.44	0.38	0.44	15.7
All Vehicles		2064	3.0	2064	3.0	0.890	33.2	LOS C	21.4	153.8	0.84	0.84	0.97	27.7

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Network Data dialog (Network tab).
Vehicle movement LOS values are based on average delay per movement.
Intersection and Approach LOS values are based on average delay for all vehicle movements.
Delay Model: SIDRA Standard (Geometric Delay is included).
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

* Critical Movement (Signal Timing)

Pedestrian Movement Performance (CCG)

Mov ID	Crossing	Dem. Flow ped/h	Aver. Delay sec	Level of Service	AVERAGE BACK OF QUEUE [Ped ped	Dist] m	Prop. Que	Effective Stop Rate	Travel Time sec	Travel Dist. m	Aver. Speed m/sec
Site: 4783_W [Saint George Street/ Cramer Street West]											
South: Saint George Street (South)											
P1	Full	53	26.7	LOS C	0.1	0.1	0.73	0.73	51.2	31.9	0.62
East: Cramer Street (East)											
P2	Full	53	26.0	LOS C	0.1	0.1	0.72	0.72	53.1	35.2	0.66
North: Saint George Street (North)											
P3	Full	53	34.5	LOS D	0.1	0.1	0.83	0.83	56.5	28.6	0.51
West: Cramer Street (West)											
P4	Full	53	15.7	LOS B	0.1	0.1	0.56	0.56	42.8	35.2	0.82
All Pedestrians		211	25.7	LOS C	0.1	0.1	0.71	0.71	50.9	32.7	0.64
Site: 4783_E [Saint George Street/ Cramer Street East]											
South: Saint George Street (South)											
P1	Full	53	25.3	LOS C	0.1	0.1	0.71	0.71	47.3	28.6	0.61
East: Cramer Street (East)											
P2	Full	53	26.0	LOS C	0.1	0.1	0.72	0.72	53.1	35.2	0.66
North: Saint George Street (North)											
P3	Full	53	34.5	LOS D	0.1	0.1	0.83	0.83	56.5	28.6	0.51
All Pedestrians		158	28.6	LOS C	0.1	0.1	0.75	0.75	52.3	30.8	0.59

Level of Service (LOS) Method: SIDRA Pedestrian LOS Method (Based on Average Delay)
Pedestrian movement LOS values are based on average delay per pedestrian movement.
Intersection LOS value for Pedestrians is based on average delay for all pedestrian movements.

MOVEMENT SUMMARY

Site: Cramer-101 [Cramer Street / Preston Marker (Site Folder: AM _ Exisitng _ Cramer Corridor _ Ratio)]

Network: N101 [AM _ Existing _ Cramer Corridor _ Ratio (Network Folder: Existing)]

New Site
Site Category: (None)
Stop (Two-Way)

Vehicle Movement Performance

Mov ID	Turn	DEMAND FLOWS [Total veh/h	HV] %	ARRIVAL FLOWS [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	AVERAGE BACK OF QUEUE [Veh. veh	Dist] m	Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed km/h
East: Cramer Street														
5	T1	381	3.0	381	3.0	0.137	0.7	LOS A	0.3	2.1	0.14	0.08	0.14	50.6
6	R2	59	0.0	59	0.0	0.137	8.9	LOS A	0.3	2.1	0.43	0.24	0.43	51.2
Approach		440	2.6	440	2.6	0.137	1.8	NA	0.3	2.1	0.17	0.10	0.17	50.8
North: Preston Marker														
7	L2	68	0.0	68	0.0	0.175	9.2	LOS A	0.3	1.8	0.07	0.96	0.07	42.6
9	R2	25	0.0	25	0.0	0.175	25.4	LOS D	0.3	1.8	0.07	0.96	0.07	42.6
Approach		94	0.0	94	0.0	0.175	13.6	LOS B	0.3	1.8	0.07	0.96	0.07	42.6
West: Cramer Street														
10	L2	81	0.0	81	0.0	0.054	5.5	LOS A	0.0	0.0	0.00	0.47	0.00	51.5
11	T1	531	3.0	531	3.0	0.268	0.1	LOS A	0.0	0.0	0.00	0.02	0.00	58.6
Approach		612	2.6	612	2.6	0.268	0.8	NA	0.0	0.0	0.00	0.08	0.00	55.3
All Vehicles		1145	2.4	1145	2.4	0.268	2.2	NA	0.3	2.1	0.07	0.16	0.07	50.8

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Network Data dialog (Network tab).
Vehicle movement LOS values are based on average delay per movement.
Minor Road Approach LOS values are based on average delay for all vehicle movements.
NA: Intersection LOS and Major Road Approach LOS values are Not Applicable for two-way sign control since the average delay is not a good LOS measure due to zero delays associated with major road movements.
Delay Model: SIDRA Standard (Geometric Delay is included).
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

MOVEMENT SUMMARY

Site: Cramer-102 [Cramer Street / Mary Street / Preston Market (Site Folder: AM _ Exisitng _ Cramer Corridor _ Ratio)]

Network: N101 [AM _ Existing _ Cramer Corridor _ Ratio (Network Folder: Existing)]

New Site
Site Category: (None)
Stop (Two-Way)

Vehicle Movement Performance

Mov ID	Turn	DEMAND FLOWS [Total veh/h	HV] %	ARRIVAL FLOWS [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	AVERAGE BACK OF QUEUE [Veh. veh	Dist] m	Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed km/h
South: Mary Street														
1	L2	40	0.0	40	0.0	0.143	9.5	LOS A	0.2	1.4	0.56	0.90	0.56	40.9
2	T1	7	0.0	7	0.0	0.143	29.3	LOS D	0.2	1.4	0.56	0.90	0.56	47.3
3	R2	8	0.0	8	0.0	0.143	32.3	LOS D	0.2	1.4	0.56	0.90	0.56	40.9
Approach		56	0.0	56	0.0	0.143	15.6	LOS C	0.2	1.4	0.56	0.90	0.56	42.2
East: Cramer Street														
4	L2	26	0.0	26	0.0	0.161	3.5	LOS A	0.0	0.0	0.00	0.05	0.00	56.5
5	T1	279	3.0	279	3.0	0.161	0.0	LOS A	0.0	0.0	0.00	0.05	0.00	54.4
6	R2	104	0.0	104	0.0	0.101	5.6	LOS A	0.2	1.2	0.53	0.70	0.53	48.3
Approach		409	2.0	409	2.0	0.161	1.6	NA	0.2	1.2	0.14	0.22	0.14	50.5
North: Preston Market														
7	L2	9	0.0	9	0.0	0.117	11.1	LOS B	0.2	1.1	0.77	0.98	0.77	35.0
8	T1	7	0.0	7	0.0	0.117	27.5	LOS D	0.2	1.1	0.77	0.98	0.77	43.1
9	R2	8	0.0	8	0.0	0.117	34.3	LOS D	0.2	1.1	0.77	0.98	0.77	35.0
Approach		25	0.0	25	0.0	0.117	23.6	LOS C	0.2	1.1	0.77	0.98	0.77	38.2
West: Cramer Street														
10	L2	52	0.0	52	0.0	0.279	5.5	LOS A	0.0	0.0	0.00	0.06	0.00	56.5
11	T1	480	3.0	480	3.0	0.279	0.0	LOS A	0.0	0.0	0.00	0.06	0.00	55.8
12	R2	77	0.0	77	0.0	0.057	6.5	LOS A	0.1	0.7	0.39	0.61	0.39	48.2
Approach		608	2.4	608	2.4	0.279	1.3	NA	0.1	0.7	0.05	0.13	0.05	53.1
All Vehicles		1099	2.1	1099	2.1	0.279	2.7	NA	0.2	1.4	0.12	0.22	0.12	49.6

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Network Data dialog (Network tab).
Vehicle movement LOS values are based on average delay per movement.
Minor Road Approach LOS values are based on average delay for all vehicle movements.
NA: Intersection LOS and Major Road Approach LOS values are Not Applicable for two-way sign control since the average delay is not a good LOS measure due to zero delays associated with major road movements.
Delay Model: SIDRA Standard (Geometric Delay is included).
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

MOVEMENT SUMMARY

Site: Cramer-104 [Cramer Street / Preston Market Left-in / Left-out (Site Folder: AM _ Exisitng _ Cramer Corridor _ Ratio)]

Network: N101 [AM _ Existing _ Cramer Corridor _ Ratio (Network Folder: Existing)]

New Site
Site Category: (None)
Stop (Two-Way)

Vehicle Movement Performance

Mov ID	Turn	DEMAND FLOWS [Total veh/h	HV] %	ARRIVAL FLOWS [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	AVERAGE BACK OF QUEUE [Veh. veh	Dist] m	Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed km/h
East: Cramer Street														
5	T1	506	3.0	506	3.0	0.265	0.0	LOS A	0.0	0.0	0.00	0.00	0.00	59.9
Approach		506	3.0	506	3.0	0.265	0.0	NA	0.0	0.0	0.00	0.00	0.00	59.9
North: Preston Market														
7	L2	44	0.0	44	0.0	0.106	10.6	LOS B	0.1	0.6	0.50	0.94	0.50	45.9
Approach		44	0.0	44	0.0	0.106	10.6	LOS B	0.1	0.6	0.50	0.94	0.50	45.9
West: Cramer Street														
11	T1	495	3.0	495	3.0	0.510	0.0	LOS A	0.0	0.0	0.00	0.00	0.00	59.2
Approach		495	3.0	495	3.0	0.510	0.0	NA	0.0	0.0	0.00	0.00	0.00	59.2
All Vehicles		1045	2.9	1045	2.9	0.510	0.5	NA	0.1	0.6	0.02	0.04	0.02	55.3

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Network Data dialog (Network tab).
Vehicle movement LOS values are based on average delay per movement.
Minor Road Approach LOS values are based on average delay for all vehicle movements.
NA: Intersection LOS and Major Road Approach LOS values are Not Applicable for two-way sign control since the average delay is not a good LOS measure due to zero delays associated with major road movements.
Delay Model: SIDRA Standard (Geometric Delay is included).
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

MOVEMENT SUMMARY

Site: 3221 [High Street / Cramer Street / Gower Street (Site Folder: AM _ Exisitng _ Cramer Corridor _ Ratio)]

Network: N101 [AM _ Existing _ Cramer Corridor _ Ratio (Network Folder: Existing)]

New Site
Site Category: (None)
Signals - EQUISAT (Fixed-Time/SCATS) Isolated Cycle Time = 80 seconds (Site Practical Cycle Time)

Vehicle Movement Performance

Mov ID	Turn	DEMAND FLOWS [Total veh/h	HV] %	ARRIVAL FLOWS [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	AVERAGE BACK OF QUEUE [Veh. veh	Dist] m	Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed km/h
South: High Street														
1	L2	5	3.0	5	3.0	0.213	28.3	LOS C	2.2	15.8	0.79	0.64	0.79	34.5
2	T1	428	3.0	428	3.0	0.579	25.0	LOS C	6.3	45.4	0.86	0.72	0.86	42.6
3	R2	77	3.0	77	3.0	0.563	47.5	LOS D	1.9	13.9	1.00	0.78	1.05	33.3
Approach		511	3.0	511	3.0	0.579	28.4	LOS C	6.3	45.4	0.88	0.73	0.89	40.8
East: Gower Street														
4	L2	74	3.0	74	3.0	0.162	31.2	LOS C	1.4	10.0	0.82	0.74	0.82	38.9
5	T1	331	3.0	331	3.0	0.733	31.7	LOS C	7.6	54.9	0.96	0.87	1.05	29.8
6	R2	43	3.0	43	3.0	0.316	46.2	LOS D	1.1	7.6	0.98	0.73	0.98	33.6
Approach		447	3.0	447	3.0	0.733	33.0	LOS C	7.6	54.9	0.94	0.83	1.00	32.3
North: High Street														
7	L2	46	3.0	46	3.0	0.874	44.1	LOS D	13.7	98.0	1.00	1.06	1.27	35.9
8	T1	888	3.0	888	3.0	* 0.874	38.4	LOS D	13.7	98.0	0.98	1.04	1.27	36.7
9	R2	100	3.0	100	3.0	* 0.733	49.6	LOS D	2.6	18.8	1.00	0.86	1.24	23.1
Approach		1035	3.0	1035	3.0	0.874	39.7	LOS D	13.7	98.0	0.99	1.03	1.27	35.6
West: Cramer Street														
10	L2	84	3.0	84	3.0	0.185	31.2	LOS C	1.6	11.5	0.82	0.75	0.82	31.2
11	T1	369	3.0	369	3.0	* 0.851	38.3	LOS D	9.7	69.5	0.99	1.01	1.26	28.8
12	R2	63	3.0	63	3.0	* 0.463	46.0	LOS D	1.6	11.2	1.00	0.75	1.00	25.4
Approach		517	3.0	517	3.0	0.851	38.1	LOS D	9.7	69.5	0.96	0.93	1.16	28.7
All Vehicles		2509	3.0	2509	3.0	0.874	35.9	LOS D	13.7	98.0	0.95	0.91	1.12	35.0

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Network Data dialog (Network tab).
Vehicle movement LOS values are based on average delay per movement.
Intersection and Approach LOS values are based on average delay for all vehicle movements.
Delay Model: SIDRA Standard (Geometric Delay is included).
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

* Critical Movement (Signal Timing)

Pedestrian Movement Performance

Mov ID	Crossing	Dem. Flow ped/h	Aver. Delay sec	Level of Service	AVERAGE BACK OF QUEUE [Ped ped	Dist] m	Prop. Que	Effective Stop Rate	Travel Time sec	Travel Dist. m	Aver. Speed m/sec
South: High Street											
P1	Full	53	34.3	LOS D	0.1	0.1	0.93	0.93	202.4	218.5	1.08
East: Gower Street											
P2	Full	53	34.3	LOS D	0.1	0.1	0.93	0.93	199.8	215.2	1.08
North: High Street											

P3 Full	53	34.3	LOS D	0.1	0.1	0.93	0.93	202.4	218.5	1.08
West: Cramer Street										
P4 Full	53	34.3	LOS D	0.1	0.1	0.93	0.93	199.8	215.2	1.08
All Pedestrians	211	34.3	LOS D	0.1	0.1	0.93	0.93	201.1	216.9	1.08

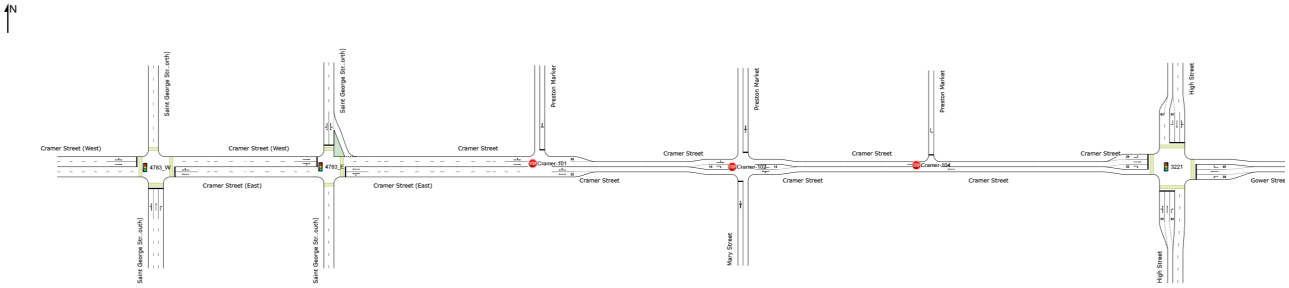
Level of Service (LOS) Method: SIDRA Pedestrian LOS Method (Based on Average Delay)
Pedestrian movement LOS values are based on average delay per pedestrian movement.
Intersection LOS value for Pedestrians is based on average delay for all pedestrian movements.

NETWORK LAYOUT

Network: N101 [PM _ Existing _ Cramer Corridor _ Ratio (Network Folder: Existing)]

New Network
Network Category: (None)

Layout pictures are schematic functional drawings reflecting input data. They are not design drawings.



SITES IN NETWORK		
Site ID	**CCG ID**	**Site Name**
4783_W	CCG1	Saint George Street/ Cramer Street West
4783_E	CCG1	Saint George Street/ Cramer Street East
Cramer-101	NA	Cramer Street / Preston Marker
Cramer-102	NA	Cramer Street / Mary Street / Preston Market
Cramer-104	NA	Cramer Street / Preston Market Left-in / Left-out
3221	NA	High Street / Cramer Street / Gower Street

CCG MOVEMENT SUMMARY

Common Control Group: CCG1 [Saint George Street]

Network: N101 [PM _ Existing _ Cramer Corridor _ Ratio (Network Folder: Existing)]

EQUISAT (Fixed-Time/SCATS) Isolated Cycle Time = 90 seconds (CCG Practical Cycle Time)

Vehicle Movement Performance (CCG)

Mov ID	Turn	DEMAND FLOWS [Total veh/h	HV] %	ARRIVAL FLOWS [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	AVERAGE BACK OF QUEUE [Veh. veh	Dist] m	Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed km/h
Site: 4783_W [Saint George Street/ Cramer Street West]														
South: Saint George Street (South)														
1	L2	53	3.0	53	3.0	0.623	22.5	LOS C	11.7	83.8	0.77	0.70	0.77	44.0
2	T1	1163	3.0	1163	3.0	0.623	16.9	LOS B	11.7	84.1	0.77	0.70	0.77	43.6
3	R2	120	3.0	120	3.0	0.258	19.1	LOS B	1.9	13.3	0.60	0.74	0.60	37.0
Approach		1336	3.0	1336	3.0	0.623	17.3	LOS B	11.7	84.1	0.76	0.70	0.76	43.2
East: Cramer Street (East)														
5	T1	375	3.0	375	3.0	0.529	9.6	LOS A	1.1	8.0	0.44	0.38	0.44	42.4
6	R2	98	3.0	98	3.0	* 0.529	23.0	LOS C	1.1	8.0	0.86	0.73	0.86	23.1
Approach		473	3.0	473	3.0	0.529	12.4	LOS B	1.1	8.0	0.53	0.45	0.53	37.7
West: Cramer Street (West)														
10	L2	40	3.0	40	3.0	0.864	55.3	LOS E	7.0	50.5	1.00	1.05	1.40	25.0
11	T1	363	3.0	363	3.0	* 0.864	50.6	LOS D	7.0	50.5	1.00	1.05	1.42	18.6
Approach		403	3.0	403	3.0	0.864	51.1	LOS D	7.0	50.5	1.00	1.05	1.42	19.4
All Vehicles		2212	3.0	2212	3.0	0.864	22.4	LOS C	11.7	84.1	0.75	0.71	0.83	36.9
Site: 4783_E [Saint George Street/ Cramer Street East]														
East: Cramer Street (East)														
4	L2	101	3.0	101	3.0	0.740	36.7	LOS D	7.7	55.2	0.93	0.89	1.03	31.1
5	T1	448	3.0	448	3.0	0.740	31.6	LOS C	7.7	55.2	0.93	0.88	1.05	11.3
Approach		549	3.0	549	3.0	0.740	32.6	LOS C	7.7	55.2	0.93	0.88	1.04	17.0
North: Saint George Street (North)														
7	L2	75	3.0	75	3.0	0.813	40.5	LOS D	13.5	96.8	0.98	0.96	1.10	18.4
8	T1	843	3.0	843	3.0	* 0.813	35.1	LOS D	13.5	96.8	0.98	0.96	1.11	33.7
9	R2	42	3.0	42	3.0	0.813	40.8	LOS D	12.5	90.1	0.98	0.96	1.12	18.2
Approach		960	3.0	960	3.0	0.813	35.8	LOS D	13.5	96.8	0.98	0.96	1.11	32.4
West: Cramer Street (West)														
11	T1	434	3.0	434	3.0	0.409	9.9	LOS A	1.1	8.0	0.58	0.49	0.58	5.8
12	R2	49	3.0	49	3.0	* 0.409	17.1	LOS B	1.1	8.0	0.80	0.68	0.80	38.0
Approach		483	3.0	483	3.0	0.409	10.7	LOS B	1.1	8.0	0.61	0.51	0.61	16.6
All Vehicles		1993	3.0	1993	3.0	0.813	28.8	LOS C	13.5	96.8	0.88	0.83	0.97	27.7

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Network Data dialog (Network tab).
Vehicle movement LOS values are based on average delay per movement.
Intersection and Approach LOS values are based on average delay for all vehicle movements.
Delay Model: SIDRA Standard (Geometric Delay is included).
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

* Critical Movement (Signal Timing)

Pedestrian Movement Performance (CCG)

Mov ID	Crossing	Dem. Flow ped/h	Aver. Delay sec	Level of Service	AVERAGE BACK OF QUEUE [Ped ped	Dist] m	Prop. Que	Effective Stop Rate	Travel Time sec	Travel Dist. m	Aver. Speed m/sec
Site: 4783_W [Saint George Street/ Cramer Street West]											
South: Saint George Street (South)											
P1	Full	53	23.5	LOS C	0.1	0.1	0.72	0.72	48.1	31.9	0.66
East: Cramer Street (East)											
P2	Full	53	28.1	LOS C	0.1	0.1	0.79	0.79	55.1	35.2	0.64
North: Saint George Street (North)											
P3	Full	53	31.3	LOS D	0.1	0.1	0.84	0.84	53.3	28.6	0.54
West: Cramer Street (West)											
P4	Full	53	16.2	LOS B	0.1	0.1	0.60	0.60	43.3	35.2	0.81
All Pedestrians		211	24.8	LOS C	0.1	0.1	0.74	0.74	50.0	32.7	0.66
Site: 4783_E [Saint George Street/ Cramer Street East]											
South: Saint George Street (South)											
P1	Full	53	22.1	LOS C	0.1	0.1	0.70	0.70	44.1	28.6	0.65
East: Cramer Street (East)											
P2	Full	53	28.1	LOS C	0.1	0.1	0.79	0.79	55.1	35.2	0.64
North: Saint George Street (North)											
P3	Full	53	31.3	LOS D	0.1	0.1	0.84	0.84	53.3	28.6	0.54
All Pedestrians		158	27.2	LOS C	0.1	0.1	0.78	0.78	50.9	30.8	0.61

Level of Service (LOS) Method: SIDRA Pedestrian LOS Method (Based on Average Delay)
Pedestrian movement LOS values are based on average delay per pedestrian movement.
Intersection LOS value for Pedestrians is based on average delay for all pedestrian movements.

MOVEMENT SUMMARY

Site: Cramer-101 [Cramer Street / Preston Marker (Site Folder: PM _ Exisitng _ Cramer Corridor _ Ratio)]

Network: N101 [PM _ Existing _ Cramer Corridor _ Ratio (Network Folder: Existing)]

New Site
Site Category: (None)
Stop (Two-Way)

Vehicle Movement Performance

Mov ID	Turn	DEMAND FLOWS [Total veh/h	HV] %	ARRIVAL FLOWS [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	AVERAGE BACK OF QUEUE [Veh. veh	Dist] m	Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed km/h
East: Cramer Street														
5	T1	496	3.0	496	3.0	0.147	0.3	LOS A	0.2	1.2	0.08	0.04	0.08	54.7
6	R2	31	0.0	31	0.0	0.147	8.4	LOS A	0.2	1.2	0.18	0.08	0.18	54.6
Approach		526	2.8	526	2.8	0.147	0.8	NA	0.2	1.2	0.09	0.04	0.09	54.7
North: Preston Marker														
7	L2	85	0.0	85	0.0	0.330	10.2	LOS B	0.6	4.1	0.21	0.93	0.24	39.4
9	R2	54	0.0	54	0.0	0.330	28.0	LOS D	0.6	4.1	0.21	0.93	0.24	39.4
Approach		139	0.0	139	0.0	0.330	17.1	LOS C	0.6	4.1	0.21	0.93	0.24	39.4
West: Cramer Street														
10	L2	37	0.0	37	0.0	0.046	5.5	LOS A	0.0	0.0	0.00	0.25	0.00	54.1
11	T1	485	3.0	485	3.0	0.228	0.1	LOS A	0.0	0.0	0.00	0.03	0.00	58.0
Approach		522	2.8	522	2.8	0.228	0.5	NA	0.0	0.0	0.00	0.04	0.00	56.8
All Vehicles		1187	2.5	1187	2.5	0.330	2.6	NA	0.6	4.1	0.06	0.14	0.07	49.5

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Network Data dialog (Network tab).
Vehicle movement LOS values are based on average delay per movement.
Minor Road Approach LOS values are based on average delay for all vehicle movements.
NA: Intersection LOS and Major Road Approach LOS values are Not Applicable for two-way sign control since the average delay is not a good LOS measure due to zero delays associated with major road movements.
Delay Model: SIDRA Standard (Geometric Delay is included).
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

MOVEMENT SUMMARY

Site: Cramer-102 [Cramer Street / Mary Street / Preston Market (Site Folder: PM _ Exisitng _ Cramer Corridor _ Ratio)]

Network: N101 [PM _ Existing _ Cramer Corridor _ Ratio (Network Folder: Existing)]

New Site
Site Category: (None)
Stop (Two-Way)

Vehicle Movement Performance

Mov ID	Turn	DEMAND FLOWS [Total veh/h	HV] %	ARRIVAL FLOWS [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	AVERAGE BACK OF QUEUE [Veh. veh	Dist] m	Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed km/h
South: Mary Street														
1	L2	79	0.0	79	0.0	0.334	12.3	LOS B	0.5	3.8	0.66	1.03	0.83	37.6
2	T1	14	0.0	14	0.0	0.334	36.2	LOS E	0.5	3.8	0.66	1.03	0.83	45.0
3	R2	18	0.0	18	0.0	0.334	40.6	LOS E	0.5	3.8	0.66	1.03	0.83	37.6
Approach		111	0.0	111	0.0	0.334	19.8	LOS C	0.5	3.8	0.66	1.03	0.83	39.0
East: Cramer Street														
4	L2	26	0.0	26	0.0	0.217	3.5	LOS A	0.0	0.0	0.00	0.04	0.00	56.6
5	T1	384	3.0	384	3.0	0.217	0.0	LOS A	0.0	0.0	0.00	0.04	0.00	55.6
6	R2	104	0.0	104	0.0	0.099	5.5	LOS A	0.2	1.2	0.52	0.70	0.52	48.5
Approach		515	2.2	515	2.2	0.217	1.3	NA	0.2	1.2	0.11	0.17	0.11	51.0
North: Preston Market														
7	L2	34	0.0	34	0.0	0.610	25.2	LOS D	1.1	7.7	0.88	1.17	1.47	24.8
8	T1	15	0.0	15	0.0	0.610	46.7	LOS E	1.1	7.7	0.88	1.17	1.47	34.2
9	R2	49	0.0	49	0.0	0.610	59.3	LOS F	1.1	7.7	0.88	1.17	1.47	24.8
Approach		98	0.0	98	0.0	0.610	45.7	LOS E	1.1	7.7	0.88	1.17	1.47	26.7
West: Cramer Street														
10	L2	75	0.0	75	0.0	0.294	5.5	LOS A	0.0	0.0	0.00	0.09	0.00	56.1
11	T1	443	3.0	443	3.0	0.294	0.0	LOS A	0.0	0.0	0.00	0.09	0.00	54.0
12	R2	57	0.0	57	0.0	0.048	6.9	LOS A	0.1	0.6	0.45	0.64	0.45	47.9
Approach		575	2.3	575	2.3	0.294	1.4	NA	0.1	0.6	0.04	0.14	0.04	52.9
All Vehicles		1298	1.9	1298	1.9	0.610	6.3	NA	1.1	7.7	0.18	0.31	0.24	42.8

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Network Data dialog (Network tab).
Vehicle movement LOS values are based on average delay per movement.
Minor Road Approach LOS values are based on average delay for all vehicle movements.
NA: Intersection LOS and Major Road Approach LOS values are Not Applicable for two-way sign control since the average delay is not a good LOS measure due to zero delays associated with major road movements.
Delay Model: SIDRA Standard (Geometric Delay is included).
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

MOVEMENT SUMMARY

Site: Cramer-104 [Cramer Street / Preston Market Left-in / Left-out (Site Folder: PM _ Exisitng _ Cramer Corridor _ Ratio)]

Network: N101 [PM _ Existing _ Cramer Corridor _ Ratio (Network Folder: Existing)]

New Site
Site Category: (None)
Stop (Two-Way)

Vehicle Movement Performance

Mov ID	Turn	DEMAND FLOWS [Total veh/h	HV] %	ARRIVAL FLOWS [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	AVERAGE BACK OF QUEUE [Veh. veh	Dist] m	Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed km/h
East: Cramer Street														
5	T1	484	3.0	484	3.0	0.253	0.0	LOS A	0.0	0.0	0.00	0.00	0.00	59.9
Approach		484	3.0	484	3.0	0.253	0.0	NA	0.0	0.0	0.00	0.00	0.00	59.9
North: Preston Market														
7	L2	105	0.0	105	0.0	0.256	10.8	LOS B	0.3	2.3	0.52	0.98	0.53	45.7
Approach		105	0.0	105	0.0	0.256	10.8	LOS B	0.3	2.3	0.52	0.98	0.53	45.7
West: Cramer Street														
11	T1	493	3.0	493	3.0	0.258	0.0	LOS A	1.5	11.0	0.00	0.00	0.00	59.9
Approach		493	3.0	493	3.0	0.258	0.0	NA	1.5	11.0	0.00	0.00	0.00	59.9
All Vehicles		1082	2.7	1082	2.7	0.258	1.1	NA	1.5	11.0	0.05	0.10	0.05	52.3

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Network Data dialog (Network tab).
Vehicle movement LOS values are based on average delay per movement.
Minor Road Approach LOS values are based on average delay for all vehicle movements.
NA: Intersection LOS and Major Road Approach LOS values are Not Applicable for two-way sign control since the average delay is not a good LOS measure due to zero delays associated with major road movements.
Delay Model: SIDRA Standard (Geometric Delay is included).
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

MOVEMENT SUMMARY

Site: 3221 [High Street / Cramer Street / Gower Street (Site Folder: PM _ Exisitng _ Cramer Corridor _ Ratio)]

Network: N101 [PM _ Existing _ Cramer Corridor _ Ratio (Network Folder: Existing)]

New Site
Site Category: (None)
Signals - EQUISAT (Fixed-Time/SCATS) Isolated Cycle Time = 80 seconds (Site Practical Cycle Time)

Vehicle Movement Performance

Mov ID	Turn	DEMAND FLOWS [Total veh/h	HV] %	ARRIVAL FLOWS [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	AVERAGE BACK OF QUEUE [Veh. veh	Dist] m	Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed km/h
South: High Street														
1	L2	7	3.0	7	3.0	0.319	30.7	LOS C	3.2	23.2	0.84	0.69	0.84	33.0
2	T1	575	3.0	575	3.0	* 0.865	35.1	LOS D	11.0	79.2	0.95	0.94	1.15	38.2
3	R2	63	3.0	63	3.0	0.463	46.9	LOS D	1.6	11.2	1.00	0.75	1.00	33.5
Approach		645	3.0	645	3.0	0.865	36.2	LOS D	11.0	79.2	0.95	0.91	1.13	37.6
East: Gower Street														
4	L2	63	3.0	63	3.0	0.126	29.2	LOS C	1.1	8.2	0.79	0.73	0.79	39.7
5	T1	399	3.0	399	3.0	0.805	33.5	LOS C	9.8	70.1	0.98	0.94	1.14	28.9
6	R2	47	3.0	47	3.0	0.347	46.3	LOS D	1.2	8.3	0.99	0.74	0.99	33.5
Approach		509	3.0	509	3.0	0.805	34.2	LOS C	9.8	70.1	0.95	0.90	1.08	31.3
North: High Street														
7	L2	7	3.0	7	3.0	0.541	32.7	LOS C	5.9	42.4	0.90	0.76	0.90	40.6
8	T1	528	3.0	528	3.0	0.541	26.8	LOS C	5.9	42.4	0.89	0.75	0.89	41.6
9	R2	78	3.0	78	3.0	* 0.571	47.6	LOS D	2.0	14.1	1.00	0.78	1.06	23.7
Approach		614	3.0	614	3.0	0.571	29.5	LOS C	5.9	42.4	0.91	0.76	0.92	39.6
West: Cramer Street														
10	L2	104	3.0	104	3.0	0.208	30.1	LOS C	1.9	13.9	0.81	0.75	0.81	31.9
11	T1	419	3.0	419	3.0	* 0.886	41.2	LOS D	9.7	70.0	0.99	1.07	1.34	27.7
12	R2	75	3.0	75	3.0	* 0.548	46.5	LOS D	1.9	13.5	1.00	0.77	1.04	25.3
Approach		598	3.0	598	3.0	0.886	40.0	LOS D	9.7	70.0	0.96	0.98	1.21	28.0
All Vehicles		2366	3.0	2366	3.0	0.886	35.0	LOS C	11.0	79.2	0.94	0.89	1.08	34.8

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Network Data dialog (Network tab).
Vehicle movement LOS values are based on average delay per movement.
Intersection and Approach LOS values are based on average delay for all vehicle movements.
Delay Model: SIDRA Standard (Geometric Delay is included).
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

* Critical Movement (Signal Timing)

Pedestrian Movement Performance

Mov ID	Crossing	Dem. Flow ped/h	Aver. Delay sec	Level of Service	AVERAGE BACK OF QUEUE [Ped ped	Dist] m	Prop. Que	Effective Stop Rate	Travel Time sec	Travel Dist. m	Aver. Speed m/sec
South: High Street											
P1	Full	53	34.3	LOS D	0.1	0.1	0.93	0.93	202.4	218.5	1.08
East: Gower Street											
P2	Full	53	34.3	LOS D	0.1	0.1	0.93	0.93	199.8	215.2	1.08
North: High Street											

P3 Full	53	34.3	LOS D	0.1	0.1	0.93	0.93	202.4	218.5	1.08
West: Cramer Street										
P4 Full	53	34.3	LOS D	0.1	0.1	0.93	0.93	199.8	215.2	1.08
All Pedestrians	211	34.3	LOS D	0.1	0.1	0.93	0.93	201.1	216.9	1.08

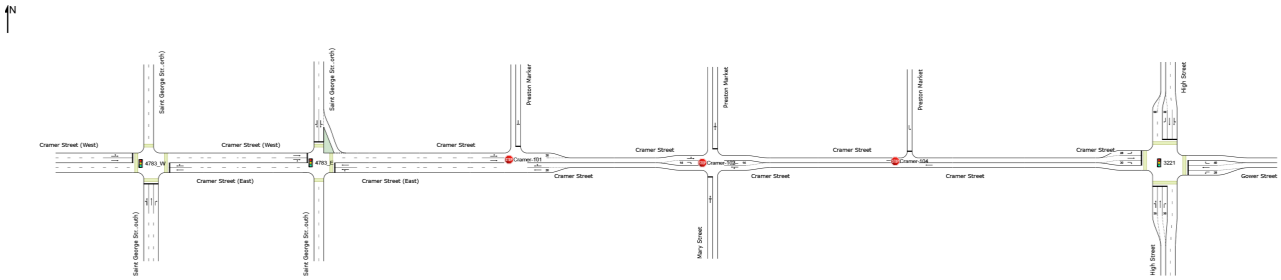
Level of Service (LOS) Method: SIDRA Pedestrian LOS Method (Based on Average Delay)
Pedestrian movement LOS values are based on average delay per pedestrian movement.
Intersection LOS value for Pedestrians is based on average delay for all pedestrian movements.

NETWORK LAYOUT

Network: N101 [SAT _ Existing _ Cramer Corridor _ Ratio (Network Folder: Existing)]

New Network
Network Category: (None)

Layout pictures are schematic functional drawings reflecting input data. They are not design drawings.



SITES IN NETWORK		
Site ID	**CCG ID**	**Site Name**
4783_W	CCG1	Saint George Street/ Cramer Street West
4783_E	CCG1	Saint George Street/ Cramer Street East
Cramer-101	NA	Cramer Street / Preston Marker
Cramer-102	NA	Cramer Street / Mary Street / Preston Market
Cramer-104	NA	Cramer Street / Preston Market Left-in / Left-out
3221	NA	High Street / Cramer Street / Gower Street

CCG MOVEMENT SUMMARY

Common Control Group: CCG1 [Saint George Intersection]

Network: N101 [SAT _ Existing _ Cramer Corridor _ Ratio (Network Folder: Existing)]

EQUISAT (Fixed-Time/SCATS) Isolated Cycle Time = 120 seconds (CCG Practical Cycle Time)

Vehicle Movement Performance (CCG)

Mov ID	Turn	DEMAND FLOWS [Total veh/h	HV] %	ARRIVAL FLOWS [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	AVERAGE BACK OF QUEUE [Veh. veh	Dist] m	Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed km/h
Site: 4783_W [Saint George Street/ Cramer Street West]														
South: Saint George Street (South)														
1	L2	46	3.0	46	3.0	0.393	18.3	LOS B	8.2	59.1	0.55	0.52	0.55	46.7
2	T1	865	3.0	865	3.0	0.393	12.8	LOS B	8.3	59.4	0.55	0.50	0.55	46.7
3	R2	191	3.0	191	3.0	* 0.898	76.7	LOS E	8.5	61.2	1.00	1.01	1.44	17.2
Approach		1102	3.0	1102	3.0	0.898	24.0	LOS C	8.5	61.2	0.63	0.59	0.71	38.6
East: Cramer Street (East)														
5	T1	261	3.0	261	3.0	0.468	50.0	LOS D	1.1	8.0	1.00	0.85	1.00	19.2
6	R2	119	3.0	119	3.0	* 0.657	42.6	LOS D	1.1	8.0	1.00	0.80	1.05	15.6
Approach		380	3.0	380	3.0	0.657	47.7	LOS D	1.1	8.0	1.00	0.83	1.01	18.2
West: Cramer Street (West)														
10	L2	23	3.0	23	3.0	0.906	80.1	LOS F	7.2	51.8	1.00	1.08	1.49	19.7
11	T1	291	3.0	291	3.0	* 0.906	74.9	LOS E	7.2	51.8	1.00	1.08	1.50	14.0
Approach		314	3.0	314	3.0	0.906	75.3	LOS E	7.2	51.8	1.00	1.08	1.50	14.5
All Vehicles		1796	3.0	1796	3.0	0.906	38.0	LOS D	8.5	61.2	0.77	0.73	0.91	28.8
Site: 4783_E [Saint George Street/ Cramer Street East]														
East: Cramer Street (East)														
4	L2	132	3.0	132	3.0	0.614	45.1	LOS D	10.4	74.9	0.92	0.81	0.92	27.8
5	T1	376	3.0	376	3.0	0.614	40.1	LOS D	10.4	74.9	0.92	0.80	0.92	9.2
Approach		507	3.0	507	3.0	0.614	41.4	LOS D	10.4	74.9	0.92	0.80	0.92	16.1
North: Saint George Street (North)														
7	L2	126	3.0	126	3.0	0.880	56.5	LOS E	20.9	150.1	1.00	1.02	1.17	13.9
8	T1	921	3.0	921	3.0	* 0.880	51.3	LOS D	20.9	150.1	1.00	1.02	1.17	28.1
9	R2	23	3.0	23	3.0	0.880	57.2	LOS E	20.3	145.9	1.00	1.02	1.17	13.9
Approach		1071	3.0	1071	3.0	0.880	52.1	LOS D	20.9	150.1	1.00	1.02	1.17	26.6
West: Cramer Street (West)														
11	T1	428	3.0	428	3.0	0.325	17.4	LOS B	1.1	8.0	0.79	0.68	0.79	3.5
12	R2	53	3.0	53	3.0	0.325	17.7	LOS B	1.1	8.0	0.68	0.61	0.68	37.5
Approach		481	3.0	481	3.0	0.325	17.4	LOS B	1.1	8.0	0.78	0.67	0.78	11.9
All Vehicles		2059	3.0	2059	3.0	0.880	41.3	LOS D	20.9	150.1	0.93	0.89	1.02	23.3

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Network Data dialog (Network tab).
Vehicle movement LOS values are based on average delay per movement.
Intersection and Approach LOS values are based on average delay for all vehicle movements.
Delay Model: SIDRA Standard (Geometric Delay is included).
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

* Critical Movement (Signal Timing)

Pedestrian Movement Performance (CCG)

Mov ID	Crossing	Dem. Flow ped/h	Aver. Delay sec	Level of Service	AVERAGE BACK OF QUEUE [Ped ped	Dist] m	Prop. Que	Effective Stop Rate	Travel Time sec	Travel Dist. m	Aver. Speed m/sec
Site: 4783_W [Saint George Street/ Cramer Street West]											
South: Saint George Street (South)											
P1	Full	53	35.3	LOS D	0.1	0.1	0.77	0.77	59.9	31.9	0.53
East: Cramer Street (East)											
P2	Full	53	34.6	LOS D	0.1	0.1	0.76	0.76	61.7	35.2	0.57
North: Saint George Street (North)											
P3	Full	53	45.2	LOS E	0.2	0.2	0.87	0.87	67.2	28.6	0.43
West: Cramer Street (West)											
P4	Full	53	13.6	LOS B	0.1	0.1	0.48	0.48	40.6	35.2	0.87
All Pedestrians		211	32.2	LOS D	0.2	0.2	0.72	0.72	57.3	32.7	0.57
Site: 4783_E [Saint George Street/ Cramer Street East]											
South: Saint George Street (South)											
P1	Full	53	33.8	LOS D	0.1	0.1	0.75	0.75	55.8	28.6	0.51
East: Cramer Street (East)											
P2	Full	53	34.6	LOS D	0.1	0.1	0.76	0.76	61.7	35.2	0.57
North: Saint George Street (North)											
P3	Full	53	45.2	LOS E	0.2	0.2	0.87	0.87	67.2	28.6	0.43
All Pedestrians		158	37.9	LOS D	0.2	0.2	0.79	0.79	61.5	30.8	0.50

Level of Service (LOS) Method: SIDRA Pedestrian LOS Method (Based on Average Delay)
Pedestrian movement LOS values are based on average delay per pedestrian movement.
Intersection LOS value for Pedestrians is based on average delay for all pedestrian movements.

MOVEMENT SUMMARY

Site: Cramer-101 [Cramer Street / Preston Marker (Site Folder: SAT _ Exisitng _ Cramer Corridor _ Ratio)]

Network: N101 [SAT _ Existing _ Cramer Corridor _ Ratio (Network Folder: Existing)]

New Site
Site Category: (None)
Stop (Two-Way)

Vehicle Movement Performance

Mov ID	Turn	DEMAND FLOWS [Total veh/h	HV] %	ARRIVAL FLOWS [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	AVERAGE BACK OF QUEUE [Veh. veh	Dist] m	Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed km/h
East: Cramer Street														
5	T1	400	3.0	400	3.0	0.173	0.5	LOS A	0.4	2.6	0.09	0.08	0.09	52.2
6	R2	116	0.0	116	0.0	0.173	8.5	LOS A	0.4	2.6	0.54	0.48	0.54	49.0
Approach		516	2.3	516	2.3	0.173	2.3	NA	0.4	2.6	0.19	0.17	0.19	50.3
North: Preston Marker														
7	L2	211	0.0	211	0.0	0.652	17.3	LOS C	2.5	17.6	0.00	1.00	0.00	33.8
9	R2	106	0.0	106	0.0	0.652	38.8	LOS E	2.5	17.6	0.00	1.00	0.00	33.8
Approach		317	0.0	317	0.0	0.652	24.5	LOS C	2.5	17.6	0.00	1.00	0.00	33.8
West: Cramer Street														
10	L2	182	0.0	182	0.0	0.098	5.5	LOS A	0.0	0.0	0.00	0.58	0.00	50.3
11	T1	374	3.0	374	3.0	0.195	0.0	LOS A	0.0	0.0	0.00	0.00	0.00	59.9
Approach		556	2.0	556	2.0	0.195	1.8	NA	0.0	0.0	0.00	0.19	0.00	52.8
All Vehicles		1388	1.7	1388	1.7	0.652	7.2	NA	2.5	17.6	0.07	0.37	0.07	43.3

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Network Data dialog (Network tab).
Vehicle movement LOS values are based on average delay per movement.
Minor Road Approach LOS values are based on average delay for all vehicle movements.
NA: Intersection LOS and Major Road Approach LOS values are Not Applicable for two-way sign control since the average delay is not a good LOS measure due to zero delays associated with major road movements.
Delay Model: SIDRA Standard (Geometric Delay is included).
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

MOVEMENT SUMMARY

Site: Cramer-102 [Cramer Street / Mary Street / Preston Market (Site Folder: SAT _ Exisitng _ Cramer Corridor _ Ratio)]

Network: N101 [SAT _ Existing _ Cramer Corridor _ Ratio (Network Folder: Existing)]

New Site
Site Category: (None)
Stop (Two-Way)

Vehicle Movement Performance

Mov ID	Turn	DEMAND FLOWS [Total veh/h	HV] %	ARRIVAL FLOWS [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	AVERAGE BACK OF QUEUE [Veh. veh	Dist] m	Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed km/h
South: Mary Street														
1	L2	92	0.0	92	0.0	0.346	12.1	LOS B	0.6	4.2	0.65	1.02	0.83	38.0
2	T1	16	0.0	16	0.0	0.346	37.7	LOS E	0.6	4.2	0.65	1.02	0.83	45.3
3	R2	16	0.0	16	0.0	0.346	42.0	LOS E	0.6	4.2	0.65	1.02	0.83	38.0
Approach		123	0.0	123	0.0	0.346	19.2	LOS C	0.6	4.2	0.65	1.02	0.83	39.4
East: Cramer Street														
4	L2	21	0.0	21	0.0	0.201	3.5	LOS A	0.0	0.0	0.00	0.03	0.00	56.7
5	T1	360	3.0	360	3.0	0.201	0.0	LOS A	0.0	0.0	0.00	0.03	0.00	56.2
6	R2	161	0.0	161	0.0	0.151	5.5	LOS A	0.3	1.8	0.53	0.71	0.53	48.4
Approach		542	2.0	542	2.0	0.201	1.8	NA	0.3	1.8	0.16	0.23	0.16	50.2
North: Preston Market														
7	L2	59	0.0	59	0.0	0.792	40.9	LOS E	2.0	14.3	0.89	1.38	2.18	20.5
8	T1	13	0.0	13	0.0	0.792	63.9	LOS F	2.0	14.3	0.89	1.38	2.18	29.9
9	R2	66	0.0	66	0.0	0.792	79.0	LOS F	2.0	14.3	0.89	1.38	2.18	20.5
Approach		138	0.0	138	0.0	0.792	61.3	LOS F	2.0	14.3	0.89	1.38	2.18	21.6
West: Cramer Street														
10	L2	98	0.0	98	0.0	0.266	5.5	LOS A	0.0	0.0	0.00	0.12	0.00	55.7
11	T1	407	3.0	407	3.0	0.266	0.0	LOS A	0.0	0.0	0.00	0.12	0.00	52.3
12	R2	64	0.0	64	0.0	0.052	6.8	LOS A	0.1	0.6	0.44	0.63	0.44	48.0
Approach		569	2.1	569	2.1	0.266	1.7	NA	0.1	0.6	0.05	0.17	0.05	52.3
All Vehicles		1373	1.7	1373	1.7	0.792	9.3	NA	2.0	14.3	0.23	0.39	0.38	39.4

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Network Data dialog (Network tab).
Vehicle movement LOS values are based on average delay per movement.
Minor Road Approach LOS values are based on average delay for all vehicle movements.
NA: Intersection LOS and Major Road Approach LOS values are Not Applicable for two-way sign control since the average delay is not a good LOS measure due to zero delays associated with major road movements.
Delay Model: SIDRA Standard (Geometric Delay is included).
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

MOVEMENT SUMMARY

Site: Cramer-104 [Cramer Street / Preston Market Left-in / Left-out (Site Folder: SAT _ Exisitng _ Cramer Corridor _ Ratio)]

Network: N101 [SAT _ Existing _ Cramer Corridor _ Ratio (Network Folder: Existing)]

New Site
Site Category: (None)
Stop (Two-Way)

Vehicle Movement Performance

Mov ID	Turn	DEMAND FLOWS [Total veh/h	HV] %	ARRIVAL FLOWS [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	AVERAGE BACK OF QUEUE [Veh. veh	Dist] m	Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed km/h
East: Cramer Street														
5	T1	544	3.0	544	3.0	0.285	0.0	LOS A	0.0	0.0	0.00	0.00	0.00	59.8
Approach		544	3.0	544	3.0	0.285	0.0	NA	0.0	0.0	0.00	0.00	0.00	59.8
North: Preston Market														
7	L2	154	0.0	154	0.0	0.288	11.0	LOS B	0.3	2.2	0.53	0.99	0.57	45.5
Approach		154	0.0	154	0.0	0.288	11.0	LOS B	0.3	2.2	0.53	0.99	0.57	45.5
West: Cramer Street														
11	T1	483	3.0	483	3.0	0.395	0.0	LOS A	0.0	0.0	0.00	0.00	0.00	59.6
Approach		483	3.0	483	3.0	0.395	0.0	NA	0.0	0.0	0.00	0.00	0.00	59.6
All Vehicles		1181	2.6	1181	2.6	0.395	1.4	NA	0.3	2.2	0.07	0.13	0.07	51.1

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Network Data dialog (Network tab).
Vehicle movement LOS values are based on average delay per movement.
Minor Road Approach LOS values are based on average delay for all vehicle movements.
NA: Intersection LOS and Major Road Approach LOS values are Not Applicable for two-way sign control since the average delay is not a good LOS measure due to zero delays associated with major road movements.
Delay Model: SIDRA Standard (Geometric Delay is included).
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

MOVEMENT SUMMARY

Site: 3221 [High Street / Cramer Street / Gower Street (Site Folder: SAT _ Exisitng _ Cramer Corridor _ Ratio)]

Network: N101 [SAT _ Existing _ Cramer Corridor _ Ratio (Network Folder: Existing)]

New Site
Site Category: (None)
Signals - EQUISAT (Fixed-Time/SCATS) Isolated Cycle Time = 70 seconds (Site Practical Cycle Time)

Vehicle Movement Performance

Mov ID	Turn	DEMAND FLOWS [Total veh/h	HV] %	ARRIVAL FLOWS [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	AVERAGE BACK OF QUEUE [Veh. veh	Dist] m	Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed km/h
South: High Street														
1	L2	7	3.0	7	3.0	0.302	29.5	LOS C	2.5	17.6	0.86	0.70	0.86	33.7
2	T1	480	3.0	480	3.0	* 0.819	30.2	LOS C	7.8	55.7	0.95	0.89	1.12	40.2
3	R2	76	3.0	76	3.0	0.486	41.2	LOS D	1.6	11.8	0.99	0.76	0.99	35.3
Approach		563	3.0	563	3.0	0.819	31.7	LOS C	7.8	55.7	0.95	0.87	1.10	39.4
East: Gower Street														
4	L2	66	3.0	66	3.0	0.150	28.4	LOS C	1.1	8.0	0.82	0.74	0.82	40.1
5	T1	296	3.0	296	3.0	0.674	27.0	LOS C	5.8	41.9	0.95	0.83	1.00	32.1
6	R2	46	3.0	46	3.0	0.297	40.4	LOS D	1.0	7.0	0.97	0.73	0.97	35.5
Approach		408	3.0	408	3.0	0.674	28.8	LOS C	5.8	41.9	0.93	0.80	0.97	34.4
North: High Street														
7	L2	9	3.0	9	3.0	0.612	31.7	LOS C	5.4	39.1	0.94	0.79	0.94	41.0
8	T1	539	3.0	539	3.0	0.612	26.0	LOS C	5.4	39.1	0.94	0.78	0.94	42.0
9	R2	81	3.0	81	3.0	* 0.520	41.4	LOS D	1.8	12.7	1.00	0.77	1.01	25.7
Approach		629	3.0	629	3.0	0.612	28.1	LOS C	5.4	39.1	0.94	0.78	0.95	40.2
West: Cramer Street														
10	L2	106	3.0	106	3.0	0.241	29.1	LOS C	1.8	13.2	0.84	0.76	0.84	32.3
11	T1	358	3.0	358	3.0	* 0.854	35.0	LOS C	8.4	60.2	0.99	1.02	1.31	30.2
12	R2	76	3.0	76	3.0	* 0.486	40.4	LOS D	1.6	11.8	0.99	0.76	0.99	27.3
Approach		540	3.0	540	3.0	0.854	34.6	LOS C	8.4	60.2	0.96	0.93	1.18	30.1
All Vehicles		2141	3.0	2141	3.0	0.854	30.8	LOS C	8.4	60.2	0.95	0.85	1.05	36.8

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Network Data dialog (Network tab).
Vehicle movement LOS values are based on average delay per movement.
Intersection and Approach LOS values are based on average delay for all vehicle movements.
Delay Model: SIDRA Standard (Geometric Delay is included).
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

* Critical Movement (Signal Timing)

Pedestrian Movement Performance

Mov ID	Crossing	Dem. Flow ped/h	Aver. Delay sec	Level of Service	AVERAGE BACK OF QUEUE [Ped ped	Dist] m	Prop. Que	Effective Stop Rate	Travel Time sec	Travel Dist. m	Aver. Speed m/sec
South: High Street											
P1	Full	53	29.3	LOS C	0.1	0.1	0.92	0.92	197.4	218.5	1.11
East: Gower Street											
P2	Full	53	29.3	LOS C	0.1	0.1	0.92	0.92	194.9	215.2	1.10
North: High Street											

P3 Full	53	29.3	LOS C	0.1	0.1	0.92	0.92	197.4	218.5	1.11
West: Cramer Street										
P4 Full	53	29.3	LOS C	0.1	0.1	0.92	0.92	194.9	215.2	1.10
All Pedestrians	211	29.3	LOS C	0.1	0.1	0.92	0.92	196.1	216.9	1.11

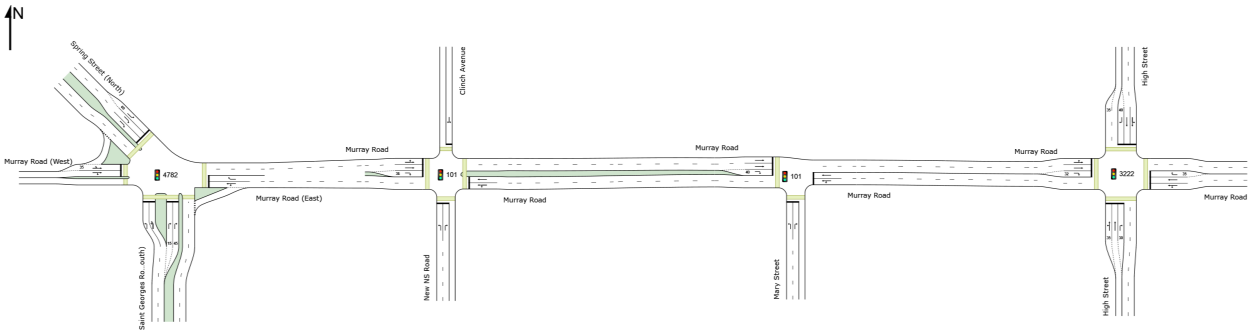
Level of Service (LOS) Method: SIDRA Pedestrian LOS Method (Based on Average Delay)
Pedestrian movement LOS values are based on average delay per pedestrian movement.
Intersection LOS value for Pedestrians is based on average delay for all pedestrian movements.

NETWORK LAYOUT

Network: N101 [AM _ Future Dev _ Murray Corridor _ Ratio (Network Folder: Future Dev)]

New Network
Network Category: (None)

Layout pictures are schematic functional drawings reflecting input data. They are not design drawings.



SITES IN NETWORK		
Site ID	**CCG ID**	**Site Name**
4782	NA	St Georges Road / Spring Street / Murray Road
101	NA	Murray Road / Clinch Avenue / Proposed Road
101	NA	Murray Road / Mary Street
3222	NA	High Street / Murray Road

MOVEMENT SUMMARY

Site: 4782 [St Georges Road / Spring Street / Murray Road (Site Folder: AM _ Dev _ Murray Corridor _ Ratio)]

Network: N101 [AM _ Future Dev _ Murray Corridor _ Ratio (Network Folder: Future Dev)]

New Site
Site Category: (None)
Signals - EQUISAT (Fixed-Time/SCATS) Coordinated Cycle Time = 90 seconds (Network Practical Cycle Time)

Vehicle Movement Performance

Mov ID	Turn	DEMAND FLOWS [Total veh/h	HV] %	ARRIVAL FLOWS [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	AVERAGE BACK OF QUEUE [Veh. veh	Dist] m	Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed km/h
South: Saint Georges Road (South)														
1	L2	34	3.0	34	3.0	0.038	18.2	LOS B	0.5	3.3	0.54	0.67	0.54	41.7
1a	L1	595	3.0	595	3.0	0.727	22.9	LOS C	12.0	85.9	0.81	0.81	0.81	39.5
3	R2	182	3.0	182	3.0	* 0.768	56.1	LOS E	2.8	19.9	1.00	0.88	1.30	13.1
Approach		811	3.0	811	3.0	0.768	30.2	LOS C	12.0	85.9	0.84	0.82	0.91	33.5
East: Murray Road (East)														
4	L2	218	3.0	218	3.0	0.856	10.9	LOS B	6.6	47.5	0.41	0.57	0.45	41.8
5	T1	391	3.0	391	3.0	* 0.856	5.9	LOS A	6.6	47.5	0.41	0.57	0.45	49.4
6a	R1	108	3.0	108	3.0	0.372	38.0	LOS D	2.5	18.1	0.88	0.75	0.88	28.7
Approach		717	3.0	717	3.0	0.856	12.3	LOS B	6.6	47.5	0.48	0.60	0.51	42.6
NorthWest: Spring Street (North)														
27a	L1	205	3.0	205	3.0	0.214	11.4	LOS B	1.8	12.9	0.58	0.71	0.58	43.7
29a	R1	1077	3.0	1077	3.0	* 0.870	42.7	LOS D	17.2	123.4	0.97	0.99	1.19	30.7
Approach		1282	3.0	1282	3.0	0.870	37.7	LOS D	17.2	123.4	0.91	0.94	1.09	31.7
West: Murray Road (West)														
10b	L3	18	3.0	18	3.0	0.828	57.0	LOS E	7.2	51.5	1.00	0.99	1.26	32.8
11	T1	386	3.0	386	3.0	0.828	49.0	LOS D	7.2	51.5	1.00	0.99	1.28	23.2
12	R2	45	3.0	45	3.0	0.828	52.9	LOS D	6.1	43.7	1.00	0.97	1.30	28.7
Approach		449	3.0	449	3.0	0.828	49.8	LOS D	7.2	51.5	1.00	0.99	1.28	24.3
All Vehicles		3259	3.0	3259	3.0	0.870	31.9	LOS C	17.2	123.4	0.81	0.84	0.94	32.4

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Network Data dialog (Network tab).
Vehicle movement LOS values are based on average delay per movement.
Intersection and Approach LOS values are based on average delay for all vehicle movements.
Delay Model: SIDRA Standard (Geometric Delay is included).
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

* Critical Movement (Signal Timing)

Pedestrian Movement Performance

Mov ID	Crossing	Dem. Flow ped/h	Aver. Delay sec	Level of Service	AVERAGE BACK OF QUEUE [Ped ped	Dist] m	Prop. Que	Effective Stop Rate	Travel Time sec	Travel Dist. m	Aver. Speed m/sec
South: Saint Georges Road (South)											
P11	Stage 1	53	27.3	LOS C	0.1	0.1	0.78	0.78	58.2	40.2	0.69
P12	Stage 2	53	20.0	LOS C	0.1	0.1	0.67	0.67	41.3	27.6	0.67
East: Murray Road (East)											
P2	Full	53	25.7	LOS C	0.1	0.1	0.76	0.76	52.8	35.2	0.67
NorthWest: Spring Street (North)											
P7	Full	53	39.3	LOS D	0.1	0.1	0.94	0.94	208.9	220.5	1.06

West: Murray Road (West)										
P41 Stage 1	53	21.4	LOS C	0.1	0.1	0.69	0.69	42.6	27.6	0.65
P42 Stage 2	53	20.0	LOS C	0.1	0.1	0.67	0.67	38.7	24.3	0.63
All Pedestrians	316	25.6	LOS C	0.1	0.1	0.75	0.75	73.8	62.6	0.85

Level of Service (LOS) Method: SIDRA Pedestrian LOS Method (Based on Average Delay)
Pedestrian movement LOS values are based on average delay per pedestrian movement.
Intersection LOS value for Pedestrians is based on average delay for all pedestrian movements.

MOVEMENT SUMMARY

Site: 101 [Murray Road / Clinch Avenue / Proposed Road (Site Folder: AM _ Dev _ Murray Corridor _ Ratio)]

Network: N101 [AM _ Future Dev _ Murray Corridor _ Ratio (Network Folder: Future Dev)]

Murray Road / Clinch Avenue / new NS Road - AM
Site Category: (None)
Signals - EQUISAT (Fixed-Time/SCATS) Coordinated Cycle Time = 90 seconds (Network Practical Cycle Time)

Vehicle Movement Performance

Mov ID	Turn	DEMAND FLOWS [Total veh/h	HV] %	ARRIVAL FLOWS [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	AVERAGE BACK OF QUEUE [Veh. veh	Dist] m	Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed km/h
South: New NS Road														
1	L2	27	1.0	27	1.0	0.121	43.7	LOS D	0.7	4.7	0.91	0.71	0.91	24.9
3	R2	45	1.0	45	1.0	* 0.184	44.0	LOS D	1.1	7.9	0.92	0.73	0.92	24.7
Approach		73	1.0	73	1.0	0.184	43.9	LOS D	1.1	7.9	0.92	0.73	0.92	24.8
East: Murray Road														
4	L2	89	1.0	89	1.0	0.611	30.8	LOS C	8.6	61.7	0.92	0.82	0.92	34.6
5	T1	694	3.0	694	3.0	* 0.611	33.5	LOS C	10.8	77.5	0.97	0.85	0.97	12.1
Approach		783	2.8	783	2.8	0.611	33.2	LOS C	10.8	77.5	0.96	0.84	0.96	15.9
North: Clinch Avenue														
7	L2	1	1.0	1	1.0	0.013	42.3	LOS D	0.1	0.5	0.89	0.63	0.89	25.4
9	R2	2	1.0	2	1.0	0.013	42.3	LOS D	0.1	0.5	0.89	0.63	0.89	25.4
Approach		3	1.0	3	1.0	0.013	42.3	LOS D	0.1	0.5	0.89	0.63	0.89	25.4
West: Murray Road														
10	L2	1	1.0	1	1.0	0.312	19.9	LOS B	4.6	33.2	0.58	0.51	0.58	40.7
11	T1	635	3.0	635	3.0	0.312	13.1	LOS B	4.6	33.2	0.53	0.46	0.53	17.3
12	R2	135	1.0	135	1.0	* 0.598	47.4	LOS D	3.7	25.8	1.00	0.81	1.02	25.1
Approach		771	2.6	771	2.6	0.598	19.1	LOS B	4.6	33.2	0.61	0.52	0.62	21.2
All Vehicles		1629	2.6	1629	2.6	0.611	27.0	LOS C	10.8	77.5	0.80	0.69	0.80	18.6

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Network Data dialog (Network tab).
Vehicle movement LOS values are based on average delay per movement.
Intersection and Approach LOS values are based on average delay for all vehicle movements.
Delay Model: SIDRA Standard (Geometric Delay is included).
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

* Critical Movement (Signal Timing)

Pedestrian Movement Performance

Mov ID	Crossing	Dem. Flow ped/h	Aver. Delay sec	Level of Service	AVERAGE BACK OF QUEUE [Ped ped	Dist] m	Prop. Que	Effective Stop Rate	Travel Time sec	Travel Dist. m	Aver. Speed m/sec
South: New NS Road											
P1	Full	53	24.3	LOS C	0.1	0.1	0.73	0.73	48.8	31.9	0.65
East: Murray Road											
P2	Full	53	39.3	LOS D	0.1	0.1	0.94	0.94	68.7	38.2	0.56
North: Clinch Avenue											
P3	Full	53	22.8	LOS C	0.1	0.1	0.71	0.71	44.8	28.6	0.64
West: Murray Road											
P4	Full	53	39.3	LOS D	0.1	0.1	0.94	0.94	68.9	38.5	0.56
All Pedestrians		211	31.4	LOS D	0.1	0.1	0.83	0.83	57.8	34.3	0.59

Level of Service (LOS) Method: SIDRA Pedestrian LOS Method (Based on Average Delay)
Pedestrian movement LOS values are based on average delay per pedestrian movement.
Intersection LOS value for Pedestrians is based on average delay for all pedestrian movements.

MOVEMENT SUMMARY

Site: 101 [Murray Road / Mary Street (Site Folder: AM _ Dev _ Murray Corridor _ Ratio)]

Network: N101 [AM _ Future Dev _ Murray Corridor _ Ratio (Network Folder: Future Dev)]

Murray Road / Mary Street NSI - AM
Site Category: (None)
Signals - EQUISAT (Fixed-Time/SCATS) Coordinated Cycle Time = 90 seconds (Network Practical Cycle Time)

Vehicle Movement Performance

Mov ID	Turn	DEMAND FLOWS [Total veh/h	HV] %	ARRIVAL FLOWS [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	AVERAGE BACK OF QUEUE [Veh. veh	Dist] m	Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed km/h
South: Mary Street														
1	L2	107	1.0	107	1.0	* 0.202	28.0	LOS C	2.1	14.5	0.79	0.74	0.79	31.4
3	R2	97	1.0	97	1.0	0.394	45.5	LOS D	2.5	17.5	0.96	0.77	0.96	24.2
Approach		204	1.0	204	1.0	0.394	36.3	LOS D	2.5	17.5	0.87	0.76	0.87	27.6
East: Murray Road														
4	L2	267	1.0	267	1.0	0.462	24.9	LOS C	9.4	66.7	0.85	0.80	0.85	36.1
5	T1	609	3.0	609	3.0	* 0.462	22.8	LOS C	10.1	72.8	0.91	0.81	0.91	13.4
Approach		877	2.4	877	2.4	0.462	23.4	LOS C	10.1	72.8	0.89	0.81	0.89	24.0
West: Murray Road														
11	T1	498	3.0	498	3.0	0.177	8.5	LOS A	4.5	32.4	0.69	0.59	0.69	30.2
12	R2	135	1.0	135	1.0	* 0.470	49.8	LOS D	3.7	26.1	1.00	0.80	1.00	25.7
Approach		633	2.6	633	2.6	0.470	17.3	LOS B	4.5	32.4	0.76	0.64	0.76	27.6
All Vehicles		1714	2.3	1714	2.3	0.470	22.7	LOS C	10.1	72.8	0.84	0.74	0.84	25.8

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Network Data dialog (Network tab).
Vehicle movement LOS values are based on average delay per movement.
Intersection and Approach LOS values are based on average delay for all vehicle movements.
Delay Model: SIDRA Standard (Geometric Delay is included).
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

* Critical Movement (Signal Timing)

Pedestrian Movement Performance

Mov ID	Crossing	Dem. Flow ped/h	Aver. Delay sec	Level of Service	AVERAGE BACK OF QUEUE [Ped ped	Dist] m	Prop. Que	Effective Stop Rate	Travel Time sec	Travel Dist. m	Aver. Speed m/sec
South: Mary Street											
P1	Full	53	14.5	LOS B	0.1	0.1	0.57	0.57	39.0	31.9	0.82
West: Murray Road											
P4	Full	53	39.3	LOS D	0.1	0.1	0.94	0.94	68.9	38.5	0.56
All Pedestrians		105	26.9	LOS C	0.1	0.1	0.75	0.75	54.0	35.2	0.65

Level of Service (LOS) Method: SIDRA Pedestrian LOS Method (Based on Average Delay)
Pedestrian movement LOS values are based on average delay per pedestrian movement.
Intersection LOS value for Pedestrians is based on average delay for all pedestrian movements.

MOVEMENT SUMMARY

Site: 3222 [High Street / Murray Road (Site Folder: AM _ Dev _ Murray Corridor _ Ratio)]

Network: N101 [AM _ Future Dev _ Murray Corridor _ Ratio (Network Folder: Future Dev)]

New Site
Site Category: (None)
Signals - EQUISAT (Fixed-Time/SCATS) Coordinated Cycle Time = 90 seconds (Network Practical Cycle Time)

Vehicle Movement Performance

Mov ID	Turn	DEMAND FLOWS [Total veh/h	HV] %	ARRIVAL FLOWS [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	AVERAGE BACK OF QUEUE [Veh. veh	Dist] m	Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed km/h
South: High Street														
1	L2	106	3.0	106	3.0	0.231	32.1	LOS C	2.2	16.0	0.80	0.76	0.80	29.5
2	T1	432	3.0	432	3.0	* 0.827	37.6	LOS D	12.0	85.9	0.98	0.96	1.15	37.2
3	R2	37	3.0	37	3.0	0.150	23.2	LOS C	0.5	3.6	0.85	0.72	0.85	42.7
Approach		575	3.0	575	3.0	0.827	35.7	LOS D	12.0	85.9	0.94	0.91	1.06	36.5
East: Murray Road														
4	L2	64	3.0	64	3.0	0.852	51.7	LOS D	8.8	63.1	1.00	1.01	1.29	33.2
5	T1	465	3.0	465	3.0	* 0.852	46.6	LOS D	8.8	63.1	1.00	1.01	1.31	23.9
6	R2	76	3.0	76	3.0	0.348	32.5	LOS C	1.5	11.0	0.95	0.75	0.95	38.6
Approach		605	3.0	605	3.0	0.852	45.3	LOS D	8.8	63.1	0.99	0.98	1.26	27.3
North: High Street														
7	L2	54	3.0	54	3.0	0.774	32.7	LOS C	14.4	103.5	0.93	0.87	0.98	40.5
8	T1	955	3.0	955	3.0	0.774	26.6	LOS C	14.4	103.5	0.88	0.83	0.95	41.7
9	R2	221	3.0	221	3.0	* 0.627	23.7	LOS C	3.5	24.9	0.94	0.82	0.94	34.1
Approach		1229	3.0	1229	3.0	0.774	26.3	LOS C	14.4	103.5	0.90	0.83	0.95	40.7
West: Murray Road														
10	L2	55	3.0	55	3.0	0.745	50.9	LOS D	8.0	57.7	1.00	0.89	1.07	26.4
11	T1	487	3.0	487	3.0	0.745	41.2	LOS D	8.0	57.7	1.00	0.88	1.08	28.3
12	R2	78	3.0	78	3.0	* 0.643	56.1	LOS E	2.3	16.3	1.00	0.79	1.06	23.5
Approach		620	3.0	620	3.0	0.745	44.0	LOS D	8.0	57.7	1.00	0.87	1.07	27.4
All Vehicles		3029	3.0	3029	3.0	0.852	35.5	LOS D	14.4	103.5	0.94	0.88	1.06	34.5

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Network Data dialog (Network tab).
Vehicle movement LOS values are based on average delay per movement.
Intersection and Approach LOS values are based on average delay for all vehicle movements.
Delay Model: SIDRA Standard (Geometric Delay is included).
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

* Critical Movement (Signal Timing)

Pedestrian Movement Performance

Mov ID	Crossing	Dem. Flow ped/h	Aver. Delay sec	Level of Service	AVERAGE BACK OF QUEUE [Ped ped	Dist] m	Prop. Que	Effective Stop Rate	Travel Time sec	Travel Dist. m	Aver. Speed m/sec
South: High Street											
P1	Full	53	39.3	LOS D	0.1	0.1	0.94	0.94	207.4	218.5	1.05
East: Murray Road											
P2	Full	53	39.3	LOS D	0.1	0.1	0.94	0.94	207.4	218.5	1.05
North: High Street											
P3	Full	53	39.3	LOS D	0.1	0.1	0.94	0.94	207.4	218.5	1.05

West: Murray Road										
P4 Full	53	39.3	LOS D	0.1	0.1	0.94	0.94	207.4	218.5	1.05
All Pedestrians	211	39.3	LOS D	0.1	0.1	0.94	0.94	207.4	218.5	1.05

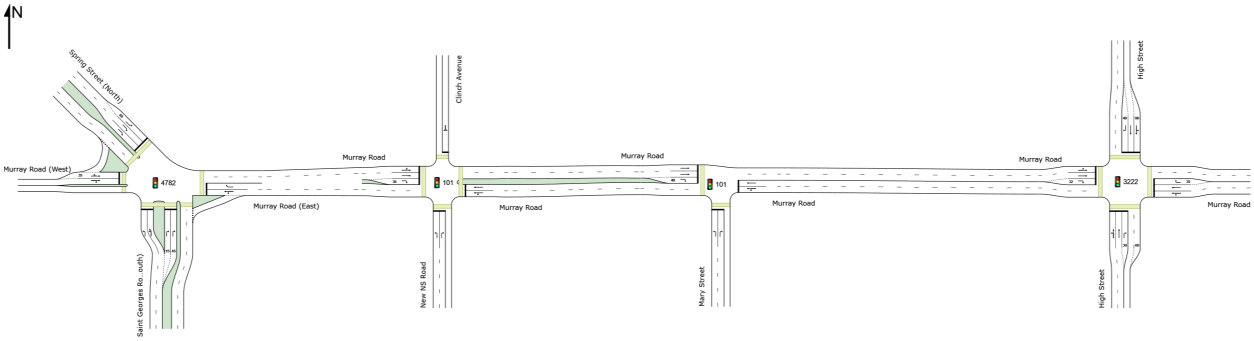
Level of Service (LOS) Method: SIDRA Pedestrian LOS Method (Based on Average Delay)
Pedestrian movement LOS values are based on average delay per pedestrian movement.
Intersection LOS value for Pedestrians is based on average delay for all pedestrian movements.

NETWORK LAYOUT

Network: N101 [PM _ Future Dev _ Murray Corridor _ Ratio (Network Folder: Future Dev)]

New Network
Network Category: (None)

Layout pictures are schematic functional drawings reflecting input data. They are not design drawings.



SITES IN NETWORK		
Site ID	**CCG ID**	**Site Name**
4782	NA	St Georges Road / Spring Street / Murray Road
101	NA	Murray Road / Clinch Avenue / Proposed Road
101	NA	Murray Road / Mary Street
3222	NA	High Street / Murray Road

MOVEMENT SUMMARY

Site: 4782 [St Georges Road / Spring Street / Murray Road (Site Folder: PM _ Dev _ Murray Corridor _ Ratio)]

Network: N101 [PM _ Future Dev _ Murray Corridor _ Ratio (Network Folder: Future Dev)]

New Site
Site Category: (None)
Signals - EQUISAT (Fixed-Time/SCATS) Coordinated Cycle Time = 120 seconds (Network Practical Cycle Time)

Vehicle Movement Performance

Mov ID	Turn	DEMAND FLOWS [Total veh/h	HV] %	ARRIVAL FLOWS [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	AVERAGE BACK OF QUEUE [Veh. veh	Dist] m	Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed km/h
South: Saint Georges Road (South)														
1	L2	58	3.0	58	3.0	0.059	19.2	LOS B	1.0	6.9	0.50	0.68	0.50	41.1
1a	L1	1053	3.0	1053	3.0	* 1.107	162.1	LOS F	76.6	549.6	1.00	1.45	1.98	13.0
3	R2	245	3.0	245	3.0	0.906	78.0	LOS E	7.5	53.6	0.99	0.99	1.50	10.0
Approach		1356	3.0	1356	3.0	1.107	140.8	LOS F	76.6	549.6	0.98	1.33	1.83	13.1
East: Murray Road (East)														
4	L2	184	3.0	184	3.0	1.090	117.1	LOS F	10.4	75.0	1.00	1.38	1.81	8.5
5	T1	552	3.0	552	3.0	* 1.090	112.2	LOS F	10.4	75.0	1.00	1.38	1.81	13.5
6a	R1	272	3.0	272	3.0	0.916	51.4	LOS D	10.1	72.4	1.00	0.91	1.13	24.3
Approach		1007	3.0	1007	3.0	1.090	96.7	LOS F	10.4	75.0	1.00	1.25	1.63	14.4
NorthWest: Spring Street (North)														
27a	L1	157	3.0	157	3.0	0.155	12.1	LOS B	1.5	10.9	0.53	0.69	0.53	43.0
29a	R1	774	3.0	774	3.0	0.569	35.1	LOS D	11.5	82.5	0.83	0.81	0.83	33.5
Approach		931	3.0	931	3.0	0.569	31.3	LOS C	11.5	82.5	0.78	0.79	0.78	34.4
West: Murray Road (West)														
10b	L3	33	3.0	33	3.0	1.035	80.5	LOS F	17.0	122.2	1.00	1.03	1.83	18.1
11	T1	363	3.0	363	3.0	1.035	88.0	LOS F	17.0	122.2	1.00	1.10	1.87	11.1
12	R2	63	3.0	63	3.0	1.035	130.1	LOS F	9.5	67.9	1.00	1.27	1.96	15.7
Approach		459	3.0	459	3.0	1.035	93.2	LOS F	17.0	122.2	1.00	1.12	1.88	12.4
All Vehicles		3753	3.0	3753	3.0	1.107	96.0	LOS F	76.6	549.6	0.94	1.15	1.52	16.1

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Network Data dialog (Network tab).
Vehicle movement LOS values are based on average delay per movement.
Intersection and Approach LOS values are based on average delay for all vehicle movements.
Delay Model: SIDRA Standard (Geometric Delay is included).
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

* Critical Movement (Signal Timing)

Pedestrian Movement Performance

Mov ID	Crossing	Dem. Flow ped/h	Aver. Delay sec	Level of Service	AVERAGE BACK OF QUEUE [Ped ped	Dist] m	Prop. Que	Effective Stop Rate	Travel Time sec	Travel Dist. m	Aver. Speed m/sec
South: Saint Georges Road (South)											
P11	Stage 1	53	34.6	LOS D	0.1	0.1	0.76	0.76	65.5	40.2	0.61
P12	Stage 2	53	27.4	LOS C	0.1	0.1	0.68	0.68	48.6	27.6	0.57
East: Murray Road (East)											
P2	Full	53	29.5	LOS C	0.1	0.1	0.70	0.70	56.5	35.2	0.62
NorthWest: Spring Street (North)											
P7	Full	53	54.3	LOS E	0.2	0.2	0.95	0.95	223.9	220.5	0.98

West: Murray Road (West)										
P41 Stage 1	53	25.4	LOS C	0.1	0.1	0.65	0.65	46.6	27.6	0.59
P42 Stage 2	53	24.1	LOS C	0.1	0.1	0.63	0.63	42.8	24.3	0.57
All Pedestrians	316	32.5	LOS D	0.2	0.2	0.73	0.73	80.7	62.6	0.78

Level of Service (LOS) Method: SIDRA Pedestrian LOS Method (Based on Average Delay)
Pedestrian movement LOS values are based on average delay per pedestrian movement.
Intersection LOS value for Pedestrians is based on average delay for all pedestrian movements.

MOVEMENT SUMMARY

Site: 101 [Murray Road / Clinch Avenue / Proposed Road (Site Folder: PM _ Dev _ Murray Corridor _ Ratio)]

Network: N101 [PM _ Future Dev _ Murray Corridor _ Ratio (Network Folder: Future Dev)]

Murray Road / Clinch Avenue / new NS Road - AM
Site Category: (None)
Signals - EQUISAT (Fixed-Time/SCATS) Coordinated Cycle Time = 120 seconds (Network Practical Cycle Time)

Vehicle Movement Performance

Mov ID	Turn	DEMAND FLOWS [Total veh/h	HV] %	ARRIVAL FLOWS [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	AVERAGE BACK OF QUEUE [Veh. veh	Dist] m	Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed km/h
South: New NS Road														
1	L2	59	1.0	59	1.0	* 0.511	62.2	LOS E	3.7	26.4	0.98	0.78	0.98	19.9
3	R2	115	1.0	115	1.0	0.498	59.9	LOS E	4.0	27.9	0.98	0.79	0.98	20.4
Approach		174	1.0	174	1.0	0.511	60.7	LOS E	4.0	27.9	0.98	0.79	0.98	20.2
East: Murray Road														
4	L2	80	1.0	80	1.0	0.989	97.6	LOS F	18.2	130.0	1.00	1.33	1.57	17.4
5	T1	904	3.0	904	3.0	* 0.989	91.6	LOS F	18.2	130.0	1.00	1.33	1.57	5.1
Approach		984	2.8	984	2.8	0.989	92.1	LOS F	18.2	130.0	1.00	1.33	1.57	6.4
North: Clinch Avenue														
7	L2	21	1.0	21	1.0	0.280	59.1	LOS E	1.5	10.6	0.95	0.75	0.95	20.6
9	R2	23	1.0	23	1.0	* 0.280	59.1	LOS E	1.5	10.6	0.95	0.75	0.95	20.6
Approach		44	1.0	44	1.0	0.280	59.1	LOS E	1.5	10.6	0.95	0.75	0.95	20.6
West: Murray Road														
10	L2	1	1.0	1	1.0	0.291	19.9	LOS B	5.7	40.8	0.52	0.46	0.52	40.7
11	T1	677	3.0	666	3.0	0.291	12.4	LOS B	5.7	40.8	0.45	0.39	0.45	18.0
12	R2	119	1.0	117	1.0	* 0.952	82.8	LOS F	4.9	34.7	1.00	0.96	1.43	17.7
Approach		797	2.7	784 N1	2.7	0.952	22.9	LOS C	5.7	40.8	0.53	0.48	0.59	17.9
All Vehicles		1999	2.6	1986 N1	2.6	0.989	61.3	LOS E	18.2	130.0	0.81	0.93	1.12	10.3

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Network Data dialog (Network tab).
Vehicle movement LOS values are based on average delay per movement.
Intersection and Approach LOS values are based on average delay for all vehicle movements.
Delay Model: SIDRA Standard (Geometric Delay is included).
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

* Critical Movement (Signal Timing)
N1 Arrival Flow value is reduced due to capacity constraint at oversaturated upstream lanes.

Pedestrian Movement Performance

Mov ID	Crossing	Dem. Flow ped/h	Aver. Delay sec	Level of Service	AVERAGE BACK OF QUEUE [Ped ped	Dist] m	Prop. Que	Effective Stop Rate	Travel Time sec	Travel Dist. m	Aver. Speed m/sec
South: New NS Road											
P1	Full	53	19.9	LOS B	0.1	0.1	0.58	0.58	44.4	31.9	0.72
East: Murray Road											
P2	Full	53	54.3	LOS E	0.2	0.2	0.95	0.95	83.7	38.2	0.46
North: Clinch Avenue											
P3	Full	53	18.7	LOS B	0.1	0.1	0.56	0.56	40.7	28.6	0.70
West: Murray Road											
P4	Full	53	54.3	LOS E	0.2	0.2	0.95	0.95	83.9	38.5	0.46

All Pedestrians	211	36.8	LOS D	0.2	0.2	0.76	0.76	63.2	34.3	0.54

Level of Service (LOS) Method: SIDRA Pedestrian LOS Method (Based on Average Delay)
Pedestrian movement LOS values are based on average delay per pedestrian movement.
Intersection LOS value for Pedestrians is based on average delay for all pedestrian movements.

MOVEMENT SUMMARY

Site: 101 [Murray Road / Mary Street (Site Folder: PM _ Dev _ Murray Corridor _ Ratio)]

Network: N101 [PM _ Future Dev _ Murray Corridor _ Ratio (Network Folder: Future Dev)]

Murray Road / Mary Street NSI - AM
Site Category: (None)
Signals - EQUISAT (Fixed-Time/SCATS) Coordinated Cycle Time = 120 seconds (Network Practical Cycle Time)

Vehicle Movement Performance

Mov ID	Turn	DEMAND FLOWS [Total veh/h	HV] %	ARRIVAL FLOWS [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	AVERAGE BACK OF QUEUE [Veh. veh	Dist] m	Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed km/h
South: Mary Street														
1	L2	286	1.0	286	1.0	* 0.828	48.7	LOS D	10.3	73.0	0.97	0.94	1.16	23.3
3	R2	262	1.0	262	1.0	0.583	44.9	LOS D	8.1	57.2	0.91	0.83	0.91	24.4
Approach		548	1.0	548	1.0	0.828	46.9	LOS D	10.3	73.0	0.94	0.89	1.04	23.8
East: Murray Road														
4	L2	233	1.0	233	1.0	0.833	38.1	LOS D	14.0	100.0	0.87	0.87	0.95	30.0
5	T1	634	3.0	634	3.0	* 0.833	35.8	LOS D	14.0	100.0	0.89	0.89	1.00	9.4
Approach		866	2.5	866	2.5	0.833	36.4	LOS D	14.0	100.0	0.88	0.89	0.98	17.2
West: Murray Road														
11	T1	574	3.0	566	3.0	0.302	10.0	LOS A	4.6	33.1	0.41	0.36	0.41	27.8
12	R2	119	1.0	117	1.0	* 0.764	57.6	LOS E	4.2	29.5	0.98	0.80	1.03	23.7
Approach		693	2.7	684 N1	2.7	0.764	18.2	LOS B	4.6	33.1	0.51	0.44	0.52	25.6
All Vehicles		2107	2.1	2098 N1	2.2	0.833	33.2	LOS C	14.0	100.0	0.78	0.74	0.85	21.5

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Network Data dialog (Network tab).
Vehicle movement LOS values are based on average delay per movement.
Intersection and Approach LOS values are based on average delay for all vehicle movements.
Delay Model: SIDRA Standard (Geometric Delay is included).
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

* Critical Movement (Signal Timing)
N1 Arrival Flow value is reduced due to capacity constraint at oversaturated upstream lanes.

Pedestrian Movement Performance

Mov ID	Crossing	Dem. Flow ped/h	Aver. Delay sec	Level of Service	AVERAGE BACK OF QUEUE [Ped ped	Dist] m	Prop. Que	Effective Stop Rate	Travel Time sec	Travel Dist. m	Aver. Speed m/sec
South: Mary Street											
P1	Full	53	20.5	LOS C	0.1	0.1	0.58	0.58	45.0	31.9	0.71
West: Murray Road											
P4	Full	53	40.1	LOS E	0.1	0.1	0.82	0.82	69.7	38.5	0.55
All Pedestrians		105	30.3	LOS D	0.1	0.1	0.70	0.70	57.4	35.2	0.61

Level of Service (LOS) Method: SIDRA Pedestrian LOS Method (Based on Average Delay)
Pedestrian movement LOS values are based on average delay per pedestrian movement.
Intersection LOS value for Pedestrians is based on average delay for all pedestrian movements.

MOVEMENT SUMMARY

Site: 3222 [High Street / Murray Road (Site Folder: PM _ Dev _ Murray Corridor _ Ratio)]

Network: N101 [PM _ Future Dev _ Murray Corridor _ Ratio (Network Folder: Future Dev)]

New Site
Site Category: (None)
Signals - EQUISAT (Fixed-Time/SCATS) Coordinated Cycle Time = 120 seconds (Network Practical Cycle Time)

Vehicle Movement Performance

Mov ID	Turn	DEMAND FLOWS [Total veh/h	HV] %	ARRIVAL FLOWS [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	AVERAGE BACK OF QUEUE [Veh. veh	Dist] m	Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed km/h
South: High Street														
1	L2	95	3.0	95	3.0	0.828	57.2	LOS E	13.4	96.2	1.00	0.96	1.14	22.2
2	T1	634	3.0	634	3.0	* 0.828	50.6	LOS D	13.4	96.2	0.99	0.95	1.13	32.6
3	R2	34	3.0	34	3.0	0.154	47.7	LOS D	1.0	7.2	0.85	0.73	0.85	33.2
Approach		762	3.0	762	3.0	0.828	51.3	LOS D	13.4	96.2	0.98	0.94	1.12	31.7
East: Murray Road														
4	L2	55	3.0	55	3.0	0.798	54.4	LOS D	11.6	83.5	0.99	0.94	1.10	32.8
5	T1	561	3.0	561	3.0	* 0.798	47.3	LOS D	11.6	83.5	0.97	0.92	1.09	23.7
6	R2	66	3.0	66	3.0	0.224	43.2	LOS D	1.9	13.6	0.82	0.75	0.82	34.6
Approach		682	3.0	682	3.0	0.798	47.4	LOS D	11.6	83.5	0.95	0.91	1.07	26.0
North: High Street														
7	L2	11	3.0	11	3.0	0.193	24.2	LOS C	3.6	25.7	0.60	0.52	0.60	44.7
8	T1	492	3.0	492	3.0	0.504	20.2	LOS C	7.1	51.2	0.64	0.55	0.64	45.2
9	R2	199	3.0	199	3.0	* 0.658	32.6	LOS C	4.5	32.5	0.96	0.83	0.98	29.3
Approach		701	3.0	701	3.0	0.658	23.8	LOS C	7.1	51.2	0.73	0.63	0.74	41.5
West: Murray Road														
10	L2	125	3.0	124	3.0	0.509	32.5	LOS C	10.3	74.0	0.76	0.71	0.76	32.9
11	T1	612	3.0	606	3.0	0.509	29.4	LOS C	10.3	74.0	0.83	0.74	0.83	33.1
12	R2	112	3.0	111	3.0	* 0.811	73.6	LOS E	4.3	30.8	1.00	0.85	1.15	19.8
Approach		848	3.0	841 N1	3.0	0.811	35.7	LOS D	10.3	74.0	0.85	0.75	0.87	30.4
All Vehicles		2994	3.0	2986 N1	3.0	0.828	39.6	LOS D	13.4	96.2	0.88	0.81	0.95	32.1

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Network Data dialog (Network tab).
Vehicle movement LOS values are based on average delay per movement.
Intersection and Approach LOS values are based on average delay for all vehicle movements.
Delay Model: SIDRA Standard (Geometric Delay is included).
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

* Critical Movement (Signal Timing)
N1 Arrival Flow value is reduced due to capacity constraint at oversaturated upstream lanes.

Pedestrian Movement Performance

Mov ID	Crossing	Dem. Flow ped/h	Aver. Delay sec	Level of Service	AVERAGE BACK OF QUEUE [Ped ped	Dist] m	Prop. Que	Effective Stop Rate	Travel Time sec	Travel Dist. m	Aver. Speed m/sec
South: High Street											
P1	Full	53	54.3	LOS E	0.2	0.2	0.95	0.95	222.3	218.5	0.98
East: Murray Road											
P2	Full	53	54.3	LOS E	0.2	0.2	0.95	0.95	222.3	218.5	0.98
North: High Street											

P3 Full	53	54.3	LOS E	0.2	0.2	0.95	0.95	222.3	218.5	0.98
West: Murray Road										
P4 Full	53	54.3	LOS E	0.2	0.2	0.95	0.95	222.3	218.5	0.98
All Pedestrians	211	54.3	LOS E	0.2	0.2	0.95	0.95	222.3	218.5	0.98

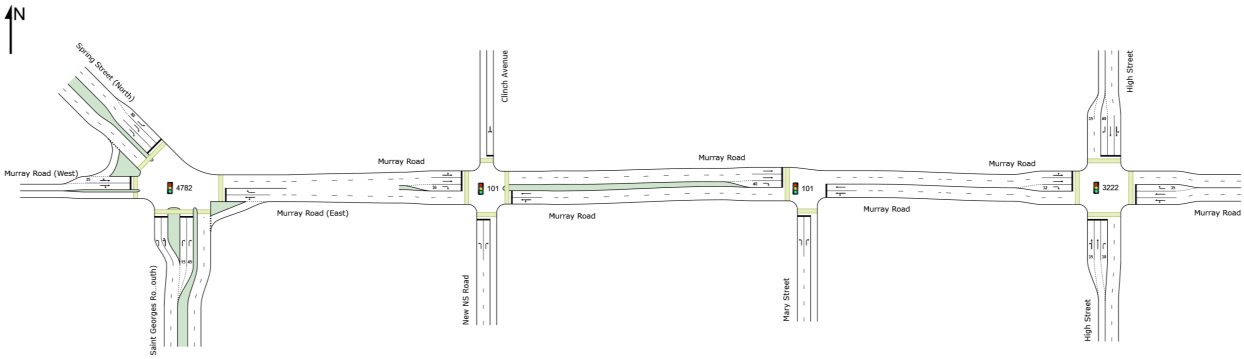
Level of Service (LOS) Method: SIDRA Pedestrian LOS Method (Based on Average Delay)
Pedestrian movement LOS values are based on average delay per pedestrian movement.
Intersection LOS value for Pedestrians is based on average delay for all pedestrian movements.

NETWORK LAYOUT

Network: N101 [SAT_ Future Dev _ Murray Corridor _Ratio (Network Folder: Future Dev)]

New Network
Network Category: (None)

Layout pictures are schematic functional drawings reflecting input data. They are not design drawings.



SITES IN NETWORK		
Site ID	**CCG ID**	**Site Name**
4782	NA	St Georges Road / Spring Street / Murray Road
101	NA	Murray Road / Clinch Avenue / Proposed Road
101	NA	Murray Road / Mary Street
3222	NA	High Street / Murray Road

MOVEMENT SUMMARY

Site: 4782 [St Georges Road / Spring Street / Murray Road (Site Folder: SAT _ Dev _ Murray Corridor _ Ratio)]

Network: N101 [SAT_ Future Dev _ Murray Corridor _Ratio (Network Folder: Future Dev)]

New Site
Site Category: (None)
Signals - EQUISAT (Fixed-Time/SCATS) Coordinated Cycle Time = 120 seconds (Network Practical Cycle Time)

Vehicle Movement Performance

Mov ID	Turn	DEMAND FLOWS [Total veh/h	HV] %	ARRIVAL FLOWS [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	AVERAGE BACK OF QUEUE [Veh. veh	Dist] m	Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed km/h
South: Saint Georges Road (South)														
1	L2	42	3.0	42	3.0	0.046	21.2	LOS C	0.7	5.3	0.53	0.68	0.53	39.9
1a	L1	785	3.0	785	3.0	* 0.897	43.5	LOS D	28.3	203.3	0.92	0.95	1.06	30.5
3	R2	208	3.0	208	3.0	0.857	73.1	LOS E	5.7	40.6	0.99	0.94	1.40	10.6
Approach		1036	3.0	1036	3.0	0.897	48.5	LOS D	28.3	203.3	0.92	0.94	1.10	26.8
East: Murray Road (East)														
4	L2	261	3.0	261	3.0	0.877	16.0	LOS B	10.4	75.0	0.61	0.71	0.65	35.4
5	T1	377	3.0	377	3.0	* 0.877	11.0	LOS B	10.4	75.0	0.61	0.71	0.65	44.0
6a	R1	181	3.0	181	3.0	0.611	41.6	LOS D	5.3	38.4	0.85	0.77	0.85	27.4
Approach		819	3.0	819	3.0	0.877	19.3	LOS B	10.4	75.0	0.66	0.72	0.69	36.5
NorthWest: Spring Street (North)														
27a	L1	188	3.0	188	3.0	0.192	13.0	LOS B	2.1	15.2	0.56	0.71	0.56	42.1
29a	R1	817	3.0	817	3.0	0.640	37.4	LOS D	13.0	93.4	0.87	0.82	0.87	32.6
Approach		1005	3.0	1005	3.0	0.640	32.8	LOS C	13.0	93.4	0.81	0.80	0.81	33.6
West: Murray Road (West)														
10b	L3	31	3.0	31	3.0	0.873	78.8	LOS E	12.0	85.9	1.00	1.05	1.25	27.4
11	T1	383	3.0	383	3.0	0.873	69.8	LOS E	12.0	85.9	1.00	1.04	1.28	18.4
12	R2	74	3.0	74	3.0	0.873	69.7	LOS E	7.4	53.1	0.99	1.02	1.36	24.2
Approach		487	3.0	487	3.0	0.873	70.3	LOS E	12.0	85.9	1.00	1.04	1.29	20.1
All Vehicles		3347	3.0	3347	3.0	0.897	39.8	LOS D	28.3	203.3	0.83	0.86	0.94	29.0

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Network Data dialog (Network tab).
Vehicle movement LOS values are based on average delay per movement.
Intersection and Approach LOS values are based on average delay for all vehicle movements.
Delay Model: SIDRA Standard (Geometric Delay is included).
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

* Critical Movement (Signal Timing)

Pedestrian Movement Performance

Mov ID	Crossing	Dem. Flow ped/h	Aver. Delay sec	Level of Service	AVERAGE BACK OF QUEUE [Ped ped	Dist] m	Prop. Que	Effective Stop Rate	Travel Time sec	Travel Dist. m	Aver. Speed m/sec
South: Saint Georges Road (South)											
P11	Stage 1	53	31.6	LOS D	0.1	0.1	0.73	0.73	62.5	40.2	0.64
P12	Stage 2	53	24.8	LOS C	0.1	0.1	0.64	0.64	46.0	27.6	0.60
East: Murray Road (East)											
P2	Full	53	30.9	LOS D	0.1	0.1	0.72	0.72	58.0	35.2	0.61
NorthWest: Spring Street (North)											
P7	Full	53	54.3	LOS E	0.2	0.2	0.95	0.95	223.9	220.5	0.98

West: Murray Road (West)										
P41 Stage 1	53	26.7	LOS C	0.1	0.1	0.67	0.67	48.0	27.6	0.58
P42 Stage 2	53	25.4	LOS C	0.1	0.1	0.65	0.65	44.1	24.3	0.55
All Pedestrians	316	32.3	LOS D	0.2	0.2	0.73	0.73	80.4	62.6	0.78

Level of Service (LOS) Method: SIDRA Pedestrian LOS Method (Based on Average Delay)
Pedestrian movement LOS values are based on average delay per pedestrian movement.
Intersection LOS value for Pedestrians is based on average delay for all pedestrian movements.

MOVEMENT SUMMARY

Site: 101 [Murray Road / Clinch Avenue / Proposed Road (Site Folder: SAT _ Dev _ Murray Corridor _ Ratio)]

Network: N101 [SAT_ Future Dev _ Murray Corridor _Ratio (Network Folder: Future Dev)]

Murray Road / Clinch Avenue / new NS Road - AM
Site Category: (None)
Signals - EQUISAT (Fixed-Time/SCATS) Coordinated Cycle Time = 120 seconds (Network Practical Cycle Time)

Vehicle Movement Performance

Mov ID	Turn	DEMAND FLOWS [Total veh/h	HV] %	ARRIVAL FLOWS [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	AVERAGE BACK OF QUEUE [Veh. veh	Dist] m	Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed km/h
South: New NS Road														
1	L2	56	1.0	56	1.0	* 0.484	62.0	LOS E	2.0	14.1	0.97	0.78	0.97	20.0
3	R2	107	1.0	107	1.0	0.466	59.6	LOS E	3.7	26.0	0.97	0.79	0.97	20.4
Approach		163	1.0	163	1.0	0.484	60.4	LOS E	3.7	26.0	0.97	0.78	0.97	20.3
East: Murray Road														
4	L2	107	1.0	107	1.0	0.703	35.2	LOS D	8.8	63.1	0.82	0.77	0.83	32.2
5	T1	755	3.0	755	3.0	* 0.703	40.0	LOS D	18.0	129.4	0.95	0.85	0.95	10.5
Approach		862	2.8	862	2.8	0.703	39.4	LOS D	18.0	129.4	0.93	0.84	0.94	14.3
North: Clinch Avenue														
7	L2	17	1.0	17	1.0	0.174	57.1	LOS E	1.3	9.2	0.93	0.73	0.93	21.1
9	R2	23	1.0	23	1.0	* 0.174	57.1	LOS E	1.3	9.2	0.93	0.73	0.93	21.1
Approach		40	1.0	40	1.0	0.174	57.1	LOS E	1.3	9.2	0.93	0.73	0.93	21.1
West: Murray Road														
10	L2	1	1.0	1	1.0	0.280	19.8	LOS B	5.0	35.9	0.47	0.42	0.47	40.8
11	T1	642	3.0	642	3.0	0.280	11.9	LOS B	5.0	35.9	0.41	0.36	0.41	18.5
12	R2	160	1.0	160	1.0	* 0.820	67.9	LOS E	6.1	43.0	1.00	0.89	1.20	20.2
Approach		803	2.6	803	2.6	0.820	23.1	LOS C	6.1	43.0	0.53	0.46	0.57	19.6
All Vehicles		1868	2.5	1868	2.5	0.820	34.6	LOS C	18.0	129.4	0.76	0.67	0.78	17.1

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Network Data dialog (Network tab).
Vehicle movement LOS values are based on average delay per movement.
Intersection and Approach LOS values are based on average delay for all vehicle movements.
Delay Model: SIDRA Standard (Geometric Delay is included).
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

* Critical Movement (Signal Timing)

Pedestrian Movement Performance

Mov ID	Crossing	Dem. Flow ped/h	Aver. Delay sec	Level of Service	AVERAGE BACK OF QUEUE [Ped ped	Dist] m	Prop. Que	Effective Stop Rate	Travel Time sec	Travel Dist. m	Aver. Speed m/sec
South: New NS Road											
P1	Full	53	26.1	LOS C	0.1	0.1	0.66	0.66	50.6	31.9	0.63
East: Murray Road											
P2	Full	53	54.3	LOS E	0.2	0.2	0.95	0.95	83.7	38.2	0.46
North: Clinch Avenue											
P3	Full	53	24.8	LOS C	0.1	0.1	0.64	0.64	46.8	28.6	0.61
West: Murray Road											
P4	Full	53	54.3	LOS E	0.2	0.2	0.95	0.95	83.9	38.5	0.46
All Pedestrians		211	39.8	LOS D	0.2	0.2	0.80	0.80	66.2	34.3	0.52

Level of Service (LOS) Method: SIDRA Pedestrian LOS Method (Based on Average Delay)
Pedestrian movement LOS values are based on average delay per pedestrian movement.
Intersection LOS value for Pedestrians is based on average delay for all pedestrian movements.

MOVEMENT SUMMARY

Site: 101 [Murray Road / Mary Street (Site Folder: SAT _ Dev _ Murray Corridor _ Ratio)]

Network: N101 [SAT_ Future Dev _ Murray Corridor _Ratio (Network Folder: Future Dev)]

Murray Road / Mary Street NSI - AM
Site Category: (None)
Signals - EQUISAT (Fixed-Time/SCATS) Coordinated Cycle Time = 120 seconds (Network Practical Cycle Time)

Vehicle Movement Performance

Mov ID	Turn	DEMAND FLOWS [Total veh/h	HV] %	ARRIVAL FLOWS [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	AVERAGE BACK OF QUEUE [Veh. veh	Dist] m	Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed km/h
South: Mary Street														
1	L2	264	1.0	264	1.0	0.465	37.7	LOS D	7.3	51.6	0.86	0.80	0.86	27.0
3	R2	242	1.0	242	1.0	* 0.875	70.0	LOS E	9.7	68.6	1.00	0.95	1.30	18.3
Approach		506	1.0	506	1.0	0.875	53.2	LOS D	9.7	68.6	0.92	0.87	1.07	22.0
East: Murray Road														
4	L2	316	1.0	316	1.0	0.559	33.0	LOS C	14.1	100.0	0.91	0.85	0.91	32.0
5	T1	560	3.0	560	3.0	* 0.559	31.8	LOS C	14.1	100.0	0.95	0.86	0.95	10.2
Approach		876	2.3	876	2.3	0.559	32.2	LOS C	14.1	100.0	0.94	0.86	0.94	21.0
West: Murray Road														
11	T1	552	3.0	552	3.0	0.215	4.7	LOS A	3.7	26.6	0.33	0.29	0.33	38.9
12	R2	160	1.0	160	1.0	* 0.548	57.6	LOS E	5.6	39.9	1.00	0.81	1.00	23.7
Approach		712	2.6	712	2.6	0.548	16.6	LOS B	5.6	39.9	0.48	0.41	0.48	28.5
All Vehicles		2094	2.1	2094	2.1	0.875	32.0	LOS C	14.1	100.0	0.78	0.71	0.81	23.0

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Network Data dialog (Network tab).
Vehicle movement LOS values are based on average delay per movement.
Intersection and Approach LOS values are based on average delay for all vehicle movements.
Delay Model: SIDRA Standard (Geometric Delay is included).
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

* Critical Movement (Signal Timing)

Pedestrian Movement Performance

Mov ID	Crossing	Dem. Flow ped/h	Aver. Delay sec	Level of Service	AVERAGE BACK OF QUEUE [Ped ped	Dist] m	Prop. Que	Effective Stop Rate	Travel Time sec	Travel Dist. m	Aver. Speed m/sec
South: Mary Street											
P1	Full	53	16.1	LOS B	0.1	0.1	0.52	0.52	40.6	31.9	0.79
West: Murray Road											
P4	Full	53	54.3	LOS E	0.2	0.2	0.95	0.95	83.9	38.5	0.46
All Pedestrians		105	35.2	LOS D	0.2	0.2	0.73	0.73	62.2	35.2	0.57

Level of Service (LOS) Method: SIDRA Pedestrian LOS Method (Based on Average Delay)
Pedestrian movement LOS values are based on average delay per pedestrian movement.
Intersection LOS value for Pedestrians is based on average delay for all pedestrian movements.

MOVEMENT SUMMARY

Site: 3222 [High Street / Murray Road (Site Folder: SAT _ Dev _ Murray Corridor _ Ratio)]

Network: N101 [SAT_ Future Dev _ Murray Corridor _Ratio (Network Folder: Future Dev)]

New Site
Site Category: (None)
Signals - EQUISAT (Fixed-Time/SCATS) Coordinated Cycle Time = 120 seconds (Network Practical Cycle Time)

Vehicle Movement Performance

Mov ID	Turn	DEMAND FLOWS [Total veh/h	HV] %	ARRIVAL FLOWS [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	AVERAGE BACK OF QUEUE [Veh. veh	Dist] m	Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed km/h
South: High Street														
1	L2	121	3.0	121	3.0	0.444	43.2	LOS D	3.6	25.9	0.85	0.80	0.85	25.1
2	T1	469	3.0	469	3.0	* 0.883	53.4	LOS D	18.1	130.2	0.99	1.03	1.20	32.0
3	R2	46	3.0	46	3.0	0.101	24.8	LOS C	0.9	6.3	0.72	0.70	0.72	41.9
Approach		637	3.0	637	3.0	0.883	49.4	LOS D	18.1	130.2	0.95	0.96	1.10	31.7
East: Murray Road														
4	L2	47	3.0	47	3.0	0.894	70.3	LOS E	11.8	84.7	1.00	1.09	1.35	28.5
5	T1	538	3.0	538	3.0	* 0.894	62.4	LOS E	13.0	93.2	0.99	1.07	1.33	19.9
6	R2	85	3.0	85	3.0	* 0.341	34.4	LOS C	2.0	14.5	0.90	0.76	0.90	37.8
Approach		671	3.0	671	3.0	0.894	59.4	LOS E	13.0	93.2	0.98	1.03	1.27	23.0
North: High Street														
7	L2	11	3.0	11	3.0	0.457	42.2	LOS D	7.6	54.6	0.86	0.73	0.86	36.7
8	T1	476	3.0	476	3.0	0.457	36.2	LOS D	7.6	54.6	0.85	0.72	0.85	37.6
9	R2	202	3.0	202	3.0	* 0.806	40.7	LOS D	5.3	38.0	1.00	0.92	1.20	26.0
Approach		688	3.0	688	3.0	0.806	37.6	LOS D	7.6	54.6	0.90	0.78	0.96	34.9
West: Murray Road														
10	L2	116	3.0	116	3.0	0.680	45.6	LOS D	11.3	81.0	0.88	0.78	0.88	28.0
11	T1	560	3.0	560	3.0	0.680	34.3	LOS C	11.3	81.0	0.82	0.72	0.82	30.8
12	R2	119	3.0	119	3.0	0.981	91.1	LOS F	5.3	37.7	1.00	1.01	1.52	17.2
Approach		795	3.0	795	3.0	0.981	44.5	LOS D	11.3	81.0	0.86	0.77	0.94	27.2
All Vehicles		2791	3.0	2791	3.0	0.981	47.5	LOS D	18.1	130.2	0.92	0.88	1.06	29.1

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Network Data dialog (Network tab).
Vehicle movement LOS values are based on average delay per movement.
Intersection and Approach LOS values are based on average delay for all vehicle movements.
Delay Model: SIDRA Standard (Geometric Delay is included).
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

* Critical Movement (Signal Timing)

Pedestrian Movement Performance

Mov ID	Crossing	Dem. Flow ped/h	Aver. Delay sec	Level of Service	AVERAGE BACK OF QUEUE [Ped ped	Dist] m	Prop. Que	Effective Stop Rate	Travel Time sec	Travel Dist. m	Aver. Speed m/sec
South: High Street											
P1	Full	53	54.3	LOS E	0.2	0.2	0.95	0.95	222.3	218.5	0.98
East: Murray Road											
P2	Full	53	54.3	LOS E	0.2	0.2	0.95	0.95	222.3	218.5	0.98
North: High Street											
P3	Full	53	54.3	LOS E	0.2	0.2	0.95	0.95	222.3	218.5	0.98

West: Murray Road										
P4 Full	53	54.3	LOS E	0.2	0.2	0.95	0.95	222.3	218.5	0.98
All Pedestrians	211	54.3	LOS E	0.2	0.2	0.95	0.95	222.3	218.5	0.98

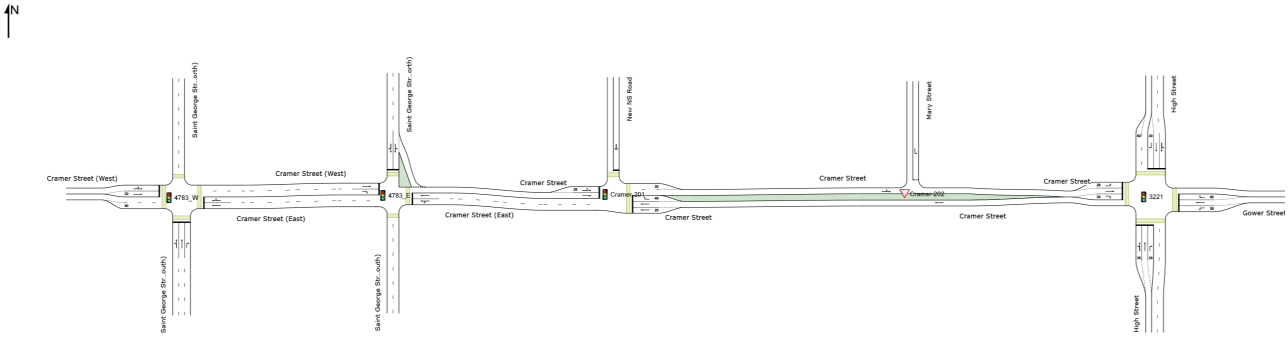
Level of Service (LOS) Method: SIDRA Pedestrian LOS Method (Based on Average Delay)
Pedestrian movement LOS values are based on average delay per pedestrian movement.
Intersection LOS value for Pedestrians is based on average delay for all pedestrian movements.

NETWORK LAYOUT

Network: N101 [AM _ Future Dev _ Cramer Corridor _ Ratio (Network Folder: Future Dev)]

New Network
Network Category: (None)

Layout pictures are schematic functional drawings reflecting input data. They are not design drawings.



SITES IN NETWORK		
Site ID	**CCG ID**	**Site Name**
4783_W	CCG1	Saint George Street/ Cramer Street West
4783_E	CCG1	Saint George Street/ Cramer Street East
Cramer-201	NA	Cramer Street / New NS Road
Cramer-202	NA	Cramer Street Left in / Left out
3221	NA	High Street / Cramer Street / Gower Street

CCG MOVEMENT SUMMARY

Common Control Group: CCG1 [Saint George Street]

Network: N101 [AM _ Future Dev _ Cramer Corridor _ Ratio (Network Folder: Future Dev)]

EQUISAT (Fixed-Time/SCATS) Isolated Cycle Time = 120 seconds (CCG Practical Cycle Time)

Vehicle Movement Performance (CCG)

Mov ID	Turn	DEMAND FLOWS [Total veh/h	HV] %	ARRIVAL FLOWS [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	AVERAGE BACK OF QUEUE [Veh. veh	Dist] m	Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed km/h
Site: 4783_W [Saint George Street/ Cramer Street West]														
South: Saint George Street (South)														
1	L2	43	3.0	43	3.0	0.376	21.1	LOS C	7.9	56.5	0.59	0.55	0.59	45.1
2	T1	771	3.0	771	3.0	0.376	15.1	LOS B	7.9	56.8	0.59	0.53	0.59	44.9
3	R2	180	3.0	180	3.0	* 0.914	78.4	LOS E	7.6	54.6	1.00	0.98	1.46	16.9
Approach		994	3.0	994	3.0	0.914	26.9	LOS C	7.9	56.8	0.67	0.61	0.75	37.0
East: Cramer Street (East)														
5	T1	293	3.0	293	3.0	0.589	34.3	LOS C	1.1	8.0	0.73	0.64	0.73	24.3
6	R2	51	3.0	51	3.0	* 0.589	46.9	LOS D	1.1	8.0	0.91	0.82	0.91	15.0
Approach		343	3.0	343	3.0	0.589	36.1	LOS D	1.1	8.0	0.75	0.66	0.75	22.8
West: Cramer Street (West)														
10	L2	23	3.0	23	3.0	0.908	79.5	LOS E	6.9	49.8	1.00	1.08	1.51	19.7
11	T1	348	3.0	348	3.0	* 0.908	69.4	LOS E	8.7	62.3	0.98	1.05	1.44	14.9
Approach		372	3.0	372	3.0	0.908	70.0	LOS E	8.7	62.3	0.98	1.05	1.44	15.3
All Vehicles		1708	3.0	1708	3.0	0.914	38.1	LOS D	8.7	62.3	0.75	0.72	0.90	28.6
Site: 4783_E [Saint George Street/ Cramer Street East]														
East: Cramer Street (East)														
4	L2	171	3.0	171	3.0	0.513	55.2	LOS E	11.2	80.1	1.00	0.86	1.00	24.5
5	T1	312	3.0	312	3.0	0.513	49.9	LOS D	11.2	80.1	1.00	0.85	1.00	7.7
Approach		482	3.0	482	3.0	0.513	51.7	LOS D	11.2	80.1	1.00	0.86	1.00	15.5
North: Saint George Street (North)														
7	L2	173	3.0	173	3.0	0.892	51.4	LOS D	26.5	190.6	1.00	1.02	1.15	15.1
8	T1	1105	3.0	1105	3.0	* 0.892	46.8	LOS D	26.5	190.6	1.00	1.02	1.16	29.4
9	R2	56	3.0	56	3.0	0.892	53.2	LOS D	24.9	179.0	1.00	1.03	1.17	14.7
Approach		1334	3.0	1334	3.0	0.892	47.6	LOS D	26.5	190.6	1.00	1.02	1.16	27.6
West: Cramer Street (West)														
11	T1	513	3.0	513	3.0	0.766	2.0	LOS A	1.1	8.0	0.13	0.12	0.13	21.3
12	R2	31	3.0	31	3.0	0.117	23.4	LOS C	0.5	3.7	0.64	0.64	0.64	32.8
Approach		543	3.0	543	3.0	0.766	3.2	LOS A	1.1	8.0	0.16	0.15	0.16	27.4
All Vehicles		2359	3.0	2359	3.0	0.892	38.2	LOS D	26.5	190.6	0.81	0.79	0.90	24.9

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Network Data dialog (Network tab).
Vehicle movement LOS values are based on average delay per movement.
Intersection and Approach LOS values are based on average delay for all vehicle movements.
Delay Model: SIDRA Standard (Geometric Delay is included).
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

* Critical Movement (Signal Timing)

Pedestrian Movement Performance (CCG)

Mov	Dem.	Aver.	Level of	AVERAGE BACK OF	Prop.	Effective	Travel	Travel	Aver.

ID	Crossing	Flow	Delay	Service	QUEUE [Ped	Dist]	Que	Stop Rate	Time	Dist.	Speed
		ped/h	sec		ped	m			sec	m	m/sec
Site: 4783_W [Saint George Street/ Cramer Street West]											
South: Saint George Street (South)											
P1	Full	53	31.6	LOS D	0.1	0.1	0.73	0.73	56.1	31.9	0.57
East: Cramer Street (East)											
P2	Full	53	27.4	LOS C	0.1	0.1	0.68	0.68	54.5	35.2	0.65
North: Saint George Street (North)											
P3	Full	53	43.4	LOS E	0.2	0.2	0.85	0.85	65.4	28.6	0.44
West: Cramer Street (West)											
P4	Full	53	16.1	LOS B	0.1	0.1	0.52	0.52	43.1	35.2	0.82
All Pedestrians		211	29.6	LOS C	0.2	0.2	0.69	0.69	54.8	32.7	0.60
Site: 4783_E [Saint George Street/ Cramer Street East]											
South: Saint George Street (South)											
P1	Full	53	30.2	LOS D	0.1	0.1	0.71	0.71	52.2	28.6	0.55
East: Cramer Street (East)											
P2	Full	53	25.4	LOS C	0.1	0.1	0.65	0.65	49.9	31.9	0.64
North: Saint George Street (North)											
P3	Full	53	43.4	LOS E	0.2	0.2	0.85	0.85	65.4	28.6	0.44
All Pedestrians		158	33.0	LOS D	0.2	0.2	0.74	0.74	55.9	29.7	0.53

Level of Service (LOS) Method: SIDRA Pedestrian LOS Method (Based on Average Delay)
Pedestrian movement LOS values are based on average delay per pedestrian movement.
Intersection LOS value for Pedestrians is based on average delay for all pedestrian movements.

MOVEMENT SUMMARY

Site: Cramer-201 [Cramer Street / New NS Road (Site Folder: AM _ Dev _ Cramer Corridor _ Ratio)]

Network: N101 [AM _ Future Dev _ Cramer Corridor _ Ratio (Network Folder: Future Dev)]

Cramer Street / New NS Road - PM
Site Category: (None)
Signals - EQUISAT (Fixed-Time/SCATS) Coordinated Cycle Time = 80 seconds (Network Practical Cycle Time)

Vehicle Movement Performance

Mov ID	Turn	DEMAND FLOWS [Total veh/h	HV] %	ARRIVAL FLOWS [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	AVERAGE BACK OF QUEUE [Veh. veh	Dist] m	Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed km/h
East: Cramer Street														
5	T1	392	3.0	392	3.0	0.156	8.8	LOS A	3.2	22.6	0.73	0.61	0.73	31.8
6	R2	92	1.0	92	1.0	* 0.195	15.0	LOS B	1.0	6.8	0.83	0.76	0.83	42.1
Approach		483	2.6	483	2.6	0.195	10.0	LOS A	3.2	22.6	0.75	0.64	0.75	36.1
North: New NS Road														
7	L2	35	1.0	35	1.0	0.494	42.7	LOS D	2.9	20.5	0.97	0.79	0.97	25.6
9	R2	91	1.0	91	1.0	* 0.494	41.6	LOS D	2.9	20.5	0.97	0.79	0.97	25.6
Approach		125	1.0	125	1.0	0.494	41.9	LOS D	2.9	20.5	0.97	0.79	0.97	25.6
West: Cramer Street														
10	L2	136	1.0	136	1.0	0.117	8.7	LOS A	0.9	6.6	0.37	0.64	0.37	47.3
11	T1	551	3.0	551	3.0	* 0.587	12.0	LOS B	8.1	58.1	0.67	0.60	0.67	22.9
Approach		686	2.6	686	2.6	0.587	11.3	LOS B	8.1	58.1	0.61	0.61	0.61	32.1
All Vehicles		1295	2.5	1295	2.5	0.587	13.8	LOS B	8.1	58.1	0.70	0.64	0.70	31.9

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Network Data dialog (Network tab).
Vehicle movement LOS values are based on average delay per movement.
Intersection and Approach LOS values are based on average delay for all vehicle movements.
Delay Model: SIDRA Standard (Geometric Delay is included).
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

* Critical Movement (Signal Timing)

Pedestrian Movement Performance

Mov ID	Crossing	Dem. Flow ped/h	Aver. Delay sec	Level of Service	AVERAGE BACK OF QUEUE [Ped ped	Dist] m	Prop. Que	Effective Stop Rate	Travel Time sec	Travel Dist. m	Aver. Speed m/sec
East: Cramer Street											
P2	Full	53	34.3	LOS D	0.1	0.1	0.93	0.93	63.9	38.5	0.60
North: New NS Road											
P3	Full	53	10.5	LOS B	0.1	0.1	0.51	0.51	32.5	28.6	0.88
All Pedestrians		105	22.4	LOS C	0.1	0.1	0.72	0.72	48.2	33.6	0.70

Level of Service (LOS) Method: SIDRA Pedestrian LOS Method (Based on Average Delay)
Pedestrian movement LOS values are based on average delay per pedestrian movement.
Intersection LOS value for Pedestrians is based on average delay for all pedestrian movements.

MOVEMENT SUMMARY

Site: Cramer-202 [Cramer Street Left in / Left out (Site Folder: AM _ Dev _ Cramer Corridor _ Ratio)]

Network: N101 [AM _ Future Dev _ Cramer Corridor _ Ratio (Network Folder: Future Dev)]

Cramer Street Left in / Left out - AM
Site Category: (None)
Give-Way (Two-Way)

Vehicle Movement Performance

Mov ID	Turn	DEMAND FLOWS [Total veh/h	HV] %	ARRIVAL FLOWS [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	AVERAGE BACK OF QUEUE [Veh. veh	Dist] m	Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed km/h
East: Cramer Street														
5	T1	484	3.0	484	3.0	0.253	0.0	LOS A	0.0	0.0	0.00	0.00	0.00	59.9
Approach		484	3.0	484	3.0	0.253	0.0	NA	0.0	0.0	0.00	0.00	0.00	59.9
North: Mary Street														
7	L2	52	10.0	52	10.0	0.061	8.1	LOS A	0.1	0.7	0.51	0.67	0.51	47.7
Approach		52	10.0	52	10.0	0.061	8.1	LOS A	0.1	0.7	0.51	0.67	0.51	47.7
West: Cramer Street														
10	L2	45	1.0	45	1.0	0.334	5.6	LOS A	0.0	0.0	0.00	0.05	0.00	56.7
11	T1	541	3.0	541	3.0	0.334	0.0	LOS A	0.0	0.0	0.00	0.05	0.00	57.3
Approach		586	2.8	586	2.8	0.334	0.5	NA	0.0	0.0	0.00	0.05	0.00	57.1
All Vehicles		1122	3.2	1122	3.2	0.334	0.6	NA	0.1	0.7	0.02	0.06	0.02	56.1

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Network Data dialog (Network tab).
Vehicle movement LOS values are based on average delay per movement.
Minor Road Approach LOS values are based on average delay for all vehicle movements.
NA: Intersection LOS and Major Road Approach LOS values are Not Applicable for two-way sign control since the average delay is not a good LOS measure due to zero delays associated with major road movements.
Delay Model: SIDRA Standard (Geometric Delay is included).
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

MOVEMENT SUMMARY

Site: 3221 [High Street / Cramer Street / Gower Street (Site Folder: AM _ Dev _ Cramer Corridor _ Ratio)]

Network: N101 [AM _ Future Dev _ Cramer Corridor _ Ratio (Network Folder: Future Dev)]

New Site
Site Category: (None)
Signals - EQUISAT (Fixed-Time/SCATS) Coordinated Cycle Time = 80 seconds (Network Practical Cycle Time)

Vehicle Movement Performance

Mov ID	Turn	DEMAND FLOWS [Total veh/h	HV] %	ARRIVAL FLOWS [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	AVERAGE BACK OF QUEUE [Veh. veh	Dist] m	Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed km/h
South: High Street														
1	L2	64	3.0	64	3.0	0.293	28.2	LOS C	3.1	22.5	0.80	0.70	0.80	33.4
2	T1	529	3.0	529	3.0	0.794	29.0	LOS C	9.9	70.9	0.91	0.86	1.02	40.6
3	R2	77	3.0	77	3.0	* 0.563	47.5	LOS D	1.9	13.9	1.00	0.78	1.05	33.3
Approach		671	3.0	671	3.0	0.794	31.1	LOS C	9.9	70.9	0.91	0.84	1.00	39.1
East: Gower Street														
4	L2	74	3.0	74	3.0	0.171	32.1	LOS C	1.4	10.2	0.83	0.74	0.83	38.5
5	T1	362	3.0	362	3.0	* 0.839	38.0	LOS D	9.4	67.6	1.00	1.00	1.25	27.1
6	R2	43	3.0	43	3.0	0.316	46.2	LOS D	1.1	7.6	0.98	0.73	0.98	33.6
Approach		479	3.0	479	3.0	0.839	37.8	LOS D	9.4	67.6	0.97	0.94	1.16	30.1
North: High Street														
7	L2	46	3.0	46	3.0	0.827	38.8	LOS D	12.4	88.9	0.99	0.98	1.16	37.9
8	T1	901	3.0	901	3.0	* 0.827	33.0	LOS C	12.4	88.9	0.98	0.97	1.15	38.8
9	R2	57	3.0	57	3.0	0.417	46.7	LOS D	1.4	10.1	0.99	0.75	0.99	24.0
Approach		1004	3.0	1004	3.0	0.827	34.1	LOS C	12.4	88.9	0.98	0.96	1.14	38.1
West: Cramer Street														
10	L2	112	3.0	112	3.0	0.258	24.7	LOS C	1.6	11.8	0.63	0.71	0.63	34.8
11	T1	312	3.0	312	3.0	0.769	22.8	LOS C	6.2	44.6	0.83	0.74	0.90	36.5
12	R2	97	3.0	97	3.0	* 0.710	49.6	LOS D	2.5	18.1	1.00	0.81	1.11	24.4
Approach		520	3.0	520	3.0	0.769	28.2	LOS C	6.2	44.6	0.82	0.75	0.88	33.1
All Vehicles		2674	3.0	2674	3.0	0.839	32.8	LOS C	12.4	88.9	0.93	0.88	1.06	36.3

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Network Data dialog (Network tab).
Vehicle movement LOS values are based on average delay per movement.
Intersection and Approach LOS values are based on average delay for all vehicle movements.
Delay Model: SIDRA Standard (Geometric Delay is included).
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

* Critical Movement (Signal Timing)

Pedestrian Movement Performance

Mov ID	Crossing	Dem. Flow ped/h	Aver. Delay sec	Level of Service	AVERAGE BACK OF QUEUE [Ped ped	Dist] m	Prop. Que	Effective Stop Rate	Travel Time sec	Travel Dist. m	Aver. Speed m/sec
South: High Street											
P1	Full	53	34.3	LOS D	0.1	0.1	0.93	0.93	202.4	218.5	1.08
East: Gower Street											
P2	Full	53	34.3	LOS D	0.1	0.1	0.93	0.93	199.8	215.2	1.08
North: High Street											
P3	Full	53	34.3	LOS D	0.1	0.1	0.93	0.93	202.4	218.5	1.08

West: Cramer Street										
P4 Full	53	34.3	LOS D	0.1	0.1	0.93	0.93	199.8	215.2	1.08
All Pedestrians	211	34.3	LOS D	0.1	0.1	0.93	0.93	201.1	216.9	1.08

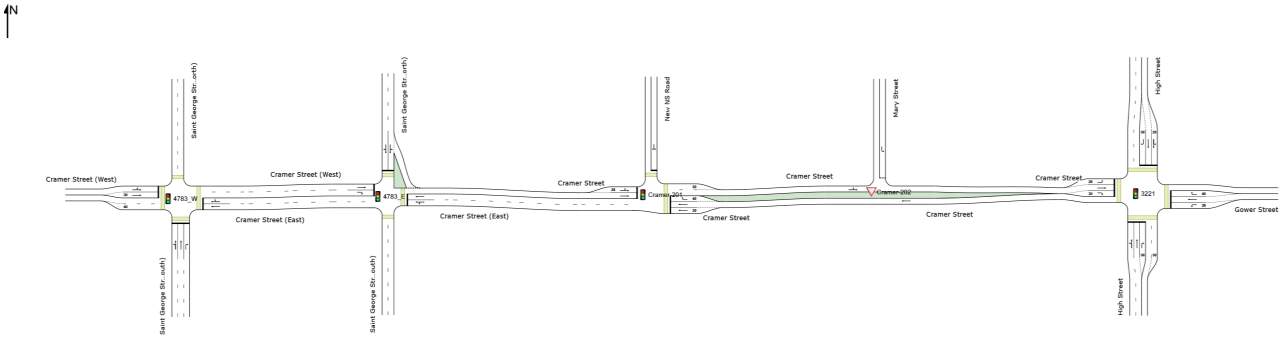
Level of Service (LOS) Method: SIDRA Pedestrian LOS Method (Based on Average Delay)
Pedestrian movement LOS values are based on average delay per pedestrian movement.
Intersection LOS value for Pedestrians is based on average delay for all pedestrian movements.

NETWORK LAYOUT

Network: N101 [PM _ Future Dev _ Cramer Corridor _ Ratio (Network Folder: Future Dev)]

New Network
Network Category: (None)

Layout pictures are schematic functional drawings reflecting input data. They are not design drawings.



SITES IN NETWORK		
Site ID	**CCG ID**	**Site Name**
4783_W	CCG1	Saint George Street/ Cramer Street West
4783_E	CCG1	Saint George Street/ Cramer Street East
Cramer-201	NA	Cramer Street / New NS Road
Cramer-202	NA	Cramer Street Left in / Left out
3221	NA	High Street / Cramer Street / Gower Street

CCG MOVEMENT SUMMARY

Common Control Group: CCG1 [St George]

Network: N101 [PM _ Future Dev _ Cramer Corridor _ Ratio (Network Folder: Future Dev)]

EQUISAT (Fixed-Time/SCATS) Isolated Cycle Time = 120 seconds (CCG Practical Cycle Time)

Vehicle Movement Performance (CCG)

Mov ID	Turn	DEMAND FLOWS [Total veh/h	HV] %	ARRIVAL FLOWS [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	AVERAGE BACK OF QUEUE [Veh. veh	Dist] m	Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed km/h
Site: 4783_W [Saint George Street/ Cramer Street West]														
South: Saint George Street (South)														
1	L2	53	3.0	53	3.0	0.623	28.0	LOS C	15.5	111.2	0.77	0.71	0.77	41.2
2	T1	1177	3.0	1177	3.0	0.623	22.0	LOS C	15.6	111.7	0.77	0.70	0.77	40.4
3	R2	196	3.0	196	3.0	0.923	79.6	LOS E	8.4	60.3	1.00	0.99	1.47	16.7
Approach		1425	3.0	1425	3.0	0.923	30.1	LOS C	15.6	111.7	0.80	0.74	0.87	35.6
East: Cramer Street (East)														
5	T1	403	3.0	403	3.0	0.858	17.4	LOS B	1.1	8.0	0.56	0.52	0.60	34.3
6	R2	112	3.0	112	3.0	* 0.858	31.4	LOS C	1.1	8.0	0.96	0.89	1.03	19.7
Approach		515	3.0	515	3.0	0.858	20.4	LOS C	1.1	8.0	0.65	0.60	0.70	30.7
West: Cramer Street (West)														
10	L2	45	3.0	45	3.0	0.896	75.1	LOS E	7.3	52.5	1.00	1.06	1.45	20.4
11	T1	353	3.0	353	3.0	* 0.896	65.4	LOS E	8.9	64.1	0.97	1.03	1.38	15.5
Approach		398	3.0	398	3.0	0.896	66.5	LOS E	8.9	64.1	0.97	1.03	1.39	16.2
All Vehicles		2338	3.0	2338	3.0	0.923	34.2	LOS C	15.6	111.7	0.80	0.76	0.92	30.6
Site: 4783_E [Saint George Street/ Cramer Street East]														
East: Cramer Street (East)														
4	L2	260	3.0	260	3.0	0.643	57.1	LOS E	15.9	114.0	1.00	0.88	1.00	24.0
5	T1	434	3.0	434	3.0	0.643	42.4	LOS D	15.9	114.0	0.96	0.84	0.96	8.8
Approach		694	3.0	694	3.0	0.643	47.9	LOS D	15.9	114.0	0.97	0.85	0.97	16.7
North: Saint George Street (North)														
7	L2	138	3.0	138	3.0	0.925	64.3	LOS E	26.1	187.5	1.00	1.09	1.25	12.5
8	T1	868	3.0	868	3.0	* 0.925	60.4	LOS E	26.1	187.5	1.00	1.10	1.28	25.5
9	R2	113	3.0	113	3.0	0.925	68.1	LOS E	22.0	157.7	1.00	1.11	1.31	11.8
Approach		1119	3.0	1119	3.0	0.925	61.7	LOS E	26.1	187.5	1.00	1.10	1.28	23.2
West: Cramer Street (West)														
11	T1	499	3.0	499	3.0	* 0.803	3.7	LOS A	1.1	8.0	0.30	0.34	0.32	13.6
12	R2	49	3.0	49	3.0	0.142	7.1	LOS A	0.2	1.7	0.22	0.55	0.22	46.0
Approach		548	3.0	548	3.0	0.803	4.0	LOS A	1.1	8.0	0.30	0.36	0.31	28.5
All Vehicles		2361	3.0	2361	3.0	0.925	44.2	LOS D	26.1	187.5	0.83	0.85	0.96	21.5

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Network Data dialog (Network tab).
Vehicle movement LOS values are based on average delay per movement.
Intersection and Approach LOS values are based on average delay for all vehicle movements.
Delay Model: SIDRA Standard (Geometric Delay is included).
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

* Critical Movement (Signal Timing)

Pedestrian Movement Performance (CCG)

Mov	Dem.	Aver.	Level of	AVERAGE BACK OF	Prop.	Effective	Travel	Travel	Aver.

ID	Crossing	Flow	Delay	Service	QUEUE [Ped	Dist]	Que	Stop Rate	Time	Dist.	Speed
		ped/h	sec		ped	m			sec	m	m/sec
Site: 4783_W [Saint George Street/ Cramer Street West]											
South: Saint George Street (South)											
P1	Full	53	27.4	LOS C	0.1	0.1	0.68	0.68	51.9	31.9	0.61
East: Cramer Street (East)											
P2	Full	53	32.3	LOS D	0.1	0.1	0.73	0.73	59.4	35.2	0.59
North: Saint George Street (North)											
P3	Full	53	41.8	LOS E	0.1	0.1	0.84	0.84	63.8	28.6	0.45
West: Cramer Street (West)											
P4	Full	53	19.3	LOS B	0.1	0.1	0.57	0.57	46.4	35.2	0.76
All Pedestrians		211	30.2	LOS D	0.1	0.1	0.70	0.70	55.4	32.7	0.59
Site: 4783_E [Saint George Street/ Cramer Street East]											
South: Saint George Street (South)											
P1	Full	53	26.1	LOS C	0.1	0.1	0.66	0.66	48.1	28.6	0.60
East: Cramer Street (East)											
P2	Full	53	30.2	LOS D	0.1	0.1	0.71	0.71	54.7	31.9	0.58
North: Saint George Street (North)											
P3	Full	53	41.8	LOS E	0.1	0.1	0.84	0.84	63.8	28.6	0.45
All Pedestrians		158	32.7	LOS D	0.1	0.1	0.73	0.73	55.5	29.7	0.54

Level of Service (LOS) Method: SIDRA Pedestrian LOS Method (Based on Average Delay)
Pedestrian movement LOS values are based on average delay per pedestrian movement.
Intersection LOS value for Pedestrians is based on average delay for all pedestrian movements.

MOVEMENT SUMMARY

Site: Cramer-201 [Cramer Street / New NS Road (Site Folder: PM _ Dev _ Cramer Corridor _ Ratio)]

Network: N101 [PM _ Future Dev _ Cramer Corridor _ Ratio (Network Folder: Future Dev)]

Cramer Street / New NS Road - PM
Site Category: (None)
Signals - EQUISAT (Fixed-Time/SCATS) Coordinated Cycle Time = 90 seconds (Network Practical Cycle Time)

Vehicle Movement Performance

Mov ID	Turn	DEMAND FLOWS [Total veh/h	HV] %	ARRIVAL FLOWS [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	AVERAGE BACK OF QUEUE [Veh. veh	Dist] m	Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed km/h
East: Cramer Street														
5	T1	462	3.0	462	3.0	0.257	6.4	LOS A	3.4	24.3	0.48	0.41	0.48	36.5
6	R2	86	1.0	86	1.0	* 0.181	13.9	LOS B	0.9	6.3	0.67	0.72	0.67	42.9
Approach		548	2.7	548	2.7	0.257	7.6	LOS A	3.4	24.3	0.51	0.46	0.51	39.0
North: New NS Road														
7	L2	61	1.0	61	1.0	0.889	57.5	LOS E	9.2	65.2	1.00	0.99	1.39	21.2
9	R2	231	1.0	231	1.0	* 0.889	56.4	LOS E	9.2	65.2	1.00	0.99	1.39	21.2
Approach		292	1.0	292	1.0	0.889	56.7	LOS E	9.2	65.2	1.00	0.99	1.39	21.2
West: Cramer Street														
10	L2	123	1.0	123	1.0	0.113	9.8	LOS A	1.1	7.7	0.39	0.64	0.39	46.4
11	T1	514	3.0	514	3.0	* 0.564	14.0	LOS B	8.5	60.7	0.67	0.60	0.67	20.8
Approach		637	2.6	637	2.6	0.564	13.2	LOS B	8.5	60.7	0.62	0.61	0.62	29.8
All Vehicles		1477	2.3	1477	2.3	0.889	19.7	LOS B	9.2	65.2	0.65	0.63	0.73	27.9

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Network Data dialog (Network tab).
Vehicle movement LOS values are based on average delay per movement.
Intersection and Approach LOS values are based on average delay for all vehicle movements.
Delay Model: SIDRA Standard (Geometric Delay is included).
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

* Critical Movement (Signal Timing)

Pedestrian Movement Performance

Mov ID	Crossing	Dem. Flow ped/h	Aver. Delay sec	Level of Service	AVERAGE BACK OF QUEUE [Ped ped	Dist] m	Prop. Que	Effective Stop Rate	Travel Time sec	Travel Dist. m	Aver. Speed m/sec
East: Cramer Street											
P2	Full	53	39.3	LOS D	0.1	0.1	0.94	0.94	68.9	38.5	0.56
North: New NS Road											
P3	Full	53	12.3	LOS B	0.1	0.1	0.52	0.52	34.3	28.6	0.83
All Pedestrians		105	25.8	LOS C	0.1	0.1	0.73	0.73	51.6	33.6	0.65

Level of Service (LOS) Method: SIDRA Pedestrian LOS Method (Based on Average Delay)
Pedestrian movement LOS values are based on average delay per pedestrian movement.
Intersection LOS value for Pedestrians is based on average delay for all pedestrian movements.

MOVEMENT SUMMARY

Site: Cramer-202 [Cramer Street Left in / Left out (Site Folder: PM _ Dev _ Cramer Corridor _ Ratio)]

Network: N101 [PM _ Future Dev _ Cramer Corridor _ Ratio (Network Folder: Future Dev)]

Cramer Street Left in / Left out - AM
Site Category: (None)
Give-Way (Two-Way)

Vehicle Movement Performance

Mov ID	Turn	DEMAND FLOWS [Total veh/h	HV] %	ARRIVAL FLOWS [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	AVERAGE BACK OF QUEUE [Veh. veh	Dist] m	Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed km/h
East: Cramer Street														
5	T1	548	3.0	548	3.0	0.287	0.0	LOS A	0.0	0.0	0.00	0.00	0.00	59.8
Approach		548	3.0	548	3.0	0.287	0.0	NA	0.0	0.0	0.00	0.00	0.00	59.8
North: Mary Street														
7	L2	137	10.0	137	10.0	0.199	8.3	LOS A	0.3	2.0	0.53	0.73	0.53	47.5
Approach		137	10.0	137	10.0	0.199	8.3	LOS A	0.3	2.0	0.53	0.73	0.53	47.5
West: Cramer Street														
10	L2	40	1.0	40	1.0	0.401	5.6	LOS A	0.0	0.0	0.00	0.04	0.00	56.7
11	T1	536	3.0	536	3.0	0.401	0.1	LOS A	0.0	0.0	0.00	0.04	0.00	57.4
Approach		576	2.9	576	2.9	0.401	0.4	NA	0.0	0.0	0.00	0.04	0.00	57.2
All Vehicles		1261	3.7	1261	3.7	0.401	1.1	NA	0.3	2.0	0.06	0.10	0.06	54.3

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Network Data dialog (Network tab).
Vehicle movement LOS values are based on average delay per movement.
Minor Road Approach LOS values are based on average delay for all vehicle movements.
NA: Intersection LOS and Major Road Approach LOS values are Not Applicable for two-way sign control since the average delay is not a good LOS measure due to zero delays associated with major road movements.
Delay Model: SIDRA Standard (Geometric Delay is included).
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

MOVEMENT SUMMARY

Site: 3221 [High Street / Cramer Street / Gower Street (Site Folder: PM _ Dev _ Cramer Corridor _ Ratio)]

Network: N101 [PM _ Future Dev _ Cramer Corridor _ Ratio (Network Folder: Future Dev)]

New Site
Site Category: (None)
Signals - EQUISAT (Fixed-Time/SCATS) Coordinated Cycle Time = 90 seconds (Network Practical Cycle Time)

Vehicle Movement Performance

Mov ID	Turn	DEMAND FLOWS [Total veh/h	HV] %	ARRIVAL FLOWS [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	AVERAGE BACK OF QUEUE [Veh. veh	Dist] m	Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed km/h
South: High Street														
1	L2	65	3.0	65	3.0	0.700	37.2	LOS D	9.4	67.7	0.95	0.84	0.97	29.3
2	T1	661	3.0	661	3.0	0.700	31.3	LOS C	9.4	67.7	0.94	0.82	0.96	39.5
3	R2	63	3.0	63	3.0	* 0.521	52.9	LOS D	1.8	12.8	1.00	0.76	1.02	31.7
Approach		789	3.0	789	3.0	0.700	33.5	LOS C	9.4	67.7	0.94	0.82	0.97	38.1
East: Gower Street														
4	L2	63	3.0	63	3.0	0.125	33.3	LOS C	1.3	9.2	0.78	0.73	0.78	38.6
5	T1	438	3.0	438	3.0	* 0.876	43.4	LOS D	13.2	94.8	1.00	1.05	1.27	25.1
6	R2	47	3.0	47	3.0	0.261	47.9	LOS D	1.2	8.9	0.96	0.74	0.96	33.1
Approach		548	3.0	548	3.0	0.876	42.7	LOS D	13.2	94.8	0.97	0.99	1.19	27.9
North: High Street														
7	L2	7	3.0	7	3.0	0.217	31.8	LOS C	2.5	17.6	0.80	0.65	0.80	40.9
8	T1	562	3.0	562	3.0	* 0.873	39.4	LOS D	13.4	96.4	0.95	0.96	1.16	36.5
9	R2	45	3.0	45	3.0	0.373	52.2	LOS D	1.3	9.0	0.99	0.74	0.99	22.4
Approach		615	3.0	615	3.0	0.873	40.3	LOS D	13.4	96.4	0.96	0.94	1.14	35.7
West: Cramer Street														
10	L2	184	3.0	184	3.0	0.374	33.8	LOS C	4.3	30.9	0.91	0.80	0.91	29.8
11	T1	299	3.0	299	3.0	0.723	32.3	LOS C	7.5	54.1	0.95	0.84	1.01	31.4
12	R2	153	3.0	153	3.0	* 0.839	49.0	LOS D	4.4	31.5	1.00	0.88	1.20	24.6
Approach		636	3.0	636	3.0	0.839	36.8	LOS D	7.5	54.1	0.95	0.84	1.03	29.0
All Vehicles		2588	3.0	2588	3.0	0.876	37.8	LOS D	13.4	96.4	0.95	0.89	1.07	33.6

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Network Data dialog (Network tab).
Vehicle movement LOS values are based on average delay per movement.
Intersection and Approach LOS values are based on average delay for all vehicle movements.
Delay Model: SIDRA Standard (Geometric Delay is included).
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

* Critical Movement (Signal Timing)

Pedestrian Movement Performance

Mov ID	Crossing	Dem. Flow ped/h	Aver. Delay sec	Level of Service	AVERAGE BACK OF QUEUE [Ped ped	Dist] m	Prop. Que	Effective Stop Rate	Travel Time sec	Travel Dist. m	Aver. Speed m/sec
South: High Street											
P1	Full	53	39.3	LOS D	0.1	0.1	0.94	0.94	207.4	218.5	1.05
East: Gower Street											
P2	Full	53	39.3	LOS D	0.1	0.1	0.94	0.94	204.8	215.2	1.05
North: High Street											
P3	Full	53	39.3	LOS D	0.1	0.1	0.94	0.94	207.4	218.5	1.05

West: Cramer Street										
P4 Full	53	39.3	LOS D	0.1	0.1	0.94	0.94	204.8	215.2	1.05
All Pedestrians	211	39.3	LOS D	0.1	0.1	0.94	0.94	206.1	216.9	1.05

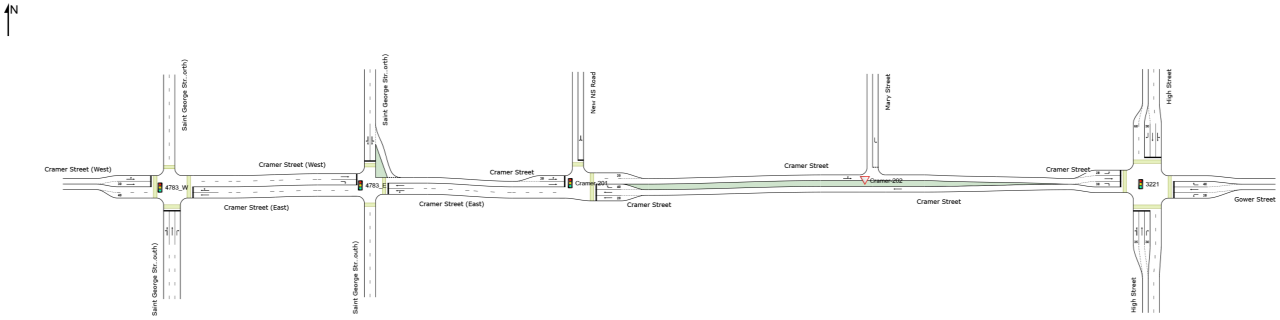
Level of Service (LOS) Method: SIDRA Pedestrian LOS Method (Based on Average Delay)
Pedestrian movement LOS values are based on average delay per pedestrian movement.
Intersection LOS value for Pedestrians is based on average delay for all pedestrian movements.

NETWORK LAYOUT

Network: N101 [SAT_ Future Dev _ Cramer Corridor _ Ratio (Network Folder: Future Dev)]

New Network
Network Category: (None)

Layout pictures are schematic functional drawings reflecting input data. They are not design drawings.



SITES IN NETWORK		
Site ID	**CCG ID**	**Site Name**
4783_W	CCG1	Saint George Street/ Cramer Street West
4783_E	CCG1	Saint George Street/ Cramer Street East
Cramer-201	NA	Cramer Street / New NS Road
Cramer-202	NA	Cramer Street Left in / Left out
3221	NA	High Street / Cramer Street / Gower Street

CCG MOVEMENT SUMMARY

Common Control Group: CCG1 [St George]

Network: N101 [SAT_ Future Dev _ Cramer Corridor _ Ratio (Network Folder: Future Dev)]

EQUISAT (Fixed-Time/SCATS) Isolated Cycle Time = 120 seconds (CCG Practical Cycle Time)

Vehicle Movement Performance (CCG)

Mov ID	Turn	DEMAND FLOWS [Total veh/h	HV] %	ARRIVAL FLOWS [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	AVERAGE BACK OF QUEUE [Veh. veh	Dist] m	Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed km/h
Site: 4783_W [Saint George Street/ Cramer Street West]														
South: Saint George Street (South)														
1	L2	46	3.0	46	3.0	0.400	18.7	LOS B	8.4	60.5	0.56	0.52	0.56	46.6
2	T1	881	3.0	881	3.0	0.400	12.8	LOS B	8.5	60.8	0.56	0.51	0.56	46.6
3	R2	213	3.0	213	3.0	* 0.881	71.8	LOS E	8.8	63.3	1.00	0.97	1.35	18.0
Approach		1140	3.0	1140	3.0	0.881	24.1	LOS C	8.8	63.3	0.64	0.59	0.70	38.5
East: Cramer Street (East)														
5	T1	268	3.0	268	3.0	0.860	48.1	LOS D	1.1	8.0	0.99	0.88	1.09	19.6
6	R2	109	3.0	109	3.0	* 0.860	50.0	LOS D	1.1	8.0	0.99	0.94	1.17	14.1
Approach		378	3.0	378	3.0	0.860	48.7	LOS D	1.1	8.0	0.99	0.89	1.11	18.1
West: Cramer Street (West)														
10	L2	29	3.0	29	3.0	0.871	77.4	LOS E	6.3	45.4	1.00	1.00	1.47	20.0
11	T1	206	3.0	206	3.0	* 0.871	70.1	LOS E	6.3	45.4	1.00	0.99	1.43	14.7
Approach		236	3.0	236	3.0	0.871	71.0	LOS E	6.3	45.4	1.00	0.99	1.43	15.5
All Vehicles		1754	3.0	1754	3.0	0.881	35.7	LOS D	8.8	63.3	0.76	0.71	0.89	30.0
Site: 4783_E [Saint George Street/ Cramer Street East]														
East: Cramer Street (East)														
4	L2	256	3.0	256	3.0	0.805	61.4	LOS E	12.6	90.7	1.00	0.90	1.06	22.7
5	T1	313	3.0	313	3.0	0.805	61.5	LOS E	12.6	90.7	1.00	0.92	1.09	6.4
Approach		568	3.0	568	3.0	0.805	61.5	LOS E	12.6	90.7	1.00	0.91	1.08	15.2
North: Saint George Street (North)														
7	L2	177	3.0	177	3.0	0.874	51.3	LOS D	23.6	169.4	1.00	1.01	1.12	15.1
8	T1	943	3.0	943	3.0	* 0.874	46.4	LOS D	23.6	169.4	1.00	1.01	1.14	29.4
9	R2	79	3.0	79	3.0	0.874	52.7	LOS D	21.3	153.1	1.00	1.01	1.15	14.7
Approach		1199	3.0	1199	3.0	0.874	47.6	LOS D	23.6	169.4	1.00	1.01	1.14	27.2
West: Cramer Street (West)														
11	T1	367	3.0	367	3.0	0.678	23.7	LOS C	1.1	8.0	0.92	0.78	0.92	2.6
12	R2	53	3.0	53	3.0	0.165	35.3	LOS D	1.1	8.0	0.67	0.67	0.67	27.2
Approach		420	3.0	420	3.0	0.678	25.1	LOS C	1.1	8.0	0.89	0.77	0.89	9.6
All Vehicles		2187	3.0	2187	3.0	0.874	46.9	LOS D	23.6	169.4	0.98	0.94	1.07	22.3

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Network Data dialog (Network tab).
Vehicle movement LOS values are based on average delay per movement.
Intersection and Approach LOS values are based on average delay for all vehicle movements.
Delay Model: SIDRA Standard (Geometric Delay is included).
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

* Critical Movement (Signal Timing)

Pedestrian Movement Performance (CCG)

Mov	Dem.	Aver.	Level of	AVERAGE BACK OF	Prop.	Effective	Travel	Travel	Aver.

ID	Crossing	Flow	Delay	Service	QUEUE [Ped	Dist]	Que	Stop Rate	Time	Dist.	Speed
		ped/h	sec		ped	m			sec	m	m/sec
Site: 4783_W [Saint George Street/ Cramer Street West]											
South: Saint George Street (South)											
P1	Full	53	35.3	LOS D	0.1	0.1	0.77	0.77	59.9	31.9	0.53
East: Cramer Street (East)											
P2	Full	53	29.5	LOS C	0.1	0.1	0.70	0.70	56.5	35.2	0.62
North: Saint George Street (North)											
P3	Full	53	52.4	LOS E	0.2	0.2	0.94	0.94	74.4	28.6	0.38
West: Cramer Street (West)											
P4	Full	53	13.6	LOS B	0.1	0.1	0.48	0.48	40.6	35.2	0.87
All Pedestrians		211	32.7	LOS D	0.2	0.2	0.72	0.72	57.9	32.7	0.57
Site: 4783_E [Saint George Street/ Cramer Street East]											
South: Saint George Street (South)											
P1	Full	53	33.8	LOS D	0.1	0.1	0.75	0.75	55.8	28.6	0.51
East: Cramer Street (East)											
P2	Full	53	27.4	LOS C	0.1	0.1	0.68	0.68	51.9	31.9	0.61
North: Saint George Street (North)											
P3	Full	53	21.1	LOS C	0.1	0.1	0.80	0.80	43.1	28.6	0.66
All Pedestrians		158	27.4	LOS C	0.1	0.1	0.74	0.74	50.3	29.7	0.59

Level of Service (LOS) Method: SIDRA Pedestrian LOS Method (Based on Average Delay)
Pedestrian movement LOS values are based on average delay per pedestrian movement.
Intersection LOS value for Pedestrians is based on average delay for all pedestrian movements.

MOVEMENT SUMMARY

Site: Cramer-201 [Cramer Street / New NS Road (Site Folder: SAT _ Dev _ Cramer Corridor _ Ratio)]

Network: N101 [SAT_ Future Dev _ Cramer Corridor _ Ratio (Network Folder: Future Dev)]

Cramer Street / New NS Road - PM
Site Category: (None)
Signals - EQUISAT (Fixed-Time/SCATS) Coordinated Cycle Time = 80 seconds (Network Practical Cycle Time)

Vehicle Movement Performance

Mov ID	Turn	DEMAND FLOWS [Total veh/h	HV] %	ARRIVAL FLOWS [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	AVERAGE BACK OF QUEUE [Veh. veh	Dist] m	Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed km/h
East: Cramer Street														
5	T1	353	3.0	353	3.0	0.148	1.2	LOS A	0.4	2.7	0.09	0.07	0.09	53.5
6	R2	113	1.0	113	1.0	* 0.195	10.7	LOS B	0.7	4.6	0.41	0.67	0.41	45.5
Approach		465	2.5	465	2.5	0.195	3.5	LOS A	0.7	4.6	0.17	0.22	0.17	48.7
North: New NS Road														
7	L2	61	1.0	61	1.0	0.920	57.9	LOS E	8.3	58.8	1.00	1.05	1.56	21.0
9	R2	215	1.0	215	1.0	* 0.920	57.1	LOS E	8.3	58.8	1.00	1.05	1.56	21.0
Approach		276	1.0	276	1.0	0.920	57.3	LOS E	8.3	58.8	1.00	1.05	1.56	21.0
West: Cramer Street														
10	L2	164	1.0	164	1.0	0.137	9.4	LOS A	1.2	8.3	0.41	0.68	0.41	46.3
11	T1	380	3.0	380	3.0	* 0.463	14.1	LOS B	5.8	41.7	0.68	0.59	0.68	20.7
Approach		544	2.4	544	2.4	0.463	12.7	LOS B	5.8	41.7	0.60	0.62	0.60	33.4
All Vehicles		1285	2.1	1285	2.1	0.920	18.9	LOS B	8.3	58.8	0.53	0.57	0.65	30.4

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Network Data dialog (Network tab).
Vehicle movement LOS values are based on average delay per movement.
Intersection and Approach LOS values are based on average delay for all vehicle movements.
Delay Model: SIDRA Standard (Geometric Delay is included).
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

* Critical Movement (Signal Timing)

Pedestrian Movement Performance

Mov ID	Crossing	Dem. Flow ped/h	Aver. Delay sec	Level of Service	AVERAGE BACK OF QUEUE [Ped ped	Dist] m	Prop. Que	Effective Stop Rate	Travel Time sec	Travel Dist. m	Aver. Speed m/sec
East: Cramer Street											
P2	Full	53	34.3	LOS D	0.1	0.1	0.93	0.93	63.9	38.5	0.60
North: New NS Road											
P3	Full	53	13.3	LOS B	0.1	0.1	0.58	0.58	35.3	28.6	0.81
All Pedestrians		105	23.8	LOS C	0.1	0.1	0.75	0.75	49.6	33.6	0.68

Level of Service (LOS) Method: SIDRA Pedestrian LOS Method (Based on Average Delay)
Pedestrian movement LOS values are based on average delay per pedestrian movement.
Intersection LOS value for Pedestrians is based on average delay for all pedestrian movements.

MOVEMENT SUMMARY

Site: Cramer-202 [Cramer Street Left in / Left out (Site Folder: SAT _ Dev _ Cramer Corridor _ Ratio)]

Network: N101 [SAT_ Future Dev _ Cramer Corridor _ Ratio (Network Folder: Future Dev)]

Cramer Street Left in / Left out - AM
Site Category: (None)
Give-Way (Two-Way)

Vehicle Movement Performance

Mov ID	Turn	DEMAND FLOWS [Total veh/h	HV] %	ARRIVAL FLOWS [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	AVERAGE BACK OF QUEUE [Veh. veh	Dist] m	Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed km/h
East: Cramer Street														
5	T1	465	3.0	465	3.0	0.243	0.0	LOS A	0.0	0.0	0.00	0.00	0.00	59.9
Approach		465	3.0	465	3.0	0.243	0.0	NA	0.0	0.0	0.00	0.00	0.00	59.9
North: Mary Street														
7	L2	127	10.0	127	10.0	0.116	7.3	LOS A	0.2	1.6	0.45	0.63	0.45	48.5
Approach		127	10.0	127	10.0	0.116	7.3	LOS A	0.2	1.6	0.45	0.63	0.45	48.5
West: Cramer Street														
10	L2	54	1.0	54	1.0	0.232	5.6	LOS A	0.0	0.0	0.00	0.07	0.00	56.5
11	T1	388	3.0	388	3.0	0.232	0.0	LOS A	0.0	0.0	0.00	0.07	0.00	56.0
Approach		442	2.8	442	2.8	0.232	0.7	NA	0.0	0.0	0.00	0.07	0.00	56.2
All Vehicles		1035	3.8	1035	3.8	0.243	1.2	NA	0.2	1.6	0.06	0.11	0.06	54.0

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Network Data dialog (Network tab).
Vehicle movement LOS values are based on average delay per movement.
Minor Road Approach LOS values are based on average delay for all vehicle movements.
NA: Intersection LOS and Major Road Approach LOS values are Not Applicable for two-way sign control since the average delay is not a good LOS measure due to zero delays associated with major road movements.
Delay Model: SIDRA Standard (Geometric Delay is included).
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

MOVEMENT SUMMARY

Site: 3221 [High Street / Cramer Street / Gower Street (Site Folder: SAT _ Dev _ Cramer Corridor _ Ratio)]

Network: N101 [SAT_ Future Dev _ Cramer Corridor _ Ratio (Network Folder: Future Dev)]

New Site
Site Category: (None)
Signals - EQUISAT (Fixed-Time/SCATS) Coordinated Cycle Time = 80 seconds (Network Practical Cycle Time)

Vehicle Movement Performance

Mov ID	Turn	DEMAND FLOWS [Total veh/h	HV] %	ARRIVAL FLOWS [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	AVERAGE BACK OF QUEUE [Veh. veh	Dist] m	Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed km/h
South: High Street														
1	L2	78	3.0	78	3.0	0.295	26.0	LOS C	3.4	24.3	0.77	0.69	0.77	34.7
2	T1	597	3.0	597	3.0	* 0.801	27.3	LOS C	11.1	79.8	0.90	0.86	1.00	41.3
3	R2	76	3.0	76	3.0	* 0.556	47.5	LOS D	1.9	13.7	1.00	0.78	1.05	33.3
Approach		751	3.0	751	3.0	0.801	29.2	LOS C	11.1	79.8	0.89	0.83	0.98	39.9
East: Gower Street														
4	L2	66	3.0	66	3.0	0.195	35.8	LOS D	1.4	9.9	0.88	0.75	0.88	37.1
5	T1	287	3.0	287	3.0	* 0.828	40.0	LOS D	7.5	53.8	1.00	0.98	1.26	26.3
6	R2	46	3.0	46	3.0	0.291	44.8	LOS D	1.1	7.9	0.97	0.74	0.97	34.0
Approach		400	3.0	400	3.0	0.828	39.8	LOS D	7.5	53.8	0.98	0.91	1.16	29.7
North: High Street														
7	L2	9	3.0	9	3.0	0.442	27.3	LOS C	5.5	39.4	0.82	0.70	0.82	43.2
8	T1	569	3.0	569	3.0	0.442	21.6	LOS C	5.5	39.4	0.81	0.69	0.81	44.2
9	R2	18	3.0	18	3.0	0.131	45.2	LOS D	0.4	3.1	0.96	0.69	0.96	24.5
Approach		597	3.0	597	3.0	0.442	22.4	LOS C	5.5	39.4	0.82	0.69	0.82	43.7
West: Cramer Street														
10	L2	176	3.0	176	3.0	0.516	38.9	LOS D	4.1	29.4	0.99	0.81	0.99	28.3
11	T1	162	3.0	162	3.0	0.452	32.3	LOS C	3.7	26.7	0.98	0.79	0.98	31.4
12	R2	115	3.0	115	3.0	* 0.721	47.5	LOS D	3.0	21.3	1.00	0.86	1.20	25.0
Approach		453	3.0	453	3.0	0.721	38.7	LOS D	4.1	29.4	0.99	0.82	1.04	28.3
All Vehicles		2200	3.0	2200	3.0	0.828	31.3	LOS C	11.1	79.8	0.91	0.81	0.98	37.0

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Network Data dialog (Network tab).
Vehicle movement LOS values are based on average delay per movement.
Intersection and Approach LOS values are based on average delay for all vehicle movements.
Delay Model: SIDRA Standard (Geometric Delay is included).
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

* Critical Movement (Signal Timing)

Pedestrian Movement Performance

Mov ID	Crossing	Dem. Flow ped/h	Aver. Delay sec	Level of Service	AVERAGE BACK OF QUEUE [Ped ped	Dist] m	Prop. Que	Effective Stop Rate	Travel Time sec	Travel Dist. m	Aver. Speed m/sec
South: High Street											
P1	Full	53	34.3	LOS D	0.1	0.1	0.93	0.93	202.4	218.5	1.08
East: Gower Street											
P2	Full	53	34.3	LOS D	0.1	0.1	0.93	0.93	199.8	215.2	1.08
North: High Street											
P3	Full	53	34.3	LOS D	0.1	0.1	0.93	0.93	202.4	218.5	1.08

West: Cramer Street										
P4 Full	53	34.3	LOS D	0.1	0.1	0.93	0.93	199.8	215.2	1.08
All Pedestrians	211	34.3	LOS D	0.1	0.1	0.93	0.93	201.1	216.9	1.08

Level of Service (LOS) Method: SIDRA Pedestrian LOS Method (Based on Average Delay)
Pedestrian movement LOS values are based on average delay per pedestrian movement.
Intersection LOS value for Pedestrians is based on average delay for all pedestrian movements.