



719 Second Avenue  
Suite 1250  
Seattle, WA 98104  
206.382.9800  
www.dksassociates.com

# MEMORANDUM

**DATE:** June 1, 2015

**TO:** Evan Corey, Senior Associate, Nelson Nygaard

**FROM:** Elisabeth Schuck, AICP and Richard Hutchinson, P.E., PTOE

**SUBJECT: SDOT Multimodal Corridors – Delridge Level of Service Analysis**

P#14194-003

Evan,

As requested, DKS has completed a level of service analysis for Delridge Way SW, from the West Seattle Bridge to SW Roxbury Street (Seattle city limits). The data and assumptions used to complete this analysis are documented below, followed by the Synchro output files for the AM and PM Peak arterial level of service and intersection reports.

In April 2015, SDOT collected traffic counts for the following intersections along Delridge Way SW:

1. SW Henderson St.
2. SW Trenton St.
3. SW Thistle St.
4. SW Kenyon St.
5. SW Holden St.
6. SW Orchard St.
7. SW Mrytle St.
8. SW Juneau St.
9. SW Brandon St.
10. SW Oregon St.

DKS input the 2015 traffic counts for the above locations into the latest West Seattle Synchro file provided by SDOT for this analysis. DKS did not receive traffic counts for the following intersections along Delridge Way SW:

1. SW Holly St.



2. SW Genesee St.
3. SW Andover St.
4. SW Roxbury St.

To estimate the 2015 traffic volumes for the above four intersections, DKS reviewed the percent change in traffic volumes from Synchro to the 2015 data for the 10 intersections where traffic counts were collected. In comparing the two data sets, it was determined that the Synchro volumes for the four missing intersections should be increased by the following:

- For the AM Peak, a growth rate of 10% should be applied to traffic volumes in both the northbound and southbound directions.
- For the PM Peak, a growth rate of 3% should be applied to traffic volumes in the northbound direction and 10% to the southbound direction.

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**Arterial Level of Service: NB Delridge Way SW**


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Cross Street	Arterial Class	Flow Speed	Running Time	Signal Delay	Travel Time (s)	Dist (mi)	Arterial Speed	Arterial LOS
SW Henderson St	III	31	40.9	11.4	52.3	0.32	22.2	C
SW Trenton St	III	35	16.9	14.1	31.0	0.13	15.3	D
SW Thistle St	III	35	29.7	5.7	35.4	0.25	25.2	B
SW Kenyon St	III	35	30.0	2.7	32.7	0.25	27.5	B
SW Holden St	III	35	16.7	8.2	24.9	0.12	17.9	D
SW Orchard St	III	35	36.1	5.2	41.3	0.30	26.2	B
SW Myrtle St	III	35	11.2	5.7	16.9	0.08	17.6	D
SW Holly St	III	35	31.6	2.5	34.1	0.26	27.8	B
SW Juneau St	III	35	62.2	4.7	66.9	0.52	27.9	B
SW Brandon St	III	35	30.1	3.8	33.9	0.25	26.6	B
SW Oregon St	III	35	65.4	10.2	75.6	0.64	30.3	A
SW Genesee St	III	35	16.4	32.0	48.4	0.13	9.5	F
SW Andover St	III	35	30.0	14.1	44.1	0.25	20.4	C
SW Spokane St	III	35	19.7	35.7	55.4	0.15	10.0	E
<b>Total</b>	<b>III</b>		<b>436.9</b>	<b>156.0</b>	<b>592.9</b>	<b>3.66</b>	<b>22.2</b>	<b>C</b>

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**Arterial Level of Service: SB Delridge Way SW**


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Cross Street	Arterial Class	Flow Speed	Running Time	Signal Delay	Travel Time (s)	Dist (mi)	Arterial Speed	Arterial LOS
SW Andover St	III	35	16.6	14.4	31.0	0.12	14.3	D
SW Genesee St	III	35	30.0	14.0	44.0	0.25	20.5	C
SW Oregon St	III	35	16.4	2.7	19.1	0.13	24.1	B
SW Brandon St	III	35	65.4	4.0	69.4	0.64	33.0	A
SW Juneau St	III	35	30.1	5.6	35.7	0.25	25.3	B
SW Holly St	III	35	62.2	4.6	66.8	0.52	27.9	B
SW Myrtle St	III	35	31.6	3.7	35.3	0.26	26.8	B
SW Orchard St	III	35	11.2	4.4	15.6	0.08	19.1	C
SW Holden St	III	35	36.1	9.3	45.4	0.30	23.8	C
SW Kenyon St	III	35	16.7	0.7	17.4	0.12	25.6	B
SW Thistle St	III	35	30.0	4.7	34.7	0.25	25.9	B
SW Trenton St	III	35	29.7	17.3	47.0	0.25	19.0	C
SW Barton St	III	35	16.9	5.4	22.3	0.13	21.3	C
SW Roxbury St	III	35	16.7	27.1	43.8	0.12	10.2	E
<b>Total</b>	<b>III</b>		<b>409.6</b>	<b>117.9</b>	<b>527.5</b>	<b>3.43</b>	<b>23.4</b>	<b>C</b>

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**Arterial Level of Service: NB Delridge Way SW**


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Cross Street	Arterial Class	Flow Speed	Running Time	Signal Delay	Travel Time (s)	Dist (mi)	Arterial Speed	Arterial LOS
SW Henderson St	III	31	40.9	16.0	56.9	0.32	20.4	C
SW Trenton St	III	35	16.9	11.4	28.3	0.13	16.8	D
SW Thistle St	III	35	29.7	6.8	36.5	0.25	24.4	B
SW Kenyon St	III	35	30.0	4.0	34.0	0.25	26.4	B
SW Holden St	III	35	16.7	4.5	21.2	0.12	21.0	C
SW Orchard St	III	35	36.1	16.7	52.8	0.30	20.5	C
SW Myrtle St	III	35	11.2	6.0	17.2	0.08	17.3	D
SW Holly St	III	35	31.6	11.9	43.5	0.26	21.8	C
SW Juneau St	III	35	62.2	0.5	62.7	0.52	29.8	B
SW Brandon St	III	35	30.1	1.8	31.9	0.25	28.3	B
SW Oregon St	III	35	65.4	7.5	72.9	0.64	31.4	A
SW Genesee St	III	35	16.4	3.5	19.9	0.13	23.1	C
SW Andover St	III	35	30.0	14.2	44.2	0.25	20.4	C
	III	30	20.7	18.6	39.3	0.15	14.1	D
<b>Total</b>	<b>III</b>		<b>437.9</b>	<b>123.4</b>	<b>561.3</b>	<b>3.66</b>	<b>23.5</b>	<b>C</b>

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**Arterial Level of Service: SB Delridge Way SW**


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Cross Street	Arterial Class	Flow Speed	Running Time	Signal Delay	Travel Time (s)	Dist (mi)	Arterial Speed	Arterial LOS
SW Andover St	III	35	16.6	45.8	62.4	0.12	7.1	F
SW Genesee St	III	35	30.0	4.9	34.9	0.25	25.8	B
SW Oregon St	III	35	16.4	3.7	20.1	0.13	22.9	C
SW Brandon St	III	35	65.4	5.4	70.8	0.64	32.3	A
SW Juneau St	III	35	30.1	3.8	33.9	0.25	26.6	B
SW Holly St	III	35	62.2	11.9	74.1	0.52	25.2	B
SW Myrtle St	III	35	31.6	9.5	41.1	0.26	23.0	C
SW Orchard St	III	35	11.2	7.7	18.9	0.08	15.8	D
SW Holden St	III	35	36.1	5.2	41.3	0.30	26.2	B
SW Kenyon St	III	35	16.7	0.5	17.2	0.12	25.9	B
SW Thistle St	III	35	30.0	4.7	34.7	0.25	25.9	B
SW Trenton St	III	35	29.7	11.7	41.4	0.25	21.5	C
SW Barton St	III	35	16.9	10.1	27.0	0.13	17.6	D
SW Roxbury St	III	35	16.7	15.0	31.7	0.12	14.1	D
<b>Total</b>	<b>III</b>		<b>409.6</b>	<b>139.9</b>	<b>549.5</b>	<b>3.43</b>	<b>22.5</b>	<b>C</b>

# Lanes, Volumes, Timings

## 3: 16th Ave SW & SW Roxbury St & Delridge Way SW

6/1/2015














Lane Group	EBL2	EBL	EBT	EBR	WBL	WBT	WBR	WBR2	NBL2	NBL	NBT	NBR
Lane Configurations												
Traffic Volume (vph)	7	13	605	4	9	275	97	47	10	39	73	46
Future Volume (vph)	7	13	605	4	9	275	97	47	10	39	73	46
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	11	12	12	12	12	10	12
Grade (%)			0%			0%					0%	
Storage Length (ft)		110		0	97		0			0		110
Storage Lanes		1		0	1		0			0		1
Taper Length (ft)		25			25					25		
Lane Util. Factor	0.95	1.00	0.95	0.95	1.00	1.00	1.00	1.00	0.95	0.95	0.95	0.95
Ped Bike Factor		0.99	1.00		0.99	0.99					0.98	
Frt			0.999			0.949					0.959	
Flt Protected		0.950			0.950						0.986	
Satd. Flow (prot)	0	1787	3569	0	1656	1582	0	0	0	0	2255	0
Flt Permitted		0.337			0.337						0.828	
Satd. Flow (perm)	0	629	3569	0	580	1582	0	0	0	0	1876	0
Right Turn on Red				Yes			Yes					Yes
Satd. Flow (RTOR)			1			8					50	
Link Speed (mph)			30			30					30	
Link Distance (ft)			337			276					889	
Travel Time (s)			7.7			6.3					20.2	
Confl. Peds. (#/hr)	9	9		17	17		7	9	7	9		14
Confl. Bikes (#/hr)												
Peak Hour Factor	0.93	0.93	0.93	0.93	0.88	0.88	0.88	0.88	0.91	0.91	0.91	0.91
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	1%	1%	1%	1%	9%	9%	9%	9%	40%	40%	40%	40%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)												
Mid-Block Traffic (%)			0%			0%					0%	
Adj. Flow (vph)	8	14	651	4	10	313	110	53	11	43	80	51
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	22	655	0	10	476	0	0	0	0	185	0
Turn Type	D.P+P	D.P+P	NA		D.P+P	NA			Perm	Perm	NA	
Protected Phases	7	7	4		3	8					2	
Permitted Phases	8	8			4				2	2		
Detector Phase	7	7	4		3	8			2	2	2	
Switch Phase												
Minimum Initial (s)	5.0	5.0	7.0		5.0	7.0			7.0	7.0	7.0	
Minimum Split (s)	9.0	9.0	24.5		9.0	28.5			24.5	24.5	24.5	
Total Split (s)	9.0	9.0	48.0		9.0	48.0			25.0	25.0	25.0	
Total Split (%)	9.0%	9.0%	48.0%		9.0%	48.0%			25.0%	25.0%	25.0%	
Yellow Time (s)	3.5	3.5	3.5		3.5	3.5			3.5	3.5	3.5	
All-Red Time (s)	0.0	0.0	1.0		0.0	1.0			1.0	1.0	1.0	
Lost Time Adjust (s)		0.0	0.0		0.0	0.0					0.0	
Total Lost Time (s)		3.5	4.5		3.5	4.5					4.5	
Lead/Lag	Lead	Lead	Lag		Lead	Lag			Lag	Lag	Lag	
Lead-Lag Optimize?												
Recall Mode	None	None	C-Max		None	C-Max			Max	Max	Max	
Act Effect Green (s)		52.1	50.7		52.8	48.9					20.5	

Lanes, Volumes, Timings

3: 16th Ave SW & SW Roxbury St & Delridge Way SW

6/1/2015

								
Lane Group	SBL	SBT	SBR	SBR2	SEL2	SEL	SER	SER2
Lane Configurations								
Traffic Volume (vph)	45	48	18	1	2	135	26	5
Future Volume (vph)	45	48	18	1	2	135	26	5
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	14	12	16	12	12	12	16
Grade (%)		0%				0%		
Storage Length (ft)	0		200			0	90	
Storage Lanes	0		1			1	0	
Taper Length (ft)	25					25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor		0.99		0.98		0.98		
Frt		0.976		0.850		0.975		
Flt Protected		0.980				0.961		
Satd. Flow (prot)	0	1633	0	1551	0	1765	0	0
Flt Permitted		0.805				0.961		
Satd. Flow (perm)	0	1333	0	1513	0	1737	0	0
Right Turn on Red				Yes				Yes
Satd. Flow (RTOR)				153		104		
Link Speed (mph)		30				35		
Link Distance (ft)		390				654		
Travel Time (s)		8.9				12.7		
Confl. Peds. (#/hr)	14		7	9	9			7
Confl. Bikes (#/hr)								
Peak Hour Factor	0.82	0.82	0.82	0.82	0.96	0.96	0.96	0.96
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	18%	18%	18%	18%	0%	0%	0%	0%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0
Parking (#/hr)								
Mid-Block Traffic (%)		0%				0%		
Adj. Flow (vph)	55	59	22	1	2	141	27	5
Shared Lane Traffic (%)								
Lane Group Flow (vph)	0	136	0	1	0	175	0	0
Turn Type	Perm	NA		Free	Prot	Prot		
Protected Phases		2			1	1		
Permitted Phases	2			Free				
Detector Phase	2	2			1	1		
Switch Phase								
Minimum Initial (s)	7.0	7.0			7.0	7.0		
Minimum Split (s)	24.5	24.5			12.0	12.0		
Total Split (s)	25.0	25.0			18.0	18.0		
Total Split (%)	25.0%	25.0%			18.0%	18.0%		
Yellow Time (s)	3.5	3.5			3.5	3.5		
All-Red Time (s)	1.0	1.0			1.0	1.0		
Lost Time Adjust (s)		0.0				0.0		
Total Lost Time (s)		4.5				4.5		
Lead/Lag	Lag	Lag			Lead	Lead		
Lead-Lag Optimize?								
Recall Mode	Max	Max			Max	Max		
Act Effect Green (s)		20.5		100.0		13.5		

Lanes, Volumes, Timings  
 3: 16th Ave SW & SW Roxbury St & Delridge Way SW

6/1/2015



Lane Group	EBL2	EBL	EBT	EBR	WBL	WBT	WBR	WBR2	NBL2	NBL	NBT	NBR
Actuated g/C Ratio		0.52	0.51		0.53	0.49					0.20	
v/c Ratio		0.06	0.36		0.03	0.61					0.44	
Control Delay		5.3	7.6		6.3	15.2					28.7	
Queue Delay		0.0	0.2		0.0	0.6					0.0	
Total Delay		5.3	7.8		6.3	15.7					28.7	
LOS		A	A		A	B					C	
Approach Delay			7.7			15.5					28.7	
Approach LOS			A			B					C	

Intersection Summary

Area Type:	Other
Cycle Length:	100
Actuated Cycle Length:	100
Offset:	45 (45%), Referenced to phase 4:EBWB and 8:EBWB, Start of Green
Natural Cycle:	75
Control Type:	Actuated-Coordinated
Maximum v/c Ratio:	0.61
Intersection Signal Delay:	17.2
Intersection Capacity Utilization	61.1%
Analysis Period (min)	15
Intersection LOS:	B
ICU Level of Service	B

Splits and Phases: 3: 16th Ave SW & SW Roxbury St & Delridge Way SW

φ1	φ2	φ3	φ4 (R)
18 s	25 s	9 s	48 s
		φ7	φ8 (R)
		9 s	48 s

Lanes, Volumes, Timings  
 3: 16th Ave SW & SW Roxbury St & Delridge Way SW

6/1/2015



Lane Group	SBL	SBT	SBR	SBR2	SEL2	SEL	SER	SER2
Actuated g/C Ratio		0.20		1.00		0.14		
v/c Ratio		0.50		0.00		0.53		
Control Delay		42.5		0.0		27.1		
Queue Delay		0.0		0.0		0.0		
Total Delay		42.5		0.0		27.1		
LOS		D		A		C		
Approach Delay		42.1				27.1		
Approach LOS		D				C		

Intersection Summary



Lanes, Volumes, Timings

4: Delridge Way SW & SW Barton St/SW Henderson St













6/1/2015

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	79	160	26	6	91	53	42	339	2	61	312	0
Future Volume (vph)	79	160	26	6	91	53	42	339	2	61	312	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	10	12	12	10	12	12	12	12	12	12	12
Grade (%)		0%			0%			0%			0%	
Storage Length (ft)	0		0	0		0	150		0	180		0
Storage Lanes	0		0	0		0	1		0	1		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor		1.00			0.99		0.99	1.00		0.99		
Frt		0.987			0.952			0.999				
Flt Protected		0.985			0.998		0.950			0.950		
Satd. Flow (prot)	0	1591	0	0	1576	0	1736	1824	0	1752	1845	0
Flt Permitted		0.867			0.986		0.507			0.459		
Satd. Flow (perm)	0	1399	0	0	1556	0	918	1824	0	834	1845	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		9			47			1				
Link Speed (mph)		30			30			30			35	
Link Distance (ft)		130			618			1395			188	
Travel Time (s)		3.0			14.0			31.7			3.7	
Confl. Peds. (#/hr)	3		12	12		3	8		15	15		8
Confl. Bikes (#/hr)												
Peak Hour Factor	0.83	0.83	0.83	0.96	0.96	0.96	0.80	0.80	0.80	0.85	0.85	0.85
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	8%	8%	8%	6%	6%	6%	4%	4%	4%	3%	3%	3%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)												
Mid-Block Traffic (%)		0%			0%			0%			0%	
Adj. Flow (vph)	95	193	31	6	95	55	53	424	3	72	367	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	319	0	0	156	0	53	427	0	72	367	0
Turn Type	Perm	NA		Perm	NA		Perm	NA		Perm	NA	
Protected Phases		4			4			2			2	
Permitted Phases	4			4			2			2		
Detector Phase	4	4		4	4		2	2		2	2	
Switch Phase												
Minimum Initial (s)	7.0	7.0		7.0	7.0		7.0	7.0		7.0	7.0	
Minimum Split (s)	29.0	29.0		29.0	29.0		22.0	22.0		22.0	22.0	
Total Split (s)	33.0	33.0		33.0	33.0		37.0	37.0		37.0	37.0	
Total Split (%)	47.1%	47.1%		47.1%	47.1%		52.9%	52.9%		52.9%	52.9%	
Yellow Time (s)	3.5	3.5		3.5	3.5		4.0	4.0		4.0	4.0	
All-Red Time (s)	1.0	1.0		1.0	1.0		1.0	1.0		1.0	1.0	
Lost Time Adjust (s)		0.0			0.0		0.0	0.0		0.0	0.0	
Total Lost Time (s)		4.5			4.5		5.0	5.0		5.0	5.0	
Lead/Lag												
Lead-Lag Optimize?												
Recall Mode	None	None		None	None		C-Max	C-Max		C-Max	C-Max	
Act Effect Green (s)		20.4			20.4		40.1	40.1		40.1	40.1	

Lanes, Volumes, Timings

4: Delridge Way SW & SW Barton St/SW Henderson St

6/1/2015

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Actuated g/C Ratio		0.29			0.29		0.57	0.57		0.57	0.57	
v/c Ratio		0.77			0.32		0.10	0.41		0.15	0.35	
Control Delay		33.9			13.5		9.8	11.4		5.5	5.4	
Queue Delay		0.0			0.0		0.0	0.0		0.0	0.0	
Total Delay		33.9			13.5		9.8	11.4		5.5	5.4	
LOS		C			B		A	B		A	A	
Approach Delay		33.9			13.5			11.2			5.4	
Approach LOS		C			B			B			A	

Intersection Summary

Area Type: Other

Cycle Length: 70

Actuated Cycle Length: 70

Offset: 56 (80%), Referenced to phase 2:NBSB, Start of Green

Natural Cycle: 55

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.77

Intersection Signal Delay: 14.8

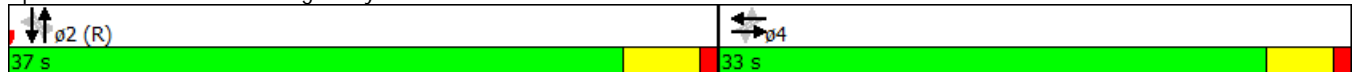
Intersection LOS: B

Intersection Capacity Utilization 65.5%

ICU Level of Service C














Analysis Period (min) 15

Splits and Phases: 4: Delridge Way SW & SW Barton St/SW Henderson St



Lanes, Volumes, Timings  
6: Delridge Way SW & SW Holden St

6/1/2015

						
Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations				 	 	
Traffic Volume (vph)	366	70	65	485	385	143
Future Volume (vph)	366	70	65	485	385	143
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	10	10	10	10	10	10
Grade (%)	0%			0%	0%	
Storage Length (ft)	0	250	0			80
Storage Lanes	1	1	0			1
Taper Length (ft)	25		25			
Lane Util. Factor	1.00	1.00	0.95	0.95	0.95	1.00
Ped Bike Factor		0.96		1.00		
Fr <sub>t</sub>		0.850				0.850
Fl <sub>t</sub> Protected	0.950			0.994		
Satd. Flow (prot)	1636	1463	0	3220	3271	1463
Fl <sub>t</sub> Permitted	0.950			0.843		
Satd. Flow (perm)	1636	1402	0	2726	3271	1463
Right Turn on Red		Yes				Yes
Satd. Flow (RTOR)		81				168
Link Speed (mph)	30			35	35	
Link Distance (ft)	4001			245	1082	
Travel Time (s)	90.9			4.8	21.1	
Confl. Peds. (#/hr)		22	12			12
Confl. Bikes (#/hr)						
Peak Hour Factor	0.86	0.86	0.83	0.83	0.85	0.85
Growth Factor	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	3%	3%	4%	4%	3%	3%
Bus Blockages (#/hr)	0	0	0	0	0	0
Parking (#/hr)						
Mid-Block Traffic (%)	0%			0%	0%	
Adj. Flow (vph)	426	81	78	584	453	168
Shared Lane Traffic (%)						
Lane Group Flow (vph)	426	81	0	662	453	168
Turn Type	Prot	Perm	Perm	NA	NA	Prot
Protected Phases	4			2	2	2
Permitted Phases		4	2			
Detector Phase	4	4	2	2	2	2
Switch Phase						
Minimum Initial (s)	7.0	7.0	7.0	7.0	7.0	7.0
Minimum Split (s)	19.5	19.5	21.0	21.0	21.0	21.0
Total Split (s)	34.0	34.0	36.0	36.0	36.0	36.0
Total Split (%)	48.6%	48.6%	51.4%	51.4%	51.4%	51.4%
Yellow Time (s)	3.5	3.5	4.0	4.0	4.0	4.0
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0		0.0	0.0	0.0
Total Lost Time (s)	4.5	4.5		5.0	5.0	5.0
Lead/Lag						
Lead-Lag Optimize?						
Recall Mode	None	None	C-Max	C-Max	C-Max	C-Max
Act Effect Green (s)	23.2	23.2		37.3	37.3	37.3

Lanes, Volumes, Timings  
6: Delridge Way SW & SW Holden St

6/1/2015



Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Actuated g/C Ratio	0.33	0.33		0.53	0.53	0.53
v/c Ratio	0.79	0.16		0.46	0.26	0.20
Control Delay	31.5	4.3		8.2	9.3	2.3
Queue Delay	0.0	0.0		0.0	0.0	0.0
Total Delay	31.5	4.3		8.2	9.3	2.3
LOS	C	A		A	A	A
Approach Delay	27.2			8.2	7.4	
Approach LOS	C			A	A	

Intersection Summary

Area Type: Other

Cycle Length: 70

Actuated Cycle Length: 70

Offset: 37 (53%), Referenced to phase 2:NBSB, Start of Green

Natural Cycle: 45

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.79

Intersection Signal Delay: 13.3

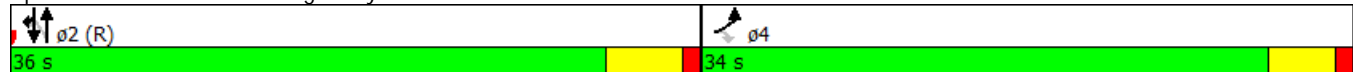
Intersection LOS: B

Intersection Capacity Utilization 59.3%

ICU Level of Service B





















Analysis Period (min) 15

Splits and Phases: 6: Delridge Way SW & SW Holden St



Lanes, Volumes, Timings  
 10: Delridge Way SW & SW Andover St

6/1/2015

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	244	10	10	8	20	43	29	823	9	34	353	98
Future Volume (vph)	244	10	10	8	20	43	29	823	9	34	353	98
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	11	11	12	12	12	12	12	12	12	12	12	12
Grade (%)		0%			0%			0%			0%	
Storage Length (ft)	0		0	0		0	110		0	110		0
Storage Lanes	0		0	0		0	1		1	1		1
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor		0.97			0.96		0.96		0.94			0.87
Frt		0.995			0.918				0.850			0.850
Flt Protected		0.956			0.994		0.950			0.950		
Satd. Flow (prot)	0	1659	0	0	1630	0	1752	1845	1568	1687	1776	1509
Flt Permitted		0.956			0.994		0.464			0.151		
Satd. Flow (perm)	0	1615	0	0	1623	0	825	1845	1469	268	1776	1319
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		2			57				55			110
Link Speed (mph)		30			25			35			35	
Link Distance (ft)		534			366			285			320	
Travel Time (s)		12.1			10.0			5.6			6.2	
Confl. Peds. (#/hr)	12		24	24		12	27		11	11		27
Confl. Bikes (#/hr)												
Peak Hour Factor	0.80	0.80	0.80	0.73	0.73	0.73	0.95	0.95	0.95	0.89	0.89	0.89
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	5%	5%	5%	3%	3%	3%	3%	3%	3%	7%	7%	7%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)												
Mid-Block Traffic (%)		0%			0%			0%			0%	
Adj. Flow (vph)	305	13	13	11	27	59	31	866	9	38	397	110
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	331	0	0	97	0	31	866	9	38	397	110
Turn Type	Split	NA		Split	NA		Perm	NA	Perm	Perm	NA	Perm
Protected Phases	3	3		4	4			2			2	
Permitted Phases							2		2	2		2
Detector Phase	3	3		4	4		2	2	2	2	2	2
Switch Phase												
Minimum Initial (s)	7.0	7.0		7.0	7.0		7.0	7.0	7.0	7.0	7.0	7.0
Minimum Split (s)	28.0	28.0		27.0	27.0		21.0	21.0	21.0	21.0	21.0	21.0
Total Split (s)	30.0	30.0		27.0	27.0		63.0	63.0	63.0	63.0	63.0	63.0
Total Split (%)	25.0%	25.0%		22.5%	22.5%		52.5%	52.5%	52.5%	52.5%	52.5%	52.5%
Yellow Time (s)	3.5	3.5		3.5	3.5		4.0	4.0	4.0	4.0	4.0	4.0
All-Red Time (s)	1.0	1.0		1.0	1.0		1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)		0.0			0.0		0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)		4.5			4.5		5.0	5.0	5.0	5.0	5.0	5.0
Lead/Lag	Lead	Lead		Lag	Lag							
Lead-Lag Optimize?	Yes	Yes		Yes	Yes							
Recall Mode	None	None		None	None		C-Max	C-Max	C-Max	C-Max	C-Max	C-Max
Act Effect Green (s)		25.1			9.3		71.6	71.6	71.6	71.6	71.6	71.6

Lanes, Volumes, Timings  
 10: Delridge Way SW & SW Andover St

6/1/2015

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Actuated g/C Ratio		0.21			0.08		0.60	0.60	0.60	0.60	0.60	0.60
v/c Ratio		0.95			0.54		0.06	0.79	0.01	0.24	0.37	0.13
Control Delay		83.7			35.8		5.4	14.1	0.0	17.4	14.4	2.6
Queue Delay		0.0			0.0		0.0	0.0	0.0	0.0	0.0	0.0
Total Delay		83.7			35.8		5.4	14.1	0.0	17.4	14.4	2.6
LOS		F			D		A	B	A	B	B	A
Approach Delay		83.7			35.8			13.7			12.2	
Approach LOS		F			D			B			B	

Intersection Summary












Area Type:	Other
Cycle Length:	120
Actuated Cycle Length:	120
Offset:	53 (44%), Referenced to phase 2:NBSB, Start of Green
Natural Cycle:	110
Control Type:	Actuated-Coordinated
Maximum v/c Ratio:	0.95
Intersection Signal Delay:	26.7
Intersection Capacity Utilization	72.6%
Analysis Period (min)	15
Intersection LOS:	C
ICU Level of Service	C

Splits and Phases: 10: Delridge Way SW & SW Andover St

02 (R) 63 s	03 30 s	04 27 s
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Lanes, Volumes, Timings  
 13: Delridge Way SW & SW Genesee St

6/1/2015

						
Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	108	70	91	874	319	8
Future Volume (vph)	108	70	91	874	319	8
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	9	12	12	12	12	12
Grade (%)	0%			0%	0%	
Storage Length (ft)	0	0	130			0
Storage Lanes	1	0	1			0
Taper Length (ft)	25		25			
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor	0.97		0.99		1.00	
Frt	0.947				0.997	
Flt Protected	0.971		0.950			
Satd. Flow (prot)	1503	0	1736	1827	1802	0
Flt Permitted	0.971		0.498			
Satd. Flow (perm)	1475	0	904	1827	1802	0
Right Turn on Red		Yes				Yes
Satd. Flow (RTOR)	25				2	
Link Speed (mph)	30			35	35	
Link Distance (ft)	389			675	1035	
Travel Time (s)	8.8			13.1	20.2	
Confl. Peds. (#/hr)	10	6	3			3
Confl. Bikes (#/hr)						
Peak Hour Factor	0.72	0.72	0.67	0.67	0.89	0.89
Growth Factor	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	3%	3%	4%	4%	5%	5%
Bus Blockages (#/hr)	0	0	0	0	0	0
Parking (#/hr)						
Mid-Block Traffic (%)	0%			0%	0%	
Adj. Flow (vph)	150	97	136	1304	358	9
Shared Lane Traffic (%)						
Lane Group Flow (vph)	247	0	136	1304	367	0
Turn Type	Prot		D.P+P	NA	NA	
Protected Phases	4		5	2	6	
Permitted Phases			6			
Detector Phase	4		5	2	6	
Switch Phase						
Minimum Initial (s)	7.0		5.0	7.0	7.0	
Minimum Split (s)	23.5		12.0	17.0	17.0	
Total Split (s)	32.0		17.0	88.0	71.0	
Total Split (%)	26.7%		14.2%	73.3%	59.2%	
Yellow Time (s)	3.5		4.0	4.0	4.0	
All-Red Time (s)	1.0		0.0	1.0	1.0	
Lost Time Adjust (s)	0.0		0.0	0.0	0.0	
Total Lost Time (s)	4.5		4.0	5.0	5.0	
Lead/Lag			Lead		Lag	
Lead-Lag Optimize?						
Recall Mode	None		None	C-Max	C-Max	
Act Effect Green (s)	22.3		85.2	88.2	76.0	

Lanes, Volumes, Timings  
 13: Delridge Way SW & SW Genesee St

6/1/2015



Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Actuated g/C Ratio	0.19		0.71	0.74	0.63	
v/c Ratio	0.83		0.19	0.97	0.32	
Control Delay	64.0		5.4	32.0	14.0	
Queue Delay	0.0		0.0	0.0	0.0	
Total Delay	64.0		5.4	32.0	14.0	
LOS	E		A	C	B	
Approach Delay	64.0			29.5	14.0	
Approach LOS	E			C	B	

Intersection Summary

Area Type:	Other
Cycle Length:	120
Actuated Cycle Length:	120
Offset:	18 (15%), Referenced to phase 2:NBT and 6:NBSB, Start of Green
Natural Cycle:	100
Control Type:	Actuated-Coordinated
Maximum v/c Ratio:	0.97
Intersection Signal Delay:	30.9
Intersection Capacity Utilization	65.4%
Analysis Period (min)	15
Intersection LOS:	C
ICU Level of Service	C

Splits and Phases: 13: Delridge Way SW & SW Genesee St





Lanes, Volumes, Timings  
 16: Delridge Way SW & SW Oregon St

6/1/2015

	↙	↖	↑	↗	↘	↓
Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	↙		↑	↗	↘	↑
Traffic Volume (vph)	27	229	627	46	246	331
Future Volume (vph)	27	229	627	46	246	331
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12
Grade (%)	0%		0%			0%
Storage Length (ft)	0	0		50	210	
Storage Lanes	1	0		1	1	
Taper Length (ft)	25				25	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor				0.91		
Frt	0.879			0.850		
Flt Protected	0.995				0.950	
Satd. Flow (prot)	1613	0	1827	1553	1736	1827
Flt Permitted	0.995				0.327	
Satd. Flow (perm)	1613	0	1827	1418	597	1827
Right Turn on Red		Yes		Yes		
Satd. Flow (RTOR)	260			18		
Link Speed (mph)	30		35			35
Link Distance (ft)	157		3358			675
Travel Time (s)	3.6		65.4			13.1
Confl. Peds. (#/hr)				13	13	
Confl. Bikes (#/hr)				1		
Peak Hour Factor	0.88	0.88	0.90	0.90	0.94	0.94
Growth Factor	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	3%	3%	4%	4%	4%	4%
Bus Blockages (#/hr)	0	0	0	0	0	0
Parking (#/hr)						
Mid-Block Traffic (%)	0%		0%			0%
Adj. Flow (vph)	31	260	697	51	262	352
Shared Lane Traffic (%)						
Lane Group Flow (vph)	291	0	697	51	262	352
Turn Type	Prot		NA	Perm	D.P+P	NA
Protected Phases	4		2		1	6
Permitted Phases				2	2	
Detector Phase	4		2	2	1	6
Switch Phase						
Minimum Initial (s)	7.0		7.0	7.0	5.0	7.0
Minimum Split (s)	12.0		18.0	18.0	9.0	18.0
Total Split (s)	25.0		81.0	81.0	14.0	95.0
Total Split (%)	20.8%		67.5%	67.5%	11.7%	79.2%
Yellow Time (s)	3.5		4.0	4.0	4.0	4.0
All-Red Time (s)	1.0		1.0	1.0	0.0	1.0
Lost Time Adjust (s)	0.0		0.0	0.0	0.0	0.0
Total Lost Time (s)	4.5		5.0	5.0	4.0	5.0
Lead/Lag			Lag	Lag	Lead	
Lead-Lag Optimize?						
Recall Mode	None		C-Max	C-Max	None	C-Max
Act Effect Green (s)	10.6		86.9	86.9	96.9	99.9

Lanes, Volumes, Timings  
 16: Delridge Way SW & SW Oregon St

6/1/2015



Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Actuated g/C Ratio	0.09		0.72	0.72	0.81	0.83
v/c Ratio	0.77		0.53	0.05	0.46	0.23
Control Delay	22.9		10.2	4.7	6.5	2.7
Queue Delay	0.3		0.1	0.0	0.0	0.0
Total Delay	23.1		10.3	4.7	6.5	2.7
LOS	C		B	A	A	A
Approach Delay	23.1		10.0			4.3
Approach LOS	C		A			A

Intersection Summary

Area Type: Other

Cycle Length: 120

Actuated Cycle Length: 120

Offset: 30 (25%), Referenced to phase 2:NBSB and 6:SBT, Start of Green

Natural Cycle: 60

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.77

Intersection Signal Delay: 10.2

Intersection LOS: B

Intersection Capacity Utilization 73.5%

ICU Level of Service D



















Analysis Period (min) 15

Splits and Phases: 16: Delridge Way SW & SW Oregon St



Lanes, Volumes, Timings  
 18: Delridge Way SW & SW Brandon St

6/1/2015

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	68	2	23	1	3	12	11	664	2	2	307	18
Future Volume (vph)	68	2	23	1	3	12	11	664	2	2	307	18
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12
Grade (%)		0%			0%			0%			0%	
Storage Length (ft)	0		0	0		0	100		0	100		0
Storage Lanes	0		0	0		0	1		0	1		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor		0.98			0.98		0.99	1.00			1.00	
Frt		0.966			0.894						0.992	
Flt Protected		0.965			0.998		0.950			0.950		
Satd. Flow (prot)	0	1660	0	0	1624	0	1752	1844	0	1736	1807	0
Flt Permitted		0.769			0.989		0.520			0.333		
Satd. Flow (perm)	0	1314	0	0	1607	0	946	1844	0	608	1807	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		26			18						7	
Link Speed (mph)		25			25			35			35	
Link Distance (ft)		556			356			1325			3358	
Travel Time (s)		15.2			9.7			25.8			65.4	
Confl. Peds. (#/hr)	6		29	29		6	10		11	11		10
Confl. Bikes (#/hr)									3			
Peak Hour Factor	0.83	0.83	0.83	0.68	0.68	0.68	0.90	0.90	0.90	0.79	0.79	0.79
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	5%	5%	5%	2%	2%	2%	3%	3%	3%	4%	4%	4%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)												
Mid-Block Traffic (%)		0%			0%			0%			0%	
Adj. Flow (vph)	82	2	28	1	4	18	12	738	2	3	389	23
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	112	0	0	23	0	12	740	0	3	412	0
Turn Type	Perm	NA		Perm	NA		Perm	NA		Perm	NA	
Protected Phases		4			4			2			2	
Permitted Phases	4			4			2			2		
Detector Phase	4	4		4	4		2	2		2	2	
Switch Phase												
Minimum Initial (s)	7.0	7.0		7.0	7.0		7.0	7.0		7.0	7.0	
Minimum Split (s)	27.0	27.0		27.0	27.0		17.0	17.0		17.0	17.0	
Total Split (s)	27.0	27.0		27.0	27.0		43.0	43.0		43.0	43.0	
Total Split (%)	38.6%	38.6%		38.6%	38.6%		61.4%	61.4%		61.4%	61.4%	
Yellow Time (s)	3.0	3.0		3.0	3.0		4.0	4.0		4.0	4.0	
All-Red Time (s)	1.0	1.0		1.0	1.0		1.0	1.0		1.0	1.0	
Lost Time Adjust (s)		0.0			0.0		0.0	0.0		0.0	0.0	
Total Lost Time (s)		4.0			4.0		5.0	5.0		5.0	5.0	
Lead/Lag												
Lead-Lag Optimize?												
Recall Mode	None	None		None	None		C-Max	C-Max		C-Max	C-Max	
Act Effect Green (s)		9.6			9.6		54.6	54.6		54.6	54.6	

Lanes, Volumes, Timings  
 18: Delridge Way SW & SW Brandon St

6/1/2015

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Actuated g/C Ratio		0.14			0.14		0.78	0.78		0.78	0.78	
v/c Ratio		0.56			0.10		0.02	0.51		0.01	0.29	
Control Delay		32.2			14.4		1.1	3.8		3.5	4.0	
Queue Delay		0.0			0.0		0.0	0.0		0.0	0.0	
Total Delay		32.2			14.4		1.1	3.8		3.5	4.0	
LOS		C			B		A	A		A	A	
Approach Delay		32.2			14.4			3.7			4.0	
Approach LOS		C			B			A			A	

Intersection Summary



















Area Type: Other  
 Cycle Length: 70  
 Actuated Cycle Length: 70  
 Offset: 44 (63%), Referenced to phase 2:NBSB, Start of Green  
 Natural Cycle: 60  
 Control Type: Actuated-Coordinated  
 Maximum v/c Ratio: 0.56  
 Intersection Signal Delay: 6.4  
 Intersection Capacity Utilization 59.2%  
 Analysis Period (min) 15  
 Intersection LOS: A  
 ICU Level of Service B

Splits and Phases: 18: Delridge Way SW & SW Brandon St















Lanes, Volumes, Timings  
 21: Delridge Way SW & SW Juneau St

6/1/2015

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	8	3	16	15	0	27	13	627	16	20	293	6
Future Volume (vph)	8	3	16	15	0	27	13	627	16	20	293	6
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	16	12	12	12	12	12	12	12	12	12	12
Grade (%)		0%			0%			0%			0%	
Storage Length (ft)	0		0	0		0	100		0	100		0
Storage Lanes	0		0	0		0	1		0	1		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor		0.97			0.97		1.00	1.00			1.00	
Frt		0.920			0.913			0.996			0.997	
Flt Protected		0.985			0.982		0.950			0.950		
Satd. Flow (prot)	0	1728	0	0	1601	0	1752	1835	0	1736	1821	0
Flt Permitted		0.903			0.864		0.542			0.344		
Satd. Flow (perm)	0	1577	0	0	1397	0	998	1835	0	628	1821	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		26			36			3			2	
Link Speed (mph)		25			25			35			35	
Link Distance (ft)		492			412			2736			1325	
Travel Time (s)		13.4			11.2			53.3			25.8	
Confl. Peds. (#/hr)	9		14	14		9	1		14	14		1
Confl. Bikes (#/hr)												
Peak Hour Factor	0.61	0.61	0.61	0.75	0.75	0.75	0.87	0.87	0.87	0.81	0.81	0.81
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	10%	10%	10%	4%	4%	4%	3%	3%	3%	4%	4%	4%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)												
Mid-Block Traffic (%)		0%			0%			0%			0%	
Adj. Flow (vph)	13	5	26	20	0	36	15	721	18	25	362	7
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	44	0	0	56	0	15	739	0	25	369	0
Turn Type	Perm	NA		Perm	NA		Perm	NA		Perm	NA	
Protected Phases		4			4			2			2	
Permitted Phases	4			4			2			2		
Detector Phase	4	4		4	4		2	2		2	2	
Switch Phase												
Minimum Initial (s)	7.0	7.0		7.0	7.0		7.0	7.0		7.0	7.0	
Minimum Split (s)	25.0	25.0		25.0	25.0		18.0	18.0		18.0	18.0	
Total Split (s)	25.0	25.0		25.0	25.0		45.0	45.0		45.0	45.0	
Total Split (%)	35.7%	35.7%		35.7%	35.7%		64.3%	64.3%		64.3%	64.3%	
Yellow Time (s)	3.5	3.5		3.5	3.5		4.0	4.0		4.0	4.0	
All-Red Time (s)	1.0	1.0		1.0	1.0		1.0	1.0		1.0	1.0	
Lost Time Adjust (s)		0.0			0.0		0.0	0.0		0.0	0.0	
Total Lost Time (s)		4.5			4.5		5.0	5.0		5.0	5.0	
Lead/Lag												
Lead-Lag Optimize?												
Recall Mode	None	None		None	None		C-Max	C-Max		C-Max	C-Max	
Act Effect Green (s)		7.3			7.3		56.5	56.5		56.5	56.5	

Lanes, Volumes, Timings  
 21: Delridge Way SW & SW Juneau St

6/1/2015

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Actuated g/C Ratio		0.10			0.10		0.81	0.81		0.81	0.81	
v/c Ratio		0.23			0.31		0.02	0.50		0.05	0.25	
Control Delay		19.8			20.0		1.2	4.7		4.2	5.6	
Queue Delay		0.0			0.0		0.0	0.0		0.0	0.0	
Total Delay		19.8			20.0		1.2	4.7		4.2	5.6	
LOS		B			C		A	A		A	A	
Approach Delay		19.8			20.0			4.6			5.5	
Approach LOS		B			C			A			A	

Intersection Summary

Area Type: Other  
 Cycle Length: 70  
 Actuated Cycle Length: 70  
 Offset: 14 (20%), Referenced to phase 2:NBSB, Start of Green  
 Natural Cycle: 60  
 Control Type: Actuated-Coordinated  
 Maximum v/c Ratio: 0.50  
 Intersection Signal Delay: 6.1  
 Intersection Capacity Utilization 51.8%  
 Analysis Period (min) 15  
 Intersection LOS: A  
 ICU Level of Service A

Splits and Phases: 21: Delridge Way SW & SW Juneau St



Lanes, Volumes, Timings  
 24: Delridge Way SW & SW Holly St

6/1/2015

	↙	↖	↑	↗	↘	↓	
Lane Group	WBL	WBR	NBT	NBR	SBL	SBT	ø4
Lane Configurations			↑			↑	
Traffic Volume (vph)	0	0	645	0	0	375	
Future Volume (vph)	0	0	645	0	0	375	
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	
Lane Width (ft)	12	12	12	12	12	12	
Grade (%)	0%		0%			0%	
Storage Length (ft)	0	0		0	0		
Storage Lanes	0	0		0	0		
Taper Length (ft)	25				25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	
Ped Bike Factor							
Frt							
Flt Protected							
Satd. Flow (prot)	0	0	1792	0	0	1776	
Flt Permitted							
Satd. Flow (perm)	0	0	1792	0	0	1776	
Right Turn on Red		Yes		Yes			
Satd. Flow (RTOR)							
Link Speed (mph)	25		35			35	
Link Distance (ft)	284		1389			2736	
Travel Time (s)	7.7		27.1			53.3	
Confl. Peds. (#/hr)							
Confl. Bikes (#/hr)							
Peak Hour Factor	0.92	0.92	0.91	0.91	0.89	0.89	
Growth Factor	100%	100%	100%	100%	100%	100%	
Heavy Vehicles (%)	2%	2%	6%	6%	7%	7%	
Bus Blockages (#/hr)	0	0	0	0	0	0	
Parking (#/hr)							
Mid-Block Traffic (%)	0%		0%			0%	
Adj. Flow (vph)	0	0	709	0	0	421	
Shared Lane Traffic (%)							
Lane Group Flow (vph)	0	0	709	0	0	421	
Turn Type			NA			NA	
Protected Phases			2			2	4
Permitted Phases							
Detector Phase			2			2	
Switch Phase							
Minimum Initial (s)			7.0			7.0	7.0
Minimum Split (s)			12.0			12.0	28.0
Total Split (s)			42.0			42.0	28.0
Total Split (%)			60.0%			60.0%	40%
Yellow Time (s)			4.0			4.0	3.0
All-Red Time (s)			1.0			1.0	1.0
Lost Time Adjust (s)			0.0			0.0	
Total Lost Time (s)			5.0			5.0	
Lead/Lag							
Lead-Lag Optimize?							
Recall Mode			C-Max			C-Max	None
Act Effect Green (s)			63.4			63.4	

Lanes, Volumes, Timings  
 24: Delridge Way SW & SW Holly St

6/1/2015



Lane Group	WBL	WBR	NBT	NBR	SBL	SBT	ø4
Actuated g/C Ratio			0.91			0.91	
v/c Ratio			0.44			0.26	
Control Delay			2.5			4.6	
Queue Delay			0.0			0.0	
Total Delay			2.5			4.6	
LOS			A			A	
Approach Delay			2.5			4.6	
Approach LOS			A			A	

Intersection Summary

Area Type: Other  
 Cycle Length: 70  
 Actuated Cycle Length: 70  
 Offset: 27 (39%), Referenced to phase 2:NBSB, Start of Green  
 Natural Cycle: 60  
 Control Type: Actuated-Coordinated  
 Maximum v/c Ratio: 0.44  
 Intersection Signal Delay: 3.3  
 Intersection Capacity Utilization 38.1%  
 Analysis Period (min) 15  
 Intersection LOS: A  
 ICU Level of Service A













Splits and Phases: 24: Delridge Way SW & SW Holly St





Lanes, Volumes, Timings  
26: Delridge Way SW & SW Myrtle St

6/1/2015

						
Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	4	23	17	709	401	4
Future Volume (vph)	4	23	17	709	401	4
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12
Grade (%)	0%			0%	0%	
Storage Length (ft)	0	0	50			0
Storage Lanes	1	1	1			0
Taper Length (ft)	25		25			
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor		0.96	0.99		1.00	
Frt		0.850			0.999	
Flt Protected	0.950		0.950			
Satd. Flow (prot)	1752	1568	1752	1845	1842	0
Flt Permitted	0.950		0.464			
Satd. Flow (perm)	1752	1513	852	1845	1842	0
Right Turn on Red		Yes				Yes
Satd. Flow (RTOR)		34			1	
Link Speed (mph)	30			35	35	
Link Distance (ft)	459			191	1389	
Travel Time (s)	10.4			3.7	27.1	
Confl. Peds. (#/hr)		10	12			12
Confl. Bikes (#/hr)		1				
Peak Hour Factor	0.68	0.68	0.91	0.91	0.80	0.80
Growth Factor	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	3%	3%	3%	3%	3%	3%
Bus Blockages (#/hr)	0	0	0	0	0	0
Parking (#/hr)						
Mid-Block Traffic (%)	0%			0%	0%	
Adj. Flow (vph)	6	34	19	779	501	5
Shared Lane Traffic (%)						
Lane Group Flow (vph)	6	34	19	779	506	0
Turn Type	Prot	Perm	Perm	NA	NA	
Protected Phases	4			2	2	
Permitted Phases		4	2			
Detector Phase	4	4	2	2	2	
Switch Phase						
Minimum Initial (s)	7.0	7.0	7.0	7.0	7.0	
Minimum Split (s)	28.0	28.0	12.0	12.0	12.0	
Total Split (s)	28.0	28.0	42.0	42.0	42.0	
Total Split (%)	40.0%	40.0%	60.0%	60.0%	60.0%	
Yellow Time (s)	3.0	3.0	4.0	4.0	4.0	
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	
Total Lost Time (s)	4.0	4.0	5.0	5.0	5.0	
Lead/Lag						
Lead-Lag Optimize?						
Recall Mode	None	None	C-Max	C-Max	C-Max	
Act Effect Green (s)	10.4	10.4	57.0	57.0	57.0	

Lanes, Volumes, Timings  
 26: Delridge Way SW & SW Myrtle St

6/1/2015



Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Actuated g/C Ratio	0.15	0.15	0.81	0.81	0.81	
v/c Ratio	0.02	0.13	0.03	0.52	0.34	
Control Delay	21.0	8.9	3.2	5.7	3.7	
Queue Delay	0.0	0.0	0.0	0.0	0.0	
Total Delay	21.0	8.9	3.2	5.7	3.7	
LOS	C	A	A	A	A	
Approach Delay	10.7			5.6	3.7	
Approach LOS	B			A	A	

Intersection Summary

Area Type: Other

Cycle Length: 70

Actuated Cycle Length: 70

Offset: 64 (91%), Referenced to phase 2:NBSB, Start of Green

Natural Cycle: 60

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.52

Intersection Signal Delay: 5.1

Intersection LOS: A

Intersection Capacity Utilization 54.7%

ICU Level of Service A




















Analysis Period (min) 15

Splits and Phases: 26: Delridge Way SW & SW Myrtle St



Lanes, Volumes, Timings  
 29: Delridge Way SW & SW Orchard St

6/1/2015

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	75	5	103	29	140	70	14	591	3	2	397	38
Future Volume (vph)	75	5	103	29	140	70	14	591	3	2	397	38
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	11	12	12	11	12	11	10	12	12	12	12
Grade (%)		0%			0%			0%			0%	
Storage Length (ft)	0		0	0		0	100		0	140		0
Storage Lanes	0		0	0		0	1		0	1		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	0.95	0.95	0.95	0.95	0.95	0.95	1.00	0.95	0.95	1.00	0.95	0.95
Ped Bike Factor		0.98			0.99			1.00			1.00	
Frt		0.916			0.956			0.999			0.987	
Flt Protected		0.980			0.994		0.950			0.950		
Satd. Flow (prot)	0	2941	0	0	3099	0	1694	3268	0	1752	3451	0
Flt Permitted		0.704			0.882		0.950			0.950		
Satd. Flow (perm)	0	2101	0	0	2746	0	1694	3268	0	1752	3451	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		129			86			1			16	
Link Speed (mph)		30			30			35			35	
Link Distance (ft)		415			667			506			246	
Travel Time (s)		9.4			15.2			9.9			4.8	
Confl. Peds. (#/hr)	22		14	14		22			12			12
Confl. Bikes (#/hr)									1			
Peak Hour Factor	0.80	0.80	0.80	0.81	0.81	0.81	0.87	0.87	0.87	0.79	0.79	0.79
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	5%	5%	5%	6%	6%	6%	3%	3%	3%	3%	3%	3%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)												
Mid-Block Traffic (%)		0%			0%			0%			0%	
Adj. Flow (vph)	94	6	129	36	173	86	16	679	3	3	503	48
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	229	0	0	295	0	16	682	0	3	551	0
Turn Type	Perm	NA		Perm	NA		Prot	NA		Prot	NA	
Protected Phases		4			4		5	2		1	6	
Permitted Phases	4			4								
Detector Phase	4	4		4	4		5	2		1	6	
Switch Phase												
Minimum Initial (s)	7.0	7.0		7.0	7.0		5.0	7.0		5.0	7.0	
Minimum Split (s)	27.0	27.0		27.0	27.0		12.0	24.0		12.0	23.0	
Total Split (s)	27.0	27.0		27.0	27.0		12.0	31.0		12.0	31.0	
Total Split (%)	38.6%	38.6%		38.6%	38.6%		17.1%	44.3%		17.1%	44.3%	
Yellow Time (s)	3.5	3.5		3.5	3.5		4.0	4.0		4.0	4.0	
All-Red Time (s)	1.0	1.0		1.0	1.0		1.0	1.0		1.0	1.0	
Lost Time Adjust (s)		0.0			0.0		0.0	0.0		0.0	0.0	
Total Lost Time (s)		4.5			4.5		5.0	5.0		5.0	5.0	
Lead/Lag							Lead	Lag		Lead	Lag	
Lead-Lag Optimize?												
Recall Mode	None	None		None	None		None	C-Max		None	Max	
Act Effect Green (s)		10.6			10.6		6.3	47.7		5.7	47.4	

Lanes, Volumes, Timings  
 29: Delridge Way SW & SW Orchard St

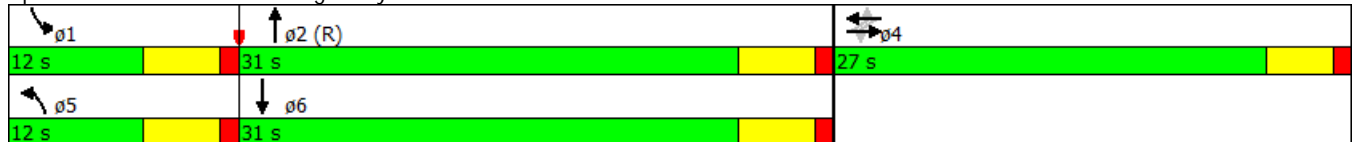
6/1/2015

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Actuated g/C Ratio		0.15			0.15		0.09	0.68		0.08	0.68	
v/c Ratio		0.54			0.60		0.11	0.31		0.02	0.24	
Control Delay		16.7			24.3		29.4	5.2		35.5	4.4	
Queue Delay		0.0			0.0		0.0	0.0		0.0	0.0	
Total Delay		16.7			24.3		29.4	5.2		35.5	4.4	
LOS		B			C		C	A		D	A	
Approach Delay		16.7			24.3			5.8			4.6	
Approach LOS		B			C			A			A	

Intersection Summary

Area Type:	Other
Cycle Length:	70
Actuated Cycle Length:	70
Offset:	0 (0%), Referenced to phase 2:NBT, Start of Green
Natural Cycle:	65
Control Type:	Actuated-Coordinated
Maximum v/c Ratio:	0.60
Intersection Signal Delay:	9.9
Intersection Capacity Utilization	52.1%
Analysis Period (min)	15
	Intersection LOS: A
	ICU Level of Service A

Splits and Phases: 29: Delridge Way SW & SW Orchard St



Lanes, Volumes, Timings  
34: Delridge Way SW & SW Kenyon St

6/1/2015



Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	42	10	6	499	453	13
Future Volume (vph)	42	10	6	499	453	13
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	14	12	10
Grade (%)	0%			0%	0%	
Storage Length (ft)	0	0	0			0
Storage Lanes	1	0	0			0
Taper Length (ft)	25		25			
Lane Util. Factor	1.00	1.00	1.00	1.00	0.95	0.95
Ped Bike Factor	0.98			1.00	1.00	
Frt	0.975				0.996	
Flt Protected	0.961			0.999		
Satd. Flow (prot)	1754	0	0	1947	3453	0
Flt Permitted	0.961			0.995		
Satd. Flow (perm)	1723	0	0	1939	3453	0
Right Turn on Red		Yes				Yes
Satd. Flow (RTOR)	12				7	
Link Speed (mph)	30			35	35	
Link Distance (ft)	449			305	409	
Travel Time (s)	10.2			5.9	8.0	
Confl. Peds. (#/hr)	10	11	8			8
Confl. Bikes (#/hr)						
Peak Hour Factor	0.81	0.81	0.81	0.81	0.84	0.84
Growth Factor	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	1%	1%	4%	4%	4%	4%
Bus Blockages (#/hr)	0	0	0	0	0	0
Parking (#/hr)						
Mid-Block Traffic (%)	0%			0%	0%	
Adj. Flow (vph)	52	12	7	616	539	15
Shared Lane Traffic (%)						
Lane Group Flow (vph)	64	0	0	623	554	0
Turn Type	Prot		Perm	NA	NA	
Protected Phases	4			2	2	
Permitted Phases			2			
Detector Phase	4		2	2	2	
Switch Phase						
Minimum Initial (s)	7.0		7.0	7.0	7.0	
Minimum Split (s)	22.0		22.0	22.0	22.0	
Total Split (s)	23.0		47.0	47.0	47.0	
Total Split (%)	32.9%		67.1%	67.1%	67.1%	
Yellow Time (s)	3.5		4.0	4.0	4.0	
All-Red Time (s)	1.0		1.0	1.0	1.0	
Lost Time Adjust (s)	0.0			0.0	0.0	
Total Lost Time (s)	4.5			5.0	5.0	
Lead/Lag						
Lead-Lag Optimize?						
Recall Mode	None		C-Max	C-Max	C-Max	
Act Effect Green (s)	8.1			59.0	59.0	

Lanes, Volumes, Timings  
 34: Delridge Way SW & SW Kenyon St

6/1/2015



Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Actuated g/C Ratio	0.12			0.84	0.84	
v/c Ratio	0.30			0.38	0.19	
Control Delay	27.5			2.7	0.7	
Queue Delay	0.0			0.0	0.0	
Total Delay	27.5			2.7	0.7	
LOS	C			A	A	
Approach Delay	27.5			2.7	0.7	
Approach LOS	C			A	A	

Intersection Summary

Area Type: Other  
 Cycle Length: 70  
 Actuated Cycle Length: 70  
 Offset: 40 (57%), Referenced to phase 2:NBSB, Start of Green  
 Natural Cycle: 50  
 Control Type: Actuated-Coordinated  
 Maximum v/c Ratio: 0.38  
 Intersection Signal Delay: 3.1  
 Intersection Capacity Utilization 47.1%  
 Analysis Period (min) 15



















Intersection LOS: A  
 ICU Level of Service A

Splits and Phases: 34: Delridge Way SW & SW Kenyon St















Lanes, Volumes, Timings  
 35: Delridge Way SW & SW Thistle St

6/1/2015

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	88	67	113	5	116	31	66	355	3	19	341	64
Future Volume (vph)	88	67	113	5	116	31	66	355	3	19	341	64
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12	14	10	12	14	10
Grade (%)		0%			0%			0%			0%	
Storage Length (ft)	0		0	0		0	0		35	0		35
Storage Lanes	0		0	0		0	0		1	0		1
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor		0.95			0.96			1.00	0.93		1.00	0.91
Fr <sub>t</sub>		0.943			0.972				0.850			0.850
Fl <sub>t</sub> Protected		0.984			0.998			0.992			0.997	
Satd. Flow (prot)	0	1671	0	0	1699	0	0	1933	1449	0	1943	1449
Fl <sub>t</sub> Permitted		0.774			0.986			0.879			0.968	
Satd. Flow (perm)	0	1264	0	0	1678	0	0	1706	1344	0	1884	1316
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		63			22				23			40
Link Speed (mph)		30			25			35			35	
Link Distance (ft)		3996			609			1308			1013	
Travel Time (s)		90.8			16.6			25.5			19.7	
Confl. Peds. (#/hr)	78		6	6		78	25		18	18		25
Confl. Bikes (#/hr)						3			2			1
Peak Hour Factor	0.74	0.74	0.74	0.71	0.71	0.71	0.94	0.94	0.94	0.80	0.80	0.80
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	4%	4%	4%	4%	4%	4%	4%	4%	4%	4%	4%	4%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)												
Mid-Block Traffic (%)		0%			0%			0%			0%	
Adj. Flow (vph)	119	91	153	7	163	44	70	378	3	24	426	80
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	363	0	0	214	0	0	448	3	0	450	80
Turn Type	Perm	NA		Perm	NA		Perm	NA	Perm	Perm	NA	Perm
Protected Phases		4			4			2			2	
Permitted Phases	4			4			2		2	2		2
Detector Phase	4	4		4	4		2	2	2	2	2	2
Switch Phase												
Minimum Initial (s)	7.0	7.0		7.0	7.0		7.0	7.0	7.0	7.0	7.0	7.0
Minimum Split (s)	20.0	20.0		20.0	20.0		17.0	17.0	17.0	17.0	17.0	17.0
Total Split (s)	33.0	33.0		33.0	33.0		37.0	37.0	37.0	37.0	37.0	37.0
Total Split (%)	47.1%	47.1%		47.1%	47.1%		52.9%	52.9%	52.9%	52.9%	52.9%	52.9%
Yellow Time (s)	3.5	3.5		3.5	3.5		4.0	4.0	4.0	4.0	4.0	4.0
All-Red Time (s)	1.0	1.0		1.0	1.0		1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)		0.0			0.0			0.0	0.0		0.0	0.0
Total Lost Time (s)		4.5			4.5			5.0	5.0		5.0	5.0
Lead/Lag												
Lead-Lag Optimize?												
Recall Mode	None	None		None	None		C-Max	C-Max	C-Max	C-Max	C-Max	C-Max
Act Effect Green (s)		20.7			20.7			39.8	39.8		39.8	39.8

Lanes, Volumes, Timings  
 35: Delridge Way SW & SW Thistle St

6/1/2015

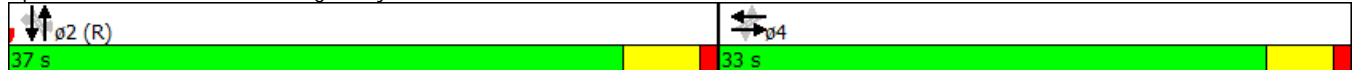
												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Actuated g/C Ratio		0.30			0.30			0.57	0.57		0.57	0.57
v/c Ratio		0.87			0.42			0.46	0.00		0.42	0.10
Control Delay		39.5			18.7			5.7	0.0		4.7	1.0
Queue Delay		0.0			0.0			0.0	0.0		0.0	0.0
Total Delay		39.5			18.7			5.7	0.0		4.7	1.0
LOS		D			B			A	A		A	A
Approach Delay		39.5			18.7			5.6			4.2	
Approach LOS		D			B			A			A	

Intersection Summary

Area Type: Other  
 Cycle Length: 70  
 Actuated Cycle Length: 70  
 Offset: 5 (7%), Referenced to phase 2:NBSB, Start of Green  
 Natural Cycle: 45  
 Control Type: Actuated-Coordinated  
 Maximum v/c Ratio: 0.87  
 Intersection Signal Delay: 14.8  
 Intersection Capacity Utilization 85.0%  
 Analysis Period (min) 15

Intersection LOS: B  
 ICU Level of Service E




















Splits and Phases: 35: Delridge Way SW & SW Thistle St

















Lanes, Volumes, Timings  
 38: Delridge Way SW & SW Trenton St

6/1/2015

													
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR	
Lane Configurations													
Traffic Volume (vph)	64	57	53	5	46	10	59	418	3	19	374	39	
Future Volume (vph)	64	57	53	5	46	10	59	418	3	19	374	39	
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	
Lane Width (ft)	12	12	12	12	12	12	12	14	10	12	14	10	
Grade (%)		0%			0%			0%			0%		
Storage Length (ft)	0		0	0		0	0		35	0		35	
Storage Lanes	0		0	0		0	0		1	0		1	
Taper Length (ft)	25			25			25			25			
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
Ped Bike Factor		0.98			0.99			1.00	0.94		1.00	0.94	
Frt		0.959			0.977				0.850			0.850	
Flt Protected		0.982			0.996			0.994			0.998		
Satd. Flow (prot)	0	1740	0	0	1784	0	0	1937	1449	0	1908	1422	
Flt Permitted		0.869			0.977			0.886			0.963		
Satd. Flow (perm)	0	1532	0	0	1746	0	0	1724	1363	0	1840	1340	
Right Turn on Red			Yes			Yes			Yes			Yes	
Satd. Flow (RTOR)		35			12				23			25	
Link Speed (mph)		30			25			35			35		
Link Distance (ft)		4006			618			508			1308		
Travel Time (s)		91.0			16.9			9.9			25.5		
Confl. Peds. (#/hr)	7		18	18		7	15		16	16		15	
Confl. Bikes (#/hr)						1			1			1	
Peak Hour Factor	0.78	0.78	0.78	0.86	0.86	0.86	0.83	0.83	0.83	0.80	0.80	0.80	
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	
Heavy Vehicles (%)	1%	1%	1%	3%	3%	3%	4%	4%	4%	6%	6%	6%	
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0	
Parking (#/hr)													
Mid-Block Traffic (%)		0%			0%			0%			0%		
Adj. Flow (vph)	82	73	68	6	53	12	71	504	4	24	468	49	
Shared Lane Traffic (%)													
Lane Group Flow (vph)	0	223	0	0	71	0	0	575	4	0	492	49	
Turn Type	Perm	NA		Perm	NA		Perm	NA	Perm	Perm	NA	Perm	
Protected Phases		4			4			2			2		
Permitted Phases	4			4			2		2	2		2	
Detector Phase	4	4		4	4		2	2	2	2	2	2	
Switch Phase													
Minimum Initial (s)	7.0	7.0		7.0	7.0		7.0	7.0	7.0	7.0	7.0	7.0	
Minimum Split (s)	21.0	21.0		21.0	21.0		21.0	21.0	21.0	21.0	21.0	21.0	
Total Split (s)	29.0	29.0		29.0	29.0		41.0	41.0	41.0	41.0	41.0	41.0	
Total Split (%)	41.4%	41.4%		41.4%	41.4%		58.6%	58.6%	58.6%	58.6%	58.6%	58.6%	
Yellow Time (s)	3.5	3.5		3.5	3.5		4.0	4.0	4.0	4.0	4.0	4.0	
All-Red Time (s)	1.0	1.0		1.0	1.0		1.0	1.0	1.0	1.0	1.0	1.0	
Lost Time Adjust (s)		0.0			0.0			0.0	0.0		0.0	0.0	
Total Lost Time (s)		4.5			4.5			5.0	5.0		5.0	5.0	
Lead/Lag													
Lead-Lag Optimize?													
Recall Mode	Max	Max		Max	Max		Max	Max	Max	Max	Max	Max	
Act Effect Green (s)		24.5			24.5			36.0	36.0		36.0	36.0	

Lanes, Volumes, Timings  
 38: Delridge Way SW & SW Trenton St

6/1/2015

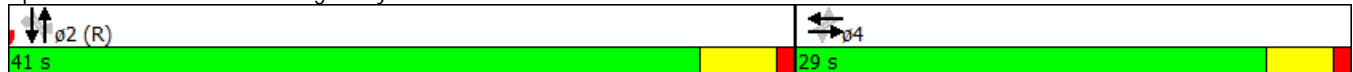
												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Actuated g/C Ratio		0.35			0.35			0.51	0.51		0.51	0.51
v/c Ratio		0.40			0.11			0.65	0.01		0.52	0.07
Control Delay		17.0			14.0			14.1	0.7		17.3	6.9
Queue Delay		0.0			0.0			0.0	0.0		0.0	0.0
Total Delay		17.0			14.0			14.1	0.7		17.3	6.9
LOS		B			B			B	A		B	A
Approach Delay		17.0			14.0			14.0			16.3	
Approach LOS		B			B			B			B	

Intersection Summary

Area Type: Other  
 Cycle Length: 70  
 Actuated Cycle Length: 70  
 Offset: 47 (67%), Referenced to phase 2:NBSB, Start of Green  
 Natural Cycle: 50  
 Control Type: Pretimed  
 Maximum v/c Ratio: 0.65  
 Intersection Signal Delay: 15.3  
 Intersection Capacity Utilization 75.1%  
 Analysis Period (min) 15

Intersection LOS: B  
 ICU Level of Service D

Splits and Phases: 38: Delridge Way SW & SW Trenton St



Lanes, Volumes, Timings

3: 16th Ave SW & SW Roxbury St & Delridge Way SW

6/1/2015














Lane Group	EBL2	EBL	EBT	EBR	WBL	WBT	WBR	WBR2	NBL2	NBL	NBT	NBR
Lane Configurations												
Traffic Volume (vph)	8	13	605	4	9	275	100	47	11	41	73	46
Future Volume (vph)	8	13	605	4	9	275	100	47	11	41	73	46
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	11	12	12	12	12	10	12
Grade (%)			0%			0%					0%	
Storage Length (ft)		110		0	97		0			0		110
Storage Lanes		1		0	1		0			0		1
Taper Length (ft)		25			25					25		
Lane Util. Factor	0.95	1.00	0.95	0.95	1.00	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Ped Bike Factor		0.99	1.00		0.99	0.99					0.98	
Frt			0.999			0.948					0.959	
Flt Protected		0.950			0.950						0.985	
Satd. Flow (prot)	0	1787	3570	0	1656	3006	0	0	0	0	2256	0
Flt Permitted		0.411			0.300						0.835	
Satd. Flow (perm)	0	767	3570	0	517	3006	0	0	0	0	1897	0
Right Turn on Red				Yes			Yes					Yes
Satd. Flow (RTOR)			1			17					51	
Link Speed (mph)			30			30					30	
Link Distance (ft)			337			276					889	
Travel Time (s)			7.7			6.3					20.2	
Confl. Peds. (#/hr)	9	9		17	17		7	9	7	9		14
Confl. Bikes (#/hr)												
Peak Hour Factor	0.93	0.93	0.93	0.93	0.88	0.88	0.88	0.88	0.91	0.91	0.91	0.91
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	1%	1%	1%	1%	9%	9%	9%	9%	40%	40%	40%	40%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)												
Mid-Block Traffic (%)			0%			0%					0%	
Adj. Flow (vph)	9	14	651	4	10	313	114	53	12	45	80	51
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	23	655	0	10	480	0	0	0	0	188	0
Turn Type	D.P+P	D.P+P	NA		D.P+P	NA			Perm	Perm	NA	
Protected Phases	7	7	4		3	8					2	
Permitted Phases	8	8			4				2	2		
Detector Phase	7	7	4		3	8			2	2	2	
Switch Phase												
Minimum Initial (s)	5.0	5.0	7.0		5.0	7.0			7.0	7.0	7.0	
Minimum Split (s)	9.0	9.0	24.5		9.0	28.5			24.5	24.5	24.5	
Total Split (s)	9.0	9.0	29.4		9.0	29.4			24.6	24.6	24.6	
Total Split (%)	11.3%	11.3%	36.8%		11.3%	36.8%			30.8%	30.8%	30.8%	
Yellow Time (s)	3.5	3.5	3.5		3.5	3.5			3.5	3.5	3.5	
All-Red Time (s)	0.0	0.0	1.0		0.0	1.0			1.0	1.0	1.0	
Lost Time Adjust (s)		0.0	0.0		0.0	0.0					0.0	
Total Lost Time (s)		3.5	4.5		3.5	4.5					4.5	
Lead/Lag	Lead	Lead	Lag		Lead	Lag			Lag	Lag	Lag	
Lead-Lag Optimize?												
Recall Mode	None	None	C-Max		None	C-Max			Max	Max	Max	
Act Effect Green (s)		33.5	32.1		34.2	30.3					20.1	

Lanes, Volumes, Timings

3: 16th Ave SW & SW Roxbury St & Delridge Way SW

6/1/2015

								
Lane Group	SBL	SBT	SBR	SBR2	SEL2	SEL	SER	SER2
Lane Configurations								
Traffic Volume (vph)	45	48	18	2	2	135	26	5
Future Volume (vph)	45	48	18	2	2	135	26	5
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	14	12	16	12	12	12	16
Grade (%)		0%				0%		
Storage Length (ft)	0		200			0	90	
Storage Lanes	0		1			1	0	
Taper Length (ft)	25					25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor		0.99		0.98		0.98		
Frt		0.976		0.850		0.975		
Flt Protected		0.980				0.961		
Satd. Flow (prot)	0	1637	0	1551	0	1772	0	0
Flt Permitted		0.814				0.961		
Satd. Flow (perm)	0	1353	0	1513	0	1747	0	0
Right Turn on Red				Yes				Yes
Satd. Flow (RTOR)				191		130		
Link Speed (mph)		30				35		
Link Distance (ft)		390				654		
Travel Time (s)		8.9				12.7		
Confl. Peds. (#/hr)	14		7	9	9			7
Confl. Bikes (#/hr)								
Peak Hour Factor	0.82	0.82	0.82	0.82	0.96	0.96	0.96	0.96
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	18%	18%	18%	18%	0%	0%	0%	0%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0
Parking (#/hr)								
Mid-Block Traffic (%)		0%				0%		
Adj. Flow (vph)	55	59	22	2	2	141	27	5
Shared Lane Traffic (%)								
Lane Group Flow (vph)	0	136	0	2	0	175	0	0
Turn Type	Perm	NA		Free	Prot	Prot		
Protected Phases		2			1	1		
Permitted Phases	2			Free				
Detector Phase	2	2			1	1		
Switch Phase								
Minimum Initial (s)	7.0	7.0			7.0	7.0		
Minimum Split (s)	24.5	24.5			12.0	12.0		
Total Split (s)	24.6	24.6			17.0	17.0		
Total Split (%)	30.8%	30.8%			21.3%	21.3%		
Yellow Time (s)	3.5	3.5			3.5	3.5		
All-Red Time (s)	1.0	1.0			1.0	1.0		
Lost Time Adjust (s)		0.0				0.0		
Total Lost Time (s)		4.5				4.5		
Lead/Lag	Lag	Lag			Lead	Lead		
Lead-Lag Optimize?								
Recall Mode	Max	Max			Max	Max		
Act Effect Green (s)		20.1		80.0		12.5		

Lanes, Volumes, Timings  
 3: 16th Ave SW & SW Roxbury St & Delridge Way SW

6/1/2015



Lane Group	EBL2	EBL	EBT	EBR	WBL	WBT	WBR	WBR2	NBL2	NBL	NBT	NBR
Actuated g/C Ratio		0.42	0.40		0.43	0.38					0.25	
v/c Ratio		0.06	0.46		0.03	0.42					0.37	
Control Delay		8.6	12.2		13.2	20.1					20.2	
Queue Delay		0.0	0.2		0.0	1.2					0.0	
Total Delay		8.6	12.4		13.2	21.3					20.2	
LOS		A	B		B	C					C	
Approach Delay			12.2			21.1					20.2	
Approach LOS			B			C					C	

Intersection Summary

Area Type: Other  
 Cycle Length: 80  
 Actuated Cycle Length: 80  
 Offset: 10 (13%), Referenced to phase 4:EBWB and 8:EBWB, Start of Green  
 Natural Cycle: 75  
 Control Type: Actuated-Coordinated  
 Maximum v/c Ratio: 0.46  
 Intersection Signal Delay: 17.4  
 Intersection Capacity Utilization 57.5%  
 Analysis Period (min) 15  
 Intersection LOS: B  
 ICU Level of Service B

Splits and Phases: 3: 16th Ave SW & SW Roxbury St & Delridge Way SW

φ1	φ2	φ3	φ4 (R)
17 s	24.6 s	9 s	29.4 s
		φ7	φ8 (R)
		9 s	29.4 s

Lanes, Volumes, Timings

3: 16th Ave SW & SW Roxbury St & Delridge Way SW

6/1/2015





















Lane Group	SBL	SBT	SBR	SBR2	SEL2	SEL	SER	SER2
Actuated g/C Ratio		0.25		1.00		0.16		
v/c Ratio		0.40		0.00		0.45		
Control Delay		29.2		0.0		15.0		
Queue Delay		0.0		0.0		0.0		
Total Delay		29.2		0.0		15.0		
LOS		C		A		B		
Approach Delay		28.8				15.0		
Approach LOS		C				B		

Intersection Summary

Lanes, Volumes, Timings

4: Delridge Way SW & SW Barton St/SW Henderson St

6/1/2015

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	71	163	42	16	232	47	72	348	2	45	397	0
Future Volume (vph)	71	163	42	16	232	47	72	348	2	45	397	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	10	12	12	10	12	12	12	12	12	12	12
Grade (%)		0%			0%			0%			0%	
Storage Length (ft)	0		0	0		0	0		0	180		0
Storage Lanes	0		0	0		0	1		0	1		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor		0.99			0.99		0.98	1.00		0.98		
Frt		0.980			0.978			0.999				
Flt Protected		0.987			0.997		0.950			0.950		
Satd. Flow (prot)	0	1580	0	0	1621	0	1736	1825	0	1752	1845	0
Flt Permitted		0.735			0.976		0.462			0.484		
Satd. Flow (perm)	0	1174	0	0	1587	0	829	1825	0	878	1845	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		14			15							
Link Speed (mph)		30			30			30			35	
Link Distance (ft)		130			618			1395			188	
Travel Time (s)		3.0			14.0			31.7			3.7	
Confl. Peds. (#/hr)	11		8	8		11	17		14	14		17
Confl. Bikes (#/hr)												1
Peak Hour Factor	0.89	0.89	0.89	0.92	0.92	0.92	0.89	0.89	0.89	0.94	0.94	0.94
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	8%	8%	8%	6%	6%	6%	4%	4%	4%	3%	3%	3%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)												
Mid-Block Traffic (%)		0%			0%			0%			0%	
Adj. Flow (vph)	80	183	47	17	252	51	81	391	2	48	422	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	310	0	0	320	0	81	393	0	48	422	0
Turn Type	Perm	NA		Perm	NA		Perm	NA		Perm	NA	
Protected Phases		4			4			2			2	
Permitted Phases	4			4			2			2		
Detector Phase	4	4		4	4		2	2		2	2	
Switch Phase												
Minimum Initial (s)	7.0	7.0		7.0	7.0		7.0	7.0		7.0	7.0	
Minimum Split (s)	29.0	29.0		29.0	29.0		22.0	22.0		22.0	22.0	
Total Split (s)	39.0	39.0		39.0	39.0		41.0	41.0		41.0	41.0	
Total Split (%)	48.8%	48.8%		48.8%	48.8%		51.3%	51.3%		51.3%	51.3%	
Yellow Time (s)	3.5	3.5		3.5	3.5		4.0	4.0		4.0	4.0	
All-Red Time (s)	1.0	1.0		1.0	1.0		1.0	1.0		1.0	1.0	
Lost Time Adjust (s)		0.0			0.0		0.0	0.0		0.0	0.0	
Total Lost Time (s)		4.5			4.5		5.0	5.0		5.0	5.0	
Lead/Lag												
Lead-Lag Optimize?												
Recall Mode	None	None		None	None		C-Max	C-Max		C-Max	C-Max	
Act Effect Green (s)		23.0			23.0		47.5	47.5		47.5	47.5	

Lanes, Volumes, Timings

4: Delridge Way SW & SW Barton St/SW Henderson St

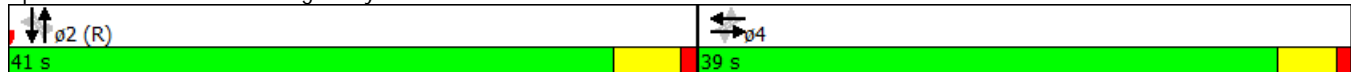
6/1/2015

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Actuated g/C Ratio		0.29			0.29		0.59	0.59		0.59	0.59	
v/c Ratio		0.89			0.69		0.16	0.36		0.09	0.39	
Control Delay		52.8			30.8		16.1	16.0		10.0	10.1	
Queue Delay		0.0			0.0		0.0	0.0		0.0	0.0	
Total Delay		52.8			30.8		16.1	16.0		10.0	10.1	
LOS		D			C		B	B		B	B	
Approach Delay		52.8			30.8			16.0			10.1	
Approach LOS		D			C			B			B	

Intersection Summary

Area Type:	Other
Cycle Length:	80
Actuated Cycle Length:	80
Offset:	67 (84%), Referenced to phase 2:NBSB, Start of Green
Natural Cycle:	55
Control Type:	Actuated-Coordinated
Maximum v/c Ratio:	0.89
Intersection Signal Delay:	24.5
Intersection Capacity Utilization	76.2%
Analysis Period (min)	15
	Intersection LOS: C
	ICU Level of Service D














Splits and Phases: 4: Delridge Way SW & SW Barton St/SW Henderson St





Lanes, Volumes, Timings  
6: Delridge Way SW & SW Holden St

6/1/2015

						
Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations				 	 	
Traffic Volume (vph)	179	63	64	502	719	222
Future Volume (vph)	179	63	64	502	719	222
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	10	10	10	10	10	10
Grade (%)	0%			0%	0%	
Storage Length (ft)	0	250	0			80
Storage Lanes	1	1	0			1
Taper Length (ft)	25		25			
Lane Util. Factor	1.00	1.00	0.95	0.95	0.95	1.00
Ped Bike Factor		0.97		1.00		
Fr <sub>t</sub>		0.850				0.850
Fl <sub>t</sub> Protected	0.950			0.994		
Satd. Flow (prot)	1636	1463	0	3220	3271	1463
Fl <sub>t</sub> Permitted	0.950			0.797		
Satd. Flow (perm)	1636	1418	0	2580	3271	1463
Right Turn on Red		Yes				Yes
Satd. Flow (RTOR)		76				234
Link Speed (mph)	30			35	35	
Link Distance (ft)	4001			245	1082	
Travel Time (s)	90.9			4.8	21.1	
Confl. Peds. (#/hr)		12	8			8
Confl. Bikes (#/hr)						
Peak Hour Factor	0.83	0.83	0.93	0.93	0.95	0.95
Growth Factor	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	3%	3%	4%	4%	3%	3%
Bus Blockages (#/hr)	0	0	0	0	0	0
Parking (#/hr)						
Mid-Block Traffic (%)	0%			0%	0%	
Adj. Flow (vph)	216	76	69	540	757	234
Shared Lane Traffic (%)						
Lane Group Flow (vph)	216	76	0	609	757	234
Turn Type	Prot	Perm	Perm	NA	NA	Prot
Protected Phases	4			2	2	2
Permitted Phases		4	2			
Detector Phase	4	4	2	2	2	2
Switch Phase						
Minimum Initial (s)	7.0	7.0	7.0	7.0	7.0	7.0
Minimum Split (s)	20.0	20.0	21.0	21.0	21.0	21.0
Total Split (s)	31.0	31.0	49.0	49.0	49.0	49.0
Total Split (%)	38.8%	38.8%	61.3%	61.3%	61.3%	61.3%
Yellow Time (s)	3.5	3.5	4.0	4.0	4.0	4.0
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0		0.0	0.0	0.0
Total Lost Time (s)	4.5	4.5		5.0	5.0	5.0
Lead/Lag						
Lead-Lag Optimize?						
Recall Mode	None	None	C-Max	C-Max	C-Max	C-Max
Act Effect Green (s)	15.8	15.8		54.7	54.7	54.7

Lanes, Volumes, Timings  
 6: Delridge Way SW & SW Holden St

6/1/2015



Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Actuated g/C Ratio	0.20	0.20		0.68	0.68	0.68
v/c Ratio	0.67	0.22		0.35	0.34	0.22
Control Delay	34.3	4.5		4.5	5.2	0.8
Queue Delay	0.0	0.0		0.0	0.0	0.0
Total Delay	34.3	4.5		4.5	5.2	0.8
LOS	C	A		A	A	A
Approach Delay	26.6			4.5	4.1	
Approach LOS	C			A	A	

Intersection Summary

Area Type: Other

Cycle Length: 80

Actuated Cycle Length: 80

Offset: 26 (33%), Referenced to phase 2:NBSB, Start of Green

Natural Cycle: 45

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.67

Intersection Signal Delay: 7.7

Intersection LOS: A

Intersection Capacity Utilization 58.5%

ICU Level of Service B




















Analysis Period (min) 15

Splits and Phases: 6: Delridge Way SW & SW Holden St



Lanes, Volumes, Timings  
 10: Delridge Way SW & SW Andover St

6/1/2015

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	158	40	24	19	31	23	25	581	10	86	904	193
Future Volume (vph)	158	40	24	19	31	23	25	581	10	86	904	193
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	11	11	12	12	12	12	12	12	12	12	12	12
Grade (%)		0%			0%			0%			0%	
Storage Length (ft)	0		0	0		0	110		0	110		0
Storage Lanes	0		0	0		0	1		0	1		1
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.95	0.95	1.00	1.00	1.00
Ped Bike Factor		0.99			0.99			1.00		0.98		0.82
Frt		0.985			0.957			0.997				0.850
Flt Protected		0.966			0.987		0.950			0.950		
Satd. Flow (prot)	0	1659	0	0	1731	0	1752	3490	0	1687	1776	1509
Flt Permitted		0.966			0.987		0.056			0.381		
Satd. Flow (perm)	0	1650	0	0	1725	0	103	3490	0	666	1776	1231
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		5			17			2				134
Link Speed (mph)		30			25			35				35
Link Distance (ft)		534			366			285				320
Travel Time (s)		12.1			10.0			5.6				6.2
Confl. Peds. (#/hr)	5		13	13		5	42		13	13		42
Confl. Bikes (#/hr)												
Peak Hour Factor	0.80	0.80	0.80	0.73	0.73	0.73	0.95	0.95	0.95	0.89	0.89	0.89
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	5%	5%	5%	3%	3%	3%	3%	3%	3%	7%	7%	7%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)												
Mid-Block Traffic (%)		0%			0%			0%			0%	
Adj. Flow (vph)	198	50	30	26	42	32	26	612	11	97	1016	217
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	278	0	0	100	0	26	623	0	97	1016	217
Turn Type	Split	NA		Split	NA		Perm	NA		Perm	NA	Perm
Protected Phases	3	3		4	4			2			2	
Permitted Phases							2			2		2
Detector Phase	3	3		4	4		2	2		2	2	2
Switch Phase												
Minimum Initial (s)	7.0	7.0		7.0	7.0		7.0	7.0		7.0	7.0	7.0
Minimum Split (s)	28.0	28.0		27.0	27.0		22.0	22.0		22.0	22.0	22.0
Total Split (s)	31.0	31.0		27.0	27.0		62.0	62.0		62.0	62.0	62.0
Total Split (%)	25.8%	25.8%		22.5%	22.5%		51.7%	51.7%		51.7%	51.7%	51.7%
Yellow Time (s)	3.5	3.5		3.5	3.5		4.0	4.0		4.0	4.0	4.0
All-Red Time (s)	1.0	1.0		1.0	1.0		1.0	1.0		1.0	1.0	1.0
Lost Time Adjust (s)		0.0			0.0		0.0	0.0		0.0	0.0	0.0
Total Lost Time (s)		4.5			4.5		5.0	5.0		5.0	5.0	5.0
Lead/Lag	Lead	Lead		Lag	Lag							
Lead-Lag Optimize?	Yes	Yes		Yes	Yes							
Recall Mode	None	None		None	None		C-Max	C-Max		C-Max	C-Max	C-Max
Act Effect Green (s)		23.5			11.3		71.3	71.3		71.3	71.3	71.3

Lanes, Volumes, Timings  
 10: Delridge Way SW & SW Andover St

6/1/2015

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Actuated g/C Ratio		0.20			0.09		0.59	0.59		0.59	0.59	0.59
v/c Ratio		0.85			0.56		0.43	0.30		0.25	0.96	0.28
Control Delay		68.5			54.5		41.7	14.2		15.7	45.8	6.5
Queue Delay		0.0			0.0		0.0	0.0		0.0	0.0	0.0
Total Delay		68.5			54.5		41.7	14.2		15.7	45.8	6.5
LOS		E			D		D	B		B	D	A
Approach Delay		68.5			54.5			15.3			37.2	
Approach LOS		E			D			B			D	

Intersection Summary












Area Type:	Other
Cycle Length:	120
Actuated Cycle Length:	120
Offset:	53 (44%), Referenced to phase 2:NBSB, Start of Green
Natural Cycle:	130
Control Type:	Actuated-Coordinated
Maximum v/c Ratio:	0.96
Intersection Signal Delay:	35.6
Intersection Capacity Utilization	84.6%
Analysis Period (min)	15
	Intersection LOS: D
	ICU Level of Service E

Splits and Phases: 10: Delridge Way SW & SW Andover St

φ2 (R) 62 s	φ3 31 s	φ4 27 s
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Lanes, Volumes, Timings  
 13: Delridge Way SW & SW Genesee St

6/1/2015

						
Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	21	129	124	479	839	50
Future Volume (vph)	21	129	124	479	839	50
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	9	12	12	12	12	12
Grade (%)	0%			0%	0%	
Storage Length (ft)	0	0	130			0
Storage Lanes	1	0	1			0
Taper Length (ft)	25		25			
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor	0.95		1.00		1.00	
Fr <sub>t</sub>	0.884				0.992	
Fl <sub>t</sub> Protected	0.993		0.950			
Satd. Flow (prot)	1393	0	1736	1827	1792	0
Fl <sub>t</sub> Permitted	0.993		0.170			
Satd. Flow (perm)	1389	0	310	1827	1792	0
Right Turn on Red		Yes				Yes
Satd. Flow (RTOR)	179				5	
Link Speed (mph)	30			35	35	
Link Distance (ft)	389			675	1035	
Travel Time (s)	8.8			13.1	20.2	
Confl. Peds. (#/hr)	7	10	13			13
Confl. Bikes (#/hr)						
Peak Hour Factor	0.72	0.72	0.67	0.67	0.89	0.89
Growth Factor	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	3%	3%	4%	4%	5%	5%
Bus Blockages (#/hr)	0	0	0	0	0	0
Parking (#/hr)						
Mid-Block Traffic (%)	0%			0%	0%	
Adj. Flow (vph)	29	179	185	715	943	56
Shared Lane Traffic (%)						
Lane Group Flow (vph)	208	0	185	715	999	0
Turn Type	Prot		D.P+P	NA	NA	
Protected Phases	4		5	2	6	
Permitted Phases			6			
Detector Phase	4		5	2	6	
Switch Phase						
Minimum Initial (s)	7.0		5.0	7.0	7.0	
Minimum Split (s)	23.5		9.0	17.0	12.0	
Total Split (s)	24.0		16.0	96.0	80.0	
Total Split (%)	20.0%		13.3%	80.0%	66.7%	
Yellow Time (s)	3.5		4.0	4.0	4.0	
All-Red Time (s)	1.0		0.0	1.0	1.0	
Lost Time Adjust (s)	0.0		0.0	0.0	0.0	
Total Lost Time (s)	4.5		4.0	5.0	5.0	
Lead/Lag			Lead		Lag	
Lead-Lag Optimize?					Yes	
Recall Mode	None		None	C-Max	C-Max	
Act Effect Green (s)	10.5		97.0	100.0	85.9	

Lanes, Volumes, Timings  
 13: Delridge Way SW & SW Genesee St

6/1/2015



Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Actuated g/C Ratio	0.09		0.81	0.83	0.72	
v/c Ratio	0.73		0.50	0.47	0.78	
Control Delay	26.3		10.1	3.5	4.9	
Queue Delay	0.0		0.0	0.2	0.0	
Total Delay	26.3		10.1	3.7	4.9	
LOS	C		B	A	A	
Approach Delay	26.3			5.0	4.9	
Approach LOS	C			A	A	

Intersection Summary

Area Type: Other  
 Cycle Length: 120  
 Actuated Cycle Length: 120  
 Offset: 68 (57%), Referenced to phase 2:NBT and 6:NBSB, Start of Green  
 Natural Cycle: 90  
 Control Type: Actuated-Coordinated  
 Maximum v/c Ratio: 0.78  
 Intersection Signal Delay: 7.0  
 Intersection Capacity Utilization 77.0%  
 Analysis Period (min) 15  
 Intersection LOS: A  
 ICU Level of Service D

Splits and Phases: 13: Delridge Way SW & SW Genesee St



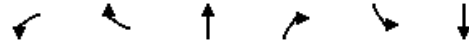
Lanes, Volumes, Timings  
 16: Delridge Way SW & SW Oregon St

6/1/2015

	↙	↖	↑	↗	↘	↓
Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	↙		↑	↗	↘	↑
Traffic Volume (vph)	14	184	475	9	234	824
Future Volume (vph)	14	184	475	9	234	824
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12
Grade (%)	0%		0%			0%
Storage Length (ft)	0	0		50	210	
Storage Lanes	1	0		1	1	
Taper Length (ft)	25				25	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor	0.98			0.97	1.00	
Frt	0.875			0.850		
Flt Protected	0.996				0.950	
Satd. Flow (prot)	1573	0	1827	1553	1736	1827
Flt Permitted	0.996				0.438	
Satd. Flow (perm)	1573	0	1827	1512	798	1827
Right Turn on Red		Yes		Yes		
Satd. Flow (RTOR)	233			5		
Link Speed (mph)	30		35			35
Link Distance (ft)	157		3358			675
Travel Time (s)	3.6		65.4			13.1
Confl. Peds. (#/hr)		1		8	8	
Confl. Bikes (#/hr)				1		
Peak Hour Factor	0.79	0.79	0.94	0.94	0.98	0.98
Growth Factor	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	3%	3%	4%	4%	4%	4%
Bus Blockages (#/hr)	0	0	0	0	0	0
Parking (#/hr)						
Mid-Block Traffic (%)	0%		0%			0%
Adj. Flow (vph)	18	233	505	10	239	841
Shared Lane Traffic (%)						
Lane Group Flow (vph)	251	0	505	10	239	841
Turn Type	Prot		NA	Perm	D.P+P	NA
Protected Phases	4		2		1	6
Permitted Phases				2	2	
Detector Phase	4		2	2	1	6
Switch Phase						
Minimum Initial (s)	7.0		7.0	7.0	5.0	7.0
Minimum Split (s)	12.0		12.0	12.0	9.0	18.0
Total Split (s)	22.0		84.0	84.0	14.0	98.0
Total Split (%)	18.3%		70.0%	70.0%	11.7%	81.7%
Yellow Time (s)	3.5		4.0	4.0	4.0	4.0
All-Red Time (s)	1.0		1.0	1.0	0.0	1.0
Lost Time Adjust (s)	0.0		0.0	0.0	0.0	0.0
Total Lost Time (s)	4.5		5.0	5.0	4.0	5.0
Lead/Lag			Lag	Lag	Lead	
Lead-Lag Optimize?			Yes	Yes		
Recall Mode	None		C-Max	C-Max	None	C-Max
Act Effect Green (s)	9.8		88.3	88.3	97.7	100.7

Lanes, Volumes, Timings  
 16: Delridge Way SW & SW Oregon St

6/1/2015



Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Actuated g/C Ratio	0.08		0.74	0.74	0.81	0.84
v/c Ratio	0.73		0.38	0.01	0.33	0.55
Control Delay	21.6		7.5	4.4	2.9	3.7
Queue Delay	0.0		0.0	0.0	0.0	0.3
Total Delay	21.6		7.5	4.4	2.9	4.0
LOS	C		A	A	A	A
Approach Delay	21.6		7.4			3.7
Approach LOS	C		A			A

Intersection Summary

Area Type: Other  
 Cycle Length: 120  
 Actuated Cycle Length: 120  
 Offset: 62 (52%), Referenced to phase 2:NBSB and 6:SBT, Start of Green  
 Natural Cycle: 50  
 Control Type: Actuated-Coordinated  
 Maximum v/c Ratio: 0.73  
 Intersection Signal Delay: 7.2  
 Intersection Capacity Utilization 63.5%  
 Analysis Period (min) 15  
 Intersection LOS: A  
 ICU Level of Service B



















Splits and Phases: 16: Delridge Way SW & SW Oregon St





Lanes, Volumes, Timings  
 18: Delridge Way SW & SW Brandon St

6/1/2015

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	49	0	32	5	1	8	23	477	6	7	685	57
Future Volume (vph)	49	0	32	5	1	8	23	477	6	7	685	57
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12
Grade (%)		0%			0%			0%			0%	
Storage Length (ft)	0		0	0		0	100		0	100		0
Storage Lanes	0		0	0		0	1		0	1		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor		0.97			0.97			1.00			0.99	
Frt		0.947			0.924			0.998			0.988	
Flt Protected		0.970			0.982			0.950			0.950	
Satd. Flow (prot)	0	1628	0	0	1655	0	1752	1840	0	1736	1791	0
Flt Permitted		0.799			0.913			0.310			0.463	
Satd. Flow (perm)	0	1327	0	0	1523	0	572	1840	0	837	1791	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		36			14			1			9	
Link Speed (mph)		25			25			35			35	
Link Distance (ft)		556			356			1325			3358	
Travel Time (s)		15.2			9.7			25.8			65.4	
Confl. Peds. (#/hr)	10		19	19		10	22		9	9		22
Confl. Bikes (#/hr)												
Peak Hour Factor	0.88	0.88	0.88	0.58	0.58	0.58	0.94	0.94	0.94	0.91	0.91	0.91
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	5%	5%	5%	2%	2%	2%	3%	3%	3%	4%	4%	4%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)												
Mid-Block Traffic (%)		0%			0%			0%			0%	
Adj. Flow (vph)	56	0	36	9	2	14	24	507	6	8	753	63
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	92	0	0	25	0	24	513	0	8	816	0
Turn Type	Perm	NA		Perm	NA		Perm	NA		Perm	NA	
Protected Phases		4			4			2			2	
Permitted Phases	4			4			2			2		
Detector Phase	4	4		4	4		2	2		2	2	
Switch Phase												
Minimum Initial (s)	7.0	7.0		7.0	7.0		7.0	7.0		7.0	7.0	
Minimum Split (s)	27.0	27.0		27.0	27.0		17.0	17.0		17.0	17.0	
Total Split (s)	27.0	27.0		27.0	27.0		53.0	53.0		53.0	53.0	
Total Split (%)	33.8%	33.8%		33.8%	33.8%		66.3%	66.3%		66.3%	66.3%	
Yellow Time (s)	3.0	3.0		3.0	3.0		4.0	4.0		4.0	4.0	
All-Red Time (s)	1.0	1.0		1.0	1.0		1.0	1.0		1.0	1.0	
Lost Time Adjust (s)		0.0			0.0			0.0			0.0	
Total Lost Time (s)		4.0			4.0			5.0			5.0	
Lead/Lag												
Lead-Lag Optimize?												
Recall Mode	None	None		None	None		C-Max	C-Max		C-Max	C-Max	
Act Effect Green (s)		8.8			8.8			65.4			65.4	

Lanes, Volumes, Timings  
 18: Delridge Way SW & SW Brandon St

6/1/2015

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Actuated g/C Ratio		0.11			0.11		0.82	0.82		0.82	0.82	
v/c Ratio		0.52			0.14		0.05	0.34		0.01	0.56	
Control Delay		32.3			21.7		1.8	1.8		2.6	5.4	
Queue Delay		0.0			0.0		0.0	0.0		0.0	0.0	
Total Delay		32.3			21.7		1.8	1.8		2.6	5.4	
LOS		C			C		A	A		A	A	
Approach Delay		32.3			21.7			1.8			5.4	
Approach LOS		C			C			A			A	

Intersection Summary



















Area Type: Other  
 Cycle Length: 80  
 Actuated Cycle Length: 80  
 Offset: 2 (3%), Referenced to phase 2:NBSB, Start of Green  
 Natural Cycle: 65  
 Control Type: Actuated-Coordinated  
 Maximum v/c Ratio: 0.56  
 Intersection Signal Delay: 6.1  
 Intersection Capacity Utilization 60.7%  
 Analysis Period (min) 15  
 Intersection LOS: A  
 ICU Level of Service B

Splits and Phases: 18: Delridge Way SW & SW Brandon St



Lanes, Volumes, Timings  
 21: Delridge Way SW & SW Juneau St

6/1/2015

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	7	4	22	21	1	26	20	467	29	34	700	17
Future Volume (vph)	7	4	22	21	1	26	20	467	29	34	700	17
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	16	12	12	12	12	12	12	12	12	12	12
Grade (%)		0%			0%			0%			0%	
Storage Length (ft)	0		0	0		0	100		0	100		0
Storage Lanes	0		0	0		0	1		0	1		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor		0.98			0.97			1.00		1.00	1.00	
Frt		0.911			0.926			0.991			0.996	
Flt Protected		0.989			0.979		0.950			0.950		
Satd. Flow (prot)	0	1727	0	0	1622	0	1752	1825	0	1736	1818	0
Flt Permitted		0.938			0.840		0.335			0.464		
Satd. Flow (perm)	0	1632	0	0	1385	0	618	1825	0	846	1818	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		27			30			7			3	
Link Speed (mph)		25			25			35			35	
Link Distance (ft)		492			412			2736			1325	
Travel Time (s)		13.4			11.2			53.3			25.8	
Confl. Peds. (#/hr)	9		6	6		9	6		2	2		6
Confl. Bikes (#/hr)												
Peak Hour Factor	0.82	0.82	0.82	0.86	0.86	0.86	0.96	0.96	0.96	0.93	0.93	0.93
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	10%	10%	10%	4%	4%	4%	3%	3%	3%	4%	4%	4%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)												
Mid-Block Traffic (%)		0%			0%			0%			0%	
Adj. Flow (vph)	9	5	27	24	1	30	21	486	30	37	753	18
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	41	0	0	55	0	21	516	0	37	771	0
Turn Type	Perm	NA		Perm	NA		Perm	NA		Perm	NA	
Protected Phases		4			4			2			2	
Permitted Phases	4			4			2			2		
Detector Phase	4	4		4	4		2	2		2	2	
Switch Phase												
Minimum Initial (s)	7.0	7.0		7.0	7.0		7.0	7.0		7.0	7.0	
Minimum Split (s)	25.0	25.0		25.0	25.0		18.0	18.0		18.0	18.0	
Total Split (s)	25.0	25.0		25.0	25.0		55.0	55.0		55.0	55.0	
Total Split (%)	31.3%	31.3%		31.3%	31.3%		68.8%	68.8%		68.8%	68.8%	
Yellow Time (s)	3.5	3.5		3.5	3.5		4.0	4.0		4.0	4.0	
All-Red Time (s)	1.0	1.0		1.0	1.0		1.0	1.0		1.0	1.0	
Lost Time Adjust (s)		0.0			0.0		0.0	0.0		0.0	0.0	
Total Lost Time (s)		4.5			4.5		5.0	5.0		5.0	5.0	
Lead/Lag												
Lead-Lag Optimize?												
Recall Mode	None	None		None	None		C-Max	C-Max		C-Max	C-Max	
Act Effect Green (s)		7.5			7.5		66.3	66.3		66.3	66.3	

Lanes, Volumes, Timings  
 21: Delridge Way SW & SW Juneau St

6/1/2015

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Actuated g/C Ratio		0.09			0.09		0.83	0.83		0.83	0.83	
v/c Ratio		0.23			0.35		0.04	0.34		0.05	0.51	
Control Delay		21.2			25.7		0.1	0.5		2.1	3.8	
Queue Delay		0.0			0.0		0.0	0.0		0.0	0.0	
Total Delay		21.2			25.7		0.1	0.5		2.1	3.8	
LOS		C			C		A	A		A	A	
Approach Delay		21.2			25.7			0.5			3.7	
Approach LOS		C			C			A			A	

Intersection Summary

Area Type:	Other
Cycle Length:	80
Actuated Cycle Length:	80
Offset:	0 (0%), Referenced to phase 2:NBSB, Start of Green
Natural Cycle:	60
Control Type:	Actuated-Coordinated
Maximum v/c Ratio:	0.51
Intersection Signal Delay:	3.8
Intersection Capacity Utilization	54.4%
Analysis Period (min)	15
Intersection LOS:	A
ICU Level of Service	A

Splits and Phases: 21: Delridge Way SW & SW Juneau St



Lanes, Volumes, Timings  
 24: Delridge Way SW & SW Holly St

6/1/2015

	↙	↖	↑	↗	↘	↓	
Lane Group	WBL	WBR	NBT	NBR	SBL	SBT	ø4
Lane Configurations			↑			↑	
Traffic Volume (vph)	0	0	646	0	0	375	
Future Volume (vph)	0	0	646	0	0	375	
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	
Lane Width (ft)	12	12	12	12	12	12	
Grade (%)	0%		0%			0%	
Storage Length (ft)	0	0		0	0		
Storage Lanes	0	0		0	0		
Taper Length (ft)	25				25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	
Ped Bike Factor							
Frt							
Flt Protected							
Satd. Flow (prot)	0	0	1792	0	0	1776	
Flt Permitted							
Satd. Flow (perm)	0	0	1792	0	0	1776	
Right Turn on Red		Yes		Yes			
Satd. Flow (RTOR)							
Link Speed (mph)	25		35			35	
Link Distance (ft)	284		1389			2736	
Travel Time (s)	7.7		27.1			53.3	
Confl. Peds. (#/hr)							
Confl. Bikes (#/hr)							
Peak Hour Factor	0.92	0.92	0.91	0.91	0.89	0.89	
Growth Factor	100%	100%	100%	100%	100%	100%	
Heavy Vehicles (%)	2%	2%	6%	6%	7%	7%	
Bus Blockages (#/hr)	0	0	0	0	0	0	
Parking (#/hr)							
Mid-Block Traffic (%)	0%		0%			0%	
Adj. Flow (vph)	0	0	710	0	0	421	
Shared Lane Traffic (%)							
Lane Group Flow (vph)	0	0	710	0	0	421	
Turn Type			NA			NA	
Protected Phases			2			2	4
Permitted Phases							
Detector Phase			2			2	
Switch Phase							
Minimum Initial (s)			7.0			7.0	7.0
Minimum Split (s)			12.0			12.0	28.0
Total Split (s)			52.0			52.0	28.0
Total Split (%)			65.0%			65.0%	35%
Yellow Time (s)			4.0			4.0	3.0
All-Red Time (s)			1.0			1.0	1.0
Lost Time Adjust (s)			0.0			0.0	
Total Lost Time (s)			5.0			5.0	
Lead/Lag							
Lead-Lag Optimize?							
Recall Mode			C-Max			C-Max	Ped
Act Effect Green (s)			47.0			47.0	

Lanes, Volumes, Timings  
 24: Delridge Way SW & SW Holly St

6/1/2015



Lane Group	WBL	WBR	NBT	NBR	SBL	SBT	ø4
Actuated g/C Ratio			0.59			0.59	
v/c Ratio			0.67			0.40	
Control Delay			11.9			11.9	
Queue Delay			0.0			0.0	
Total Delay			11.9			11.9	
LOS			B			B	
Approach Delay			11.9			11.9	
Approach LOS			B			B	

Intersection Summary

Area Type:	Other
Cycle Length:	80
Actuated Cycle Length:	80
Offset:	14 (18%), Referenced to phase 2:NBSB, Start of Green
Natural Cycle:	60
Control Type:	Actuated-Coordinated
Maximum v/c Ratio:	0.67
Intersection Signal Delay:	11.9
Intersection Capacity Utilization	38.2%
Analysis Period (min)	15
Intersection LOS:	B
ICU Level of Service	A

Splits and Phases: 24: Delridge Way SW & SW Holly St

<p>ø2 (R) 52 s</p>	<p>ø4 28 s</p>
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Lanes, Volumes, Timings  
26: Delridge Way SW & SW Myrtle St

6/1/2015



Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	3	17	23	575	802	5
Future Volume (vph)	3	17	23	575	802	5
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12
Grade (%)	0%			0%	0%	
Storage Length (ft)	0	0	50			0
Storage Lanes	1	0	1			0
Taper Length (ft)	25		25			
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor	0.96		1.00		1.00	
Frt	0.884				0.999	
Flt Protected	0.993		0.950			
Satd. Flow (prot)	1560	0	1752	1845	1842	0
Flt Permitted	0.993		0.277			
Satd. Flow (perm)	1560	0	510	1845	1842	0
Right Turn on Red		Yes				Yes
Satd. Flow (RTOR)	25				1	
Link Speed (mph)	30			35	35	
Link Distance (ft)	459			191	1389	
Travel Time (s)	10.4			3.7	27.1	
Confl. Peds. (#/hr)	1	13	12			12
Confl. Bikes (#/hr)		1				2
Peak Hour Factor	0.69	0.69	0.86	0.86	0.91	0.91
Growth Factor	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	3%	3%	3%	3%	3%	3%
Bus Blockages (#/hr)	0	0	0	0	0	0
Parking (#/hr)						
Mid-Block Traffic (%)	0%			0%	0%	
Adj. Flow (vph)	4	25	27	669	881	5
Shared Lane Traffic (%)						
Lane Group Flow (vph)	29	0	27	669	886	0
Turn Type	Prot		Perm	NA	NA	
Protected Phases	4			2	2	
Permitted Phases			2			
Detector Phase	4		2	2	2	
Switch Phase						
Minimum Initial (s)	7.0		7.0	7.0	7.0	
Minimum Split (s)	28.0		12.0	12.0	12.0	
Total Split (s)	28.0		52.0	52.0	52.0	
Total Split (%)	35.0%		65.0%	65.0%	65.0%	
Yellow Time (s)	3.0		4.0	4.0	4.0	
All-Red Time (s)	1.0		1.0	1.0	1.0	
Lost Time Adjust (s)	0.0		0.0	0.0	0.0	
Total Lost Time (s)	4.0		5.0	5.0	5.0	
Lead/Lag						
Lead-Lag Optimize?						
Recall Mode	None		C-Max	C-Max	C-Max	
Act Effect Green (s)	10.4		67.0	67.0	67.0	

Lanes, Volumes, Timings  
 26: Delridge Way SW & SW Myrtle St

6/1/2015



Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Actuated g/C Ratio	0.13		0.84	0.84	0.84	
v/c Ratio	0.13		0.06	0.43	0.57	
Control Delay	13.1		3.3	6.0	9.5	
Queue Delay	0.0		0.0	0.0	0.0	
Total Delay	13.1		3.3	6.0	9.5	
LOS	B		A	A	A	
Approach Delay	13.1			5.9	9.5	
Approach LOS	B			A	A	

Intersection Summary

Area Type: Other  
 Cycle Length: 80  
 Actuated Cycle Length: 80  
 Offset: 61 (76%), Referenced to phase 2:NBSB, Start of Green  
 Natural Cycle: 70  
 Control Type: Actuated-Coordinated  
 Maximum v/c Ratio: 0.57  
 Intersection Signal Delay: 8.0  
 Intersection Capacity Utilization 60.8%  
 Analysis Period (min) 15

Intersection LOS: A  
 ICU Level of Service B



















Splits and Phases: 26: Delridge Way SW & SW Myrtle St





Lanes, Volumes, Timings  
 29: Delridge Way SW & SW Orchard St

6/1/2015

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	60	232	9	50	297	97	23	433	39	81	650	68
Future Volume (vph)	60	232	9	50	297	97	23	433	39	81	650	68
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	11	12	12	11	12	11	10	12	12	12	12
Grade (%)		0%			0%			0%			0%	
Storage Length (ft)	0		0	0		0	100		0	140		0
Storage Lanes	0		0	0		0	1		0	1		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	0.95	0.95	0.95	0.95	0.95	0.95	1.00	0.95	0.95	1.00	0.95	0.95
Ped Bike Factor		1.00			1.00			1.00			1.00	
Frt		0.996			0.967			0.988			0.986	
Flt Protected		0.990			0.994		0.950			0.950		
Satd. Flow (prot)	0	3276	0	0	3151	0	1694	3223	0	1752	3447	0
Flt Permitted		0.699			0.870		0.950			0.950		
Satd. Flow (perm)	0	2311	0	0	2757	0	1694	3223	0	1752	3447	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		4			50			12			16	
Link Speed (mph)		30			30			35			35	
Link Distance (ft)		415			667			506			246	
Travel Time (s)		9.4			15.2			9.9			4.8	
Confl. Peds. (#/hr)	7		4	4		7			15			11
Confl. Bikes (#/hr)												
Peak Hour Factor	0.95	0.95	0.95	0.87	0.87	0.87	0.93	0.93	0.93	0.95	0.95	0.95
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	5%	5%	5%	6%	6%	6%	3%	3%	3%	3%	3%	3%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)												
Mid-Block Traffic (%)		0%			0%			0%			0%	
Adj. Flow (vph)	63	244	9	57	341	111	25	466	42	85	684	72
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	316	0	0	509	0	25	508	0	85	756	0
Turn Type	Perm	NA		Perm	NA		Prot	NA		Prot	NA	
Protected Phases		4			4		5	2		1	6	
Permitted Phases	4			4								
Detector Phase	4	4		4	4		5	2		1	6	
Switch Phase												
Minimum Initial (s)	7.0	7.0		7.0	7.0		5.0	7.0		5.0	7.0	
Minimum Split (s)	27.0	27.0		27.0	27.0		12.0	24.0		12.0	23.0	
Total Split (s)	34.0	34.0		34.0	34.0		12.0	31.0		15.0	34.0	
Total Split (%)	42.5%	42.5%		42.5%	42.5%		15.0%	38.8%		18.8%	42.5%	
Yellow Time (s)	3.5	3.5		3.5	3.5		4.0	4.0		4.0	4.0	
All-Red Time (s)	1.0	1.0		1.0	1.0		1.0	1.0		1.0	1.0	
Lost Time Adjust (s)		0.0			0.0		0.0	0.0		0.0	0.0	
Total Lost Time (s)		4.5			4.5		5.0	5.0		5.0	5.0	
Lead/Lag							Lead	Lag		Lead	Lag	
Lead-Lag Optimize?												
Recall Mode	None	None		None	None		None	C-Max		None	None	
Act Effect Green (s)		19.4			19.4		6.8	39.1		9.2	46.0	

Lanes, Volumes, Timings  
 29: Delridge Way SW & SW Orchard St

6/1/2015

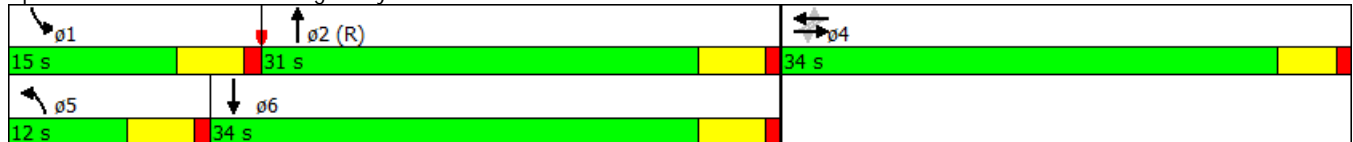
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Actuated g/C Ratio		0.24			0.24		0.08	0.49		0.12	0.58	
v/c Ratio		0.56			0.72		0.18	0.32		0.42	0.38	
Control Delay		29.3			30.6		36.5	16.7		47.7	7.7	
Queue Delay		0.0			0.0		0.0	0.0		0.0	0.0	
Total Delay		29.3			30.6		36.5	16.7		47.7	7.7	
LOS		C			C		D	B		D	A	
Approach Delay		29.3			30.6			17.7			11.7	
Approach LOS		C			C			B			B	

Intersection Summary

Area Type: Other  
 Cycle Length: 80  
 Actuated Cycle Length: 80  
 Offset: 76 (95%), Referenced to phase 2:NBT, Start of Green  
 Natural Cycle: 65  
 Control Type: Actuated-Coordinated  
 Maximum v/c Ratio: 0.72  
 Intersection Signal Delay: 20.0  
 Intersection Capacity Utilization 64.0%  
 Analysis Period (min) 15

Intersection LOS: C  
 ICU Level of Service B

Splits and Phases: 29: Delridge Way SW & SW Orchard St



Lanes, Volumes, Timings  
 34: Delridge Way SW & SW Kenyon St

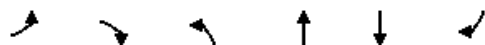
6/1/2015



Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	25	16	25	526	740	42
Future Volume (vph)	25	16	25	526	740	42
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	14	12	10
Grade (%)	0%			0%	0%	
Storage Length (ft)	0	0	0			0
Storage Lanes	1	0	0			0
Taper Length (ft)	25		25			
Lane Util. Factor	1.00	1.00	1.00	1.00	0.95	0.95
Ped Bike Factor	0.98			1.00	1.00	
Flt	0.947				0.992	
Flt Protected	0.971			0.998		
Satd. Flow (prot)	1714	0	0	1945	3433	0
Flt Permitted	0.971			0.949		
Satd. Flow (perm)	1701	0	0	1848	3433	0
Right Turn on Red		Yes				Yes
Satd. Flow (RTOR)	21				15	
Link Speed (mph)	30			35	35	
Link Distance (ft)	449			305	409	
Travel Time (s)	10.2			5.9	8.0	
Confl. Peds. (#/hr)	5	8	11			11
Confl. Bikes (#/hr)						2
Peak Hour Factor	0.77	0.77	0.93	0.93	0.95	0.95
Growth Factor	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	1%	1%	4%	4%	4%	4%
Bus Blockages (#/hr)	0	0	0	0	0	0
Parking (#/hr)						
Mid-Block Traffic (%)	0%			0%	0%	
Adj. Flow (vph)	32	21	27	566	779	44
Shared Lane Traffic (%)						
Lane Group Flow (vph)	53	0	0	593	823	0
Turn Type	Prot		Perm	NA	NA	
Protected Phases	4			2	2	
Permitted Phases			2			
Detector Phase	4		2	2	2	
Switch Phase						
Minimum Initial (s)	7.0		7.0	7.0	7.0	
Minimum Split (s)	22.0		22.0	22.0	22.0	
Total Split (s)	22.0		58.0	58.0	58.0	
Total Split (%)	27.5%		72.5%	72.5%	72.5%	
Yellow Time (s)	3.5		4.0	4.0	4.0	
All-Red Time (s)	1.0		1.0	1.0	1.0	
Lost Time Adjust (s)	0.0			0.0	0.0	
Total Lost Time (s)	4.5			5.0	5.0	
Lead/Lag						
Lead-Lag Optimize?						
Recall Mode	None		C-Max	C-Max	C-Max	
Act Effect Green (s)	7.8			69.3	69.3	

Lanes, Volumes, Timings  
 34: Delridge Way SW & SW Kenyon St

6/1/2015



Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Actuated g/C Ratio	0.10			0.87	0.87	
v/c Ratio	0.29			0.37	0.28	
Control Delay	26.8			4.0	0.5	
Queue Delay	0.0			0.0	0.0	
Total Delay	26.8			4.0	0.5	
LOS	C			A	A	
Approach Delay	26.8			4.0	0.5	
Approach LOS	C			A	A	

Intersection Summary

Area Type: Other  
 Cycle Length: 80  
 Actuated Cycle Length: 80  
 Offset: 31 (39%), Referenced to phase 2:NBSB, Start of Green  
 Natural Cycle: 50  
 Control Type: Actuated-Coordinated  
 Maximum v/c Ratio: 0.37  
 Intersection Signal Delay: 2.9  
 Intersection Capacity Utilization 63.5%  
 Analysis Period (min) 15

















Intersection LOS: A  
 ICU Level of Service B

Splits and Phases: 34: Delridge Way SW & SW Kenyon St



Lanes, Volumes, Timings  
 35: Delridge Way SW & SW Thistle St

6/1/2015

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	47	53	51	14	72	14	59	454	8	16	596	69
Future Volume (vph)	47	53	51	14	72	14	59	454	8	16	596	69
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12	14	10	12	14	10
Grade (%)		0%			0%			0%			0%	
Storage Length (ft)	0		0	0		0	0		35	0		35
Storage Lanes	0		0	0		0	0		0	0		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor		0.98			0.99			1.00			0.99	
Frt		0.955			0.981			0.998			0.986	
Flt Protected		0.985			0.993			0.994			0.999	
Satd. Flow (prot)	0	1692	0	0	1765	0	0	1932	0	0	1906	0
Flt Permitted		0.827			0.940			0.864			0.984	
Satd. Flow (perm)	0	1407	0	0	1667	0	0	1678	0	0	1877	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		32			10			2			12	
Link Speed (mph)		30			25			35			35	
Link Distance (ft)		3996			609			1308			1013	
Travel Time (s)		90.8			16.6			25.5			19.7	
Confl. Peds. (#/hr)	15		10	10		15	15		4	4		15
Confl. Bikes (#/hr)												
Peak Hour Factor	0.86	0.86	0.86	0.81	0.81	0.81	0.91	0.91	0.91	0.90	0.90	0.90
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	4%	4%	4%	4%	4%	4%	4%	4%	4%	4%	4%	4%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)												
Mid-Block Traffic (%)		0%			0%			0%			0%	
Adj. Flow (vph)	55	62	59	17	89	17	65	499	9	18	662	77
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	176	0	0	123	0	0	573	0	0	757	0
Turn Type	Perm	NA		Perm	NA		Perm	NA		Perm	NA	
Protected Phases		4			4			2			2	
Permitted Phases	4			4			2			2		
Detector Phase	4	4		4	4		2	2		2	2	
Switch Phase												
Minimum Initial (s)	7.0	7.0		7.0	7.0		7.0	7.0		7.0	7.0	
Minimum Split (s)	20.0	20.0		20.0	20.0		18.0	18.0		18.0	18.0	
Total Split (s)	28.0	28.0		28.0	28.0		52.0	52.0		52.0	52.0	
Total Split (%)	35.0%	35.0%		35.0%	35.0%		65.0%	65.0%		65.0%	65.0%	
Yellow Time (s)	3.5	3.5		3.5	3.5		4.0	4.0		4.0	4.0	
All-Red Time (s)	1.0	1.0		1.0	1.0		1.0	1.0		1.0	1.0	
Lost Time Adjust (s)		0.0			0.0			0.0			0.0	
Total Lost Time (s)		4.5			4.5			5.0			5.0	
Lead/Lag												
Lead-Lag Optimize?												
Recall Mode	None	None		None	None		C-Max	C-Max		C-Max	C-Max	
Act Effect Green (s)		12.5			12.5			58.0			58.0	

Lanes, Volumes, Timings  
 35: Delridge Way SW & SW Thistle St

6/1/2015

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Actuated g/C Ratio		0.16			0.16			0.72			0.72	
v/c Ratio		0.72			0.46			0.47			0.55	
Control Delay		43.0			32.4			6.8			4.7	
Queue Delay		0.0			0.0			0.0			0.0	
Total Delay		43.0			32.4			6.8			4.7	
LOS		D			C			A			A	
Approach Delay		43.0			32.4			6.8			4.7	
Approach LOS		D			C			A			A	

Intersection Summary

















Area Type: Other  
 Cycle Length: 80  
 Actuated Cycle Length: 80  
 Offset: 57 (71%), Referenced to phase 2:NBSB, Start of Green  
 Natural Cycle: 55  
 Control Type: Actuated-Coordinated  
 Maximum v/c Ratio: 0.72  
 Intersection Signal Delay: 11.7  
 Intersection Capacity Utilization 78.3%  
 Analysis Period (min) 15  
 Intersection LOS: B  
 ICU Level of Service D

Splits and Phases: 35: Delridge Way SW & SW Thistle St















Lanes, Volumes, Timings  
38: Delridge Way SW & SW Trenton St

6/1/2015

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	106	61	52	5	100	10	57	401	15	18	521	139
Future Volume (vph)	106	61	52	5	100	10	57	401	15	18	521	139
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12	14	10	12	14	10
Grade (%)		0%			0%			0%			0%	
Storage Length (ft)	0		0	0		0	0		35	0		35
Storage Lanes	0		0	0		0	0		0	0		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor		0.99			1.00			1.00			0.99	
Frt		0.968			0.989			0.996			0.972	
Flt Protected		0.976			0.998			0.994			0.999	
Satd. Flow (prot)	0	1724	0	0	1852	0	0	1888	0	0	1870	0
Flt Permitted		0.774			0.987			0.865			0.982	
Satd. Flow (perm)	0	1364	0	0	1831	0	0	1642	0	0	1838	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		20			6			3			27	
Link Speed (mph)		30			25			35			35	
Link Distance (ft)		4006			618			508			1308	
Travel Time (s)		91.0			16.9			9.9			25.5	
Confl. Peds. (#/hr)	3		10	10		3	13		19	19		13
Confl. Bikes (#/hr)												
Peak Hour Factor	0.82	0.82	0.82	0.81	0.81	0.81	0.88	0.88	0.88	0.95	0.95	0.95
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	3%	3%	3%	1%	1%	1%	6%	6%	6%	4%	4%	4%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)												
Mid-Block Traffic (%)		0%			0%			0%			0%	
Adj. Flow (vph)	129	74	63	6	123	12	65	456	17	19	548	146
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	266	0	0	141	0	0	538	0	0	713	0
Turn Type	Perm	NA		Perm	NA		Perm	NA		Perm	NA	
Protected Phases		4			4			2			2	
Permitted Phases	4			4			2			2		
Detector Phase	4	4		4	4		2	2		2	2	
Switch Phase												
Minimum Initial (s)	7.0	7.0		7.0	7.0		7.0	7.0		7.0	7.0	
Minimum Split (s)	20.5	20.5		20.5	20.5		21.0	21.0		21.0	21.0	
Total Split (s)	29.0	29.0		29.0	29.0		51.0	51.0		51.0	51.0	
Total Split (%)	36.3%	36.3%		36.3%	36.3%		63.8%	63.8%		63.8%	63.8%	
Yellow Time (s)	3.5	3.5		3.5	3.5		4.0	4.0		4.0	4.0	
All-Red Time (s)	1.0	1.0		1.0	1.0		1.0	1.0		1.0	1.0	
Lost Time Adjust (s)		0.0			0.0			0.0			0.0	
Total Lost Time (s)		4.5			4.5			5.0			5.0	
Lead/Lag												
Lead-Lag Optimize?												
Recall Mode	Max	Max		Max	Max		Max	Max		Max	Max	
Act Effect Green (s)		24.5			24.5			46.0			46.0	

Lanes, Volumes, Timings  
 38: Delridge Way SW & SW Trenton St

6/1/2015

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Actuated g/C Ratio		0.31			0.31			0.58			0.58	
v/c Ratio		0.62			0.25			0.57			0.67	
Control Delay		29.7			21.4			11.4			11.7	
Queue Delay		0.0			0.0			0.0			0.0	
Total Delay		29.7			21.4			11.4			11.7	
LOS		C			C			B			B	
Approach Delay		29.7			21.4			11.4			11.7	
Approach LOS		C			C			B			B	

Intersection Summary

Area Type: Other  
 Cycle Length: 80  
 Actuated Cycle Length: 80  
 Offset: 58 (73%), Referenced to phase 2:NBSB, Start of Green  
 Natural Cycle: 60  
 Control Type: Pretimed  
 Maximum v/c Ratio: 0.67  
 Intersection Signal Delay: 15.3  
 Intersection Capacity Utilization 77.4%  
 Analysis Period (min) 15

Intersection LOS: B  
 ICU Level of Service D

Splits and Phases: 38: Delridge Way SW & SW Trenton St

