

March 16, 2020

Mr. Jason Donovan Bangor Savings Bank P.O. Box 930 Bangor, ME 04402-0930

RE: TRAFFIC IMPACT ANALYSIS FOR PROPOSED BANGOR SAVINGS BANK IN WINDHAM

#### INTRODUCTION

Sewall was retained by Bangor Savings Bank to provide traffic analysis regarding their proposed new branch bank in Windham, Maine. The site is located in the northeast quadrant of the intersection of Route 302 and Route 115, as shown in Figure 1. Two parcels are being combined and redeveloped to provide for the proposed Bangor Savings Bank development. One parcel is currently occupied by a 938 square foot (S.F.) retail building. The other parcel is occupied by the 2,972 S.F. Cross Insurance office building. Both existing buildings will be demolished to provide for a new building, which will provide for both a 3,516 S.F. Bangor Savings Bank branch with an attached 3,492 tenant office space for Cross Insurance.

The current site plan provides for significant access improvements. Currently, there are five (5) existing curb cuts; two to Route 302, one to Route 115 and two to Abby Road, one of which only serves a few parking spaces. These five (5) curb cuts, each full movement, provide for twenty (20) potential drive movements. The revised site plan reduces the curb cuts from five (5) to three (3). It eliminates the two Route 302 full movement curb cuts and replaces them with a single right-in and right-out as far from the signal as practical. It eliminates the Route 115 curb cut, replacing it with a simple right-in only. The overall site access reduces the allowed movements from 20 to just 7, eliminating all left turn moments to and from both Route 302 and Route 115.

Construction is expected to begin in summer of 2020 with occupancy currently planned for February of 2021. As a result, 2021 was used as the study year for traffic analysis purposes.

#### TRIP GENERATION ANALYSIS

The number of trips to be generated by the existing and proposed development was determined utilizing the Institute of Transportation Engineers (ITE) "Trip Generation" manual. The most recent 10<sup>th</sup> edition was used for the calculations since it is derived from the largest database and considered the most current information. Land use codes 710 – General Office, 820 – Shopping Center (the only general related retail use) and 912 – Drive-In Bank were used as the basis of the calculations. The retail and office uses were based upon square footages. The bank trips were estimated on the bases of both square footage and number of drive-through lanes, and averaged, as is customary practice in Maine. The results are summarized in the following tables:



Fristing	Office and	Retail	Develo	nment
LAISHIE	Office and	ınctanı	Develo	DILLETT

Time Period	<u>Office</u>	<u>Retail</u>	<u>Total</u>
Daily	30	36	66
AM Peak Hour – Adjacent Street	3	1	4
AM Peak Hour – Generator	4	3	7
PM Peak Hour – Adjacent Street	3	4	7
PM Peak Hour – Generator	4	4	8
Saturday Peak Hour	2	4	6

## **Proposed Office and Bank Development**

			Bank		
<u>Time Period</u>	<u>Office</u>	<u>S.F.</u>	<u>Lanes</u>	Avg.	<u>Total</u>
Daily	34	352	250	302	336
AM Peak Hour – Adjacent Street	4	34	18	26	30
AM Peak Hour – Generator	5	52	35	44	49
PM Peak Hour – Adjacent Street	4	72	54	63	67
PM Peak Hour – Generator	5	72	54	63	68
Saturday Peak Hour	2	93	55	74	76

### **Overall Change in Trip Generation**

Time Period	<u>Proposed</u>	Existing	New
Daily	336	66	270
AM Peak Hour – Adjacent Street	30	4	26
AM Peak Hour – Generator	49	7	42
PM Peak Hour – Adjacent Street	67	7	60
PM Peak Hour – Generator	68	8	60
Saturday Peak Hour	76	6	70



As seen in the preceding tables, the redevelopment of the parcels to provide for the new Cross Insurance offices and Bangor Savings Bank branch is expected to result in 26 new one-way trips during the weekday AM peak hour of the adjacent street, 60 during the PM peak hour and 70 during the mid-day Saturday peak hour. Given these peak hour trip increases, the redevelopment project does not require a Traffic Movement Permit (TMP) from MaineDOT since they are less than the 100-trip threshold. It is important to note that the calculations were also performed using the 7<sup>th</sup> edition ITE report since that is the edition currently being utilized by MaineDOT for traffic permitting purposes and the projected increases were very similar and still well under 100.

#### TURNING MOVEMENT COUNTS

Turning movement counts were conducted at the intersection of Route 115 and Abby Road during the weekday AM (7:00-9:00) and PM (3:00-6:00) peak hour periods to determine existing volumes. The counts were conducted on October  $15^{th}$  and  $16^{th}$ , 2019. The counts were factored to 30th highest hour conditions utilizing MaineDOT's group mean factors. These  $30^{th}$  highest hour volumes typically occur in Maine under peak summer conditions in late July and early August. The count records are attached to this memorandum. The resulting 2019 peak hour volumes are shown Figure 2.

#### **FUTURE VOLUMES**

Existing average annual daily traffic (AADT) data for Route 115 in the vicinity was obtained from "Traffic Volume Counts, 2017, 2013 and 2009 Annual Reports", published by MaineDOT. This data is summarized below:

	Δ	verage An	nual Daily T	raffic	
Location Description	<u>2005</u>	<u>2007</u>	<u>2010</u>	<u>2013</u>	<u>2016</u>
Route 115, east of Abby Road	14290	14590	15020	14970	15500
Route 115, east of Falmouth Road	9910	10070	10420	10230	10670

As seen above, traffic volumes on Route 115 in the vicinity of the site have grown at an average annual rate of approximately 0.75 % during the longer term 2005 to 2016 period. Over the more recent short-term period they grew at an average annual rate of 1.25 %. This higher 1.25 % annual rate was utilized to project the 2019 volumes to No Build 2021 conditions. The resulting projected 2021 No-Build volumes are shown in Figure 3.

#### TRIP ASSIGNMENTS

Based upon the previous trip generation analysis, the distribution and type of trips was determined for the AM and PM peak hours of the adjacent street. Based upon ITE data, many of a bank's trips are pass-by trips, trips that would already be on Route 115 or Route 302. The percentage of pass-by trips for a bank is 47 % for the PM peak hour. A lesser 40 % would be assumed for the AM peak hour. Given that the study area for this



analysis was limited to the Route 115 and Abby Road intersection. All trips were assigned as primary (or new trips) for simplification and to be conservative without consideration of pass-by trips. The trip types are summarized as follows strictly for informational purposes:

TRIP GI	ENERATION :	SUMMARY	(One-way	Trip-Ends)
_				

<u>Analysis Period</u>	Pass-by	<u>Primary</u>	<u>Total</u>
AM Peak Hour – Adjacent Street	8	18	26
Entering	4	11	15
Exiting	4	7	11
PM Peak Hour – Adjacent Street	26	34	60
Entering	13	17	30
Exiting	13	17	30

The new trips to and from the site were assigned to the site drives based upon the traffic patterns reflected by the turning movement counts as well as average annual daily traffic (AADT) data for the vicinity of the site. The traffic volumes indicate the following patterns:

To and from North via Route 302 - 35 %To and From South via Route 302 - 30 %To and From West via Route 35 - 15 %To and From East via Route 115 - 20 %

The trip assignments for the new trips to the site, since both the retail building and existing Cross Insurance building were occupied and generating trips at the time of the counts, are shown in Figure 4. Based upon these volumes, the development is expected to have little impact beyond the intersection of Abby Road. Generally, a project will not have a significant impact on off-site traffic operations unless it generates in excess of 25 lane hour trips. As shown by the trip assignments, this project will generate a maximum of 15 new lane hour trips. The projected Build peak hour volumes, with Bangor Savings fully occupied in 2021, are shown in Figure 5.

#### TRAFFIC ANALYSIS

Traffic operations are evaluated in terms of level of service (LOS). Level of service is a qualitative measure that describes operations by letter designation. The levels range from A - very little delay to F - extreme delays. Level of service "D" is generally considered acceptable in urban locations while LOS "E" is generally considered the capacity of a facility and the minimum tolerable level. The level of service for unsignalized intersections is based upon average control delay per vehicle for each minor, opposed movement, as defined in the following table excerpted from the 2010 "Highway Capacity Manual":



#### **Unsignalized Intersection Level of Service**

<u>LOS</u>	<u>Delay Range</u>
A	< = 10.0 seconds
В	$> 10.0$ and $\leq 15.0$
C	$> 15.0$ and $\leq 25.0$
D	$> 25.0$ and $\leq 35.0$
E	$> 35.0$ and $\leq 50.0$
F	> 50.0

#### UNSIGNALIZED INTERSECTION ANALYSIS

The levels of service were calculated using Synchro 10/SimTraffic and reported based upon the Synchro Highway Capacity Manual approach. The analysis was only performed for the Route 115 and Abby Road intersection since the Route 302 exit is limited to right-turn movements only so no capacity concerns would be expected there. The analysis was performed for projected 2021 volumes with and without the proposed Bangor Savings Bank development, No Build and Build conditions. The results for the AM peak and PM peak hours are summarized in the following tables. The results are presented as level of service followed by delay, in seconds, in parentheses:

	Route 115 and Abby Road		
	AM Peak Hour Lev	vels of Service	
	2021	2021	
<u>Approach/Movement</u>	No-Build	<u>Build</u>	
Northbound Walgreens Throughs-Lefts	D (26.8)	D (27.9)	
Northbound Walgreens Rights	B (13.7)	B (13.7)	
Northbound Walgreens Overall	C (17.3)	C (17.6)	
Southbound Abby Road	C (17.7)	C (19.6)	
Eastbound Left Turns onto Abby Road	A (9.0)	A (9.0)	
Westbound Lefts Turns into Walgreens	A (9.1)	A (9.1)	

As seen above, the Abby Road intersection is projected to operate at an acceptable level of service during the AM peak hour period, at LOS "C", as will the Walgreens drive. The same level of services are projected for 2021 Build volumes showing the Bangor Savings Bank development will have little impact on operations at the intersection, as would be expected based upon the trip assignments.



	Route 115 and Abby Road	
	PM Peak Hour L	evels of Service
	2021	2021
Approach/Movement	<u>No-Build</u>	<u>Build</u>
Northbound Walgreens Throughs-Lefts	F (76.0)	F (91.9)
Northbound Walgreens Rights	C (16.3)	C (16.3)
Northbound Walgreens Overall	E (45.7)	F (53.5)
Southbound Abby Road	F (78.6)	F (132.5)
Eastbound Left Turns onto Abby Road	B (10.7)	B (10.8)
Westbound Lefts Turns into Walgreens	A (9.7)	A (9.7)

As seen above, during the PM peak hour under projected 2021 volumes, Abby Road will operate at LOS "F" while the Walgreens drive will operate at LOS "E". With the additional Bangor Savings Bank trips at the intersection the LOS will remain "F" for Abby Road and will fall to "F" for Walgreens. It is important to note that capacity analysis forecasts of delay increase exponentially once an intersection is at LOS "F" and the projected delays are generally not considered realistic. There is little that can be done to improve LOS for side streets onto busy arterials except for signalization. Signalization of Abby Road would not be warranted by the Abby Road volumes and additionally, couldn't be signalized given its proximity to Route 302. While the LOS is "F" for Abby Road the project is implementing substantial access improvements and the LOS for drives with left-turn movements on Route 302 or Route 115 would experience substantial delays given higher volumes and closer signal proximity, respectively.

#### **SAFETY ANALYSIS**

The Maine Department of Transportation uses two criteria to determine high crash locations (HCLs). The first is the critical rate factor (CRF), which is a measure of the accident rate. A CRF greater than one indicates a location which has a higher than expected accident rate. The expected rate is calculated as a statewide average of similar facilities.

The second criterion, which must also be met, is based upon the number of accidents that occur at a particular location. Eight or more accidents must also occur over the three-year study period for the location to be considered a high crash location. Accident data for both Route 115 and Route 302 in the vicinity of the site was obtained from MaineDOT and is attached. The CRF and number of accidents are summarized by location for the most recent three-year period, 2016 to 2018, in the following tables:



Route 302 Location Description	# of Acc.	<u>CRF</u>
Intersection of Route 35 and Route 115  Between Route 35/115 and Shaw's Plaza/No. Windham Shopping Center Intersection of Shaw's Plaza and No. Windham Shopping Center	42 <b>39</b> 11	0.97 <b>2.16</b> 0.32
Route 115 Location Description	# of Acc.	<u>CRF</u>
Between Abby Road and Route 302 Intersection of Abby Road	5 <b>12</b>	0.95 <b>1.83</b>
Between Abby Road and Sandbar Road	11	0.78
Intersection of Sandbar Road	4	0.61

As seen above in the accident tables, there are two high crash locations in the vicinity of the site, highlighted in bold print. Collision diagrams were obtained from MaineDOT for both locations so that they could be evaluated for accident patterns or trends that may possibly be indicative of correctable roadway deficiencies. The diagrams are evaluated as follows:

#### Between Route 35/115 and Shaw's Plaza/No. Windham Shopping Center 39 2.16

There were nine crashes in 2016, sixteen in 2017 and fourteen in 2018 along this 0.19 mile long segment of Route 302. Ten of the crashes were rear-ends, mostly attributed to following too closely, which are generally considered uncorrectable. Seven were sideswipe types due to lane changes or failures to stay in lane, typical of multi-lane roadways. There was a single vehicle pole hit, attributed to OUI. The remaining twenty-one collisions were angle collisions involving entering or exiting drive movements. These are typical of developed areas with multiple drives on busy arterials. Access management is recommended in these areas to reduce curb cuts and accident potential. The proposed project will fully eliminate one full movement drive on this stretch of roadway and will reduce the single remaining curb cut to right-turn movements only. These access management improvements should reduce accident potential along the site frontage and along this segment of Route 302.

#### Intersection of Abby Road 12

There were four crashes in 2016, three in 2017 and five in 2018 at this intersection. One was a rear-end on Route 115. One was a sideswipe turning into Walgreens due to an improper turn. One was a pedestrian hit by a right turning vehicle, attributed to failure to yield. Two angle collisions involved vehicles exiting Walgreens. The remaining seven collisions involved vehicles either exiting or entering Abby Road as left turns, constituting a pattern. These are likely due to the poor level of service but also the widened multiple lane approach to the signal where vehicles queued in one lane block sight of those in another. To improve the safety of this

1.83



intersection, Sewall recommends "Do Not Block Intersection" pavement markings and an accompanying sign. This will keep the area open to improve visibility and make it safer for vehicles to enter and exit Abby Road when traffic is queued at the route 302 signal.

#### **SUMMARY**

The redevelopment of the site to provide for a Bangor Savings Bank branch and new cross insurance offices is expected to generate 26 new one-way trips during the AM peak hour analysis period and 60 one-way trips during the PM period. The project is implementing substantial access management improvements given its site location in the northeast quadrant of the intersection of Route 302 and Route 115. Currently there are two full movement drives to Route 302. These two drives will be replaced with a single right-turn only drive eliminating 6 driveway movements and locating that single right-turn drive as far from the signal as possible. The project is also eliminating the full movement drive to Route 115 and replacing it with a single right-turn entrance only, eliminating 3 movements. Lastly, the project is eliminating one curb cut to Abby Road and locating the single Abby Road drive as far from Route 115 as possible. All told, the project is reducing movements from the current twenty (20) to just seven (7). The LOS analysis shows acceptable operations under both No Build and Build volumes during the AM peak hour at Abby Road and Route 115. During the PM peak hour, the LOS will be "F" under both No Build and Build volumes. In terms of safety, there are two existing high crash locations in the vicinity of the site. The first is the segment of Route 302 which extends from the signal to Shaw's Plaza/No. Windham Shopping Plaza. Access management is recommended along this corridor to reduce accident potential. The proposed site plan contributes greatly to that effort. The other high crash location is the intersection of Abby Road where a pattern of angle collisons was identified. "Do Not Block Intersection" pavement markings and signage are recommended to reduce crash potential there.

As always, please do not hesitate to contact me if you or the Town of Windham have any questions or concerns regarding our analysis, results or recommendations.

Sincerely,

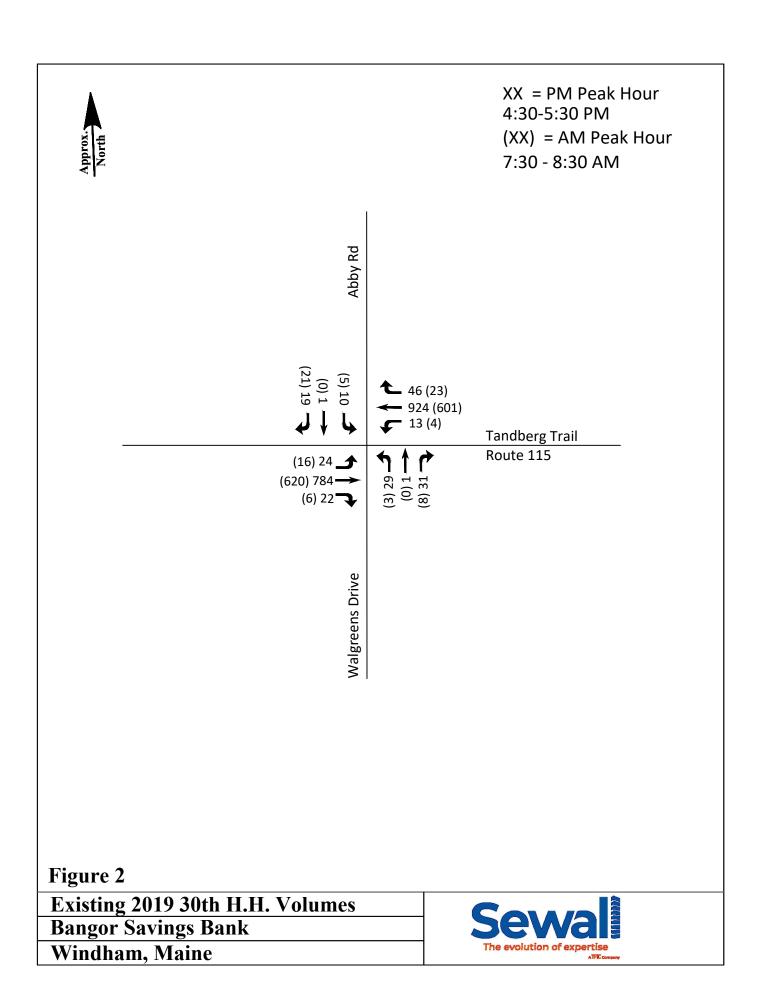
Diane W. Moras,

Diane W. Morabito, P.E. PTOE Vice President Traffic Engineering



Figure 1
Site Location Map
Bangor Savings Bank
Windham, Maine







XX = PM Peak Hour (XX) = AM Peak Hour

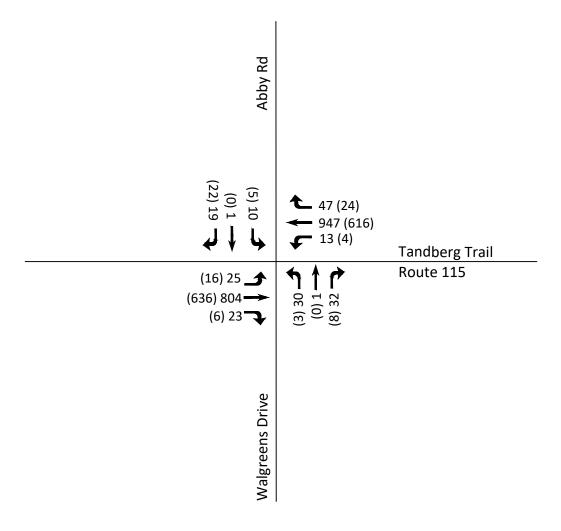
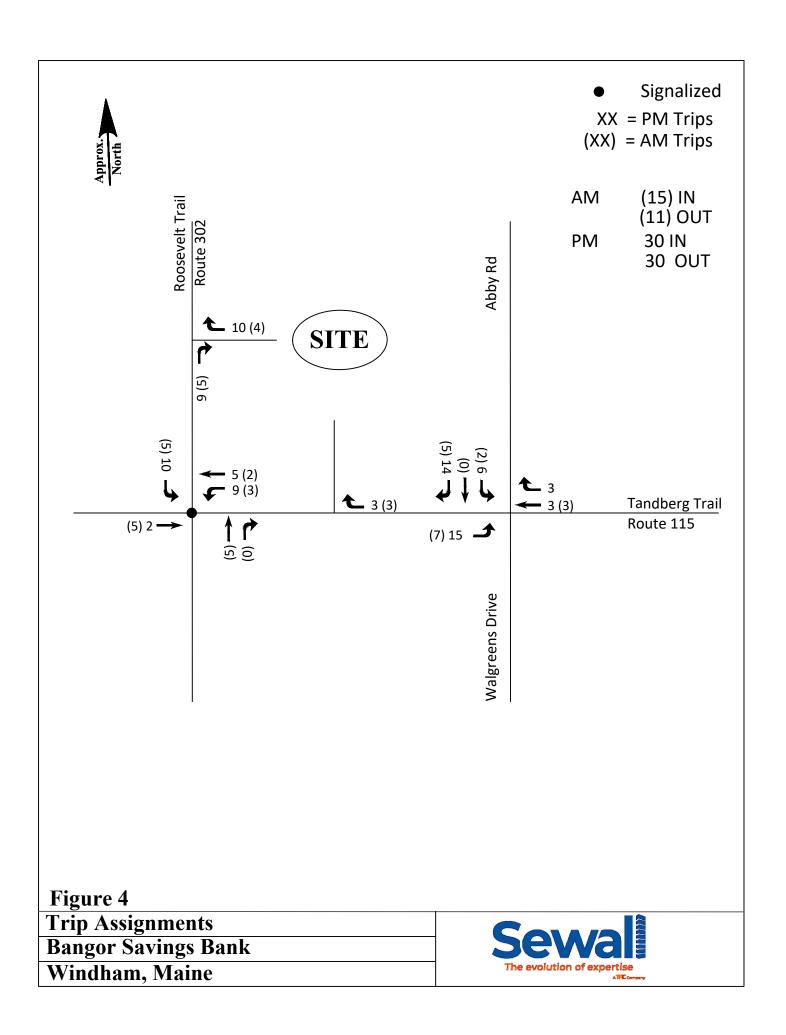


Figure 3

2021 No Build Volumes	
Bangor Savings Bank	
Windham, Maine	







XX = PM Peak Hour (XX) = AM Peak Hour

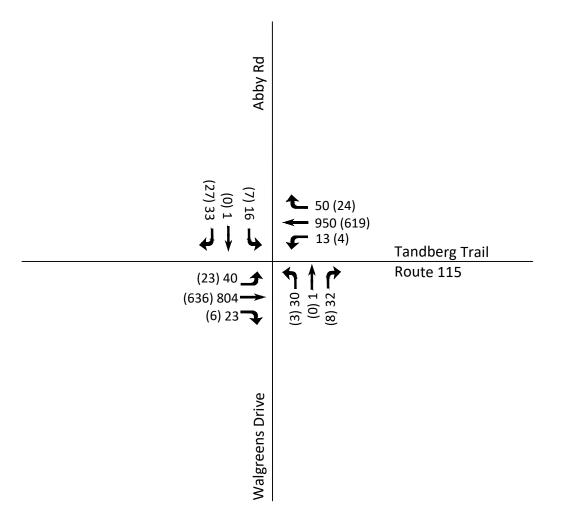


Figure 5

8	
2021 Build Volumes	
<b>Bangor Savings Bank</b>	
Windham, Maine	



# 40 Forest Falls Drive, Suite 2 Yarmouth, Maine 04096

www.mainetrafficresources.com

Title: Route 115 & Abby Road File Name: WinhamRoute115AbbyRd2019AM

Town: Windham, ME Site Code : 31312344
Counter: JAM Start Date : 10/15/2019

Weather: Sunny Page No : 1

Groups Printed- Passenger Cars - Light Trucks - Heavy Trucks

					0100	ρο	micou		g	/I <b>-</b> -	— · · · · · · · · · · ·		****								
		Al	by R	oad			Tar	berg	Trail			Wa	lgree	ns dr			R	oute '	115		
		Fr	om N	orth			Fı	rom E	ast			Fre	om S	outh			Fr	om V	/est		
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Rìght	Thru	Left	Peds	App. Total	Int. Total
Factor	1.0	1.0	1.0	1.0		1.0	1.0	1.0	1.0		1.0	1.0	1.0	1.0		1.0	1.0	1.0	1.0		
07:00 AM	4	0	4	0	8	9	108	0		117	1	0	0	0	1	0	168	1	0	169	295
07:15 AM	7	0	5	0	12	5	103	0	0	108	2	0	0	0	2	1	160	5	1	167	289
07:30 AM	6	0	2	0	8	5	131	0	0	136	0	0	0	0	0	0	160	3	0	163	307
07:45 AM	5	0	0	0	5	5	142	0	0	147	2	0	0	0	2	2	144	1	0	147	301
Total	22	0	11	0	33	24	484	0	0	508	5	0	0	0	5	3	632	10	1	646	1192
																'					
08:00 AM	2	0	1	0	3	4	144	1	0	149	1	0	1	0	2	0	134	8	0	142	296
08:15 AM	6	0	2	1	9	7	131	3	0	141	5	0	2	0	7	4	128	3	0	135	292
08:30 AM	2	0	2	0	4	9	131	1	0	141	2	0	1	0	3	3	105	3	0	111	259
08:45 AM	4	1	2	0	7	15	114	4	0	133	5	0	3	0	8	2	127	9	2	140	288
Total	14	1	7	1	23	35	520	9	0	564	13	0	7	0	20	9	494	23	2	528	1135
						'										'					
Grand Total	36	1	18	1	56	59	1004	9	0	1072	18	0	7	0	25	12	1126	33	3	1174	2327
Apprch %	64.3	1.8	32.1	1.8		5.5	93.7	0.8	0		72	0	28	0		1	95.9	2.8	0.3		
Total %	1.5	0	0.8	0	2.4	2.5	43.1	0.4	0	46.1	0.8	0	0.3	0	1.1	0.5	48.4	1.4	0.1	50.5	
Passenger Cars	36	1	18	1	56	56	936	9	0	1001	17	0	7	0	24	12	1113	33	2	1160	2241
% Passenger Cars	100	100	100	100	100	94.9	93.2	100	0	93.4	94.4	0	100	0	96	100	98.8	100	66.7	98.8	96.3
Light Trucks	0	0	0	Ō	0	3	48	0	0	51	1	0	0	0	1	0	10	0	1	11	63
% Light Trucks	0	0	0	0	0	5.1	4.8	0	0	4.8	5.6	0	0	0	4	0	0.9	0	33.3	0.9	2.7
Heavy Trucks	0	0	0	0	0	0	20	0	0	20	0	0	0	0	0	0	3	0	0	3	23
% Heavy Trucks	0	Ð	0	0	0	)	2	0	0	1.9	0	0	0	0	0	0	0.3	0	0	0.3	1

All Gr. I +II .91/.83 = 1.096

# 40 Forest Falls Drive, Suite 2 Yarmouth, Maine 04096

www.mainetrafficresources.com

Title: Route 115 & Abby Road File Name: WinhamRoute115AbbyRd2019AM

Town: Windham, ME Site Code : 31312344
Counter: JAM Start Date : 10/15/2019

Weather: Sunny Page No : 2

		Ab	by R	oad			Tar	iberg	Trail			Wa	lgree	ns dr			R	oute	115		
		Fre	om Ne	orth		ĺ	Fı	om E	ast			Fr	om S	outh			Fı	rom V	Vest		1
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
Peak Hour									of 1							•					-
Peak Hour i	for En	itire In	terse	ction I	Begins	at 07:	30 AN	Л													
07:30 AM	6	6 0 2 0				5		0	0	136	0	0	0	0	0	0	160	3	0	163	307
07:45 AM	5	0	0	0	5	5	142	0	0	147	2	0	0	0	2	2	144	1	0	147	301
08:00 AM	2	0	1	0	3	4	144	1	0	149	1	0	1	0	2	0	134	8	0	142	296
08:15 AM	6	0	2	1	9	7	131	3	0	141	5	0	2	0	7	4	128	3	0	135	292
Total Volume	19	0	5	1	25	21	548	4	0	573	8	0	3	0	11	6	566	15	0	587	1196
% App. Total	76	0	20	4		3.7	95.6	0.7	0		72.7	0	27.3	0		1	96.4	2.6	0		
PHF	.792	.000	.625	.250	.694	.750	.951	.333	.000	.961	.400	.000	.375	.000	.393	.375	.884	.469	.000	.900	.974
									Λ		4		,				_	~ <u> </u>		<i>(</i> -	

Gr. IXI = 191/183= 1.096

# 40 Forest Falls Drive, Suite 2 Yarmouth, Maine 04096

www.mainetrafficresources.com

Title: Route 115 and Abby Road File Name: WindhamRte115Abby2019PM

Town: Windham Site Code : 31312345 Counter: JAM Start Date : 10/16/2019

Weather: Cloudy Page No : 1

Groups Printed- Passenger Cars - Light Trucks - Heavy Trucks

		Ab	by R	oad			Tar	berg	Trail	, Oaro				ns Dr	,		R	oute	115		
			om N					om E			ļ		om S			_	Fr	om V	/est		
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	L.eft	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
Factor	1.0	1.0	1.0	1.0		1.0	1.0	1.0	1.0		1.0	1.0	1.0	1.0		1.0	1.0	1.0	1.0		
03:00 PM	4	1	3	0	8	7	144	4	0	155	6	1	7	0	14	10	149	8	0	167	344
03:15 PM	8	0	2	0	10	9	138	1	0	148	10	0	11	0	21	5	151	4	0	160	339
03:30 PM	5	0	3	0	8	8	144	1	0	153	5	2	5	0	12	3	159	5	0	167	340
03:45 PM	5	1	1	0	7	6	180	1	0	187	6	2	3	0	11	6	150	7	1	164	369
Total	22	2	9	0	33	30	606	7	0	643	27	5	26	0	58	24	609	24	1	658	1392
						_															_
04:00 PM	6	0	1	0	7	10	166	6	0	182	6	0	7	0	13	6	156	2	0	164	366
04:15 PM	5	1	3	0	9	12	196	1	0	209	4	1	5	0	10	4	163	5	0	172	400
04:30 PM	4	1	1	2	8	8	215	3	0	226	7	1	5	0	13	6	185	8	0	199	446
04:45 PM	8	0	1	1	10	16	201	3	0	220	6	0	6	0	12	7	189	1	0	197	439
Total	23	2	6	3	34	46	778	13	0	837	23	2	23	0	48	23	693	16	0	732	1651
																_					
05:00 PM	1	0	2	0	3	11	224	2	0	237	9	0	9	0	18	7	166	6	0	179	437
05:15 PM	4	Q	5	1	10	7	203	5	0	215	9	0	9	0	18	2	175	7	0	184	427
05:30 PM	4	2	1	2	9	6	211	7	0	224	10	0	6	0	16	6	164	4	0	174	423
05:45 PM	3	1_	5	4	13	8	197	3	0	208	11	1_	12	0	24	6	138	5	0	149	394
Total	12	3	13	7	35	32	835	17	0	884	39	1	36	0	76	21	643	22	0	686	1681
		_				ı								_							
Grand Total	57	7	28	10	102	108	2219	37	0	2364	89	. 8	85	0	182	68	1945	62	1	2076	4724
Apprch %	55.9	6.9	27.5	9.8		4.6	93.9	1.6	0		48.9	4.4	46.7	0		3.3	93.7	3	0		
Total %	1.2	0.1	0.6	0.2	2.2	2.3	47	0.8	0	50	1.9	0.2	1.8	0	3.9	1.4	41.2	1.3	0	43.9	
Passenger Cars	55	7	27	9	98	107	2125	37	0	2269	89	8	85	0	182	68	1932	62	1	2063	4612
% Passenger Cars	96.5	100	96.4	90	96.1	99.1	95.8	100	0	96	100	100	100	0	100	100	99.3	100	100	99.4	97.6
Light Trucks	2	0	1	1	4	1	85	0	0	86	0	0	0	0	0	0	9	0	0	9	99
% Light Trucks	3.5	0	3.6	10	3.9	0.9	3.8	0	0	3.6	0	0	0	0	0	0	0.5	0	0	0.4	2.1
Heavy Trucks	0	0	0	0	0	0	9	0	0	9	0	0	0	0	0	0	4	0	0	4	13
% Heavy Trucks	0	0	0	0	0	0	0.4	0	0	0.4	0	0	0	0	0	0	0.2	0	0	0.2	0.3

All Gr. I +II

# 40 Forest Falls Drive, Suite 2 Yarmouth, Maine 04096

www.mainetrafficresources.com

Title: Route 115 and Abby Road

File Name: WindhamRte115Abby2019PM

Town: Windham Counter: JAM

Site Code : 31312345 Start Date : 10/16/2019

Weather: Cloudy

Page No : 2

		Ab	by R	oad			Tan	berg	Trail	"		Wa	lgree	ns Dr			R	oute	115		
	İ	Fro	om No	orth			Fr	om E	ast		ŀ	Fre	om S	outh		'	Fi	om V	/est		
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
Peak Hour	Analy:	sis Fro	om 03	3:00 P	M to 08	5:45 P	M - P	eak 1	of 1												
Peak Hour	for En	tire In	terse	ction E	Begins	at 04:	30 PN	Λ													
04:30 PM	4	1	1	2	- 8	8	215	3	0	226	7	1	5	0	13	6	185	8	0	199	446
04:45 PM	8	8 0 1 1 <b>1</b>				16	201	3	0	220	6	0	6	0	12	7	189	1	0	197	439
05:00 PM	1	8 0 1 1 10 1 0 2 0				11	224	2	0	237	9	0	9	0	18	7	166	6	0	179	437
05:15 PM	4	0	5	1	10	7	203	5	0	215	9	0	9	0	18	2	175	7	0	184	427
Total Volume	17	1	9	4	31	42	843	13	0	898	31	1	29	0	61	22	715	22	0	759	1749
% App. Total	54.8	3.2	29	12.9		4.7	93.9	1.4	0		50.8	1.6	47.5	0		2.9	94.2	2.9	0		
PHF	.531	.250	.450	.500	.775	.656	.941	.650	.000	.947	.861	.250	.806	.000	.847	.786	.946	.688	.000	.954	.980
	\ \		· · · · · · · · · · · · · · · · · · ·			1.	Δ	~ A-	. 1	2	_		26			12	7	24	. ,	1-	
	19	. 1	1 10 4			46	0	20	12	<b>う</b>	31	1	20	1		22	- 7	84	2	4	

Gr. I +II = .91/.83 = 1.096

Intersection													
Int Delay, s/veh	0.9				Tara Carallia								
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR	
Lane Configurations		<b>^</b>			414			र्स	7		4		
Traffic Vol, veh/h	16	636	6	4	616	24	3	0	8	5	0	22	
Future Vol, veh/h	16	636	6	4	616	24	3	0	8	5	0	22	
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0	
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop	
RT Channelized	-	-	None	-	-	None			None			None	
Storage Length	-	-	-	-	-	-	-	ra stancia de de	50	-	-	-	
Veh in Median Storage	e,# -	0			0			0	a plant is		0	-	
Grade, %	-	0	-		0	-	-	0		-	0	-	
Peak Hour Factor	90	90	90	96	96	96	50	50	50	70	70	70	
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2	
Mvmt Flow	18	707	7	4	642	25	6	0	16	7	0	31	
Major/Minor	Major1			Major2			Vinor1			Vinor2			
Conflicting Flow All	667	0	0	714	0	0	1076	1422	711	1418	1413	334	
Stage 1	e vere	_		-			747	747		663	663	-	
Stage 2	-	-	-	-	-	-	329	675	-	755	750	-	KANDIKAN PARILAN DEPARTUR DAN PARILAN PARILAN KAKAH KANDARA
Critical Hdwy	4.13			4.13			7.33	6.53	6.23	7.33	6.53	6.93	
Critical Hdwy Stg 1	-	-	-	_	-	-	6.13	5.53	-	6.53	5.53	-	
Critical Hdwy Stg 2	-			-	-	•	6.53	5.53		6.13	5.53	-	
Follow-up Hdwy	2.219	-	-	2.219	_	-	3.519	4.019	3.319	3.519	4.019	3.319	
Pot Cap-1 Maneuver	921			884			185	136	432	105	137	663	
Stage 1	-	-	-	-	-	-	404	419	1.5	418	458	-	
Stage 2				-	-	-	659	452		400	418	- I	
Platoon blocked, %		-	-		-	-					-		
Mov Cap-1 Maneuver	921		-	884	-	4	171	131	432	98	132	663	
Mov Cap-2 Maneuver	-	-	-	-	-	-	171	131		98	132	-	
Stage 1							391	406	-	405	455		
Stage 2	-	-	-	-	-	-	623	449	-	373	405	-	
						1.5							
Approach	EB			WB			NB			SB			
HCM Control Delay, s	0.2			0.1			17.3			17.7			
HCM LOS			NAMES AND DESCRIPTION OF THE PERSON OF THE P	RESIDENTAL AND RES	NO CHOCKETON		С	2010/08/09/09/09		С	A CONTROL OF THE		
Minor Lane/Major Mvm	nt	NBLn11	VBLn2	EBL.	EBT	EBR	WBL	WBT	WBR	SBLn1			
Capacity (veh/h)		171	432	921			884			321			
HCM Lane V/C Ratio		0.035		0.019	-	-	0.005	-	-	0.12	udaudisia)da	esta mendo de miso	
HCM Control Delay (s)		26.8	13.7	9			9.1	0		HILLY SEE PROPERTY OF			
HCM Lane LOS		D	В	A	_	-	A	A	-	С			
HCM 95th %tile Q(veh)		0.1	0.1	0.1	-		0			0.4			
TOM OUT TO THE SELECTION		0.1	3.1	571						J. T			

03/03/2020 Baseline DWM

Intersection														
Int Delay, s/veh	1.1													
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR		
Lane Configurations		<b>^</b>			414			લ	7"		4			
Traffic Vol, veh/h	23	636	6	4	619	24	3	0	8	7		27		
Future Vol, veh/h	23	636	6	4	619	24	3	0	8	7	0	27		SAME ARTHUR
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0		
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop		DESCRIPTION OF THE PROPERTY OF
RT Channelized			None	-		None			None			None		
Storage Length	-	-	-	-	-	-	<u>-</u>	-	50	-	-	-		
Veh in Median Storage	,# -	0		-	0		•	0			0	-		
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-		
Peak Hour Factor	90	90	90	96	96	96	50	50	50	70	70	70		
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	'2	2		
Mvmt Flow	26	707	7	4	645	25	6	0	. 16	10	0	39		
Major/Minor N	Major1			Major2			Minor1		I	Minor2				
Conflicting Flow All	670	0	0	714	0	0	1094	1441	711	1437	1432	335		
Stage 1	-	-	-		n est i <del>e</del> i		763	763	•	666	666	-		
Stage 2	-	-	-	-	-	-	331	678	-	771	766	-		
Critical Hdwy	4.13			4.13			7.33	6.53	6.23	7.33	6.53	6.93		
Critical Hdwy Stg 1	-	-	-	-	-	-	6.13	5.53	-	6.53	5.53	-		
Critical Hdwy Stg 2	•	-					6.53	5.53	- 1 T	6.13	5.53	-		
Follow-up Hdwy	2.219	-	-	2.219	-	-	3.519	4.019	3.319	3.519	4.019	3.319		
Pot Cap-1 Maneuver	918	-		884	•	-	180	132	432	102	134	662		
Stage 1	-	_	-			-	396	412	-	416	456	-		
Stage 2		•		•			657	451	-	392	411	-		
Platoon blocked, %	Takan maran bagan a	-	_	NA CHINANA MARINA	_	-								gamenta and a second
Mov Cap-1 Maneuver	918	•		884	-		163	125	432	94	127	662		
Mov Cap-2 Maneuver	-	-	-	_	SELECTION OF THE SELECT	-	163	125	-	94	127	-	THE RESERVE THE PARTY OF THE PA	
Stage 1		-	•	•	-	•	377	393	-	396	453			
Stage 2	-	- PARTYMENTER	-	-	- ENERGINATE		614	448	-	360	392			
Approach	EB			WB			NB			SB				
HCM Control Delay, s	0.3			0.1			17.6			19.6				
HCM LOS							С			С				
<b>M</b> arine and the second		, and a												
Minor Lane/Major Mvm	t I	NBLn11	VBLn2	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1				and the second
Capacity (veh/h)		163	432	918			884	-		295				
HCM Lane V/C Ratio			0.037		-	-	0.005	-	-	0.165				
HCM Control Delay (s)		27.9	13.7	9	-	-	9.1	0	_	19.6				
HCM Lane LOS		D	В	Α	-	-	Α	Α	-	С				
HCM 95th %tile Q(veh)		0.1	0.1	0.1	-		0	-	-	0.6				
X Mark														

Intersection		Maria de											
Int Delay, s/veh	3.3												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR	
Lane Configurations		<b>^</b>			414			र्भ	77		4		
Traffic Vol, veh/h	25	804	23	13	947	47	30	1	32	10	1	19	
Future Vol, veh/h	25	804	23	13	947	47	30	1	32	10	1	19	
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0	
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop	
RT Channelized	•		None	<u>.</u>	-	None			None			None	
Storage Length	-	-	-	-	-	-	-	-	50	-	-	-	
Veh in Median Storage	,# -	0	-	-	0			0	-		0	4	
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-	
Peak Hour Factor	95	95	95	95	95	95	85	85	85	80	80	80	
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2	
Mvmt Flow	26	846	24	14	997	49	35	1	38	13	1	24	
Major/Minor I	Major1		N	Major2			Minor1			Minor2			
Conflicting Flow All	1046	0	0	870	0	0	1437	1984	858	1980	1972	523	
Stage 1	1040			-	-	-	910	910	-	OCCUPANTAL PROPERTY OF THE PERSON OF THE PER	1050	-	
Stage 2	_		-	-			527	1074	-	930	922	<u>-</u>	
Critical Hdwy	4.13	_	_	4.13		_	7.33	6.53	6.23	7.33	6.53	6.93	
Critical Hdwy Stg 1	-, 10	_		<del>т.</del> 10	-		6.13	5.53	0.20	6.53	5.53	- 0.00	
Critical Hdwy Stg 2	_			_	_	_	6.53	5.53	_	6.13	5.53	_	
Follow-up Hdwy	2.219			2.219	-	-	3.519	4.019	3.319	3.519	4.019	3.319	
Pot Cap-1 Maneuver	663	2	EDUNCTION DE DOCUMENTA	773		-	102	61	356	41	62	500	
Stage 1	-	<u>-</u>	-	-	-	_	328	353	-	244	303	-	
Stage 2		_	-		1 1 L		503	295		ACTION OF THE PARTY AND ADDRESS.	348	2	
Platoon blocked, %	April 1944	_	-		-	-							
Mov Cap-1 Maneuver	663		_	773		-	87	54	356	33	55	500	
Mov Cap-2 Maneuver	-	-	-	_	-	-	87	54		33	55	-	AMAGAN SANSAN MAKAN br>-
Stage 1	L.						303	326	-	225	290	-	
Stage 2	-	-	-	-	-	-	456	282	-	263	322	-	
g. <b>s -</b>													
				MAG		Carly Name of Street	ND			<b>6</b> 5			
Approach	EB			WB			NB			SB			
HCM Control Delay, s	0.3			0.3			45.7			78.6			
HCM LOS							E			F			
₩.													
Minor Lane/Major Mvm	it 1	VBLn1I	NBLn2	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1			
Capacity (veh/h)		85	356	663	-		773			84			
HCM Lane V/C Ratio	a de la contraction de la cont		0.106	0.04	-	-	0.018	-	-	0.446		The second secon	A STATE OF THE PARTY OF THE PAR
HCM Control Delay (s)		76	16.3	10.7	-		9.7	0.2	-	78.6			
HCM Lane LOS		F	С	В	-	-	Α	Α	-	F			
		1.8	0.4	0.1	AAARAMAA AAAAAAAAA	NEARANCES AND ADDRESS OF	0.1			1.8	SECRETARIO CONTRACADO DA CO	OFFICE AND ADDRESS OF THE PARTY	ONE SECURE S

Movement	Intersection													
Care   Configurations   A	Int Delay, s/veh	6.2												
Treffic Vol, veh/h 40 804 23 13 950 50 30 1 32 16 1 33	Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR	
Treffic Vol, veh/h 40 804 23 13 950 50 30 1 32 16 1 33	Lane Configurations		4			413			લ	71		4		
Future Vol, veh/h  40  804  23  13  950  50  30  132  16  133  20nflicting Peds, #hr  0  0  0  0  0  0  0  0  0  0  0  0  0		40		23	13		50	30			16	IOLESCA CONTRATED DESIGN	33	
Conflicting Peds, #/hr   0   0   0   0   0   0   0   0   0									1			AND THE PARTY OF THE PARTY.		
Sign Control   Free													0	
None   None   None   None   None   None   None   None   None											Stop		Stop	
Storage Length   -		CONTRACTOR DESCRIPTION	OF RESPENSABLE STATE		MARCHAELE MARCH	CONTRACTOR SECURIO		CHARLES AND ADDRESS OF THE PARTY OF THE PART	SELECTRICAL PROPERTY OF THE		SCHARGERSKER			
Veh in Median Storage, # - 0 - 0	P. COMPANIES CONTRACTOR DE SENSITION DE CONTRACTOR DE CONT	-	_	-	-	_		distriction of a	-		-	-	-	
Carade, %		.# -	0		_	0	_		0	OFFICE ADDRESS OF THE PARTY OF		0	-	
Peak Hour Factor 95 95 95 95 95 95 95 95 85 85 85 80 80 80 80 80 80 80 80 80 80 80 80 80		-		-	_	SAN THE RESERVE	-	-	MACCHINATION OF	_	-		-	
Heavy Vehicles, % 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2		95		95	95		95	85		85	80		80	
Major/Minor   Major   Major   Major   Major   Minor	EXPLORABLE SOCIAL DESIGNATION OF THE PROPERTY													
Major/Minor   Major1   Major2   Minor1   Minor2														
Conflicting Flow All														
Conflicting Flow All	Major/Minor N	Major1		ı	Major2			Minor1			Minor2	Constitution		
Stage 1			0			0			2023	- December 1	Control Section 1911	2000	527	
Stage 2		DESCRIPTION OF THE PARTY OF THE	STATEMENT STREET, STRE		INNERSTRANSPORTERS	NAMES AND DESCRIPTION OF				OUTS AND THE SECOND				
Critical Hdwy 4.13 - 4.13 - 7.33 6.53 6.23 7.33 6.53 6.93 Critical Hdwy Stg 1 6.13 5.53 - 6.53 5.53 - Critical Hdwy Stg 2 6.63 5.53 - 6.53 5.53 - 6.53 5.53 - Critical Hdwy Stg 2 6.63 5.53 - 6.53 5.53 - 6.13 5.53 - Critical Hdwy Stg 2 6.63 5.53 - 6.13 5.53 - Critical Hdwy Stg 2 6.63 5.53 - 6.13 5.53 - Critical Hdwy Stg 2 6.53 5.53 - 6.13 5.53 - Critical Hdwy Stg 2 6.53 5.53 - 6.13 5.53 - Critical Hdwy Stg 2 8.519 4.019 3.319 3.519 4.019 3.319 Critical Hdwy Stg 1 6.63 5.53 - 6.53 5.53 - Critical Hdwy Stg 2	A TO-STOCK CONTRACTOR OF THE PROPERTY OF THE P													
Critical Hdwy Stg 1			CALTER DAMPONIA.	- Nace 25										
Critical Hdwy Stg 2 6.63 5.53 - 6.13 5.53 - Follow-up Hdwy 2.219 - 2.219 - 3.519 4.019 3.319 3.519 4.019 3.319 2.010 Cap-1 Maneuver 659 - 773 - 97 58 356 39 59 497 2.010 Stage 1		4.13			4.13									
Follow-up Hdwy 2.219 2.219 3.519 4.019 3.319 3.519 4.019 3.319  Pot Cap-1 Maneuver 659 773 97 58 356 39 59 497  Stage 1 315 341 - 242 302 - Stage 2 502 293 - 307 336 - Platoon blocked, %			rangeria de			COLUMN TO SERVICE							DESCRIPTION OF THE PARTY OF THE	
Pot Cap-1 Maneuver 659 - 773 - 97 58 356 39 59 497  Stage 1 315 341 - 242 302 - Stage 2 502 293 - 307 336 -  Platoon blocked, %			•	<u>.</u>			-							
Stage 1 315			SAVESONE NE			NAME OF TAXABLE PARTY.								
Stage 2       -       -       -       -       502       293       -       307       336       -         Platoon blocked, %       -       -       -       -       -       -       -         Mov Cap-1 Maneuver       659       -       -       773       -       -       76       49       356       30       49       49         Mov Cap-2 Maneuver       -       -       -       -       76       49       -       30       49       -         Stage 1       -       -       -       -       276       299       -       212       289       -         Stage 2       -       -       -       -       438       280       -       240       294       -         Approach       EB       WB       NB       SB       -<	ACTURE SALES MAN AND ASSESSMENT ASSESSMENT AND ASSESSMENT ASSESSMENT AND ASSESSMENT A	SCHOOL SECTION SECTION			113								E-ILLERA DORESTINA DE ESTA	
Platoon blocked, %		PROGRAMMENT CONTROL	NAME AND ADDRESS OF THE PARTY O		<u>-</u>	A SANCHAR OF SANCHEST COME				DES RESERVADADAS DA			E-ENTERHANDING WATER	
Mov Cap-1 Maneuver         659         -         773         -         76         49         356         30         49         497           Mov Cap-2 Maneuver         -         -         -         -         76         49         -         30         49         -           Stage 1         -         -         -         -         -         276         299         -         212         289         -           Stage 2         -         -         -         -         438         280         -         240         294         -           Approach         EB         WB         NB         SB         -					8,235,491 <b>5</b> 0		Water State	302	200		301	000		
Mov Cap-2 Maneuver	A THE RESIDENCE OF THE PARTY OF	650	NUMBER DELICIONS		773	MICHIGAN STREET	CONTRACTOR CONTRACTOR	76	10	356	30	10	107	
Stage 1         -         -         -         -         276         299         -         212         289         -           Stage 2         -         -         -         -         -         438         280         -         240         294         -           Approach         EB         WB         NB         SB         -		CONTRACTOR DESCRIPTION	Description of the last of the		113					PERMITTED CONTROLLA			NORTH CHARGOS CO.	
Stage 2         - </td <td></td> <td>MATERIAL PROPERTY AND ADDRESS OF THE PARTY AND</td> <td></td> <td></td> <td>A SERVICION AS</td> <td></td> <td>MATERIAL STATE</td> <td></td> <td></td> <td>CHARLES SANS MARKET</td> <td></td> <td></td> <td></td> <td></td>		MATERIAL PROPERTY AND ADDRESS OF THE PARTY AND			A SERVICION AS		MATERIAL STATE			CHARLES SANS MARKET				
Approach EB WB NB SB HCM Control Delay, s 0.5 0.3 53.5 132.5 HCM LOS F F F  Minor Lane/Major Mvmt NBLn1 NBLn2 EBL EBT EBR WBL WBT WBR SBLn1 Capacity (veh/h) 75 356 659 - 773 - 81 HCM Lane V/C Ratio 0.486 0.106 0.064 - 0.018 - 0.772 HCM Control Delay (s) 91.9 16.3 10.8 - 9.7 0.2 - 132.5 HCM Lane LOS F C B - A A - F	Approximation of the property													
HCM Control Delay, s 0.5 0.3 53.5 132.5 HCM LOS F F F  Minor Lane/Major Mvmt NBLn1 NBLn2 EBL EBT EBR WBL WBT WBR SBLn1 Capacity (veh/h) 75 356 659 773 81 HCM Lane V/C Ratio 0.486 0.106 0.064 0.018 0.772 HCM Control Delay (s) 91.9 16.3 10.8 9.7 0.2 - 132.5 HCM Lane LOS F C B - A A - F	Slaye 2				-			430	200		240	234		
HCM Control Delay, s 0.5 0.3 53.5 132.5 HCM LOS F F F  Minor Lane/Major Mvmt NBLn1 NBLn2 EBL EBT EBR WBL WBT WBR SBLn1 Capacity (veh/h) 75 356 659 773 81 HCM Lane V/C Ratio 0.486 0.106 0.064 0.018 0.772 HCM Control Delay (s) 91.9 16.3 10.8 9.7 0.2 - 132.5 HCM Lane LOS F C B - A A - F														
HCM LOS F F F  Minor Lane/Major Mvmt NBLn1 NBLn2 EBL EBT EBR WBL WBT WBR SBLn1  Capacity (veh/h) 75 356 659 773 81  HCM Lane V/C Ratio 0.486 0.106 0.064 0.018 0.772  HCM Control Delay (s) 91.9 16.3 10.8 9.7 0.2 - 132.5  HCM Lane LOS F C B - A A - F														
Minor Lane/Major Mvmt NBLn1 NBLn2 EBL EBT EBR WBL WBT WBR SBLn1 Capacity (veh/h) 75 356 659 773 81 HCM Lane V/C Ratio 0.486 0.106 0.064 0.018 0.772 HCM Control Delay (s) 91.9 16.3 10.8 9.7 0.2 - 132.5 HCM Lane LOS F C B - A A - F	\$2 is conscionated and accompanies of the constitution of the cons	0.5			0.3						PERSONAL PROPERTY OF THE PERSON NAMED IN COLUMN 1			
Capacity (veh/h)       75       356       659       -       -       773       -       -       81         HCM Lane V/C Ratio       0.486       0.106       0.064       -       -       0.018       -       -       0.772         HCM Control Delay (s)       91.9       16.3       10.8       -       -       9.7       0.2       -       132.5         HCM Lane LOS       F       C       B       -       A       A       -       F	HCM LOS							F			F			
Capacity (veh/h)       75       356       659       -       -       773       -       -       81         HCM Lane V/C Ratio       0.486       0.106       0.064       -       -       0.018       -       -       0.772         HCM Control Delay (s)       91.9       16.3       10.8       -       -       9.7       0.2       -       132.5         HCM Lane LOS       F       C       B       -       A       A       -       F														
HCM Lane V/C Ratio 0.486 0.106 0.064 0.018 0.772 HCM Control Delay (s) 91.9 16.3 10.8 9.7 0.2 - 132.5 HCM Lane LOS F C B - A A - F		t I		COLUMN TO SERVICE STATE OF THE		EBT	EBR		WBT	WBR	ACCURAGE TO A SECURIOR STATE OF			
HCM Control Delay (s) 91.9 16.3 10.8 9.7 0.2 - 132.5 HCM Lane LOS F C B A A - F	Capacity (veh/h)													
HCM Lane LOS F C B A A - F	HCM Lane V/C Ratio		A A STATE OF THE PARTY OF THE P		CONTRACTOR OF THE PARTY OF THE	-	-					ANNUAL COMPANIES AND ADDRESS OF THE PARTY OF	000000000000000000000000000000000000000	
	HCM Control Delay (s)		91.9	Charles and Administration of	10.8			9.7	0.2	•	CONTROL OF THE PARTY OF THE PAR			
1CM 95th %tile O(veh) 2 0.4 0.2 0.1 3.8	HCM Lane LOS					-	-		Α	-				
5,17.17	HCM 95th %tile Q(veh)		2	0.4	0.2	-	-	0.1	•	•	3.8			

## Maine Department Of Transportation - Traffic Engineering, Crash Records Section

# **Crash Summary Report**

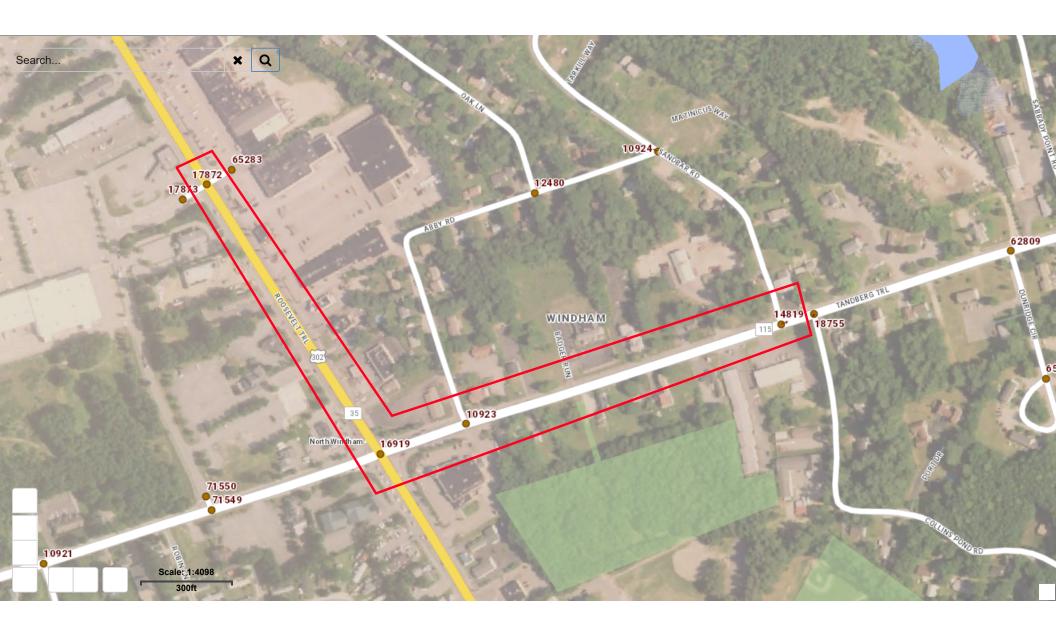
		Report Selections and Input	Parameters		
REPORT SELECTIONS					
☑ Crash Summary I	☐ Section Detail		☐1320 Public	☐1320 Private	☐1320 Summary
REPORT DESCRIPTION					
		Rte 35/115 (node 16919) to entra		opping Center (node	e 17872); Rte
115/55/Tandenberg Titlic	JIII IIILEISECLIOII WILII KLE 302 L	o intersection with Sandbar Ru (in	ode 14619)		
REPORT PARAMETERS	3				
Year 2016, Start Month 1	through Year 2018 End Mont	th: 12			
Route: <b>0302X</b>	Start Node: 16919	Start Offset: 0		☐ Exclude First N	ode
	End Node: 17872	End Offset: 0		■ Exclude Last N	ode
Route: <b>0115X</b>	Start Node: <b>16919</b>	Start Offset: 0		✓ Exclude First N	ode
	End Node: 14819	End Offset: 0		Exclude Last N	ode

# Maine Department Of Transportation - Traffic Engineering, Crash Records Section Crash Summary I

				Nodes										
Node	Route - MP	Node Description	U/R	Total		Injur	y Cra	shes		Percent	Annual M	Crash Rate	Critical	CRF
				Crashes	K	Α	В	С	PD	Injury	Ent-Veh	Oracii Rato	Rate	J. C.
16919	0302X - 15.16	Int of ROOSEVELT TRL TANDBERG TRL	9	42	0	0	0	9	33	21.4		1.03 atewide Crash Rate	1.06 e: 0.73	0.00
17872	0302X - 15.35	Int of ENT TO SHAWS NORTH WINDHAM SHOPPING CNT	F 9	11	0	0	2	3	6	45.5	10.229 Sta	0.36 atewide Crash Rate	1.11 e: 0.73	0.00
10923	0115X - 0.06	Int of ABBY RD, TANDBERG TRL	2	12	0	0	1	0	11	8.3	5.757 Sta	0.69 atewide Crash Rate	0.38 e: 0.16	1.83
14819	0115X - 0.26	Int of SANDBAR RD TANDBERG TRL	2	4	0	0	1	0	3	25.0	5.742 Sta	0.23 atewide Crash Rate	0.38 e: 0.16	0.00
Study Y	<b>/ears:</b> 3.00	NODE TOTAL	S:	69	0	0	4	12	53	23.2	35.322	0.65	0.72	0.90

# Maine Department Of Transportation - Traffic Engineering, Crash Records Section Crash Summary I

							Sect	ions									
Start	End	Element	Offset	Route - MP	Section	U/R	Total		Inju	ıry Cr	ashes		Percent	Annual	Crash Rate	Critical	CRF
Node	Node		Begin - End		Length		Crashes	K	Α	В	С	PD	Injury	HMVM		Rate	
16919 Int of ROOS		2 3130492 FRL TANDBER	0 - 0.19 RG TRL	0302X - 15.16 US 302	0.19	2	39	0	0	1	3	35	10.3	0.01770	734.51 Statewide Crash F	340.24 Rate: 193.96	2.16
10923 Int of ABBY		3105218 IDBERG TRL	0 - 0.06	0115X - 0 ST RTE 115	0.06	2	5	0	0	0	1	4	20.0	0.00318	524.31 Statewide Crash F	551.26 Rate: 216.00	0.00
10923 Int of ABBY		3123906 IDBERG TRL	0 - 0.20	0115X - 0.06 ST RTE 115	0.20	2	11	0	0	0	3	8	27.3	0.01159	316.42 Statewide Crash F	404.67 Rate: 216.00	0.00
Study Ye	ears:	3.00		Section Totals:	0.45		55	0	0	1	7	47	14.5	0.03247	564.70	316.74	1.78
				Grand Totals:	0.45		124	0	0	5	19	100	19.4	0.03247	1273.14	445.54	2.86



# H. C. L. **CRASH COLLISION DIAGRAM DATA PACKAGE**

**CUMBERLAND** COUNTY: TOWN: **WINDHAM** 

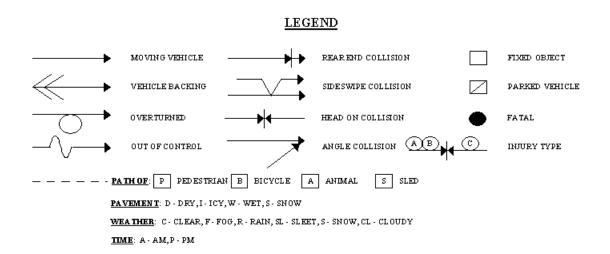
LOW NODE: 16919 HIGH NODE: 17872 **REGION:** U/R: 1 **URBAN** 

**DESCRIPTION: Roosevelt Trl from Tandberg Trl to Shaws Mall** 

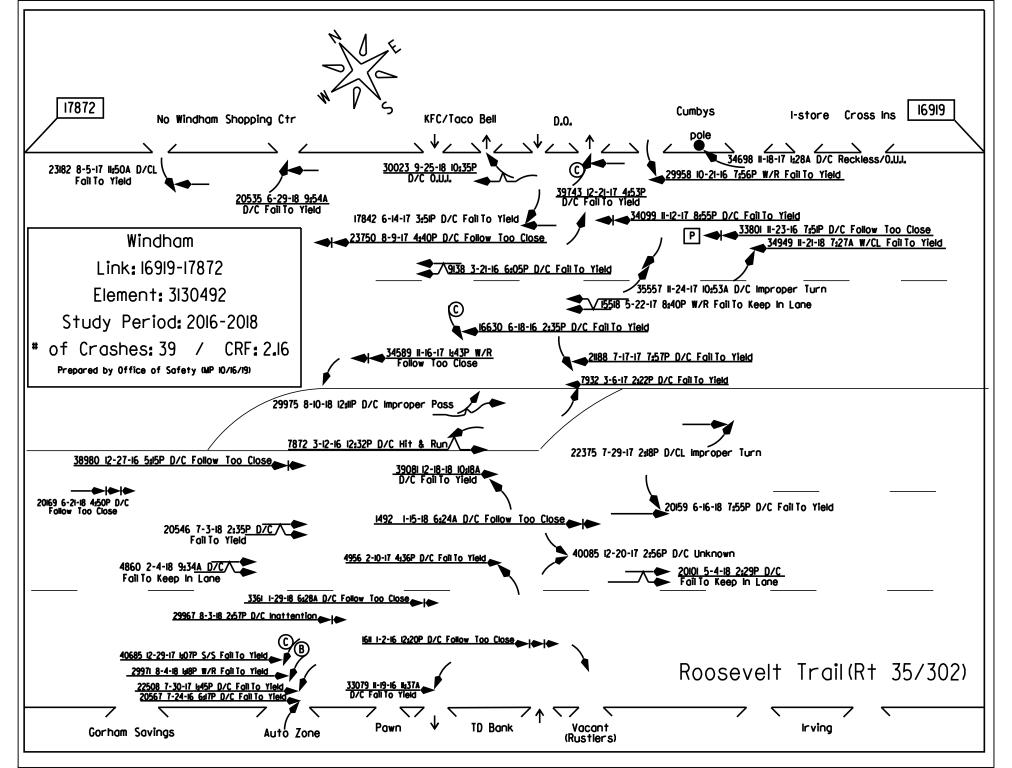
RTE # / RD #: **0035X** DATE DRAWN: **10/16/2019** DRAWN BY: Michelle

STUDY FROM: 1/1/2016 STUDY TO: 12/31/2018

CRASH RATE: **734.51** CRF: **2.16** % INJURY: TOTAL CRASHES: 39 10.3



2019



# H. C. L. CRASH COLLISION DIAGRAM DATA PACKAGE

COUNTY: CUMBERLAND TOWN: WINDHAM

LOW NODE: 10923 HIGH NODE: 0000 REGION: 1 U/R: URBAN

DESCRIPTION: Intersection of Tandberg Trail & Abby Road

RTE # / RD #: 0115X DATE DRAWN: 10/10/2019 DRAWN BY: Rachel

STUDY FROM: 1/1/2016 STUDY TO: 12/31/2018

CRASH RATE: 0.69 CRF: 1.92 % INJURY: 8.3 TOTAL CRASHES: 12

